

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-3000	6,232661E+22	6,232466E+22	3,229673E+22	3,229765E+22	1,246513E+23	6,459438E+22	1,892456E+23
-2999	6,232264E+22	6,232537E+22	3,229867E+22	3,229766E+22	1,246480E+23	6,459633E+22	1,892443E+23
-2998	6,232441E+22	6,232492E+22	3,229881E+22	3,229980E+22	1,246493E+23	6,459861E+22	1,892479E+23
-2997	6,232443E+22	6,232337E+22	3,229917E+22	3,229878E+22	1,246478E+23	6,459795E+22	1,892458E+23
-2996	6,232172E+22	6,232316E+22	3,230107E+22	3,229997E+22	1,246449E+23	6,460104E+22	1,892459E+23
-2995	6,232435E+22	6,232253E+22	3,230025E+22	3,230150E+22	1,246469E+23	6,460176E+22	1,892486E+23
-2994	6,232217E+22	6,232251E+22	3,230083E+22	3,230037E+22	1,246447E+23	6,460120E+22	1,892459E+23
-2993	6,232164E+22	6,232283E+22	3,230143E+22	3,230187E+22	1,246445E+23	6,460331E+22	1,892478E+23
-2992	6,232434E+22	6,232225E+22	3,230016E+22	3,230140E+22	1,246466E+23	6,460156E+22	1,892481E+23
-2991	6,232132E+22	6,232285E+22	3,230136E+22	3,229985E+22	1,246442E+23	6,460121E+22	1,892454E+23
-2990	6,232311E+22	6,232341E+22	3,230087E+22	3,230101E+22	1,246465E+23	6,460188E+22	1,892484E+23
-2989	6,232423E+22	6,232298E+22	3,229964E+22	3,229945E+22	1,246472E+23	6,459909E+22	1,892463E+23
-2988	6,232114E+22	6,232371E+22	3,230032E+22	3,229928E+22	1,246449E+23	6,459960E+22	1,892445E+23
-2987	6,232411E+22	6,232378E+22	3,229883E+22	3,230014E+22	1,246479E+23	6,459897E+22	1,892469E+23
-2986	6,232353E+22	6,232362E+22	3,229843E+22	3,229794E+22	1,246472E+23	6,459637E+22	1,892435E+23
-2985	6,232304E+22	6,232398E+22	3,229885E+22	3,229844E+22	1,246470E+23	6,459728E+22	1,892443E+23
-2984	6,232642E+22	6,232370E+22	3,229740E+22	3,229852E+22	1,246501E+23	6,459592E+22	1,892460E+23
-2983	6,232344E+22	6,232418E+22	3,229836E+22	3,229734E+22	1,246476E+23	6,459569E+22	1,892433E+23
-2982	6,232366E+22	6,232492E+22	3,229872E+22	3,229917E+22	1,246486E+23	6,459790E+22	1,892465E+23
-2981	6,232515E+22	6,232407E+22	3,229819E+22	3,229891E+22	1,246492E+23	6,459710E+22	1,892463E+23
-2980	6,232157E+22	6,232365E+22	3,230011E+22	3,229900E+22	1,246452E+23	6,459911E+22	1,892443E+23
-2979	6,232364E+22	6,232317E+22	3,230034E+22	3,230093E+22	1,246468E+23	6,460127E+22	1,892481E+23
-2978	6,232339E+22	6,232222E+22	3,230060E+22	3,230021E+22	1,246456E+23	6,460081E+22	1,892464E+23
-2977	6,232092E+22	6,232221E+22	3,230195E+22	3,230143E+22	1,246431E+23	6,460338E+22	1,892465E+23
-2976	6,232353E+22	6,232197E+22	3,230108E+22	3,230286E+22	1,246455E+23	6,460394E+22	1,892494E+23
-2975	6,232104E+22	6,232163E+22	3,230202E+22	3,230163E+22	1,246427E+23	6,460365E+22	1,892463E+23
-2974	6,232067E+22	6,232235E+22	3,230264E+22	3,230260E+22	1,246430E+23	6,460524E+22	1,892483E+23
-2973	6,232366E+22	6,232165E+22	3,230160E+22	3,230215E+22	1,246453E+23	6,460375E+22	1,892491E+23
-2972	6,232051E+22	6,232152E+22	3,230249E+22	3,230096E+22	1,246420E+23	6,460345E+22	1,892455E+23
-2971	6,232193E+22	6,232238E+22	3,230185E+22	3,230212E+22	1,246443E+23	6,460398E+22	1,892483E+23
-2970	6,232287E+22	6,232230E+22	3,230052E+22	3,230074E+22	1,246452E+23	6,460125E+22	1,892464E+23
-2969	6,232050E+22	6,232256E+22	3,230083E+22	3,230020E+22	1,246431E+23	6,460103E+22	1,892441E+23
-2968	6,232397E+22	6,232281E+22	3,229948E+22	3,230075E+22	1,246468E+23	6,460023E+22	1,892470E+23
-2967	6,232319E+22	6,232244E+22	3,229944E+22	3,229868E+22	1,246456E+23	6,459812E+22	1,892438E+23
-2966	6,232228E+22	6,232368E+22	3,229980E+22	3,229915E+22	1,246460E+23	6,459896E+22	1,892449E+23
-2965	6,232537E+22	6,232367E+22	3,229858E+22	3,229963E+22	1,246490E+23	6,459822E+22	1,892473E+23
-2964	6,232215E+22	6,232320E+22	3,229952E+22	3,229882E+22	1,246453E+23	6,459833E+22	1,892437E+23
-2963	6,232234E+22	6,232380E+22	3,230015E+22	3,230039E+22	1,246461E+23	6,460054E+22	1,892467E+23
-2962	6,232395E+22	6,232294E+22	3,229977E+22	3,230020E+22	1,246469E+23	6,459997E+22	1,892469E+23
-2961	6,232103E+22	6,232204E+22	3,230135E+22	3,230027E+22	1,246431E+23	6,460162E+22	1,892447E+23
-2960	6,232302E+22	6,232201E+22	3,230145E+22	3,230230E+22	1,246450E+23	6,460375E+22	1,892488E+23
-2959	6,232205E+22	6,232109E+22	3,230179E+22	3,230190E+22	1,246431E+23	6,460369E+22	1,892468E+23
-2958	6,231954E+22	6,232176E+22	3,230297E+22	3,230276E+22	1,246413E+23	6,460574E+22	1,892470E+23
-2957	6,232257E+22	6,232142E+22	3,230238E+22	3,230395E+22	1,246440E+23	6,460633E+22	1,892503E+23
-2956	6,232038E+22	6,232024E+22	3,230329E+22	3,230264E+22	1,246406E+23	6,460593E+22	1,892466E+23
-2955	6,232012E+22	6,232117E+22	3,230398E+22	3,230331E+22	1,246413E+23	6,460729E+22	1,892486E+23
-2954	6,232260E+22	6,232102E+22	3,230280E+22	3,230314E+22	1,246436E+23	6,460594E+22	1,892496E+23
-2953	6,231965E+22	6,232073E+22	3,230317E+22	3,230210E+22	1,246404E+23	6,460527E+22	1,892457E+23
-2952	6,232105E+22	6,232168E+22	3,230245E+22	3,230312E+22	1,246427E+23	6,460558E+22	1,892483E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2951	6,232174E+22	6,232122E+22	3,230143E+22	3,230177E+22	1,246430E+23	6,460319E+22	1,892462E+23
-2950	6,231985E+22	6,232192E+22	3,230168E+22	3,230079E+22	1,246418E+23	6,460247E+22	1,892442E+23
-2949	6,232365E+22	6,232212E+22	3,230060E+22	3,230146E+22	1,246458E+23	6,460206E+22	1,892478E+23
-2948	6,232255E+22	6,232133E+22	3,230039E+22	3,229984E+22	1,246439E+23	6,460023E+22	1,892441E+23
-2947	6,232117E+22	6,232293E+22	3,230083E+22	3,230028E+22	1,246441E+23	6,460111E+22	1,892452E+23
-2946	6,232389E+22	6,232314E+22	3,229978E+22	3,230095E+22	1,246470E+23	6,460073E+22	1,892478E+23
-2945	6,232130E+22	6,232201E+22	3,230056E+22	3,230003E+22	1,246433E+23	6,460058E+22	1,892439E+23
-2944	6,232172E+22	6,232256E+22	3,230135E+22	3,230140E+22	1,246443E+23	6,460275E+22	1,892470E+23
-2943	6,232301E+22	6,232150E+22	3,230124E+22	3,230155E+22	1,246445E+23	6,460279E+22	1,892473E+23
-2942	6,231993E+22	6,232132E+22	3,230254E+22	3,230154E+22	1,246412E+23	6,460407E+22	1,892453E+23
-2941	6,232195E+22	6,232147E+22	3,230274E+22	3,230381E+22	1,246434E+23	6,460655E+22	1,892500E+23
-2940	6,232095E+22	6,231988E+22	3,230299E+22	3,230349E+22	1,246408E+23	6,460648E+22	1,892473E+23
-2939	6,231855E+22	6,232069E+22	3,230437E+22	3,230380E+22	1,246392E+23	6,460817E+22	1,892474E+23
-2938	6,232173E+22	6,232058E+22	3,230394E+22	3,230490E+22	1,246423E+23	6,460884E+22	1,892511E+23
-2937	6,231997E+22	6,231897E+22	3,230442E+22	3,230357E+22	1,246389E+23	6,460799E+22	1,892469E+23
-2936	6,231924E+22	6,232036E+22	3,230493E+22	3,230431E+22	1,246396E+23	6,460924E+22	1,892488E+23
-2935	6,232104E+22	6,232014E+22	3,230375E+22	3,230453E+22	1,246412E+23	6,460828E+22	1,892495E+23
-2934	6,231821E+22	6,232016E+22	3,230389E+22	3,230311E+22	1,246384E+23	6,460700E+22	1,892454E+23
-2933	6,232030E+22	6,232092E+22	3,230341E+22	3,230398E+22	1,246412E+23	6,460739E+22	1,892486E+23
-2932	6,232137E+22	6,231974E+22	3,230232E+22	3,230261E+22	1,246411E+23	6,460493E+22	1,892460E+23
-2931	6,231956E+22	6,232092E+22	3,230265E+22	3,230141E+22	1,246405E+23	6,460406E+22	1,892445E+23
-2930	6,232288E+22	6,232182E+22	3,230160E+22	3,230239E+22	1,246447E+23	6,460399E+22	1,892487E+23
-2929	6,232183E+22	6,232078E+22	3,230110E+22	3,230099E+22	1,246426E+23	6,460208E+22	1,892447E+23
-2928	6,232021E+22	6,232241E+22	3,230176E+22	3,230133E+22	1,246426E+23	6,460309E+22	1,892457E+23
-2927	6,232252E+22	6,232213E+22	3,230117E+22	3,230217E+22	1,246446E+23	6,460333E+22	1,892480E+23
-2926	6,232029E+22	6,232108E+22	3,230195E+22	3,230102E+22	1,246414E+23	6,460296E+22	1,892443E+23
-2925	6,232101E+22	6,232142E+22	3,230291E+22	3,230266E+22	1,246424E+23	6,460556E+22	1,892480E+23
-2924	6,232190E+22	6,231995E+22	3,230252E+22	3,230327E+22	1,246419E+23	6,460579E+22	1,892476E+23
-2923	6,231875E+22	6,232023E+22	3,230372E+22	3,230306E+22	1,246390E+23	6,460678E+22	1,892458E+23
-2922	6,232068E+22	6,232066E+22	3,230401E+22	3,230520E+22	1,246413E+23	6,460921E+22	1,892505E+23
-2921	6,232039E+22	6,231869E+22	3,230407E+22	3,230460E+22	1,246391E+23	6,460868E+22	1,892478E+23
-2920	6,231814E+22	6,231965E+22	3,230558E+22	3,230455E+22	1,246378E+23	6,461013E+22	1,892479E+23
-2919	6,232059E+22	6,231957E+22	3,230536E+22	3,230597E+22	1,246402E+23	6,461134E+22	1,892515E+23
-2918	6,231860E+22	6,231863E+22	3,230550E+22	3,230464E+22	1,246372E+23	6,461015E+22	1,892474E+23
-2917	6,231793E+22	6,231986E+22	3,230600E+22	3,230560E+22	1,246378E+23	6,461160E+22	1,892494E+23
-2916	6,231974E+22	6,231887E+22	3,230465E+22	3,230590E+22	1,246386E+23	6,461055E+22	1,892492E+23
-2915	6,231748E+22	6,231894E+22	3,230482E+22	3,230392E+22	1,246364E+23	6,460874E+22	1,892452E+23
-2914	6,231991E+22	6,231996E+22	3,230446E+22	3,230469E+22	1,246399E+23	6,460915E+22	1,892490E+23
-2913	6,232140E+22	6,231868E+22	3,230304E+22	3,230340E+22	1,246401E+23	6,460644E+22	1,892465E+23
-2912	6,231904E+22	6,232044E+22	3,230334E+22	3,230223E+22	1,246395E+23	6,460557E+22	1,892450E+23
-2911	6,232145E+22	6,232137E+22	3,230259E+22	3,230359E+22	1,246428E+23	6,460617E+22	1,892490E+23
-2910	6,232045E+22	6,232044E+22	3,230210E+22	3,230194E+22	1,246409E+23	6,460404E+22	1,892449E+23
-2909	6,231929E+22	6,232157E+22	3,230316E+22	3,230235E+22	1,246409E+23	6,460551E+22	1,892464E+23
-2908	6,232165E+22	6,232045E+22	3,230257E+22	3,230341E+22	1,246421E+23	6,460598E+22	1,892481E+23
-2907	6,231946E+22	6,231968E+22	3,230330E+22	3,230219E+22	1,246391E+23	6,460549E+22	1,892446E+23
-2906	6,231996E+22	6,232059E+22	3,230421E+22	3,230415E+22	1,246405E+23	6,460835E+22	1,892489E+23
-2905	6,232110E+22	6,231887E+22	3,230343E+22	3,230482E+22	1,246400E+23	6,460826E+22	1,892482E+23
-2904	6,231784E+22	6,231943E+22	3,230479E+22	3,230426E+22	1,246373E+23	6,460905E+22	1,892463E+23
-2903	6,231949E+22	6,231975E+22	3,230549E+22	3,230639E+22	1,246392E+23	6,461188E+22	1,892511E+23

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	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2902	6,231942E+22	6,231798E+22	3,230552E+22	3,230549E+22	1,246374E+23	6,461101E+22	1,892484E+23
-2901	6,231723E+22	6,231886E+22	3,230712E+22	3,230573E+22	1,246361E+23	6,461286E+22	1,892489E+23
-2900	6,231905E+22	6,231830E+22	3,230656E+22	3,230754E+22	1,246373E+23	6,461410E+22	1,892514E+23
-2899	6,231713E+22	6,231753E+22	3,230651E+22	3,230599E+22	1,246347E+23	6,461250E+22	1,892472E+23
-2898	6,231681E+22	6,231885E+22	3,230699E+22	3,230675E+22	1,246357E+23	6,461374E+22	1,892494E+23
-2897	6,231954E+22	6,231747E+22	3,230532E+22	3,230675E+22	1,246370E+23	6,461207E+22	1,892491E+23
-2896	6,231759E+22	6,231800E+22	3,230553E+22	3,230438E+22	1,246356E+23	6,460991E+22	1,892455E+23
-2895	6,231933E+22	6,231940E+22	3,230538E+22	3,230544E+22	1,246387E+23	6,461082E+22	1,892496E+23
-2894	6,232046E+22	6,231882E+22	3,230383E+22	3,230415E+22	1,246393E+23	6,460798E+22	1,892473E+23
-2893	6,231801E+22	6,232035E+22	3,230441E+22	3,230329E+22	1,246384E+23	6,460770E+22	1,892461E+23
-2892	6,231994E+22	6,232037E+22	3,230378E+22	3,230483E+22	1,246403E+23	6,460861E+22	1,892489E+23
-2891	6,231942E+22	6,231924E+22	3,230346E+22	3,230296E+22	1,246387E+23	6,460642E+22	1,892451E+23
-2890	6,231849E+22	6,232018E+22	3,230461E+22	3,230346E+22	1,246387E+23	6,460807E+22	1,892467E+23
-2889	6,232113E+22	6,231888E+22	3,230358E+22	3,230483E+22	1,246400E+23	6,460841E+22	1,892484E+23
-2888	6,231869E+22	6,231865E+22	3,230415E+22	3,230357E+22	1,246373E+23	6,460773E+22	1,892451E+23
-2887	6,231849E+22	6,231974E+22	3,230528E+22	3,230572E+22	1,246382E+23	6,461099E+22	1,892492E+23
-2886	6,231990E+22	6,231838E+22	3,230458E+22	3,230595E+22	1,246383E+23	6,461053E+22	1,892488E+23
-2885	6,231714E+22	6,231862E+22	3,230633E+22	3,230531E+22	1,246358E+23	6,461164E+22	1,892474E+23
-2884	6,231841E+22	6,231837E+22	3,230708E+22	3,230758E+22	1,246368E+23	6,461467E+22	1,892514E+23
-2883	6,231831E+22	6,231693E+22	3,230699E+22	3,230667E+22	1,246352E+23	6,461366E+22	1,892489E+23
-2882	6,231585E+22	6,231804E+22	3,230845E+22	3,230717E+22	1,246339E+23	6,461562E+22	1,892495E+23
-2881	6,231802E+22	6,231708E+22	3,230740E+22	3,230901E+22	1,246351E+23	6,461640E+22	1,892515E+23
-2880	6,231640E+22	6,231645E+22	3,230731E+22	3,230697E+22	1,246329E+23	6,461428E+22	1,892471E+23
-2879	6,231610E+22	6,231783E+22	3,230802E+22	3,230764E+22	1,246339E+23	6,461565E+22	1,892496E+23
-2878	6,231919E+22	6,231690E+22	3,230627E+22	3,230726E+22	1,246361E+23	6,461353E+22	1,892496E+23
-2877	6,231721E+22	6,231766E+22	3,230657E+22	3,230522E+22	1,246349E+23	6,461179E+22	1,892467E+23
-2876	6,231803E+22	6,231877E+22	3,230630E+22	3,230662E+22	1,246368E+23	6,461292E+22	1,892497E+23
-2875	6,231903E+22	6,231821E+22	3,230478E+22	3,230519E+22	1,246372E+23	6,460997E+22	1,892472E+23
-2874	6,231681E+22	6,231947E+22	3,230560E+22	3,230435E+22	1,246363E+23	6,460996E+22	1,892462E+23
-2873	6,231936E+22	6,231879E+22	3,230474E+22	3,230583E+22	1,246381E+23	6,461058E+22	1,892487E+23
-2872	6,231902E+22	6,231786E+22	3,230446E+22	3,230385E+22	1,246369E+23	6,460831E+22	1,892452E+23
-2871	6,231757E+22	6,231921E+22	3,230568E+22	3,230479E+22	1,246368E+23	6,461047E+22	1,892472E+23
-2870	6,232008E+22	6,231845E+22	3,230450E+22	3,230607E+22	1,246385E+23	6,461057E+22	1,892491E+23
-2869	6,231780E+22	6,231823E+22	3,230531E+22	3,230497E+22	1,246360E+23	6,461028E+22	1,892463E+23
-2868	6,231716E+22	6,231869E+22	3,230665E+22	3,230705E+22	1,246359E+23	6,461370E+22	1,892496E+23
-2867	6,231891E+22	6,231731E+22	3,230620E+22	3,230698E+22	1,246362E+23	6,461318E+22	1,892494E+23
-2866	6,231627E+22	6,231745E+22	3,230813E+22	3,230652E+22	1,246337E+23	6,461465E+22	1,892484E+23
-2865	6,231742E+22	6,231695E+22	3,230837E+22	3,230906E+22	1,246344E+23	6,461743E+22	1,892518E+23
-2864	6,231711E+22	6,231585E+22	3,230802E+22	3,230813E+22	1,246330E+23	6,461615E+22	1,892491E+23
-2863	6,231434E+22	6,231697E+22	3,230946E+22	3,230867E+22	1,246313E+23	6,461813E+22	1,892494E+23
-2862	6,231707E+22	6,231627E+22	3,230831E+22	3,230993E+22	1,246333E+23	6,461824E+22	1,892516E+23
-2861	6,231624E+22	6,231563E+22	3,230837E+22	3,230775E+22	1,246319E+23	6,461612E+22	1,892480E+23
-2860	6,231546E+22	6,231678E+22	3,230905E+22	3,230845E+22	1,246322E+23	6,461751E+22	1,892497E+23
-2859	6,231844E+22	6,231648E+22	3,230726E+22	3,230806E+22	1,246349E+23	6,461533E+22	1,892502E+23
-2858	6,231614E+22	6,231731E+22	3,230759E+22	3,230626E+22	1,246335E+23	6,461385E+22	1,892473E+23
-2857	6,231690E+22	6,231790E+22	3,230706E+22	3,230774E+22	1,246348E+23	6,461480E+22	1,892496E+23
-2856	6,231818E+22	6,231721E+22	3,230566E+22	3,230605E+22	1,246354E+23	6,461171E+22	1,892471E+23
-2855	6,231589E+22	6,231820E+22	3,230674E+22	3,230536E+22	1,246341E+23	6,461210E+22	1,892462E+23
-2854	6,231876E+22	6,231780E+22	3,230580E+22	3,230671E+22	1,246366E+23	6,461251E+22	1,892491E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2853	6,231850E+22	6,231707E+22	3,230551E+22	3,230514E+22	1,246356E+23	6,461065E+22	1,892462E+23
-2852	6,231622E+22	6,231822E+22	3,230666E+22	3,230631E+22	1,246344E+23	6,461297E+22	1,892474E+23
-2851	6,231886E+22	6,231769E+22	3,230565E+22	3,230732E+22	1,246365E+23	6,461298E+22	1,892495E+23
-2850	6,231686E+22	6,231730E+22	3,230683E+22	3,230614E+22	1,246342E+23	6,461297E+22	1,892471E+23
-2849	6,231653E+22	6,231727E+22	3,230806E+22	3,230816E+22	1,246338E+23	6,461621E+22	1,892500E+23
-2848	6,231824E+22	6,231610E+22	3,230765E+22	3,230805E+22	1,246343E+23	6,461570E+22	1,892500E+23
-2847	6,231491E+22	6,231652E+22	3,230957E+22	3,230808E+22	1,246314E+23	6,461765E+22	1,892491E+23
-2846	6,231596E+22	6,231632E+22	3,230951E+22	3,231047E+22	1,246323E+23	6,461997E+22	1,892523E+23
-2845	6,231603E+22	6,231512E+22	3,230917E+22	3,230962E+22	1,246311E+23	6,461879E+22	1,892499E+23
-2844	6,231316E+22	6,231571E+22	3,231059E+22	3,230994E+22	1,246289E+23	6,462053E+22	1,892494E+23
-2843	6,231646E+22	6,231515E+22	3,230949E+22	3,231071E+22	1,246316E+23	6,462020E+22	1,892518E+23
-2842	6,231584E+22	6,231476E+22	3,230962E+22	3,230862E+22	1,246306E+23	6,461823E+22	1,892488E+23
-2841	6,231482E+22	6,231584E+22	3,230981E+22	3,230947E+22	1,246307E+23	6,461928E+22	1,892499E+23
-2840	6,231739E+22	6,231584E+22	3,230795E+22	3,230900E+22	1,246332E+23	6,461695E+22	1,892502E+23
-2839	6,231478E+22	6,231661E+22	3,230846E+22	3,230737E+22	1,246314E+23	6,461583E+22	1,892472E+23
-2838	6,231592E+22	6,231709E+22	3,230795E+22	3,230840E+22	1,246330E+23	6,461635E+22	1,892494E+23
-2837	6,231786E+22	6,231625E+22	3,230672E+22	3,230689E+22	1,246341E+23	6,461360E+22	1,892477E+23
-2836	6,231512E+22	6,231692E+22	3,230777E+22	3,230642E+22	1,246320E+23	6,461419E+22	1,892462E+23
-2835	6,231790E+22	6,231705E+22	3,230682E+22	3,230782E+22	1,246350E+23	6,461464E+22	1,892496E+23
-2834	6,231758E+22	6,231651E+22	3,230666E+22	3,230649E+22	1,246341E+23	6,461315E+22	1,892472E+23
-2833	6,231526E+22	6,231723E+22	3,230767E+22	3,230762E+22	1,246325E+23	6,461529E+22	1,892478E+23
-2832	6,231807E+22	6,231669E+22	3,230697E+22	3,230833E+22	1,246348E+23	6,461530E+22	1,892501E+23
-2831	6,231590E+22	6,231618E+22	3,230846E+22	3,230737E+22	1,246321E+23	6,461583E+22	1,892479E+23
-2830	6,231549E+22	6,231635E+22	3,230958E+22	3,230933E+22	1,246318E+23	6,461891E+22	1,892507E+23
-2829	6,231715E+22	6,231531E+22	3,230902E+22	3,230973E+22	1,246325E+23	6,461875E+22	1,892512E+23
-2828	6,231304E+22	6,231523E+22	3,231075E+22	3,230987E+22	1,246283E+23	6,462062E+22	1,892489E+23
-2827	6,231458E+22	6,231516E+22	3,231069E+22	3,231183E+22	1,246297E+23	6,462252E+22	1,892523E+23
-2826	6,231534E+22	6,231383E+22	3,231046E+22	3,231070E+22	1,246292E+23	6,462116E+22	1,892503E+23
-2825	6,231285E+22	6,231424E+22	3,231155E+22	3,231082E+22	1,246271E+23	6,462237E+22	1,892495E+23
-2824	6,231619E+22	6,231425E+22	3,231044E+22	3,231141E+22	1,246304E+23	6,462185E+22	1,892523E+23
-2823	6,231484E+22	6,231435E+22	3,231056E+22	3,230966E+22	1,246292E+23	6,462022E+22	1,892494E+23
-2822	6,231363E+22	6,231566E+22	3,231063E+22	3,231029E+22	1,246293E+23	6,462092E+22	1,892502E+23
-2821	6,231644E+22	6,231544E+22	3,230889E+22	3,230997E+22	1,246319E+23	6,461886E+22	1,892507E+23
-2820	6,231354E+22	6,231541E+22	3,230955E+22	3,230834E+22	1,246290E+23	6,461789E+22	1,892468E+23
-2819	6,231521E+22	6,231590E+22	3,230915E+22	3,230917E+22	1,246311E+23	6,461832E+22	1,892494E+23
-2818	6,231734E+22	6,231517E+22	3,230797E+22	3,230798E+22	1,246325E+23	6,461595E+22	1,892485E+23
-2817	6,231437E+22	6,231582E+22	3,230850E+22	3,230778E+22	1,246302E+23	6,461628E+22	1,892465E+23
-2816	6,231700E+22	6,231623E+22	3,230761E+22	3,230901E+22	1,246332E+23	6,461663E+22	1,892499E+23
-2815	6,231646E+22	6,231580E+22	3,230777E+22	3,230779E+22	1,246323E+23	6,461555E+22	1,892478E+23
-2814	6,231446E+22	6,231645E+22	3,230897E+22	3,230844E+22	1,246309E+23	6,461741E+22	1,892483E+23
-2813	6,231749E+22	6,231587E+22	3,230848E+22	3,230943E+22	1,246334E+23	6,461791E+22	1,892513E+23
-2812	6,231459E+22	6,231501E+22	3,231002E+22	3,230885E+22	1,246296E+23	6,461887E+22	1,892485E+23
-2811	6,231397E+22	6,231540E+22	3,231100E+22	3,231080E+22	1,246294E+23	6,462180E+22	1,892512E+23
-2810	6,231574E+22	6,231432E+22	3,231044E+22	3,231140E+22	1,246301E+23	6,462184E+22	1,892519E+23
-2809	6,231199E+22	6,231372E+22	3,231177E+22	3,231135E+22	1,246257E+23	6,462312E+22	1,892488E+23
-2808	6,231399E+22	6,231370E+22	3,231182E+22	3,231278E+22	1,246277E+23	6,462460E+22	1,892523E+23
-2807	6,231483E+22	6,231276E+22	3,231173E+22	3,231170E+22	1,246276E+23	6,462343E+22	1,892510E+23
-2806	6,231231E+22	6,231360E+22	3,231261E+22	3,231157E+22	1,246259E+23	6,462418E+22	1,892501E+23
-2805	6,231534E+22	6,231402E+22	3,231139E+22	3,231251E+22	1,246294E+23	6,462390E+22	1,892533E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2804	6,231318E+22	6,231366E+22	3,231150E+22	3,231088E+22	1,246268E+23	6,462239E+22	1,892492E+23
-2803	6,231224E+22	6,231487E+22	3,231167E+22	3,231116E+22	1,246271E+23	6,462283E+22	1,892499E+23
-2802	6,231565E+22	6,231437E+22	3,231012E+22	3,231084E+22	1,246300E+23	6,462096E+22	1,892510E+23
-2801	6,231311E+22	6,231388E+22	3,231041E+22	3,230927E+22	1,246270E+23	6,461968E+22	1,892467E+23
-2800	6,231485E+22	6,231477E+22	3,231000E+22	3,231008E+22	1,246296E+23	6,462008E+22	1,892497E+23
-2799	6,231647E+22	6,231463E+22	3,230882E+22	3,230927E+22	1,246311E+23	6,461809E+22	1,892492E+23
-2798	6,231347E+22	6,231550E+22	3,230932E+22	3,230880E+22	1,246290E+23	6,461812E+22	1,892471E+23
-2797	6,231628E+22	6,231589E+22	3,230869E+22	3,231011E+22	1,246322E+23	6,461881E+22	1,892510E+23
-2796	6,231522E+22	6,231471E+22	3,230919E+22	3,230889E+22	1,246299E+23	6,461809E+22	1,892480E+23
-2795	6,231344E+22	6,231535E+22	3,231064E+22	3,230947E+22	1,246288E+23	6,462011E+22	1,892489E+23
-2794	6,231640E+22	6,231472E+22	3,231019E+22	3,231089E+22	1,246311E+23	6,462107E+22	1,892522E+23
-2793	6,231312E+22	6,231351E+22	3,231118E+22	3,231062E+22	1,246266E+23	6,462180E+22	1,892484E+23
-2792	6,231269E+22	6,231396E+22	3,231211E+22	3,231233E+22	1,246267E+23	6,462444E+22	1,892511E+23
-2791	6,231459E+22	6,231304E+22	3,231165E+22	3,231282E+22	1,246276E+23	6,462448E+22	1,892521E+23
-2790	6,231152E+22	6,231263E+22	3,231289E+22	3,231218E+22	1,246241E+23	6,462507E+22	1,892492E+23
-2789	6,231381E+22	6,231300E+22	3,231299E+22	3,231367E+22	1,246268E+23	6,462667E+22	1,892535E+23
-2788	6,231372E+22	6,231209E+22	3,231295E+22	3,231281E+22	1,246258E+23	6,462576E+22	1,892516E+23
-2787	6,231096E+22	6,231333E+22	3,231379E+22	3,231261E+22	1,246243E+23	6,462640E+22	1,892507E+23
-2786	6,231395E+22	6,231355E+22	3,231266E+22	3,231370E+22	1,246275E+23	6,462635E+22	1,892539E+23
-2785	6,231198E+22	6,231246E+22	3,231244E+22	3,231203E+22	1,246244E+23	6,462448E+22	1,892489E+23
-2784	6,231160E+22	6,231339E+22	3,231269E+22	3,231194E+22	1,246250E+23	6,462462E+22	1,892496E+23
-2783	6,231510E+22	6,231320E+22	3,231117E+22	3,231186E+22	1,246283E+23	6,462304E+22	1,892513E+23
-2782	6,231272E+22	6,231309E+22	3,231114E+22	3,231017E+22	1,246258E+23	6,462131E+22	1,892471E+23
-2781	6,231422E+22	6,231444E+22	3,231062E+22	3,231125E+22	1,246287E+23	6,462188E+22	1,892505E+23
-2780	6,231516E+22	6,231400E+22	3,230971E+22	3,231049E+22	1,246292E+23	6,462019E+22	1,892493E+23
-2779	6,231242E+22	6,231479E+22	3,231051E+22	3,230959E+22	1,246272E+23	6,462010E+22	1,892473E+23
-2778	6,231546E+22	6,231495E+22	3,231029E+22	3,231099E+22	1,246304E+23	6,462127E+22	1,892517E+23
-2777	6,231441E+22	6,231330E+22	3,231054E+22	3,231010E+22	1,246277E+23	6,462063E+22	1,892483E+23
-2776	6,231241E+22	6,231401E+22	3,231199E+22	3,231079E+22	1,246264E+23	6,462279E+22	1,892492E+23
-2775	6,231491E+22	6,231381E+22	3,231148E+22	3,231262E+22	1,246287E+23	6,462411E+22	1,892528E+23
-2774	6,231198E+22	6,231251E+22	3,231226E+22	3,231205E+22	1,246245E+23	6,462431E+22	1,892488E+23
-2773	6,231195E+22	6,231305E+22	3,231324E+22	3,231366E+22	1,246250E+23	6,462690E+22	1,892519E+23
-2772	6,231360E+22	6,231179E+22	3,231306E+22	3,231402E+22	1,246254E+23	6,462708E+22	1,892525E+23
-2771	6,231077E+22	6,231174E+22	3,231439E+22	3,231312E+22	1,246225E+23	6,462751E+22	1,892500E+23
-2770	6,231283E+22	6,231243E+22	3,231448E+22	3,231492E+22	1,246253E+23	6,462940E+22	1,892547E+23
-2769	6,231227E+22	6,231120E+22	3,231393E+22	3,231427E+22	1,246235E+23	6,462819E+22	1,892517E+23
-2768	6,230967E+22	6,231220E+22	3,231480E+22	3,231377E+22	1,246219E+23	6,462857E+22	1,892504E+23
-2767	6,231278E+22	6,231247E+22	3,231373E+22	3,231475E+22	1,246252E+23	6,462849E+22	1,892537E+23
-2766	6,231155E+22	6,231126E+22	3,231332E+22	3,231271E+22	1,246228E+23	6,462603E+22	1,892488E+23
-2765	6,231156E+22	6,231257E+22	3,231345E+22	3,231278E+22	1,246241E+23	6,462623E+22	1,892504E+23
-2764	6,231418E+22	6,231242E+22	3,231199E+22	3,231290E+22	1,246266E+23	6,462489E+22	1,892515E+23
-2763	6,231175E+22	6,231283E+22	3,231198E+22	3,231109E+22	1,246246E+23	6,462307E+22	1,892477E+23
-2762	6,231328E+22	6,231408E+22	3,231173E+22	3,231224E+22	1,246274E+23	6,462397E+22	1,892513E+23
-2761	6,231409E+22	6,231296E+22	3,231076E+22	3,231150E+22	1,246270E+23	6,462226E+22	1,892493E+23
-2760	6,231174E+22	6,231342E+22	3,231192E+22	3,231046E+22	1,246252E+23	6,462238E+22	1,892475E+23
-2759	6,231443E+22	6,231380E+22	3,231182E+22	3,231223E+22	1,246282E+23	6,462406E+22	1,892523E+23
-2758	6,231337E+22	6,231227E+22	3,231173E+22	3,231153E+22	1,246256E+23	6,462325E+22	1,892489E+23
-2757	6,231128E+22	6,231317E+22	3,231297E+22	3,231249E+22	1,246245E+23	6,462547E+22	1,892499E+23
-2756	6,231325E+22	6,231259E+22	3,231268E+22	3,231428E+22	1,246258E+23	6,462695E+22	1,892528E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2755	6,231098E+22	6,231143E+22	3,231360E+22	3,231318E+22	1,246224E+23	6,462678E+22	1,892492E+23
-2754	6,231139E+22	6,231202E+22	3,231481E+22	3,231472E+22	1,246234E+23	6,462953E+22	1,892530E+23
-2753	6,231286E+22	6,231064E+22	3,231437E+22	3,231525E+22	1,246235E+23	6,462962E+22	1,892531E+23
-2752	6,230988E+22	6,231081E+22	3,231569E+22	3,231431E+22	1,246207E+23	6,463000E+22	1,892507E+23
-2751	6,231134E+22	6,231192E+22	3,231574E+22	3,231631E+22	1,246233E+23	6,463204E+22	1,892553E+23
-2750	6,231116E+22	6,231044E+22	3,231490E+22	3,231539E+22	1,246216E+23	6,463030E+22	1,892519E+23
-2749	6,230891E+22	6,231126E+22	3,231570E+22	3,231474E+22	1,246202E+23	6,463044E+22	1,892506E+23
-2748	6,231184E+22	6,231115E+22	3,231485E+22	3,231568E+22	1,246230E+23	6,463053E+22	1,892535E+23
-2747	6,231103E+22	6,231025E+22	3,231434E+22	3,231345E+22	1,246213E+23	6,462779E+22	1,892491E+23
-2746	6,231083E+22	6,231199E+22	3,231440E+22	3,231383E+22	1,246228E+23	6,462822E+22	1,892511E+23
-2745	6,231308E+22	6,231166E+22	3,231262E+22	3,231411E+22	1,246247E+23	6,462673E+22	1,892515E+23
-2744	6,231090E+22	6,231185E+22	3,231285E+22	3,231198E+22	1,246227E+23	6,462484E+22	1,892476E+23
-2743	6,231231E+22	6,231330E+22	3,231292E+22	3,231308E+22	1,246256E+23	6,462601E+22	1,892516E+23
-2742	6,231361E+22	6,231194E+22	3,231189E+22	3,231227E+22	1,246255E+23	6,462417E+22	1,892497E+23
-2741	6,231118E+22	6,231257E+22	3,231304E+22	3,231164E+22	1,246237E+23	6,462468E+22	1,892484E+23
-2740	6,231285E+22	6,231287E+22	3,231310E+22	3,231380E+22	1,246257E+23	6,462689E+22	1,892526E+23
-2739	6,231192E+22	6,231152E+22	3,231298E+22	3,231303E+22	1,246234E+23	6,462600E+22	1,892494E+23
-2738	6,231014E+22	6,231229E+22	3,231435E+22	3,231401E+22	1,246224E+23	6,462836E+22	1,892508E+23
-2737	6,231224E+22	6,231111E+22	3,231394E+22	3,231564E+22	1,246234E+23	6,462959E+22	1,892529E+23
-2736	6,231057E+22	6,230988E+22	3,231510E+22	3,231426E+22	1,246204E+23	6,462937E+22	1,892498E+23
-2735	6,231057E+22	6,231110E+22	3,231636E+22	3,231597E+22	1,246217E+23	6,463233E+22	1,892540E+23
-2734	6,231185E+22	6,230992E+22	3,231554E+22	3,231657E+22	1,246218E+23	6,463211E+22	1,892539E+23
-2733	6,230875E+22	6,231023E+22	3,231667E+22	3,231576E+22	1,246190E+23	6,463243E+22	1,892514E+23
-2732	6,230958E+22	6,231080E+22	3,231692E+22	3,231754E+22	1,246204E+23	6,463446E+22	1,892548E+23
-2731	6,231010E+22	6,230934E+22	3,231610E+22	3,231620E+22	1,246194E+23	6,463230E+22	1,892517E+23
-2730	6,230847E+22	6,231015E+22	3,231689E+22	3,231558E+22	1,246186E+23	6,463247E+22	1,892511E+23
-2729	6,231112E+22	6,230991E+22	3,231568E+22	3,231671E+22	1,246210E+23	6,463239E+22	1,892534E+23
-2728	6,231045E+22	6,230940E+22	3,231513E+22	3,231444E+22	1,246199E+23	6,462957E+22	1,892494E+23
-2727	6,230982E+22	6,231166E+22	3,231523E+22	3,231488E+22	1,246215E+23	6,463011E+22	1,892516E+23
-2726	6,231233E+22	6,231115E+22	3,231339E+22	3,231494E+22	1,246235E+23	6,462833E+22	1,892518E+23
-2725	6,231042E+22	6,231120E+22	3,231378E+22	3,231281E+22	1,246216E+23	6,462659E+22	1,892482E+23
-2724	6,231117E+22	6,231220E+22	3,231430E+22	3,231403E+22	1,246234E+23	6,462833E+22	1,892517E+23
-2723	6,231260E+22	6,231108E+22	3,231327E+22	3,231339E+22	1,246237E+23	6,462666E+22	1,892503E+23
-2722	6,230999E+22	6,231174E+22	3,231433E+22	3,231322E+22	1,246217E+23	6,462754E+22	1,892493E+23
-2721	6,231134E+22	6,231154E+22	3,231413E+22	3,231552E+22	1,246229E+23	6,462965E+22	1,892525E+23
-2720	6,231106E+22	6,230994E+22	3,231418E+22	3,231436E+22	1,246210E+23	6,462854E+22	1,892495E+23
-2719	6,230939E+22	6,231112E+22	3,231575E+22	3,231515E+22	1,246205E+23	6,463090E+22	1,892514E+23
-2718	6,231199E+22	6,231001E+22	3,231523E+22	3,231666E+22	1,246220E+23	6,463188E+22	1,892539E+23
-2717	6,231006E+22	6,230920E+22	3,231630E+22	3,231547E+22	1,246193E+23	6,463177E+22	1,892510E+23
-2716	6,230888E+22	6,231049E+22	3,231778E+22	3,231739E+22	1,246194E+23	6,463517E+22	1,892545E+23
-2715	6,231027E+22	6,230935E+22	3,231689E+22	3,231785E+22	1,246196E+23	6,463474E+22	1,892544E+23
-2714	6,230737E+22	6,230933E+22	3,231807E+22	3,231705E+22	1,246167E+23	6,463512E+22	1,892518E+23
-2713	6,230836E+22	6,230921E+22	3,231809E+22	3,231870E+22	1,246176E+23	6,463679E+22	1,892544E+23
-2712	6,230967E+22	6,230761E+22	3,231727E+22	3,231714E+22	1,246173E+23	6,463442E+22	1,892517E+23
-2711	6,230781E+22	6,230924E+22	3,231787E+22	3,231666E+22	1,246170E+23	6,463453E+22	1,892516E+23
-2710	6,231052E+22	6,230928E+22	3,231622E+22	3,231779E+22	1,246198E+23	6,463401E+22	1,892538E+23
-2709	6,230979E+22	6,230904E+22	3,231561E+22	3,231547E+22	1,246188E+23	6,463108E+22	1,892499E+23
-2708	6,230857E+22	6,231098E+22	3,231620E+22	3,231568E+22	1,246196E+23	6,463188E+22	1,892514E+23
-2707	6,231154E+22	6,231047E+22	3,231459E+22	3,231547E+22	1,246220E+23	6,463007E+22	1,892521E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2706	6,230983E+22	6,231040E+22	3,231516E+22	3,231372E+22	1,246202E+23	6,462888E+22	1,892491E+23
-2705	6,230996E+22	6,231100E+22	3,231547E+22	3,231532E+22	1,246210E+23	6,463079E+22	1,892517E+23
-2704	6,231156E+22	6,230988E+22	3,231445E+22	3,231484E+22	1,246214E+23	6,462929E+22	1,892507E+23
-2703	6,230879E+22	6,231087E+22	3,231549E+22	3,231472E+22	1,246197E+23	6,463021E+22	1,892499E+23
-2702	6,231059E+22	6,231038E+22	3,231516E+22	3,231677E+22	1,246210E+23	6,463193E+22	1,892529E+23
-2701	6,231075E+22	6,230892E+22	3,231532E+22	3,231548E+22	1,246197E+23	6,463080E+22	1,892505E+23
-2700	6,230844E+22	6,230994E+22	3,231732E+22	3,231625E+22	1,246184E+23	6,463357E+22	1,892520E+23
-2699	6,231082E+22	6,230937E+22	3,231679E+22	3,231786E+22	1,246202E+23	6,463465E+22	1,892548E+23
-2698	6,230863E+22	6,230869E+22	3,231778E+22	3,231710E+22	1,246173E+23	6,463489E+22	1,892522E+23
-2697	6,230690E+22	6,230924E+22	3,231903E+22	3,231902E+22	1,246161E+23	6,463805E+22	1,892542E+23
-2696	6,230908E+22	6,230772E+22	3,231822E+22	3,231912E+22	1,246168E+23	6,463734E+22	1,892541E+23
-2695	6,230655E+22	6,230792E+22	3,231933E+22	3,231810E+22	1,246145E+23	6,463743E+22	1,892519E+23
-2694	6,230812E+22	6,230784E+22	3,231899E+22	3,231964E+22	1,246160E+23	6,463863E+22	1,892546E+23
-2693	6,230944E+22	6,230696E+22	3,231791E+22	3,231815E+22	1,246164E+23	6,463607E+22	1,892525E+23
-2692	6,230667E+22	6,230884E+22	3,231870E+22	3,231770E+22	1,246155E+23	6,463640E+22	1,892519E+23
-2691	6,230949E+22	6,230918E+22	3,231714E+22	3,231858E+22	1,246187E+23	6,463572E+22	1,892544E+23
-2690	6,230894E+22	6,230871E+22	3,231674E+22	3,231629E+22	1,246177E+23	6,463303E+22	1,892507E+23
-2689	6,230750E+22	6,230980E+22	3,231741E+22	3,231651E+22	1,246173E+23	6,463392E+22	1,892512E+23
-2688	6,231094E+22	6,230900E+22	3,231595E+22	3,231638E+22	1,246199E+23	6,463233E+22	1,892523E+23
-2687	6,230878E+22	6,230943E+22	3,231639E+22	3,231504E+22	1,246182E+23	6,463144E+22	1,892497E+23
-2686	6,230900E+22	6,230995E+22	3,231628E+22	3,231682E+22	1,246190E+23	6,463310E+22	1,892521E+23
-2685	6,231073E+22	6,230890E+22	3,231517E+22	3,231623E+22	1,246196E+23	6,463140E+22	1,892510E+23
-2684	6,230763E+22	6,230974E+22	3,231666E+22	3,231586E+22	1,246174E+23	6,463252E+22	1,892499E+23
-2683	6,230997E+22	6,230947E+22	3,231652E+22	3,231760E+22	1,246194E+23	6,463413E+22	1,892536E+23
-2682	6,231010E+22	6,230821E+22	3,231686E+22	3,231665E+22	1,246183E+23	6,463351E+22	1,892518E+23
-2681	6,230697E+22	6,230897E+22	3,231879E+22	3,231773E+22	1,246159E+23	6,463652E+22	1,892525E+23
-2680	6,230942E+22	6,230828E+22	3,231831E+22	3,231940E+22	1,246177E+23	6,463771E+22	1,892554E+23
-2679	6,230703E+22	6,230777E+22	3,231926E+22	3,231868E+22	1,246148E+23	6,463794E+22	1,892527E+23
-2678	6,230588E+22	6,230780E+22	3,232019E+22	3,232033E+22	1,246137E+23	6,464051E+22	1,892542E+23
-2677	6,230863E+22	6,230633E+22	3,231925E+22	3,232021E+22	1,246150E+23	6,463946E+22	1,892544E+23
-2676	6,230577E+22	6,230664E+22	3,232053E+22	3,231916E+22	1,246124E+23	6,463969E+22	1,892521E+23
-2675	6,230735E+22	6,230728E+22	3,231999E+22	3,232061E+22	1,246146E+23	6,464060E+22	1,892552E+23
-2674	6,230853E+22	6,230679E+22	3,231884E+22	3,231934E+22	1,246153E+23	6,463818E+22	1,892535E+23
-2673	6,230531E+22	6,230803E+22	3,231961E+22	3,231871E+22	1,246133E+23	6,463831E+22	1,892517E+23
-2672	6,230870E+22	6,230808E+22	3,231832E+22	3,231926E+22	1,246168E+23	6,463759E+22	1,892544E+23
-2671	6,230825E+22	6,230782E+22	3,231801E+22	3,231704E+22	1,246161E+23	6,463505E+22	1,892511E+23
-2670	6,230691E+22	6,230862E+22	3,231837E+22	3,231745E+22	1,246155E+23	6,463582E+22	1,892513E+23
-2669	6,231022E+22	6,230827E+22	3,231672E+22	3,231762E+22	1,246185E+23	6,463433E+22	1,892528E+23
-2668	6,230741E+22	6,230860E+22	3,231734E+22	3,231641E+22	1,246160E+23	6,463375E+22	1,892498E+23
-2667	6,230787E+22	6,230927E+22	3,231730E+22	3,231795E+22	1,246171E+23	6,463525E+22	1,892524E+23
-2666	6,230999E+22	6,230822E+22	3,231640E+22	3,231740E+22	1,246182E+23	6,463380E+22	1,892520E+23
-2665	6,230667E+22	6,230836E+22	3,231805E+22	3,231695E+22	1,246150E+23	6,463500E+22	1,892500E+23
-2664	6,230928E+22	6,230816E+22	3,231814E+22	3,231877E+22	1,246174E+23	6,463691E+22	1,892543E+23
-2663	6,230881E+22	6,230747E+22	3,231840E+22	3,231820E+22	1,246163E+23	6,463660E+22	1,892529E+23
-2662	6,230556E+22	6,230789E+22	3,231997E+22	3,231941E+22	1,246135E+23	6,463939E+22	1,892528E+23
-2661	6,230819E+22	6,230714E+22	3,231940E+22	3,232088E+22	1,246153E+23	6,464029E+22	1,892556E+23
-2660	6,230572E+22	6,230631E+22	3,232066E+22	3,231991E+22	1,246120E+23	6,464057E+22	1,892526E+23
-2659	6,230524E+22	6,230660E+22	3,232151E+22	3,232123E+22	1,246118E+23	6,464274E+22	1,892546E+23
-2658	6,230813E+22	6,230559E+22	3,232047E+22	3,232134E+22	1,246137E+23	6,464182E+22	1,892555E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2657	6,230464E+22	6,230583E+22	3,232156E+22	3,232040E+22	1,246105E+23	6,464196E+22	1,892524E+23
-2656	6,230645E+22	6,230658E+22	3,232105E+22	3,232171E+22	1,246130E+23	6,464277E+22	1,892558E+23
-2655	6,230735E+22	6,230640E+22	3,231996E+22	3,232034E+22	1,246137E+23	6,464031E+22	1,892541E+23
-2654	6,230460E+22	6,230706E+22	3,232056E+22	3,231956E+22	1,246117E+23	6,464012E+22	1,892518E+23
-2653	6,230821E+22	6,230696E+22	3,231926E+22	3,231997E+22	1,246152E+23	6,463923E+22	1,892544E+23
-2652	6,230718E+22	6,230671E+22	3,231916E+22	3,231807E+22	1,246139E+23	6,463723E+22	1,892511E+23
-2651	6,230585E+22	6,230793E+22	3,231927E+22	3,231861E+22	1,246138E+23	6,463788E+22	1,892517E+23
-2650	6,230905E+22	6,230772E+22	3,231757E+22	3,231906E+22	1,246168E+23	6,463662E+22	1,892534E+23
-2649	6,230612E+22	6,230737E+22	3,231826E+22	3,231767E+22	1,246135E+23	6,463594E+22	1,892494E+23
-2648	6,230736E+22	6,230787E+22	3,231853E+22	3,231884E+22	1,246152E+23	6,463737E+22	1,892526E+23
-2647	6,230943E+22	6,230729E+22	3,231785E+22	3,231834E+22	1,246167E+23	6,463619E+22	1,892529E+23
-2646	6,230610E+22	6,230731E+22	3,231931E+22	3,231816E+22	1,246134E+23	6,463747E+22	1,892509E+23
-2645	6,230823E+22	6,230748E+22	3,231935E+22	3,232015E+22	1,246157E+23	6,463950E+22	1,892552E+23
-2644	6,230707E+22	6,230669E+22	3,231989E+22	3,231982E+22	1,246138E+23	6,463971E+22	1,892535E+23
-2643	6,230410E+22	6,230697E+22	3,232142E+22	3,232078E+22	1,246111E+23	6,464220E+22	1,892533E+23
-2642	6,230714E+22	6,230612E+22	3,232089E+22	3,232226E+22	1,246133E+23	6,464315E+22	1,892564E+23
-2641	6,230472E+22	6,230458E+22	3,232210E+22	3,232119E+22	1,246093E+23	6,464328E+22	1,892526E+23
-2640	6,230463E+22	6,230519E+22	3,232288E+22	3,232247E+22	1,246098E+23	6,464535E+22	1,892552E+23
-2639	6,230709E+22	6,230507E+22	3,232166E+22	3,232273E+22	1,246122E+23	6,464439E+22	1,892565E+23
-2638	6,230364E+22	6,230502E+22	3,232232E+22	3,232168E+22	1,246087E+23	6,464399E+22	1,892526E+23
-2637	6,230558E+22	6,230585E+22	3,232184E+22	3,232257E+22	1,246114E+23	6,464441E+22	1,892558E+23
-2636	6,230635E+22	6,230542E+22	3,232108E+22	3,232106E+22	1,246118E+23	6,464214E+22	1,892539E+23
-2635	6,230390E+22	6,230615E+22	3,232164E+22	3,232016E+22	1,246100E+23	6,464180E+22	1,892518E+23
-2634	6,230740E+22	6,230644E+22	3,232026E+22	3,232101E+22	1,246138E+23	6,464127E+22	1,892551E+23
-2633	6,230584E+22	6,230570E+22	3,232005E+22	3,231936E+22	1,246115E+23	6,463941E+22	1,892510E+23
-2632	6,230494E+22	6,230691E+22	3,232021E+22	3,231983E+22	1,246119E+23	6,464004E+22	1,892519E+23
-2631	6,230813E+22	6,230700E+22	3,231866E+22	3,232015E+22	1,246151E+23	6,463882E+22	1,892539E+23
-2630	6,230571E+22	6,230615E+22	3,231925E+22	3,231865E+22	1,246119E+23	6,463789E+22	1,892498E+23
-2629	6,230707E+22	6,230680E+22	3,231968E+22	3,231968E+22	1,246139E+23	6,463936E+22	1,892532E+23
-2628	6,230833E+22	6,230645E+22	3,231934E+22	3,231960E+22	1,246148E+23	6,463894E+22	1,892537E+23
-2627	6,230471E+22	6,230675E+22	3,232069E+22	3,231963E+22	1,246115E+23	6,464032E+22	1,892518E+23
-2626	6,230659E+22	6,230691E+22	3,232072E+22	3,232183E+22	1,246135E+23	6,464256E+22	1,892561E+23
-2625	6,230534E+22	6,230515E+22	3,232136E+22	3,232141E+22	1,246105E+23	6,464278E+22	1,892533E+23
-2624	6,230330E+22	6,230519E+22	3,232294E+22	3,232206E+22	1,246085E+23	6,464500E+22	1,892535E+23
-2623	6,230635E+22	6,230484E+22	3,232239E+22	3,232350E+22	1,246112E+23	6,464589E+22	1,892571E+23
-2622	6,230419E+22	6,230338E+22	3,232312E+22	3,232257E+22	1,246076E+23	6,464569E+22	1,892533E+23
-2621	6,230390E+22	6,230448E+22	3,232371E+22	3,232365E+22	1,246084E+23	6,464736E+22	1,892557E+23
-2620	6,230571E+22	6,230456E+22	3,232276E+22	3,232392E+22	1,246103E+23	6,464668E+22	1,892569E+23
-2619	6,230260E+22	6,230453E+22	3,232340E+22	3,232251E+22	1,246071E+23	6,464591E+22	1,892530E+23
-2618	6,230467E+22	6,230522E+22	3,232301E+22	3,232335E+22	1,246099E+23	6,464636E+22	1,892563E+23
-2617	6,230530E+22	6,230403E+22	3,232232E+22	3,232199E+22	1,246093E+23	6,464430E+22	1,892536E+23
-2616	6,230315E+22	6,230483E+22	3,232274E+22	3,232124E+22	1,246080E+23	6,464398E+22	1,892520E+23
-2615	6,230620E+22	6,230575E+22	3,232122E+22	3,232232E+22	1,246119E+23	6,464353E+22	1,892555E+23
-2614	6,230504E+22	6,230458E+22	3,232064E+22	3,232066E+22	1,246096E+23	6,464131E+22	1,892509E+23
-2613	6,230448E+22	6,230587E+22	3,232090E+22	3,232065E+22	1,246103E+23	6,464155E+22	1,892519E+23
-2612	6,230751E+22	6,230609E+22	3,231986E+22	3,232094E+22	1,246136E+23	6,464079E+22	1,892544E+23
-2611	6,230524E+22	6,230550E+22	3,232049E+22	3,231943E+22	1,246107E+23	6,463992E+22	1,892507E+23
-2610	6,230606E+22	6,230658E+22	3,232102E+22	3,232093E+22	1,246126E+23	6,464195E+22	1,892546E+23
-2609	6,230659E+22	6,230557E+22	3,232077E+22	3,232124E+22	1,246122E+23	6,464201E+22	1,892542E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2608	6,230325E+22	6,230556E+22	3,232222E+22	3,232127E+22	1,246088E+23	6,464349E+22	1,892523E+23
-2607	6,230515E+22	6,230580E+22	3,232234E+22	3,232337E+22	1,246109E+23	6,464571E+22	1,892566E+23
-2606	6,230462E+22	6,230326E+22	3,232263E+22	3,232282E+22	1,246079E+23	6,464546E+22	1,892533E+23
-2605	6,230291E+22	6,230359E+22	3,232412E+22	3,232322E+22	1,246065E+23	6,464733E+22	1,892538E+23
-2604	6,230539E+22	6,230385E+22	3,232366E+22	3,232488E+22	1,246092E+23	6,464854E+22	1,892578E+23
-2603	6,230309E+22	6,230289E+22	3,232412E+22	3,232385E+22	1,246060E+23	6,464797E+22	1,892540E+23
-2602	6,230268E+22	6,230424E+22	3,232474E+22	3,232484E+22	1,246069E+23	6,464958E+22	1,892565E+23
-2601	6,230435E+22	6,230341E+22	3,232401E+22	3,232488E+22	1,246078E+23	6,464890E+22	1,892567E+23
-2600	6,230191E+22	6,230320E+22	3,232473E+22	3,232327E+22	1,246051E+23	6,464799E+22	1,892531E+23
-2599	6,230377E+22	6,230430E+22	3,232432E+22	3,232422E+22	1,246081E+23	6,464854E+22	1,892566E+23
-2598	6,230453E+22	6,230287E+22	3,232310E+22	3,232321E+22	1,246074E+23	6,464631E+22	1,892537E+23
-2597	6,230243E+22	6,230398E+22	3,232333E+22	3,232236E+22	1,246064E+23	6,464569E+22	1,892521E+23
-2596	6,230513E+22	6,230506E+22	3,232209E+22	3,232346E+22	1,246102E+23	6,464555E+22	1,892557E+23
-2595	6,230445E+22	6,230400E+22	3,232152E+22	3,232148E+22	1,246084E+23	6,464300E+22	1,892514E+23
-2594	6,230402E+22	6,230537E+22	3,232200E+22	3,232141E+22	1,246094E+23	6,464341E+22	1,892528E+23
-2593	6,230655E+22	6,230498E+22	3,232127E+22	3,232198E+22	1,246115E+23	6,464325E+22	1,892548E+23
-2592	6,230424E+22	6,230458E+22	3,232193E+22	3,232082E+22	1,246088E+23	6,464275E+22	1,892516E+23
-2591	6,230427E+22	6,230592E+22	3,232248E+22	3,232253E+22	1,246102E+23	6,464500E+22	1,892552E+23
-2590	6,230522E+22	6,230411E+22	3,232192E+22	3,232296E+22	1,246093E+23	6,464489E+22	1,892542E+23
-2589	6,230246E+22	6,230378E+22	3,232337E+22	3,232250E+22	1,246062E+23	6,464587E+22	1,892521E+23
-2588	6,230428E+22	6,230420E+22	3,232379E+22	3,232456E+22	1,246085E+23	6,464834E+22	1,892568E+23
-2587	6,230413E+22	6,230221E+22	3,232387E+22	3,232395E+22	1,246063E+23	6,464782E+22	1,892542E+23
-2586	6,230207E+22	6,230323E+22	3,232525E+22	3,232452E+22	1,246053E+23	6,464977E+22	1,892551E+23
-2585	6,230390E+22	6,230311E+22	3,232498E+22	3,232631E+22	1,246070E+23	6,465129E+22	1,892583E+23
-2584	6,230191E+22	6,230212E+22	3,232551E+22	3,232508E+22	1,246040E+23	6,465059E+22	1,892546E+23
-2583	6,230131E+22	6,230353E+22	3,232627E+22	3,232582E+22	1,246048E+23	6,465209E+22	1,892569E+23
-2582	6,230360E+22	6,230189E+22	3,232521E+22	3,232593E+22	1,246055E+23	6,465114E+22	1,892566E+23
-2581	6,230138E+22	6,230171E+22	3,232576E+22	3,232421E+22	1,246031E+23	6,464997E+22	1,892531E+23
-2580	6,230261E+22	6,230339E+22	3,232532E+22	3,232550E+22	1,246060E+23	6,465082E+22	1,892568E+23
-2579	6,230354E+22	6,230230E+22	3,232373E+22	3,232441E+22	1,246058E+23	6,464814E+22	1,892540E+23
-2578	6,230163E+22	6,230362E+22	3,232397E+22	3,232339E+22	1,246053E+23	6,464736E+22	1,892526E+23
-2577	6,230430E+22	6,230397E+22	3,232312E+22	3,232429E+22	1,246083E+23	6,464740E+22	1,892557E+23
-2576	6,230409E+22	6,230301E+22	3,232273E+22	3,232217E+22	1,246071E+23	6,464490E+22	1,892520E+23
-2575	6,230319E+22	6,230485E+22	3,232343E+22	3,232230E+22	1,246080E+23	6,464573E+22	1,892538E+23
-2574	6,230552E+22	6,230397E+22	3,232236E+22	3,232334E+22	1,246095E+23	6,464570E+22	1,892552E+23
-2573	6,230307E+22	6,230351E+22	3,232304E+22	3,232220E+22	1,246066E+23	6,464524E+22	1,892518E+23
-2572	6,230275E+22	6,230485E+22	3,232386E+22	3,232402E+22	1,246076E+23	6,464788E+22	1,892555E+23
-2571	6,230424E+22	6,230288E+22	3,232318E+22	3,232421E+22	1,246071E+23	6,464739E+22	1,892545E+23
-2570	6,230188E+22	6,230270E+22	3,232466E+22	3,232369E+22	1,246046E+23	6,464835E+22	1,892529E+23
-2569	6,230333E+22	6,230271E+22	3,232528E+22	3,232594E+22	1,246060E+23	6,465121E+22	1,892573E+23
-2568	6,230313E+22	6,230133E+22	3,232524E+22	3,232545E+22	1,246045E+23	6,465070E+22	1,892552E+23
-2567	6,230053E+22	6,230279E+22	3,232669E+22	3,232598E+22	1,246033E+23	6,465267E+22	1,892560E+23
-2566	6,230265E+22	6,230191E+22	3,232618E+22	3,232771E+22	1,246046E+23	6,465389E+22	1,892584E+23
-2565	6,230112E+22	6,230074E+22	3,232676E+22	3,232602E+22	1,246019E+23	6,465278E+22	1,892546E+23
-2564	6,230030E+22	6,230231E+22	3,232766E+22	3,232680E+22	1,246026E+23	6,465446E+22	1,892571E+23
-2563	6,230284E+22	6,230100E+22	3,232620E+22	3,232697E+22	1,246038E+23	6,465316E+22	1,892570E+23
-2562	6,230054E+22	6,230129E+22	3,232649E+22	3,232540E+22	1,246018E+23	6,465189E+22	1,892537E+23
-2561	6,230136E+22	6,230247E+22	3,232622E+22	3,232677E+22	1,246038E+23	6,465299E+22	1,892568E+23
-2560	6,230281E+22	6,230159E+22	3,232468E+22	3,232541E+22	1,246044E+23	6,465009E+22	1,892545E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2559	6,230085E+22	6,230301E+22	3,232514E+22	3,232406E+22	1,246039E+23	6,464921E+22	1,892531E+23
-2558	6,230389E+22	6,230270E+22	3,232418E+22	3,232510E+22	1,246066E+23	6,464928E+22	1,892559E+23
-2557	6,230364E+22	6,230183E+22	3,232383E+22	3,232304E+22	1,246055E+23	6,464687E+22	1,892523E+23
-2556	6,230170E+22	6,230410E+22	3,232467E+22	3,232365E+22	1,246058E+23	6,464832E+22	1,892541E+23
-2555	6,230410E+22	6,230326E+22	3,232338E+22	3,232476E+22	1,246074E+23	6,464814E+22	1,892555E+23
-2554	6,230193E+22	6,230263E+22	3,232411E+22	3,232355E+22	1,246046E+23	6,464766E+22	1,892522E+23
-2553	6,230163E+22	6,230315E+22	3,232531E+22	3,232528E+22	1,246048E+23	6,465060E+22	1,892554E+23
-2552	6,230364E+22	6,230152E+22	3,232465E+22	3,232539E+22	1,246052E+23	6,465005E+22	1,892552E+23
-2551	6,230092E+22	6,230197E+22	3,232618E+22	3,232499E+22	1,246029E+23	6,465117E+22	1,892541E+23
-2550	6,230227E+22	6,230172E+22	3,232647E+22	3,232756E+22	1,246040E+23	6,465404E+22	1,892580E+23
-2549	6,230204E+22	6,230041E+22	3,232651E+22	3,232686E+22	1,246025E+23	6,465337E+22	1,892558E+23
-2548	6,229904E+22	6,230201E+22	3,232822E+22	3,232732E+22	1,246011E+23	6,465555E+22	1,892566E+23
-2547	6,230165E+22	6,230090E+22	3,232751E+22	3,232873E+22	1,246025E+23	6,465624E+22	1,892588E+23
-2546	6,230043E+22	6,229976E+22	3,232800E+22	3,232707E+22	1,246002E+23	6,465508E+22	1,892553E+23
-2545	6,229915E+22	6,230089E+22	3,232895E+22	3,232810E+22	1,246000E+23	6,465705E+22	1,892571E+23
-2544	6,230168E+22	6,230016E+22	3,232716E+22	3,232830E+22	1,246018E+23	6,465547E+22	1,892573E+23
-2543	6,229935E+22	6,230078E+22	3,232742E+22	3,232658E+22	1,246001E+23	6,465400E+22	1,892541E+23
-2542	6,230071E+22	6,230117E+22	3,232693E+22	3,232773E+22	1,246019E+23	6,465466E+22	1,892565E+23
-2541	6,230257E+22	6,230035E+22	3,232558E+22	3,232590E+22	1,246029E+23	6,465148E+22	1,892544E+23
-2540	6,230027E+22	6,230225E+22	3,232633E+22	3,232472E+22	1,246025E+23	6,465104E+22	1,892536E+23
-2539	6,230310E+22	6,230220E+22	3,232516E+22	3,232594E+22	1,246053E+23	6,465109E+22	1,892564E+23
-2538	6,230253E+22	6,230163E+22	3,232477E+22	3,232430E+22	1,246042E+23	6,464906E+22	1,892532E+23
-2537	6,230004E+22	6,230304E+22	3,232596E+22	3,232516E+22	1,246031E+23	6,465111E+22	1,892542E+23
-2536	6,230279E+22	6,230223E+22	3,232471E+22	3,232614E+22	1,246050E+23	6,465084E+22	1,892559E+23
-2535	6,230094E+22	6,230151E+22	3,232562E+22	3,232476E+22	1,246024E+23	6,465037E+22	1,892528E+23
-2534	6,230108E+22	6,230133E+22	3,232661E+22	3,232666E+22	1,246024E+23	6,465327E+22	1,892557E+23
-2533	6,230306E+22	6,230016E+22	3,232595E+22	3,232676E+22	1,246032E+23	6,465271E+22	1,892559E+23
-2532	6,229952E+22	6,230129E+22	3,232756E+22	3,232660E+22	1,246008E+23	6,465416E+22	1,892550E+23
-2531	6,230094E+22	6,230109E+22	3,232767E+22	3,232900E+22	1,246020E+23	6,465667E+22	1,892587E+23
-2530	6,230100E+22	6,229971E+22	3,232777E+22	3,232810E+22	1,246007E+23	6,465587E+22	1,892566E+23
-2529	6,229780E+22	6,230046E+22	3,232985E+22	3,232848E+22	1,245983E+23	6,465833E+22	1,892566E+23
-2528	6,230074E+22	6,229974E+22	3,232898E+22	3,232983E+22	1,246005E+23	6,465881E+22	1,892593E+23
-2527	6,229930E+22	6,229893E+22	3,232931E+22	3,232826E+22	1,245982E+23	6,465757E+22	1,892558E+23
-2526	6,229811E+22	6,229965E+22	3,232979E+22	3,232952E+22	1,245978E+23	6,465930E+22	1,892571E+23
-2525	6,230095E+22	6,229908E+22	3,232799E+22	3,232937E+22	1,246000E+23	6,465735E+22	1,892574E+23
-2524	6,229841E+22	6,230008E+22	3,232842E+22	3,232746E+22	1,245985E+23	6,465588E+22	1,892544E+23
-2523	6,230029E+22	6,230046E+22	3,232780E+22	3,232831E+22	1,246008E+23	6,465611E+22	1,892569E+23
-2522	6,230223E+22	6,229982E+22	3,232651E+22	3,232659E+22	1,246021E+23	6,465310E+22	1,892552E+23
-2521	6,229905E+22	6,230131E+22	3,232756E+22	3,232589E+22	1,246004E+23	6,465345E+22	1,892538E+23
-2520	6,230154E+22	6,230169E+22	3,232626E+22	3,232728E+22	1,246032E+23	6,465354E+22	1,892568E+23
-2519	6,230095E+22	6,230096E+22	3,232600E+22	3,232570E+22	1,246019E+23	6,465170E+22	1,892536E+23
-2518	6,229906E+22	6,230130E+22	3,232704E+22	3,232654E+22	1,246004E+23	6,465358E+22	1,892539E+23
-2517	6,230239E+22	6,230046E+22	3,232595E+22	3,232716E+22	1,246028E+23	6,465311E+22	1,892560E+23
-2516	6,230031E+22	6,230040E+22	3,232698E+22	3,232595E+22	1,246007E+23	6,465293E+22	1,892536E+23
-2515	6,230041E+22	6,230064E+22	3,232768E+22	3,232792E+22	1,246010E+23	6,465560E+22	1,892566E+23
-2514	6,230207E+22	6,229993E+22	3,232708E+22	3,232820E+22	1,246020E+23	6,465528E+22	1,892573E+23
-2513	6,229797E+22	6,230039E+22	3,232917E+22	3,232816E+22	1,245984E+23	6,465733E+22	1,892557E+23
-2512	6,229942E+22	6,230026E+22	3,232931E+22	3,233022E+22	1,245997E+23	6,465954E+22	1,892592E+23
-2511	6,229980E+22	6,229865E+22	3,232955E+22	3,232928E+22	1,245984E+23	6,465882E+22	1,892573E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2510	6,229694E+22	6,229848E+22	3,233121E+22	3,232987E+22	1,245954E+23	6,466107E+22	1,892565E+23
-2509	6,229977E+22	6,229818E+22	3,233011E+22	3,233116E+22	1,245979E+23	6,466128E+22	1,892592E+23
-2508	6,229799E+22	6,229812E+22	3,233026E+22	3,232973E+22	1,245961E+23	6,466000E+22	1,892561E+23
-2507	6,229726E+22	6,229885E+22	3,233040E+22	3,233060E+22	1,245961E+23	6,466100E+22	1,892571E+23
-2506	6,230050E+22	6,229854E+22	3,232871E+22	3,233010E+22	1,245990E+23	6,465881E+22	1,892579E+23
-2505	6,229776E+22	6,229902E+22	3,232959E+22	3,232815E+22	1,245968E+23	6,465774E+22	1,892545E+23
-2504	6,229946E+22	6,229998E+22	3,232895E+22	3,232897E+22	1,245994E+23	6,465793E+22	1,892574E+23
-2503	6,230105E+22	6,229958E+22	3,232772E+22	3,232763E+22	1,246006E+23	6,465535E+22	1,892560E+23
-2502	6,229777E+22	6,230014E+22	3,232852E+22	3,232736E+22	1,245979E+23	6,465588E+22	1,892538E+23
-2501	6,230043E+22	6,230043E+22	3,232735E+22	3,232854E+22	1,246009E+23	6,465589E+22	1,892567E+23
-2500	6,229991E+22	6,229983E+22	3,232725E+22	3,232691E+22	1,245997E+23	6,465416E+22	1,892539E+23
-2499	6,229872E+22	6,229999E+22	3,232807E+22	3,232756E+22	1,245987E+23	6,465563E+22	1,892543E+23
-2498	6,230215E+22	6,229956E+22	3,232704E+22	3,232828E+22	1,246017E+23	6,465532E+22	1,892570E+23
-2497	6,229913E+22	6,229941E+22	3,232837E+22	3,232746E+22	1,245985E+23	6,465583E+22	1,892544E+23
-2496	6,229887E+22	6,230028E+22	3,232904E+22	3,232938E+22	1,245991E+23	6,465843E+22	1,892576E+23
-2495	6,230052E+22	6,229930E+22	3,232868E+22	3,232961E+22	1,245998E+23	6,465828E+22	1,892581E+23
-2494	6,229673E+22	6,229861E+22	3,233070E+22	3,232959E+22	1,245953E+23	6,466028E+22	1,892556E+23
-2493	6,229855E+22	6,229847E+22	3,233089E+22	3,233135E+22	1,245970E+23	6,466224E+22	1,892593E+23
-2492	6,229866E+22	6,229739E+22	3,233101E+22	3,233065E+22	1,245960E+23	6,466166E+22	1,892577E+23
-2491	6,229603E+22	6,229749E+22	3,233208E+22	3,233127E+22	1,245935E+23	6,466336E+22	1,892569E+23
-2490	6,229892E+22	6,229761E+22	3,233086E+22	3,233250E+22	1,245965E+23	6,466336E+22	1,892599E+23
-2489	6,229687E+22	6,229721E+22	3,233134E+22	3,233096E+22	1,245941E+23	6,466230E+22	1,892564E+23
-2488	6,229640E+22	6,229837E+22	3,233148E+22	3,233131E+22	1,245948E+23	6,466279E+22	1,892576E+23
-2487	6,229987E+22	6,229798E+22	3,233004E+22	3,233074E+22	1,245978E+23	6,466078E+22	1,892586E+23
-2486	6,229709E+22	6,229770E+22	3,233071E+22	3,232918E+22	1,245948E+23	6,465989E+22	1,892547E+23
-2485	6,229836E+22	6,229895E+22	3,233001E+22	3,233006E+22	1,245973E+23	6,466007E+22	1,892574E+23
-2484	6,229954E+22	6,229890E+22	3,232875E+22	3,232903E+22	1,245984E+23	6,465778E+22	1,892562E+23
-2483	6,229690E+22	6,229900E+22	3,232925E+22	3,232854E+22	1,245959E+23	6,465779E+22	1,892537E+23
-2482	6,230001E+22	6,229935E+22	3,232823E+22	3,232947E+22	1,245994E+23	6,465770E+22	1,892571E+23
-2481	6,229940E+22	6,229846E+22	3,232853E+22	3,232797E+22	1,245979E+23	6,465650E+22	1,892544E+23
-2480	6,229795E+22	6,229938E+22	3,232927E+22	3,232852E+22	1,245973E+23	6,465780E+22	1,892551E+23
-2479	6,230099E+22	6,229932E+22	3,232844E+22	3,232960E+22	1,246003E+23	6,465804E+22	1,892583E+23
-2478	6,229782E+22	6,229828E+22	3,232969E+22	3,232912E+22	1,245961E+23	6,465880E+22	1,892549E+23
-2477	6,229741E+22	6,229904E+22	3,233061E+22	3,233074E+22	1,245964E+23	6,466134E+22	1,892578E+23
-2476	6,229911E+22	6,229815E+22	3,233038E+22	3,233102E+22	1,245973E+23	6,466139E+22	1,892587E+23
-2475	6,229601E+22	6,229695E+22	3,233205E+22	3,233089E+22	1,245930E+23	6,466294E+22	1,892559E+23
-2474	6,229781E+22	6,229723E+22	3,233208E+22	3,233273E+22	1,245950E+23	6,466481E+22	1,892599E+23
-2473	6,229731E+22	6,229616E+22	3,233224E+22	3,233233E+22	1,245935E+23	6,466457E+22	1,892580E+23
-2472	6,229464E+22	6,229695E+22	3,233305E+22	3,233261E+22	1,245916E+23	6,466566E+22	1,892573E+23
-2471	6,229792E+22	6,229705E+22	3,233204E+22	3,233357E+22	1,245950E+23	6,466561E+22	1,892606E+23
-2470	6,229628E+22	6,229577E+22	3,233245E+22	3,233187E+22	1,245921E+23	6,466432E+22	1,892564E+23
-2469	6,229595E+22	6,229717E+22	3,233273E+22	3,233187E+22	1,245931E+23	6,466460E+22	1,892577E+23
-2468	6,229893E+22	6,229739E+22	3,233125E+22	3,233164E+22	1,245963E+23	6,466289E+22	1,892592E+23
-2467	6,229618E+22	6,229701E+22	3,233149E+22	3,233033E+22	1,245932E+23	6,466182E+22	1,892550E+23
-2466	6,229735E+22	6,229840E+22	3,233078E+22	3,233124E+22	1,245958E+23	6,466202E+22	1,892578E+23
-2465	6,229824E+22	6,229779E+22	3,232988E+22	3,233030E+22	1,245960E+23	6,466018E+22	1,892562E+23
-2464	6,229605E+22	6,229820E+22	3,233033E+22	3,232942E+22	1,245942E+23	6,465975E+22	1,892540E+23
-2463	6,229955E+22	6,229839E+22	3,232954E+22	3,233039E+22	1,245979E+23	6,465994E+22	1,892579E+23
-2462	6,229868E+22	6,229701E+22	3,232968E+22	3,232932E+22	1,245957E+23	6,465900E+22	1,892547E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2461	6,229682E+22	6,229845E+22	3,233050E+22	3,232986E+22	1,245953E+23	6,466036E+22	1,892556E+23
-2460	6,229937E+22	6,229869E+22	3,232981E+22	3,233114E+22	1,245981E+23	6,466095E+22	1,892590E+23
-2459	6,229674E+22	6,229709E+22	3,233091E+22	3,233053E+22	1,245938E+23	6,466144E+22	1,892553E+23
-2458	6,229659E+22	6,229777E+22	3,233197E+22	3,233189E+22	1,245944E+23	6,466386E+22	1,892582E+23
-2457	6,229803E+22	6,229657E+22	3,233201E+22	3,233242E+22	1,245946E+23	6,466443E+22	1,892590E+23
-2456	6,229486E+22	6,229609E+22	3,233336E+22	3,233221E+22	1,245910E+23	6,466557E+22	1,892565E+23
-2455	6,229663E+22	6,229658E+22	3,233340E+22	3,233422E+22	1,245932E+23	6,466762E+22	1,892608E+23
-2454	6,229618E+22	6,229490E+22	3,233337E+22	3,233391E+22	1,245911E+23	6,466728E+22	1,892584E+23
-2453	6,229374E+22	6,229586E+22	3,233430E+22	3,233362E+22	1,245896E+23	6,466791E+22	1,892575E+23
-2452	6,229708E+22	6,229627E+22	3,233344E+22	3,233445E+22	1,245934E+23	6,466788E+22	1,892612E+23
-2451	6,229596E+22	6,229466E+22	3,233351E+22	3,233272E+22	1,245906E+23	6,466622E+22	1,892568E+23
-2450	6,229520E+22	6,229647E+22	3,233368E+22	3,233281E+22	1,245917E+23	6,466649E+22	1,892582E+23
-2449	6,229741E+22	6,229662E+22	3,233231E+22	3,233304E+22	1,245940E+23	6,466535E+22	1,892594E+23
-2448	6,229469E+22	6,229642E+22	3,233231E+22	3,233146E+22	1,245911E+23	6,466377E+22	1,892549E+23
-2447	6,229634E+22	6,229753E+22	3,233187E+22	3,233226E+22	1,245939E+23	6,466412E+22	1,892580E+23
-2446	6,229772E+22	6,229607E+22	3,233089E+22	3,233134E+22	1,245938E+23	6,466223E+22	1,892560E+23
-2445	6,229564E+22	6,229686E+22	3,233144E+22	3,233022E+22	1,245925E+23	6,466165E+22	1,892542E+23
-2444	6,229868E+22	6,229784E+22	3,233073E+22	3,233154E+22	1,245965E+23	6,466226E+22	1,892588E+23
-2443	6,229787E+22	6,229631E+22	3,233059E+22	3,233068E+22	1,245942E+23	6,466126E+22	1,892554E+23
-2442	6,229572E+22	6,229785E+22	3,233164E+22	3,233114E+22	1,245936E+23	6,466279E+22	1,892564E+23
-2441	6,229785E+22	6,229760E+22	3,233144E+22	3,233256E+22	1,245955E+23	6,466400E+22	1,892595E+23
-2440	6,229551E+22	6,229606E+22	3,233252E+22	3,233169E+22	1,245916E+23	6,466420E+22	1,892558E+23
-2439	6,229567E+22	6,229652E+22	3,233372E+22	3,233325E+22	1,245922E+23	6,466697E+22	1,892592E+23
-2438	6,229685E+22	6,229482E+22	3,233343E+22	3,233419E+22	1,245917E+23	6,466762E+22	1,892593E+23
-2437	6,229361E+22	6,229484E+22	3,233460E+22	3,233380E+22	1,245885E+23	6,466840E+22	1,892568E+23
-2436	6,229532E+22	6,229574E+22	3,233466E+22	3,233570E+22	1,245911E+23	6,467035E+22	1,892614E+23
-2435	6,229559E+22	6,229375E+22	3,233438E+22	3,233505E+22	1,245893E+23	6,466943E+22	1,892588E+23
-2434	6,229339E+22	6,229498E+22	3,233543E+22	3,233434E+22	1,245884E+23	6,466977E+22	1,892581E+23
-2433	6,229611E+22	6,229531E+22	3,233482E+22	3,233538E+22	1,245914E+23	6,467020E+22	1,892616E+23
-2432	6,229469E+22	6,229439E+22	3,233458E+22	3,233367E+22	1,245891E+23	6,466825E+22	1,892573E+23
-2431	6,229388E+22	6,229603E+22	3,233476E+22	3,233403E+22	1,245899E+23	6,466879E+22	1,892587E+23
-2430	6,229598E+22	6,229529E+22	3,233324E+22	3,233444E+22	1,245913E+23	6,466767E+22	1,892589E+23
-2429	6,229382E+22	6,229513E+22	3,233331E+22	3,233241E+22	1,245890E+23	6,466572E+22	1,892547E+23
-2428	6,229578E+22	6,229639E+22	3,233300E+22	3,233312E+22	1,245922E+23	6,466612E+22	1,892583E+23
-2427	6,229766E+22	6,229481E+22	3,233175E+22	3,233229E+22	1,245925E+23	6,466404E+22	1,892565E+23
-2426	6,229514E+22	6,229623E+22	3,233230E+22	3,233122E+22	1,245914E+23	6,466352E+22	1,892549E+23
-2425	6,229719E+22	6,229726E+22	3,233193E+22	3,233295E+22	1,245945E+23	6,466488E+22	1,892593E+23
-2424	6,229634E+22	6,229593E+22	3,233181E+22	3,233190E+22	1,245923E+23	6,466371E+22	1,892560E+23
-2423	6,229453E+22	6,229692E+22	3,233327E+22	3,233236E+22	1,245915E+23	6,466563E+22	1,892571E+23
-2422	6,229676E+22	6,229576E+22	3,233306E+22	3,233397E+22	1,245925E+23	6,466703E+22	1,892595E+23
-2421	6,229459E+22	6,229445E+22	3,233409E+22	3,233300E+22	1,245890E+23	6,466709E+22	1,892561E+23
-2420	6,229443E+22	6,229551E+22	3,233519E+22	3,233488E+22	1,245899E+23	6,467006E+22	1,892600E+23
-2419	6,229594E+22	6,229371E+22	3,233445E+22	3,233590E+22	1,245896E+23	6,467035E+22	1,892600E+23
-2418	6,229268E+22	6,229404E+22	3,233567E+22	3,233512E+22	1,245867E+23	6,467078E+22	1,892575E+23
-2417	6,229416E+22	6,229485E+22	3,233610E+22	3,233694E+22	1,245890E+23	6,467304E+22	1,892620E+23
-2416	6,229470E+22	6,229306E+22	3,233572E+22	3,233584E+22	1,245878E+23	6,467155E+22	1,892593E+23
-2415	6,229254E+22	6,229419E+22	3,233689E+22	3,233533E+22	1,245867E+23	6,467222E+22	1,892589E+23
-2414	6,229469E+22	6,229407E+22	3,233597E+22	3,233679E+22	1,245888E+23	6,467276E+22	1,892615E+23
-2413	6,229320E+22	6,229331E+22	3,233557E+22	3,233496E+22	1,245865E+23	6,467053E+22	1,892570E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2412	6,229257E+22	6,229503E+22	3,233576E+22	3,233525E+22	1,245876E+23	6,467101E+22	1,892586E+23
-2411	6,229561E+22	6,229382E+22	3,233394E+22	3,233539E+22	1,245894E+23	6,466934E+22	1,892588E+23
-2410	6,229383E+22	6,229402E+22	3,233408E+22	3,233300E+22	1,245878E+23	6,466708E+22	1,892549E+23
-2409	6,229521E+22	6,229560E+22	3,233406E+22	3,233402E+22	1,245908E+23	6,466808E+22	1,892589E+23
-2408	6,229667E+22	6,229478E+22	3,233270E+22	3,233319E+22	1,245915E+23	6,466590E+22	1,892574E+23
-2407	6,229398E+22	6,229607E+22	3,233358E+22	3,233247E+22	1,245901E+23	6,466605E+22	1,892561E+23
-2406	6,229557E+22	6,229616E+22	3,233335E+22	3,233440E+22	1,245917E+23	6,466775E+22	1,892595E+23
-2405	6,229508E+22	6,229465E+22	3,233343E+22	3,233315E+22	1,245897E+23	6,466658E+22	1,892563E+23
-2404	6,229349E+22	6,229548E+22	3,233500E+22	3,233373E+22	1,245890E+23	6,466873E+22	1,892577E+23
-2403	6,229606E+22	6,229405E+22	3,233435E+22	3,233559E+22	1,245901E+23	6,466993E+22	1,892600E+23
-2402	6,229374E+22	6,229332E+22	3,233517E+22	3,233461E+22	1,245871E+23	6,466978E+22	1,892568E+23
-2401	6,229293E+22	6,229450E+22	3,233640E+22	3,233661E+22	1,245874E+23	6,467301E+22	1,892604E+23
-2400	6,229464E+22	6,229313E+22	3,233563E+22	3,233713E+22	1,245878E+23	6,467277E+22	1,892605E+23
-2399	6,229197E+22	6,229320E+22	3,233715E+22	3,233614E+22	1,245852E+23	6,467329E+22	1,892585E+23
-2398	6,229315E+22	6,229338E+22	3,233760E+22	3,233799E+22	1,245865E+23	6,467558E+22	1,892621E+23
-2397	6,229370E+22	6,229204E+22	3,233711E+22	3,233686E+22	1,245857E+23	6,467397E+22	1,892597E+23
-2396	6,229118E+22	6,229343E+22	3,233815E+22	3,233663E+22	1,245846E+23	6,467478E+22	1,892594E+23
-2395	6,229357E+22	6,229296E+22	3,233676E+22	3,233818E+22	1,245865E+23	6,467494E+22	1,892615E+23
-2394	6,229241E+22	6,229230E+22	3,233633E+22	3,233598E+22	1,245847E+23	6,467231E+22	1,892570E+23
-2393	6,229174E+22	6,229393E+22	3,233679E+22	3,233621E+22	1,245857E+23	6,467300E+22	1,892587E+23
-2392	6,229519E+22	6,229313E+22	3,233491E+22	3,233601E+22	1,245883E+23	6,467092E+22	1,892592E+23
-2391	6,229347E+22	6,229348E+22	3,233519E+22	3,233389E+22	1,245869E+23	6,466909E+22	1,892560E+23
-2390	6,229394E+22	6,229480E+22	3,233511E+22	3,233531E+22	1,245887E+23	6,467042E+22	1,892592E+23
-2389	6,229525E+22	6,229413E+22	3,233384E+22	3,233445E+22	1,245894E+23	6,466829E+22	1,892577E+23
-2388	6,229257E+22	6,229517E+22	3,233502E+22	3,233381E+22	1,245877E+23	6,466883E+22	1,892566E+23
-2387	6,229475E+22	6,229458E+22	3,233461E+22	3,233569E+22	1,245893E+23	6,467030E+22	1,892596E+23
-2386	6,229449E+22	6,229313E+22	3,233471E+22	3,233429E+22	1,245876E+23	6,466900E+22	1,892566E+23
-2385	6,229242E+22	6,229423E+22	3,233638E+22	3,233528E+22	1,245867E+23	6,467166E+22	1,892583E+23
-2384	6,229485E+22	6,229338E+22	3,233547E+22	3,233701E+22	1,245882E+23	6,467247E+22	1,892607E+23
-2383	6,229264E+22	6,229267E+22	3,233646E+22	3,233614E+22	1,245853E+23	6,467260E+22	1,892579E+23
-2382	6,229156E+22	6,229331E+22	3,233780E+22	3,233807E+22	1,245849E+23	6,467587E+22	1,892607E+23
-2381	6,229363E+22	6,229199E+22	3,233723E+22	3,233819E+22	1,245856E+23	6,467542E+22	1,892610E+23
-2380	6,229107E+22	6,229207E+22	3,233890E+22	3,233727E+22	1,245831E+23	6,467617E+22	1,892593E+23
-2379	6,229225E+22	6,229201E+22	3,233885E+22	3,233931E+22	1,245843E+23	6,467816E+22	1,892624E+23
-2378	6,229252E+22	6,229107E+22	3,233810E+22	3,233820E+22	1,245836E+23	6,467630E+22	1,892599E+23
-2377	6,228962E+22	6,229243E+22	3,233915E+22	3,233811E+22	1,245820E+23	6,467727E+22	1,892593E+23
-2376	6,229247E+22	6,229216E+22	3,233762E+22	3,233912E+22	1,245846E+23	6,467673E+22	1,892614E+23
-2375	6,229211E+22	6,229141E+22	3,233736E+22	3,233678E+22	1,245835E+23	6,467414E+22	1,892577E+23
-2374	6,229118E+22	6,229270E+22	3,233781E+22	3,233706E+22	1,245839E+23	6,467487E+22	1,892588E+23
-2373	6,229450E+22	6,229256E+22	3,233597E+22	3,233686E+22	1,245871E+23	6,467283E+22	1,892599E+23
-2372	6,229240E+22	6,229316E+22	3,233635E+22	3,233508E+22	1,245856E+23	6,467143E+22	1,892570E+23
-2371	6,229277E+22	6,229396E+22	3,233606E+22	3,233661E+22	1,245867E+23	6,467268E+22	1,892594E+23
-2370	6,229428E+22	6,229319E+22	3,233496E+22	3,233557E+22	1,245875E+23	6,467053E+22	1,892580E+23
-2369	6,229148E+22	6,229378E+22	3,233643E+22	3,233505E+22	1,245853E+23	6,467149E+22	1,892567E+23
-2368	6,229387E+22	6,229341E+22	3,233595E+22	3,233676E+22	1,245873E+23	6,467270E+22	1,892600E+23
-2367	6,229380E+22	6,229209E+22	3,233603E+22	3,233577E+22	1,245859E+23	6,467180E+22	1,892577E+23
-2366	6,229091E+22	6,229293E+22	3,233756E+22	3,233702E+22	1,245838E+23	6,467458E+22	1,892584E+23
-2365	6,229349E+22	6,229243E+22	3,233675E+22	3,233850E+22	1,245859E+23	6,467525E+22	1,892612E+23
-2364	6,229158E+22	6,229163E+22	3,233803E+22	3,233747E+22	1,245832E+23	6,467549E+22	1,892587E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2363	6,229088E+22	6,229185E+22	3,233920E+22	3,233921E+22	1,245827E+23	6,467841E+22	1,892611E+23
-2362	6,229303E+22	6,229081E+22	3,233864E+22	3,233920E+22	1,245838E+23	6,467784E+22	1,892617E+23
-2361	6,228974E+22	6,229114E+22	3,234033E+22	3,233871E+22	1,245809E+23	6,467904E+22	1,892599E+23
-2360	6,229071E+22	6,229150E+22	3,233995E+22	3,234061E+22	1,245822E+23	6,468056E+22	1,892628E+23
-2359	6,229136E+22	6,229036E+22	3,233920E+22	3,233961E+22	1,245817E+23	6,467881E+22	1,892605E+23
-2358	6,228837E+22	6,229111E+22	3,234021E+22	3,233938E+22	1,245795E+23	6,467959E+22	1,892591E+23
-2357	6,229187E+22	6,229100E+22	3,233874E+22	3,233993E+22	1,245829E+23	6,467867E+22	1,892615E+23
-2356	6,229174E+22	6,229046E+22	3,233859E+22	3,233767E+22	1,245822E+23	6,467626E+22	1,892585E+23
-2355	6,229069E+22	6,229175E+22	3,233863E+22	3,233813E+22	1,245824E+23	6,467676E+22	1,892592E+23
-2354	6,229353E+22	6,229195E+22	3,233675E+22	3,233788E+22	1,245855E+23	6,467464E+22	1,892601E+23
-2353	6,229097E+22	6,229244E+22	3,233741E+22	3,233637E+22	1,245834E+23	6,467378E+22	1,892572E+23
-2352	6,229159E+22	6,229311E+22	3,233716E+22	3,233746E+22	1,245847E+23	6,467462E+22	1,892593E+23
-2351	6,229365E+22	6,229204E+22	3,233629E+22	3,233658E+22	1,245857E+23	6,467287E+22	1,892586E+23
-2350	6,229052E+22	6,229221E+22	3,233774E+22	3,233634E+22	1,245827E+23	6,467408E+22	1,892568E+23
-2349	6,229284E+22	6,229234E+22	3,233723E+22	3,233809E+22	1,245852E+23	6,467532E+22	1,892605E+23
-2348	6,229264E+22	6,229132E+22	3,233740E+22	3,233737E+22	1,245840E+23	6,467477E+22	1,892587E+23
-2347	6,228986E+22	6,229179E+22	3,233871E+22	3,233857E+22	1,245816E+23	6,467728E+22	1,892589E+23
-2346	6,229258E+22	6,229138E+22	3,233814E+22	3,233970E+22	1,245840E+23	6,467784E+22	1,892618E+23
-2345	6,229055E+22	6,229050E+22	3,233972E+22	3,233879E+22	1,245810E+23	6,467851E+22	1,892596E+23
-2344	6,228982E+22	6,229091E+22	3,234075E+22	3,234030E+22	1,245807E+23	6,468106E+22	1,892618E+23
-2343	6,229193E+22	6,229002E+22	3,234007E+22	3,234074E+22	1,245819E+23	6,468082E+22	1,892628E+23
-2342	6,228792E+22	6,228987E+22	3,234153E+22	3,234045E+22	1,245778E+23	6,468198E+22	1,892598E+23
-2341	6,228923E+22	6,229037E+22	3,234111E+22	3,234197E+22	1,245796E+23	6,468308E+22	1,892627E+23
-2340	6,229056E+22	6,228917E+22	3,234045E+22	3,234073E+22	1,245797E+23	6,468118E+22	1,892609E+23
-2339	6,228811E+22	6,228961E+22	3,234110E+22	3,234024E+22	1,245777E+23	6,468134E+22	1,892591E+23
-2338	6,229174E+22	6,229007E+22	3,233965E+22	3,234060E+22	1,245818E+23	6,468025E+22	1,892621E+23
-2337	6,229090E+22	6,228997E+22	3,233952E+22	3,233867E+22	1,245809E+23	6,467820E+22	1,892591E+23
-2336	6,228946E+22	6,229158E+22	3,233948E+22	3,233896E+22	1,245810E+23	6,467844E+22	1,892595E+23
-2335	6,229250E+22	6,229157E+22	3,233781E+22	3,233896E+22	1,245841E+23	6,467676E+22	1,892608E+23
-2334	6,228955E+22	6,229116E+22	3,233866E+22	3,233754E+22	1,245807E+23	6,467620E+22	1,892569E+23
-2333	6,229063E+22	6,229181E+22	3,233858E+22	3,233845E+22	1,245824E+23	6,467704E+22	1,892595E+23
-2332	6,229292E+22	6,229073E+22	3,233778E+22	3,233790E+22	1,245837E+23	6,467568E+22	1,892593E+23
-2331	6,228964E+22	6,229083E+22	3,233872E+22	3,233793E+22	1,245805E+23	6,467665E+22	1,892571E+23
-2330	6,229183E+22	6,229132E+22	3,233822E+22	3,233957E+22	1,245832E+23	6,467779E+22	1,892609E+23
-2329	6,229135E+22	6,229040E+22	3,233866E+22	3,233893E+22	1,245817E+23	6,467759E+22	1,892593E+23
-2328	6,228888E+22	6,229094E+22	3,234011E+22	3,233958E+22	1,245798E+23	6,467969E+22	1,892595E+23
-2327	6,229195E+22	6,229045E+22	3,233977E+22	3,234084E+22	1,245824E+23	6,468061E+22	1,892630E+23
-2326	6,228922E+22	6,228922E+22	3,234138E+22	3,234026E+22	1,245784E+23	6,468163E+22	1,892601E+23
-2325	6,228829E+22	6,229001E+22	3,234227E+22	3,234178E+22	1,245783E+23	6,468405E+22	1,892623E+23
-2324	6,229040E+22	6,228908E+22	3,234154E+22	3,234242E+22	1,245795E+23	6,468396E+22	1,892634E+23
-2323	6,228683E+22	6,228841E+22	3,234255E+22	3,234197E+22	1,245752E+23	6,468452E+22	1,892598E+23
-2322	6,228864E+22	6,228891E+22	3,234217E+22	3,234291E+22	1,245776E+23	6,468508E+22	1,892626E+23
-2321	6,229005E+22	6,228803E+22	3,234163E+22	3,234168E+22	1,245781E+23	6,468331E+22	1,892614E+23
-2320	6,228768E+22	6,228893E+22	3,234206E+22	3,234088E+22	1,245766E+23	6,468294E+22	1,892595E+23
-2319	6,229095E+22	6,228978E+22	3,234056E+22	3,234162E+22	1,245807E+23	6,468218E+22	1,892629E+23
-2318	6,228925E+22	6,228931E+22	3,234049E+22	3,233994E+22	1,245786E+23	6,468043E+22	1,892590E+23
-2317	6,228799E+22	6,229080E+22	3,234062E+22	3,233994E+22	1,245788E+23	6,468056E+22	1,892593E+23
-2316	6,229148E+22	6,229047E+22	3,233921E+22	3,233997E+22	1,245819E+23	6,467918E+22	1,892611E+23
-2315	6,228899E+22	6,228949E+22	3,233973E+22	3,233865E+22	1,245785E+23	6,467838E+22	1,892569E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2314	6,229010E+22	6,229045E+22	3,233967E+22	3,233956E+22	1,245806E+23	6,467923E+22	1,892598E+23
-2313	6,229188E+22	6,228995E+22	3,233888E+22	3,233944E+22	1,245818E+23	6,467832E+22	1,892601E+23
-2312	6,228855E+22	6,229030E+22	3,233972E+22	3,233919E+22	1,245789E+23	6,467890E+22	1,892578E+23
-2311	6,229094E+22	6,229081E+22	3,233948E+22	3,234091E+22	1,245817E+23	6,468039E+22	1,892621E+23
-2310	6,229006E+22	6,228924E+22	3,234025E+22	3,234026E+22	1,245793E+23	6,468051E+22	1,892598E+23
-2309	6,228781E+22	6,228980E+22	3,234195E+22	3,234073E+22	1,245776E+23	6,468267E+22	1,892603E+23
-2308	6,229082E+22	6,228933E+22	3,234167E+22	3,234235E+22	1,245802E+23	6,468402E+22	1,892642E+23
-2307	6,228777E+22	6,228773E+22	3,234267E+22	3,234206E+22	1,245755E+23	6,468473E+22	1,892602E+23
-2306	6,228690E+22	6,228862E+22	3,234344E+22	3,234337E+22	1,245755E+23	6,468681E+22	1,892623E+23
-2305	6,228914E+22	6,228775E+22	3,234271E+22	3,234388E+22	1,245769E+23	6,468660E+22	1,892635E+23
-2304	6,228621E+22	6,228723E+22	3,234355E+22	3,234275E+22	1,245734E+23	6,468630E+22	1,892597E+23
-2303	6,228852E+22	6,228811E+22	3,234321E+22	3,234372E+22	1,245766E+23	6,468693E+22	1,892636E+23
-2302	6,228908E+22	6,228725E+22	3,234273E+22	3,234268E+22	1,245763E+23	6,468541E+22	1,892617E+23
-2301	6,228643E+22	6,228868E+22	3,234316E+22	3,234184E+22	1,245751E+23	6,468500E+22	1,892601E+23
-2300	6,228957E+22	6,228939E+22	3,234182E+22	3,234277E+22	1,245790E+23	6,468459E+22	1,892636E+23
-2299	6,228801E+22	6,228815E+22	3,234147E+22	3,234116E+22	1,245762E+23	6,468264E+22	1,892588E+23
-2298	6,228720E+22	6,228935E+22	3,234175E+22	3,234087E+22	1,245766E+23	6,468262E+22	1,892592E+23
-2297	6,229073E+22	6,228913E+22	3,234043E+22	3,234115E+22	1,245799E+23	6,468158E+22	1,892614E+23
-2296	6,228842E+22	6,228848E+22	3,234067E+22	3,233973E+22	1,245769E+23	6,468040E+22	1,892573E+23
-2295	6,228939E+22	6,228985E+22	3,234054E+22	3,234097E+22	1,245792E+23	6,468151E+22	1,892607E+23
-2294	6,229039E+22	6,228909E+22	3,233999E+22	3,234097E+22	1,245795E+23	6,468096E+22	1,892604E+23
-2293	6,228737E+22	6,228951E+22	3,234114E+22	3,234031E+22	1,245769E+23	6,468145E+22	1,892583E+23
-2292	6,228998E+22	6,228979E+22	3,234130E+22	3,234202E+22	1,245798E+23	6,468333E+22	1,892631E+23
-2291	6,228923E+22	6,228775E+22	3,234183E+22	3,234161E+22	1,245770E+23	6,468344E+22	1,892604E+23
-2290	6,228677E+22	6,228838E+22	3,234348E+22	3,234210E+22	1,245751E+23	6,468559E+22	1,892607E+23
-2289	6,228915E+22	6,228834E+22	3,234311E+22	3,234413E+22	1,245775E+23	6,468724E+22	1,892647E+23
-2288	6,228644E+22	6,228671E+22	3,234380E+22	3,234354E+22	1,245732E+23	6,468734E+22	1,892605E+23
-2287	6,228599E+22	6,228759E+22	3,234457E+22	3,234473E+22	1,245736E+23	6,468930E+22	1,892629E+23
-2286	6,228807E+22	6,228646E+22	3,234404E+22	3,234509E+22	1,245745E+23	6,468913E+22	1,892637E+23
-2285	6,228557E+22	6,228629E+22	3,234491E+22	3,234362E+22	1,245719E+23	6,468853E+22	1,892604E+23
-2284	6,228768E+22	6,228749E+22	3,234460E+22	3,234481E+22	1,245752E+23	6,468941E+22	1,892646E+23
-2283	6,228784E+22	6,228643E+22	3,234361E+22	3,234402E+22	1,245743E+23	6,468763E+22	1,892619E+23
-2282	6,228518E+22	6,228768E+22	3,234412E+22	3,234296E+22	1,245729E+23	6,468708E+22	1,892599E+23
-2281	6,228828E+22	6,228839E+22	3,234293E+22	3,234387E+22	1,245767E+23	6,468680E+22	1,892635E+23
-2280	6,228743E+22	6,228694E+22	3,234244E+22	3,234188E+22	1,245744E+23	6,468432E+22	1,892587E+23
-2279	6,228700E+22	6,228835E+22	3,234270E+22	3,234183E+22	1,245753E+23	6,468452E+22	1,892599E+23
-2278	6,228973E+22	6,228817E+22	3,234147E+22	3,234240E+22	1,245779E+23	6,468387E+22	1,892618E+23
-2277	6,228734E+22	6,228804E+22	3,234173E+22	3,234092E+22	1,245754E+23	6,468264E+22	1,892580E+23
-2276	6,228833E+22	6,228938E+22	3,234189E+22	3,234227E+22	1,245777E+23	6,468416E+22	1,892619E+23
-2275	6,228929E+22	6,228793E+22	3,234124E+22	3,234226E+22	1,245772E+23	6,468350E+22	1,892607E+23
-2274	6,228657E+22	6,228808E+22	3,234275E+22	3,234140E+22	1,245746E+23	6,468415E+22	1,892588E+23
-2273	6,228887E+22	6,228850E+22	3,234304E+22	3,234340E+22	1,245774E+23	6,468643E+22	1,892638E+23
-2272	6,228802E+22	6,228658E+22	3,234321E+22	3,234309E+22	1,245746E+23	6,468630E+22	1,892609E+23
-2271	6,228545E+22	6,228745E+22	3,234464E+22	3,234392E+22	1,245729E+23	6,468856E+22	1,892615E+23
-2270	6,228729E+22	6,228700E+22	3,234437E+22	3,234591E+22	1,245743E+23	6,469029E+22	1,892646E+23
-2269	6,228528E+22	6,228553E+22	3,234514E+22	3,234477E+22	1,245708E+23	6,468991E+22	1,892607E+23
-2268	6,228541E+22	6,228644E+22	3,234608E+22	3,234579E+22	1,245718E+23	6,469188E+22	1,892637E+23
-2267	6,228746E+22	6,228518E+22	3,234523E+22	3,234622E+22	1,245726E+23	6,469145E+22	1,892641E+23
-2266	6,228483E+22	6,228539E+22	3,234609E+22	3,234467E+22	1,245702E+23	6,469075E+22	1,892610E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2265	6,228627E+22	6,228704E+22	3,234574E+22	3,234606E+22	1,245733E+23	6,469180E+22	1,892651E+23
-2264	6,228668E+22	6,228580E+22	3,234453E+22	3,234504E+22	1,245725E+23	6,468957E+22	1,892621E+23
-2263	6,228438E+22	6,228682E+22	3,234506E+22	3,234396E+22	1,245712E+23	6,468902E+22	1,892602E+23
-2262	6,228718E+22	6,228708E+22	3,234414E+22	3,234489E+22	1,245743E+23	6,468903E+22	1,892633E+23
-2261	6,228682E+22	6,228589E+22	3,234365E+22	3,234280E+22	1,245727E+23	6,468645E+22	1,892592E+23
-2260	6,228622E+22	6,228758E+22	3,234387E+22	3,234306E+22	1,245738E+23	6,468693E+22	1,892607E+23
-2259	6,228859E+22	6,228723E+22	3,234230E+22	3,234388E+22	1,245758E+23	6,468619E+22	1,892620E+23
-2258	6,228641E+22	6,228691E+22	3,234276E+22	3,234208E+22	1,245733E+23	6,468484E+22	1,892582E+23
-2257	6,228716E+22	6,228842E+22	3,234325E+22	3,234336E+22	1,245756E+23	6,468661E+22	1,892622E+23
-2256	6,228865E+22	6,228682E+22	3,234257E+22	3,234321E+22	1,245755E+23	6,468577E+22	1,892612E+23
-2255	6,228588E+22	6,228705E+22	3,234412E+22	3,234272E+22	1,245729E+23	6,468684E+22	1,892598E+23
-2254	6,228710E+22	6,228747E+22	3,234455E+22	3,234510E+22	1,245746E+23	6,468965E+22	1,892642E+23
-2253	6,228640E+22	6,228572E+22	3,234464E+22	3,234474E+22	1,245721E+23	6,468939E+22	1,892615E+23
-2252	6,228411E+22	6,228640E+22	3,234616E+22	3,234557E+22	1,245705E+23	6,469173E+22	1,892622E+23
-2251	6,228622E+22	6,228542E+22	3,234566E+22	3,234739E+22	1,245716E+23	6,469305E+22	1,892647E+23
-2250	6,228485E+22	6,228391E+22	3,234658E+22	3,234583E+22	1,245688E+23	6,469241E+22	1,892612E+23
-2249	6,228468E+22	6,228546E+22	3,234753E+22	3,234694E+22	1,245701E+23	6,469447E+22	1,892646E+23
-2248	6,228660E+22	6,228452E+22	3,234628E+22	3,234736E+22	1,245711E+23	6,469364E+22	1,892648E+23
-2247	6,228374E+22	6,228494E+22	3,234700E+22	3,234600E+22	1,245687E+23	6,469300E+22	1,892617E+23
-2246	6,228450E+22	6,228612E+22	3,234689E+22	3,234729E+22	1,245706E+23	6,469417E+22	1,892648E+23
-2245	6,228555E+22	6,228482E+22	3,234574E+22	3,234588E+22	1,245704E+23	6,469163E+22	1,892620E+23
-2244	6,228388E+22	6,228569E+22	3,234635E+22	3,234487E+22	1,245696E+23	6,469122E+22	1,892608E+23
-2243	6,228651E+22	6,228567E+22	3,234506E+22	3,234598E+22	1,245722E+23	6,469104E+22	1,892632E+23
-2242	6,228617E+22	6,228486E+22	3,234454E+22	3,234392E+22	1,245710E+23	6,468846E+22	1,892595E+23
-2241	6,228513E+22	6,228706E+22	3,234479E+22	3,234430E+22	1,245722E+23	6,468910E+22	1,892613E+23
-2240	6,228768E+22	6,228655E+22	3,234319E+22	3,234491E+22	1,245742E+23	6,468810E+22	1,892623E+23
-2239	6,228576E+22	6,228618E+22	3,234387E+22	3,234315E+22	1,245719E+23	6,468703E+22	1,892590E+23
-2238	6,228589E+22	6,228720E+22	3,234484E+22	3,234451E+22	1,245731E+23	6,468935E+22	1,892624E+23
-2237	6,228751E+22	6,228582E+22	3,234421E+22	3,234448E+22	1,245733E+23	6,468869E+22	1,892620E+23
-2236	6,228456E+22	6,228606E+22	3,234571E+22	3,234445E+22	1,245706E+23	6,469016E+22	1,892608E+23
-2235	6,228539E+22	6,228598E+22	3,234578E+22	3,234701E+22	1,245714E+23	6,469279E+22	1,892642E+23
-2234	6,228530E+22	6,228404E+22	3,234599E+22	3,234628E+22	1,245693E+23	6,469227E+22	1,892616E+23
-2233	6,228321E+22	6,228503E+22	3,234759E+22	3,234684E+22	1,245682E+23	6,469443E+22	1,892627E+23
-2232	6,228590E+22	6,228417E+22	3,234693E+22	3,234839E+22	1,245701E+23	6,469532E+22	1,892654E+23
-2231	6,228447E+22	6,228321E+22	3,234775E+22	3,234699E+22	1,245677E+23	6,469473E+22	1,892624E+23
-2230	6,228309E+22	6,228493E+22	3,234889E+22	3,234828E+22	1,245680E+23	6,469716E+22	1,892652E+23
-2229	6,228508E+22	6,228418E+22	3,234761E+22	3,234858E+22	1,245693E+23	6,469618E+22	1,892654E+23
-2228	6,228237E+22	6,228417E+22	3,234839E+22	3,234724E+22	1,245665E+23	6,469563E+22	1,892622E+23
-2227	6,228323E+22	6,228463E+22	3,234805E+22	3,234845E+22	1,245679E+23	6,469649E+22	1,892644E+23
-2226	6,228509E+22	6,228306E+22	3,234691E+22	3,234681E+22	1,245681E+23	6,469373E+22	1,892619E+23
-2225	6,228316E+22	6,228456E+22	3,234736E+22	3,234596E+22	1,245677E+23	6,469332E+22	1,892610E+23
-2224	6,228587E+22	6,228490E+22	3,234567E+22	3,234713E+22	1,245708E+23	6,469280E+22	1,892636E+23
-2223	6,228546E+22	6,228437E+22	3,234510E+22	3,234511E+22	1,245698E+23	6,469021E+22	1,892600E+23
-2222	6,228376E+22	6,228630E+22	3,234588E+22	3,234534E+22	1,245701E+23	6,469122E+22	1,892613E+23
-2221	6,228678E+22	6,228580E+22	3,234458E+22	3,234564E+22	1,245726E+23	6,469022E+22	1,892628E+23
-2220	6,228505E+22	6,228522E+22	3,234552E+22	3,234422E+22	1,245703E+23	6,468974E+22	1,892600E+23
-2219	6,228459E+22	6,228587E+22	3,234627E+22	3,234597E+22	1,245705E+23	6,469224E+22	1,892627E+23
-2218	6,228627E+22	6,228448E+22	3,234563E+22	3,234610E+22	1,245708E+23	6,469173E+22	1,892625E+23
-2217	6,228311E+22	6,228499E+22	3,234707E+22	3,234618E+22	1,245681E+23	6,469325E+22	1,892614E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2216	6,228445E+22	6,228465E+22	3,234696E+22	3,234845E+22	1,245691E+23	6,469541E+22	1,892645E+23
-2215	6,228482E+22	6,228289E+22	3,234722E+22	3,234759E+22	1,245677E+23	6,469480E+22	1,892625E+23
-2214	6,228225E+22	6,228384E+22	3,234919E+22	3,234807E+22	1,245661E+23	6,469726E+22	1,892634E+23
-2213	6,228485E+22	6,228352E+22	3,234852E+22	3,234958E+22	1,245684E+23	6,469810E+22	1,892665E+23
-2212	6,228316E+22	6,228276E+22	3,234924E+22	3,234855E+22	1,245659E+23	6,469779E+22	1,892637E+23
-2211	6,228122E+22	6,228376E+22	3,235006E+22	3,234981E+22	1,245650E+23	6,469987E+22	1,892648E+23
-2210	6,228381E+22	6,228263E+22	3,234886E+22	3,234976E+22	1,245664E+23	6,469862E+22	1,892651E+23
-2209	6,228148E+22	6,228275E+22	3,234958E+22	3,234825E+22	1,245642E+23	6,469783E+22	1,892621E+23
-2208	6,228289E+22	6,228315E+22	3,234891E+22	3,234930E+22	1,245660E+23	6,469822E+22	1,892643E+23
-2207	6,228481E+22	6,228231E+22	3,234757E+22	3,234785E+22	1,245671E+23	6,469541E+22	1,892625E+23
-2206	6,228201E+22	6,228404E+22	3,234820E+22	3,234709E+22	1,245661E+23	6,469529E+22	1,892613E+23
-2205	6,228480E+22	6,228469E+22	3,234664E+22	3,234805E+22	1,245695E+23	6,469469E+22	1,892642E+23
-2204	6,228457E+22	6,228395E+22	3,234636E+22	3,234611E+22	1,245685E+23	6,469247E+22	1,892610E+23
-2203	6,228261E+22	6,228504E+22	3,234724E+22	3,234633E+22	1,245677E+23	6,469357E+22	1,892612E+23
-2202	6,228607E+22	6,228427E+22	3,234618E+22	3,234671E+22	1,245703E+23	6,469289E+22	1,892632E+23
-2201	6,228388E+22	6,228407E+22	3,234703E+22	3,234572E+22	1,245680E+23	6,469275E+22	1,892607E+23
-2200	6,228336E+22	6,228468E+22	3,234737E+22	3,234767E+22	1,245680E+23	6,469505E+22	1,892631E+23
-2199	6,228518E+22	6,228341E+22	3,234661E+22	3,234782E+22	1,245686E+23	6,469443E+22	1,892630E+23
-2198	6,228171E+22	6,228371E+22	3,234843E+22	3,234764E+22	1,245654E+23	6,469608E+22	1,892615E+23
-2197	6,228372E+22	6,228363E+22	3,234848E+22	3,234952E+22	1,245674E+23	6,469801E+22	1,892654E+23
-2196	6,228422E+22	6,228201E+22	3,234886E+22	3,234882E+22	1,245662E+23	6,469768E+22	1,892639E+23
-2195	6,228088E+22	6,228281E+22	3,235067E+22	3,234951E+22	1,245637E+23	6,470019E+22	1,892639E+23
-2194	6,228353E+22	6,228246E+22	3,234999E+22	3,235102E+22	1,245660E+23	6,470102E+22	1,892670E+23
-2193	6,228150E+22	6,228186E+22	3,235065E+22	3,235002E+22	1,245634E+23	6,470067E+22	1,892640E+23
-2192	6,228009E+22	6,228244E+22	3,235114E+22	3,235102E+22	1,245625E+23	6,470216E+22	1,892647E+23
-2191	6,228325E+22	6,228130E+22	3,234981E+22	3,235079E+22	1,245646E+23	6,470061E+22	1,892652E+23
-2190	6,228067E+22	6,228144E+22	3,235072E+22	3,234926E+22	1,245621E+23	6,469999E+22	1,892621E+23
-2189	6,228221E+22	6,228250E+22	3,234990E+22	3,235026E+22	1,245647E+23	6,470015E+22	1,892649E+23
-2188	6,228391E+22	6,228202E+22	3,234850E+22	3,234907E+22	1,245659E+23	6,469757E+22	1,892635E+23
-2187	6,228066E+22	6,228321E+22	3,234910E+22	3,234822E+22	1,245639E+23	6,469732E+22	1,892612E+23
-2186	6,228395E+22	6,228353E+22	3,234788E+22	3,234885E+22	1,245675E+23	6,469673E+22	1,892642E+23
-2185	6,228377E+22	6,228295E+22	3,234776E+22	3,234699E+22	1,245667E+23	6,469475E+22	1,892615E+23
-2184	6,228197E+22	6,228378E+22	3,234843E+22	3,234740E+22	1,245657E+23	6,469583E+22	1,892616E+23
-2183	6,228515E+22	6,228343E+22	3,234723E+22	3,234815E+22	1,245686E+23	6,469538E+22	1,892640E+23
-2182	6,228227E+22	6,228317E+22	3,234829E+22	3,234741E+22	1,245654E+23	6,469569E+22	1,892611E+23
-2181	6,228200E+22	6,228382E+22	3,234868E+22	3,234912E+22	1,245658E+23	6,469780E+22	1,892636E+23
-2180	6,228424E+22	6,228252E+22	3,234809E+22	3,234929E+22	1,245668E+23	6,469738E+22	1,892641E+23
-2179	6,228070E+22	6,228211E+22	3,234993E+22	3,234893E+22	1,245628E+23	6,469886E+22	1,892617E+23
-2178	6,228301E+22	6,228210E+22	3,235018E+22	3,235075E+22	1,245651E+23	6,470093E+22	1,892660E+23
-2177	6,228297E+22	6,228118E+22	3,235045E+22	3,235035E+22	1,245642E+23	6,470080E+22	1,892650E+23
-2176	6,227946E+22	6,228175E+22	3,235186E+22	3,235113E+22	1,245612E+23	6,470299E+22	1,892642E+23
-2175	6,228219E+22	6,228145E+22	3,235108E+22	3,235248E+22	1,245636E+23	6,470356E+22	1,892672E+23
-2174	6,228008E+22	6,228047E+22	3,235200E+22	3,235123E+22	1,245606E+23	6,470323E+22	1,892638E+23
-2173	6,227935E+22	6,228121E+22	3,235244E+22	3,235186E+22	1,245606E+23	6,470430E+22	1,892649E+23
-2172	6,228276E+22	6,228048E+22	3,235101E+22	3,235186E+22	1,245632E+23	6,470287E+22	1,892661E+23
-2171	6,227960E+22	6,228053E+22	3,235166E+22	3,235044E+22	1,245601E+23	6,470210E+22	1,892622E+23
-2170	6,228134E+22	6,228175E+22	3,235090E+22	3,235135E+22	1,245631E+23	6,470225E+22	1,892653E+23
-2169	6,228277E+22	6,228158E+22	3,234960E+22	3,235011E+22	1,245644E+23	6,469971E+22	1,892641E+23
-2168	6,227988E+22	6,228226E+22	3,235011E+22	3,234915E+22	1,245621E+23	6,469926E+22	1,892614E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2167	6,228338E+22	6,228252E+22	3,234898E+22	3,234973E+22	1,245659E+23	6,469871E+22	1,892646E+23
-2166	6,228262E+22	6,228183E+22	3,234917E+22	3,234821E+22	1,245644E+23	6,469739E+22	1,892618E+23
-2165	6,228078E+22	6,228301E+22	3,234968E+22	3,234879E+22	1,245638E+23	6,469847E+22	1,892623E+23
-2164	6,228381E+22	6,228269E+22	3,234839E+22	3,234985E+22	1,245665E+23	6,469823E+22	1,892647E+23
-2163	6,228074E+22	6,228172E+22	3,234943E+22	3,234897E+22	1,245625E+23	6,469840E+22	1,892609E+23
-2162	6,228132E+22	6,228215E+22	3,235008E+22	3,235028E+22	1,245635E+23	6,470036E+22	1,892638E+23
-2161	6,228352E+22	6,228129E+22	3,234967E+22	3,235041E+22	1,245648E+23	6,470008E+22	1,892649E+23
-2160	6,228009E+22	6,228093E+22	3,235129E+22	3,235022E+22	1,245610E+23	6,470151E+22	1,892625E+23
-2159	6,228195E+22	6,228140E+22	3,235145E+22	3,235217E+22	1,245634E+23	6,470362E+22	1,892670E+23
-2158	6,228116E+22	6,228044E+22	3,235196E+22	3,235198E+22	1,245616E+23	6,470395E+22	1,892656E+23
-2157	6,227792E+22	6,228091E+22	3,235333E+22	3,235248E+22	1,245588E+23	6,470581E+22	1,892646E+23
-2156	6,228100E+22	6,228044E+22	3,235255E+22	3,235381E+22	1,245614E+23	6,470636E+22	1,892678E+23
-2155	6,227902E+22	6,227876E+22	3,235336E+22	3,235246E+22	1,245578E+23	6,470582E+22	1,892636E+23
-2154	6,227881E+22	6,227966E+22	3,235372E+22	3,235300E+22	1,245585E+23	6,470673E+22	1,892652E+23
-2153	6,228178E+22	6,227982E+22	3,235210E+22	3,235317E+22	1,245616E+23	6,470527E+22	1,892669E+23
-2152	6,227870E+22	6,227975E+22	3,235233E+22	3,235171E+22	1,245585E+23	6,470404E+22	1,892625E+23
-2151	6,228048E+22	6,228109E+22	3,235164E+22	3,235229E+22	1,245616E+23	6,470393E+22	1,892655E+23
-2150	6,228176E+22	6,228071E+22	3,235079E+22	3,235095E+22	1,245625E+23	6,470174E+22	1,892642E+23
-2149	6,227916E+22	6,228134E+22	3,235137E+22	3,234985E+22	1,245605E+23	6,470122E+22	1,892617E+23
-2148	6,228248E+22	6,228189E+22	3,235026E+22	3,235088E+22	1,245644E+23	6,470114E+22	1,892655E+23
-2147	6,228117E+22	6,228066E+22	3,235029E+22	3,234968E+22	1,245618E+23	6,469998E+22	1,892618E+23
-2146	6,227962E+22	6,228170E+22	3,235087E+22	3,235024E+22	1,245613E+23	6,470111E+22	1,892624E+23
-2145	6,228263E+22	6,228171E+22	3,234970E+22	3,235124E+22	1,245643E+23	6,470094E+22	1,892653E+23
-2144	6,228013E+22	6,228026E+22	3,235059E+22	3,235019E+22	1,245604E+23	6,470078E+22	1,892612E+23
-2143	6,228090E+22	6,228093E+22	3,235139E+22	3,235135E+22	1,245618E+23	6,470274E+22	1,892646E+23
-2142	6,228241E+22	6,228032E+22	3,235132E+22	3,235180E+22	1,245627E+23	6,470312E+22	1,892659E+23
-2141	6,227866E+22	6,228033E+22	3,235284E+22	3,235175E+22	1,245590E+23	6,470458E+22	1,892636E+23
-2140	6,228021E+22	6,228086E+22	3,235295E+22	3,235391E+22	1,245611E+23	6,470686E+22	1,892679E+23
-2139	6,227931E+22	6,227891E+22	3,235345E+22	3,235360E+22	1,245582E+23	6,470705E+22	1,892653E+23
-2138	6,227700E+22	6,227906E+22	3,235486E+22	3,235374E+22	1,245561E+23	6,470860E+22	1,892647E+23
-2137	6,228019E+22	6,227906E+22	3,235401E+22	3,235498E+22	1,245593E+23	6,470899E+22	1,892682E+23
-2136	6,227852E+22	6,227750E+22	3,235431E+22	3,235375E+22	1,245560E+23	6,470805E+22	1,892641E+23
-2135	6,227818E+22	6,227904E+22	3,235447E+22	3,235417E+22	1,245572E+23	6,470864E+22	1,892659E+23
-2134	6,228049E+22	6,227939E+22	3,235313E+22	3,235434E+22	1,245599E+23	6,470747E+22	1,892674E+23
-2133	6,227773E+22	6,227937E+22	3,235340E+22	3,235255E+22	1,245571E+23	6,470595E+22	1,892631E+23
-2132	6,227962E+22	6,228051E+22	3,235284E+22	3,235306E+22	1,245601E+23	6,470590E+22	1,892660E+23
-2131	6,228065E+22	6,227930E+22	3,235209E+22	3,235190E+22	1,245600E+23	6,470398E+22	1,892639E+23
-2130	6,227840E+22	6,227991E+22	3,235265E+22	3,235102E+22	1,245583E+23	6,470367E+22	1,892620E+23
-2129	6,228108E+22	6,228101E+22	3,235142E+22	3,235235E+22	1,245621E+23	6,470377E+22	1,892659E+23
-2128	6,228010E+22	6,227940E+22	3,235109E+22	3,235125E+22	1,245595E+23	6,470234E+22	1,892618E+23
-2127	6,227893E+22	6,228046E+22	3,235174E+22	3,235140E+22	1,245594E+23	6,470314E+22	1,892625E+23
-2126	6,228181E+22	6,228055E+22	3,235107E+22	3,235231E+22	1,245624E+23	6,470338E+22	1,892657E+23
-2125	6,227959E+22	6,227942E+22	3,235202E+22	3,235118E+22	1,245590E+23	6,470320E+22	1,892622E+23
-2124	6,227985E+22	6,228054E+22	3,235291E+22	3,235272E+22	1,245604E+23	6,470563E+22	1,892660E+23
-2123	6,228060E+22	6,227941E+22	3,235289E+22	3,235353E+22	1,245600E+23	6,470642E+22	1,892664E+23
-2122	6,227712E+22	6,227906E+22	3,235450E+22	3,235345E+22	1,245562E+23	6,470795E+22	1,892641E+23
-2121	6,227855E+22	6,227970E+22	3,235464E+22	3,235550E+22	1,245582E+23	6,471014E+22	1,892684E+23
-2120	6,227846E+22	6,227707E+22	3,235477E+22	3,235507E+22	1,245555E+23	6,470984E+22	1,892654E+23
-2119	6,227657E+22	6,227744E+22	3,235603E+22	3,235493E+22	1,245540E+23	6,471096E+22	1,892650E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2118	6,227932E+22	6,227804E+22	3,235526E+22	3,235635E+22	1,245574E+23	6,471161E+22	1,892690E+23
-2117	6,227756E+22	6,227700E+22	3,235525E+22	3,235494E+22	1,245546E+23	6,471019E+22	1,892647E+23
-2116	6,227703E+22	6,227882E+22	3,235542E+22	3,235530E+22	1,245558E+23	6,471072E+22	1,892666E+23
-2115	6,227920E+22	6,227830E+22	3,235427E+22	3,235525E+22	1,245575E+23	6,470952E+22	1,892670E+23
-2114	6,227703E+22	6,227799E+22	3,235472E+22	3,235326E+22	1,245550E+23	6,470798E+22	1,892630E+23
-2113	6,227864E+22	6,227956E+22	3,235422E+22	3,235392E+22	1,245582E+23	6,470814E+22	1,892663E+23
-2112	6,227980E+22	6,227809E+22	3,235300E+22	3,235318E+22	1,245579E+23	6,470618E+22	1,892641E+23
-2111	6,227749E+22	6,227896E+22	3,235341E+22	3,235232E+22	1,245565E+23	6,470574E+22	1,892622E+23
-2110	6,227982E+22	6,228015E+22	3,235249E+22	3,235375E+22	1,245600E+23	6,470623E+22	1,892662E+23
-2109	6,227928E+22	6,227862E+22	3,235217E+22	3,235234E+22	1,245579E+23	6,470450E+22	1,892624E+23
-2108	6,227831E+22	6,227979E+22	3,235302E+22	3,235244E+22	1,245581E+23	6,470546E+22	1,892636E+23
-2107	6,228080E+22	6,227925E+22	3,235264E+22	3,235354E+22	1,245600E+23	6,470618E+22	1,892662E+23
-2106	6,227858E+22	6,227830E+22	3,235368E+22	3,235269E+22	1,245569E+23	6,470637E+22	1,892633E+23
-2105	6,227803E+22	6,227983E+22	3,235456E+22	3,235443E+22	1,245579E+23	6,470900E+22	1,892669E+23
-2104	6,227906E+22	6,227797E+22	3,235421E+22	3,235539E+22	1,245570E+23	6,470960E+22	1,892666E+23
-2103	6,227614E+22	6,227737E+22	3,235581E+22	3,235487E+22	1,245535E+23	6,471068E+22	1,892642E+23
-2102	6,227754E+22	6,227805E+22	3,235619E+22	3,235678E+22	1,245556E+23	6,471296E+22	1,892686E+23
-2101	6,227792E+22	6,227594E+22	3,235605E+22	3,235620E+22	1,245539E+23	6,471226E+22	1,892661E+23
-2100	6,227582E+22	6,227696E+22	3,235710E+22	3,235618E+22	1,245528E+23	6,471328E+22	1,892661E+23
-2099	6,227787E+22	6,227724E+22	3,235642E+22	3,235768E+22	1,245551E+23	6,471410E+22	1,892692E+23
-2098	6,227649E+22	6,227624E+22	3,235648E+22	3,235608E+22	1,245527E+23	6,471256E+22	1,892653E+23
-2097	6,227570E+22	6,227815E+22	3,235682E+22	3,235619E+22	1,245538E+23	6,471300E+22	1,892668E+23
-2096	6,227843E+22	6,227691E+22	3,235540E+22	3,235622E+22	1,245553E+23	6,471162E+22	1,892670E+23
-2095	6,227651E+22	6,227656E+22	3,235578E+22	3,235420E+22	1,245531E+23	6,470998E+22	1,892631E+23
-2094	6,227740E+22	6,227858E+22	3,235533E+22	3,235526E+22	1,245560E+23	6,471060E+22	1,892666E+23
-2093	6,227867E+22	6,227744E+22	3,235380E+22	3,235453E+22	1,245561E+23	6,470833E+22	1,892644E+23
-2092	6,227650E+22	6,227841E+22	3,235419E+22	3,235359E+22	1,245549E+23	6,470779E+22	1,892627E+23
-2091	6,227881E+22	6,227884E+22	3,235365E+22	3,235484E+22	1,245577E+23	6,470849E+22	1,892661E+23
-2090	6,227887E+22	6,227734E+22	3,235356E+22	3,235325E+22	1,245562E+23	6,470681E+22	1,892630E+23
-2089	6,227739E+22	6,227905E+22	3,235466E+22	3,235351E+22	1,245564E+23	6,470817E+22	1,892646E+23
-2088	6,227972E+22	6,227821E+22	3,235398E+22	3,235509E+22	1,245579E+23	6,470908E+22	1,892670E+23
-2087	6,227728E+22	6,227726E+22	3,235504E+22	3,235429E+22	1,245545E+23	6,470934E+22	1,892639E+23
-2086	6,227632E+22	6,227876E+22	3,235619E+22	3,235614E+22	1,245551E+23	6,471234E+22	1,892674E+23
-2085	6,227788E+22	6,227667E+22	3,235565E+22	3,235676E+22	1,245546E+23	6,471242E+22	1,892670E+23
-2084	6,227537E+22	6,227613E+22	3,235720E+22	3,235616E+22	1,245515E+23	6,471336E+22	1,892649E+23
-2083	6,227657E+22	6,227639E+22	3,235769E+22	3,235817E+22	1,245530E+23	6,471586E+22	1,892688E+23
-2082	6,227696E+22	6,227487E+22	3,235740E+22	3,235765E+22	1,245518E+23	6,471505E+22	1,892669E+23
-2081	6,227430E+22	6,227653E+22	3,235842E+22	3,235758E+22	1,245508E+23	6,471600E+22	1,892668E+23
-2080	6,227668E+22	6,227614E+22	3,235747E+22	3,235900E+22	1,245528E+23	6,471647E+22	1,892693E+23
-2079	6,227572E+22	6,227498E+22	3,235761E+22	3,235694E+22	1,245507E+23	6,471455E+22	1,892653E+23
-2078	6,227473E+22	6,227701E+22	3,235815E+22	3,235707E+22	1,245517E+23	6,471522E+22	1,892670E+23
-2077	6,227763E+22	6,227605E+22	3,235642E+22	3,235716E+22	1,245537E+23	6,471358E+22	1,892673E+23
-2076	6,227560E+22	6,227612E+22	3,235659E+22	3,235544E+22	1,245517E+23	6,471203E+22	1,892637E+23
-2075	6,227605E+22	6,227754E+22	3,235632E+22	3,235663E+22	1,245536E+23	6,471295E+22	1,892665E+23
-2074	6,227780E+22	6,227652E+22	3,235488E+22	3,235572E+22	1,245543E+23	6,471060E+22	1,892649E+23
-2073	6,227561E+22	6,227768E+22	3,235550E+22	3,235451E+22	1,245533E+23	6,471001E+22	1,892633E+23
-2072	6,227833E+22	6,227747E+22	3,235487E+22	3,235589E+22	1,245558E+23	6,471076E+22	1,892666E+23
-2071	6,227842E+22	6,227614E+22	3,235489E+22	3,235438E+22	1,245546E+23	6,470927E+22	1,892638E+23
-2070	6,227589E+22	6,227822E+22	3,235618E+22	3,235505E+22	1,245541E+23	6,471122E+22	1,892653E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2069	6,227812E+22	6,227747E+22	3,235528E+22	3,235671E+22	1,245556E+23	6,471199E+22	1,892676E+23
-2068	6,227593E+22	6,227627E+22	3,235633E+22	3,235585E+22	1,245522E+23	6,471219E+22	1,892644E+23
-2067	6,227489E+22	6,227686E+22	3,235779E+22	3,235757E+22	1,245518E+23	6,471536E+22	1,892671E+23
-2066	6,227714E+22	6,227507E+22	3,235724E+22	3,235807E+22	1,245522E+23	6,471530E+22	1,892675E+23
-2065	6,227435E+22	6,227517E+22	3,235874E+22	3,235749E+22	1,245495E+23	6,471623E+22	1,892658E+23
-2064	6,227554E+22	6,227531E+22	3,235884E+22	3,235978E+22	1,245508E+23	6,471862E+22	1,892695E+23
-2063	6,227595E+22	6,227399E+22	3,235855E+22	3,235902E+22	1,245499E+23	6,471757E+22	1,892675E+23
-2062	6,227286E+22	6,227580E+22	3,235982E+22	3,235883E+22	1,245487E+23	6,471866E+22	1,892673E+23
-2061	6,227568E+22	6,227527E+22	3,235871E+22	3,235991E+22	1,245510E+23	6,471861E+22	1,892696E+23
-2060	6,227502E+22	6,227408E+22	3,235878E+22	3,235787E+22	1,245491E+23	6,471665E+22	1,892658E+23
-2059	6,227357E+22	6,227559E+22	3,235944E+22	3,235828E+22	1,245492E+23	6,471772E+22	1,892669E+23
-2058	6,227650E+22	6,227512E+22	3,235746E+22	3,235850E+22	1,245516E+23	6,471596E+22	1,892676E+23
-2057	6,227428E+22	6,227552E+22	3,235760E+22	3,235673E+22	1,245498E+23	6,471433E+22	1,892641E+23
-2056	6,227530E+22	6,227620E+22	3,235715E+22	3,235783E+22	1,245515E+23	6,471498E+22	1,892665E+23
-2055	6,227749E+22	6,227517E+22	3,235593E+22	3,235646E+22	1,245527E+23	6,471239E+22	1,892651E+23
-2054	6,227500E+22	6,227678E+22	3,235688E+22	3,235539E+22	1,245518E+23	6,471227E+22	1,892640E+23
-2053	6,227752E+22	6,227683E+22	3,235608E+22	3,235687E+22	1,245544E+23	6,471295E+22	1,892673E+23
-2052	6,227715E+22	6,227583E+22	3,235608E+22	3,235581E+22	1,245530E+23	6,471188E+22	1,892649E+23
-2051	6,227404E+22	6,227708E+22	3,235770E+22	3,235675E+22	1,245511E+23	6,471446E+22	1,892656E+23
-2050	6,227656E+22	6,227624E+22	3,235686E+22	3,235828E+22	1,245528E+23	6,471514E+22	1,892679E+23
-2049	6,227464E+22	6,227501E+22	3,235803E+22	3,235727E+22	1,245496E+23	6,471531E+22	1,892650E+23
-2048	6,227421E+22	6,227486E+22	3,235922E+22	3,235910E+22	1,245491E+23	6,471831E+22	1,892674E+23
-2047	6,227653E+22	6,227354E+22	3,235861E+22	3,235951E+22	1,245501E+23	6,471812E+22	1,892682E+23
-2046	6,227304E+22	6,227443E+22	3,236010E+22	3,235913E+22	1,245475E+23	6,471923E+22	1,892667E+23
-2045	6,227423E+22	6,227472E+22	3,235996E+22	3,236116E+22	1,245490E+23	6,472112E+22	1,892701E+23
-2044	6,227490E+22	6,227340E+22	3,235971E+22	3,236018E+22	1,245483E+23	6,471989E+22	1,892682E+23
-2043	6,227166E+22	6,227434E+22	3,236134E+22	3,235985E+22	1,245460E+23	6,472119E+22	1,892672E+23
-2042	6,227478E+22	6,227412E+22	3,236014E+22	3,236085E+22	1,245489E+23	6,472099E+22	1,892699E+23
-2041	6,227390E+22	6,227334E+22	3,236008E+22	3,235901E+22	1,245472E+23	6,471909E+22	1,892663E+23
-2040	6,227250E+22	6,227437E+22	3,236029E+22	3,235974E+22	1,245469E+23	6,472003E+22	1,892669E+23
-2039	6,227573E+22	6,227407E+22	3,235833E+22	3,235971E+22	1,245498E+23	6,471804E+22	1,892678E+23
-2038	6,227333E+22	6,227469E+22	3,235864E+22	3,235776E+22	1,245480E+23	6,471640E+22	1,892644E+23
-2037	6,227479E+22	6,227538E+22	3,235810E+22	3,235855E+22	1,245502E+23	6,471665E+22	1,892668E+23
-2036	6,227714E+22	6,227451E+22	3,235698E+22	3,235730E+22	1,245517E+23	6,471427E+22	1,892659E+23
-2035	6,227371E+22	6,227566E+22	3,235831E+22	3,235668E+22	1,245494E+23	6,471500E+22	1,892644E+23
-2034	6,227586E+22	6,227620E+22	3,235745E+22	3,235839E+22	1,245521E+23	6,471584E+22	1,892679E+23
-2033	6,227535E+22	6,227505E+22	3,235756E+22	3,235743E+22	1,245504E+23	6,471499E+22	1,892654E+23
-2032	6,227278E+22	6,227519E+22	3,235903E+22	3,235840E+22	1,245480E+23	6,471743E+22	1,892654E+23
-2031	6,227593E+22	6,227429E+22	3,235830E+22	3,235955E+22	1,245502E+23	6,471785E+22	1,892681E+23
-2030	6,227385E+22	6,227361E+22	3,235955E+22	3,235863E+22	1,245475E+23	6,471819E+22	1,892657E+23
-2029	6,227347E+22	6,227398E+22	3,236040E+22	3,236046E+22	1,245474E+23	6,472086E+22	1,892683E+23
-2028	6,227552E+22	6,227319E+22	3,235975E+22	3,236099E+22	1,245487E+23	6,472075E+22	1,892695E+23
-2027	6,227147E+22	6,227351E+22	3,236167E+22	3,236065E+22	1,245450E+23	6,472233E+22	1,892673E+23
-2026	6,227280E+22	6,227394E+22	3,236156E+22	3,236233E+22	1,245467E+23	6,472389E+22	1,892706E+23
-2025	6,227366E+22	6,227247E+22	3,236143E+22	3,236127E+22	1,245461E+23	6,472269E+22	1,892688E+23
-2024	6,227084E+22	6,227252E+22	3,236269E+22	3,236118E+22	1,245434E+23	6,472387E+22	1,892672E+23
-2023	6,227387E+22	6,227263E+22	3,236128E+22	3,236213E+22	1,245465E+23	6,472341E+22	1,892699E+23
-2022	6,227258E+22	6,227252E+22	3,236106E+22	3,236049E+22	1,245451E+23	6,472155E+22	1,892667E+23
-2021	6,227162E+22	6,227350E+22	3,236089E+22	3,236087E+22	1,245451E+23	6,472176E+22	1,892669E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2020	6,227517E+22	6,227338E+22	3,235905E+22	3,236053E+22	1,245486E+23	6,471957E+22	1,892681E+23
-2019	6,227266E+22	6,227353E+22	3,235984E+22	3,235854E+22	1,245462E+23	6,471837E+22	1,892646E+23
-2018	6,227400E+22	6,227472E+22	3,235937E+22	3,235929E+22	1,245487E+23	6,471866E+22	1,892674E+23
-2017	6,227589E+22	6,227421E+22	3,235837E+22	3,235845E+22	1,245501E+23	6,471682E+22	1,892669E+23
-2016	6,227235E+22	6,227445E+22	3,235951E+22	3,235833E+22	1,245468E+23	6,471784E+22	1,892646E+23
-2015	6,227453E+22	6,227485E+22	3,235880E+22	3,235987E+22	1,245494E+23	6,471867E+22	1,892681E+23
-2014	6,227405E+22	6,227379E+22	3,235905E+22	3,235893E+22	1,245478E+23	6,471798E+22	1,892658E+23
-2013	6,227217E+22	6,227367E+22	3,236027E+22	3,235964E+22	1,245458E+23	6,471991E+22	1,892657E+23
-2012	6,227552E+22	6,227316E+22	3,235956E+22	3,236087E+22	1,245487E+23	6,472042E+22	1,892691E+23
-2011	6,227269E+22	6,227241E+22	3,236106E+22	3,236026E+22	1,245451E+23	6,472132E+22	1,892664E+23
-2010	6,227193E+22	6,227350E+22	3,236183E+22	3,236202E+22	1,245454E+23	6,472385E+22	1,892693E+23
-2009	6,227393E+22	6,227267E+22	3,236139E+22	3,236247E+22	1,245466E+23	6,472386E+22	1,892705E+23
-2008	6,227024E+22	6,227185E+22	3,236320E+22	3,236209E+22	1,245421E+23	6,472529E+22	1,892674E+23
-2007	6,227195E+22	6,227226E+22	3,236313E+22	3,236340E+22	1,245442E+23	6,472653E+22	1,892708E+23
-2006	6,227259E+22	6,227121E+22	3,236285E+22	3,236251E+22	1,245438E+23	6,472536E+22	1,892692E+23
-2005	6,226988E+22	6,227149E+22	3,236354E+22	3,236247E+22	1,245414E+23	6,472601E+22	1,892674E+23
-2004	6,227298E+22	6,227204E+22	3,236195E+22	3,236343E+22	1,245450E+23	6,472538E+22	1,892704E+23
-2003	6,227139E+22	6,227149E+22	3,236206E+22	3,236172E+22	1,245429E+23	6,472378E+22	1,892667E+23
-2002	6,227074E+22	6,227293E+22	3,236194E+22	3,236164E+22	1,245437E+23	6,472358E+22	1,892672E+23
-2001	6,227452E+22	6,227276E+22	3,236036E+22	3,236123E+22	1,245473E+23	6,472159E+22	1,892689E+23
-2000	6,227204E+22	6,227213E+22	3,236104E+22	3,235964E+22	1,245442E+23	6,472068E+22	1,892648E+23
-1999	6,227294E+22	6,227365E+22	3,236061E+22	3,236048E+22	1,245466E+23	6,472109E+22	1,892677E+23
-1998	6,227424E+22	6,227346E+22	3,235962E+22	3,236002E+22	1,245477E+23	6,471964E+22	1,892673E+23
-1997	6,227120E+22	6,227322E+22	3,236051E+22	3,235976E+22	1,245444E+23	6,472027E+22	1,892647E+23
-1996	6,227380E+22	6,227359E+22	3,235992E+22	3,236108E+22	1,245474E+23	6,472100E+22	1,892684E+23
-1995	6,227325E+22	6,227214E+22	3,236057E+22	3,236022E+22	1,245454E+23	6,472079E+22	1,892662E+23
-1994	6,227132E+22	6,227280E+22	3,236169E+22	3,236085E+22	1,245441E+23	6,472255E+22	1,892667E+23
-1993	6,227427E+22	6,227277E+22	3,236113E+22	3,236238E+22	1,245470E+23	6,472351E+22	1,892705E+23
-1992	6,227137E+22	6,227130E+22	3,236251E+22	3,236208E+22	1,245427E+23	6,472459E+22	1,892673E+23
-1991	6,227053E+22	6,227229E+22	3,236346E+22	3,236344E+22	1,245428E+23	6,472690E+22	1,892697E+23
-1990	6,227249E+22	6,227158E+22	3,236311E+22	3,236388E+22	1,245441E+23	6,472699E+22	1,892711E+23
-1989	6,226948E+22	6,227023E+22	3,236453E+22	3,236331E+22	1,245397E+23	6,472784E+22	1,892675E+23
-1988	6,227112E+22	6,227100E+22	3,236429E+22	3,236466E+22	1,245421E+23	6,472894E+22	1,892711E+23
-1987	6,227121E+22	6,226998E+22	3,236403E+22	3,236410E+22	1,245412E+23	6,472813E+22	1,892693E+23
-1986	6,226851E+22	6,227088E+22	3,236443E+22	3,236377E+22	1,245394E+23	6,472819E+22	1,892676E+23
-1985	6,227193E+22	6,227146E+22	3,236304E+22	3,236449E+22	1,245434E+23	6,472753E+22	1,892709E+23
-1984	6,227087E+22	6,227003E+22	3,236308E+22	3,236264E+22	1,245409E+23	6,472572E+22	1,892666E+23
-1983	6,227037E+22	6,227168E+22	3,236314E+22	3,236221E+22	1,245421E+23	6,472535E+22	1,892674E+23
-1982	6,227363E+22	6,227215E+22	3,236162E+22	3,236215E+22	1,245458E+23	6,472377E+22	1,892696E+23
-1981	6,227107E+22	6,227142E+22	3,236195E+22	3,236085E+22	1,245425E+23	6,472279E+22	1,892653E+23
-1980	6,227172E+22	6,227308E+22	3,236157E+22	3,236182E+22	1,245448E+23	6,472338E+22	1,892682E+23
-1979	6,227275E+22	6,227225E+22	3,236098E+22	3,236152E+22	1,245450E+23	6,472250E+22	1,892675E+23
-1978	6,227010E+22	6,227221E+22	3,236185E+22	3,236094E+22	1,245423E+23	6,472278E+22	1,892651E+23
-1977	6,227312E+22	6,227247E+22	3,236150E+22	3,236230E+22	1,245456E+23	6,472380E+22	1,892694E+23
-1976	6,227249E+22	6,227046E+22	3,236196E+22	3,236183E+22	1,245430E+23	6,472379E+22	1,892667E+23
-1975	6,227021E+22	6,227171E+22	3,236312E+22	3,236242E+22	1,245419E+23	6,472553E+22	1,892675E+23
-1974	6,227264E+22	6,227203E+22	3,236261E+22	3,236406E+22	1,245447E+23	6,472668E+22	1,892713E+23
-1973	6,227015E+22	6,227005E+22	3,236381E+22	3,236356E+22	1,245402E+23	6,472737E+22	1,892676E+23
-1972	6,226959E+22	6,227105E+22	3,236485E+22	3,236461E+22	1,245406E+23	6,472946E+22	1,892701E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1971	6,227131E+22	6,226993E+22	3,236477E+22	3,236521E+22	1,245412E+23	6,472998E+22	1,892712E+23
-1970	6,226828E+22	6,226931E+22	3,236586E+22	3,236457E+22	1,245376E+23	6,473043E+22	1,892680E+23
-1969	6,226987E+22	6,227032E+22	3,236557E+22	3,236607E+22	1,245402E+23	6,473165E+22	1,892718E+23
-1968	6,227008E+22	6,226868E+22	3,236507E+22	3,236564E+22	1,245388E+23	6,473071E+22	1,892695E+23
-1967	6,226768E+22	6,226978E+22	3,236555E+22	3,236476E+22	1,245375E+23	6,473030E+22	1,892678E+23
-1966	6,227112E+22	6,227066E+22	3,236429E+22	3,236534E+22	1,245418E+23	6,472963E+22	1,892714E+23
-1965	6,227058E+22	6,226895E+22	3,236408E+22	3,236344E+22	1,245395E+23	6,472751E+22	1,892670E+23
-1964	6,226971E+22	6,227099E+22	3,236413E+22	3,236312E+22	1,245407E+23	6,472725E+22	1,892679E+23
-1963	6,227206E+22	6,227137E+22	3,236284E+22	3,236360E+22	1,245434E+23	6,472643E+22	1,892699E+23
-1962	6,226946E+22	6,227087E+22	3,236301E+22	3,236221E+22	1,245403E+23	6,472522E+22	1,892655E+23
-1961	6,227044E+22	6,227216E+22	3,236291E+22	3,236312E+22	1,245426E+23	6,472603E+22	1,892686E+23
-1960	6,227202E+22	6,227040E+22	3,236227E+22	3,236288E+22	1,245424E+23	6,472515E+22	1,892676E+23
-1959	6,226963E+22	6,227058E+22	3,236318E+22	3,236199E+22	1,245402E+23	6,472516E+22	1,892654E+23
-1958	6,227215E+22	6,227162E+22	3,236289E+22	3,236367E+22	1,245438E+23	6,472656E+22	1,892703E+23
-1957	6,227161E+22	6,226960E+22	3,236303E+22	3,236336E+22	1,245412E+23	6,472638E+22	1,892676E+23
-1956	6,226898E+22	6,227101E+22	3,236438E+22	3,236383E+22	1,245400E+23	6,472821E+22	1,892682E+23
-1955	6,227099E+22	6,227093E+22	3,236436E+22	3,236559E+22	1,245419E+23	6,472995E+22	1,892719E+23
-1954	6,226881E+22	6,226902E+22	3,236550E+22	3,236478E+22	1,245378E+23	6,473027E+22	1,892681E+23
-1953	6,226851E+22	6,226980E+22	3,236665E+22	3,236595E+22	1,245383E+23	6,473260E+22	1,892709E+23
-1952	6,227013E+22	6,226813E+22	3,236619E+22	3,236694E+22	1,245383E+23	6,473313E+22	1,892714E+23
-1951	6,226704E+22	6,226799E+22	3,236705E+22	3,236611E+22	1,245350E+23	6,473316E+22	1,892682E+23
-1950	6,226855E+22	6,226945E+22	3,236672E+22	3,236754E+22	1,245380E+23	6,473425E+22	1,892723E+23
-1949	6,226948E+22	6,226750E+22	3,236593E+22	3,236671E+22	1,245370E+23	6,473263E+22	1,892696E+23
-1948	6,226737E+22	6,226890E+22	3,236652E+22	3,236541E+22	1,245363E+23	6,473192E+22	1,892682E+23
-1947	6,227028E+22	6,226973E+22	3,236562E+22	3,236619E+22	1,245400E+23	6,473181E+22	1,892718E+23
-1946	6,226938E+22	6,226871E+22	3,236520E+22	3,236439E+22	1,245381E+23	6,472958E+22	1,892677E+23
-1945	6,226831E+22	6,227067E+22	3,236537E+22	3,236443E+22	1,245390E+23	6,472980E+22	1,892688E+23
-1944	6,227054E+22	6,227003E+22	3,236397E+22	3,236515E+22	1,245406E+23	6,472912E+22	1,892697E+23
-1943	6,226844E+22	6,226945E+22	3,236423E+22	3,236340E+22	1,245379E+23	6,472764E+22	1,892655E+23
-1942	6,226969E+22	6,227078E+22	3,236424E+22	3,236423E+22	1,245405E+23	6,472847E+22	1,892689E+23
-1941	6,227175E+22	6,226883E+22	3,236331E+22	3,236405E+22	1,245406E+23	6,472736E+22	1,892679E+23
-1940	6,226903E+22	6,226973E+22	3,236422E+22	3,236322E+22	1,245388E+23	6,472744E+22	1,892662E+23
-1939	6,227059E+22	6,227085E+22	3,236427E+22	3,236528E+22	1,245414E+23	6,472956E+22	1,892710E+23
-1938	6,226995E+22	6,226914E+22	3,236444E+22	3,236478E+22	1,245391E+23	6,472922E+22	1,892683E+23
-1937	6,226764E+22	6,227006E+22	3,236618E+22	3,236519E+22	1,245377E+23	6,473137E+22	1,892691E+23
-1936	6,226976E+22	6,226901E+22	3,236612E+22	3,236707E+22	1,245388E+23	6,473319E+22	1,892720E+23
-1935	6,226783E+22	6,226733E+22	3,236718E+22	3,236613E+22	1,245352E+23	6,473331E+22	1,892685E+23
-1934	6,226717E+22	6,226868E+22	3,236815E+22	3,236756E+22	1,245358E+23	6,473571E+22	1,892716E+23
-1933	6,226910E+22	6,226698E+22	3,236718E+22	3,236862E+22	1,245361E+23	6,473579E+22	1,892719E+23
-1932	6,226614E+22	6,226718E+22	3,236800E+22	3,236740E+22	1,245333E+23	6,473539E+22	1,892687E+23
-1931	6,226743E+22	6,226854E+22	3,236804E+22	3,236872E+22	1,245360E+23	6,473676E+22	1,892727E+23
-1930	6,226869E+22	6,226695E+22	3,236718E+22	3,236746E+22	1,245356E+23	6,473463E+22	1,892703E+23
-1929	6,226662E+22	6,226822E+22	3,236796E+22	3,236631E+22	1,245348E+23	6,473427E+22	1,892691E+23
-1928	6,226900E+22	6,226858E+22	3,236683E+22	3,236755E+22	1,245376E+23	6,473438E+22	1,892720E+23
-1927	6,226797E+22	6,226766E+22	3,236626E+22	3,236569E+22	1,245356E+23	6,473195E+22	1,892676E+23
-1926	6,226683E+22	6,226962E+22	3,236649E+22	3,236577E+22	1,245365E+23	6,473226E+22	1,892687E+23
-1925	6,226994E+22	6,226846E+22	3,236480E+22	3,236629E+22	1,245384E+23	6,473109E+22	1,892695E+23
-1924	6,226822E+22	6,226810E+22	3,236513E+22	3,236421E+22	1,245363E+23	6,472934E+22	1,892657E+23
-1923	6,226899E+22	6,226970E+22	3,236549E+22	3,236534E+22	1,245387E+23	6,473083E+22	1,892695E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1922	6,227069E+22	6,226857E+22	3,236446E+22	3,236518E+22	1,245393E+23	6,472964E+22	1,892689E+23
-1921	6,226774E+22	6,226946E+22	3,236570E+22	3,236467E+22	1,245372E+23	6,473037E+22	1,892676E+23
-1920	6,226892E+22	6,226968E+22	3,236589E+22	3,236693E+22	1,245386E+23	6,473281E+22	1,892714E+23
-1919	6,226857E+22	6,226779E+22	3,236622E+22	3,236619E+22	1,245364E+23	6,473241E+22	1,892688E+23
-1918	6,226640E+22	6,226856E+22	3,236805E+22	3,236668E+22	1,245350E+23	6,473474E+22	1,892697E+23
-1917	6,226893E+22	6,226717E+22	3,236752E+22	3,236871E+22	1,245361E+23	6,473623E+22	1,892723E+23
-1916	6,226686E+22	6,226609E+22	3,236833E+22	3,236777E+22	1,245329E+23	6,473610E+22	1,892690E+23
-1915	6,226563E+22	6,226761E+22	3,236939E+22	3,236936E+22	1,245332E+23	6,473875E+22	1,892720E+23
-1914	6,226778E+22	6,226639E+22	3,236832E+22	3,236990E+22	1,245342E+23	6,473822E+22	1,892724E+23
-1913	6,226545E+22	6,226643E+22	3,236940E+22	3,236842E+22	1,245319E+23	6,473782E+22	1,892697E+23
-1912	6,226661E+22	6,226708E+22	3,236943E+22	3,236967E+22	1,245337E+23	6,473909E+22	1,892728E+23
-1911	6,226785E+22	6,226594E+22	3,236851E+22	3,236833E+22	1,245338E+23	6,473685E+22	1,892706E+23
-1910	6,226534E+22	6,226750E+22	3,236919E+22	3,236750E+22	1,245328E+23	6,473669E+22	1,892695E+23
-1909	6,226776E+22	6,226748E+22	3,236764E+22	3,236889E+22	1,245352E+23	6,473654E+22	1,892718E+23
-1908	6,226701E+22	6,226668E+22	3,236710E+22	3,236681E+22	1,245337E+23	6,473391E+22	1,892676E+23
-1907	6,226582E+22	6,226837E+22	3,236764E+22	3,236691E+22	1,245342E+23	6,473455E+22	1,892687E+23
-1906	6,226932E+22	6,226760E+22	3,236592E+22	3,236712E+22	1,245369E+23	6,473304E+22	1,892700E+23
-1905	6,226777E+22	6,226735E+22	3,236643E+22	3,236530E+22	1,245351E+23	6,473173E+22	1,892669E+23
-1904	6,226772E+22	6,226868E+22	3,236673E+22	3,236684E+22	1,245364E+23	6,473357E+22	1,892700E+23
-1903	6,226923E+22	6,226782E+22	3,236581E+22	3,236667E+22	1,245370E+23	6,473247E+22	1,892695E+23
-1902	6,226618E+22	6,226846E+22	3,236734E+22	3,236620E+22	1,245346E+23	6,473354E+22	1,892682E+23
-1901	6,226786E+22	6,226803E+22	3,236735E+22	3,236836E+22	1,245359E+23	6,473571E+22	1,892716E+23
-1900	6,226784E+22	6,226621E+22	3,236769E+22	3,236747E+22	1,245341E+23	6,473516E+22	1,892692E+23
-1899	6,226518E+22	6,226715E+22	3,236964E+22	3,236834E+22	1,245323E+23	6,473798E+22	1,892703E+23
-1898	6,226759E+22	6,226648E+22	3,236880E+22	3,237026E+22	1,245341E+23	6,473906E+22	1,892731E+23
-1897	6,226570E+22	6,226540E+22	3,236968E+22	3,236938E+22	1,245311E+23	6,473906E+22	1,892702E+23
-1896	6,226434E+22	6,226637E+22	3,237077E+22	3,237086E+22	1,245307E+23	6,474163E+22	1,892723E+23
-1895	6,226691E+22	6,226524E+22	3,236979E+22	3,237089E+22	1,245322E+23	6,474067E+22	1,892728E+23
-1894	6,226459E+22	6,226532E+22	3,237099E+22	3,236940E+22	1,245299E+23	6,474039E+22	1,892703E+23
-1893	6,226582E+22	6,226579E+22	3,237056E+22	3,237080E+22	1,245316E+23	6,474136E+22	1,892730E+23
-1892	6,226672E+22	6,226506E+22	3,236942E+22	3,236955E+22	1,245318E+23	6,473896E+22	1,892707E+23
-1891	6,226371E+22	6,226655E+22	3,237021E+22	3,236899E+22	1,245303E+23	6,473920E+22	1,892695E+23
-1890	6,226649E+22	6,226670E+22	3,236855E+22	3,236992E+22	1,245332E+23	6,473847E+22	1,892717E+23
-1889	6,226652E+22	6,226567E+22	3,236822E+22	3,236775E+22	1,245322E+23	6,473596E+22	1,892681E+23
-1888	6,226523E+22	6,226692E+22	3,236876E+22	3,236792E+22	1,245322E+23	6,473668E+22	1,892688E+23
-1887	6,226863E+22	6,226674E+22	3,236711E+22	3,236812E+22	1,245354E+23	6,473523E+22	1,892706E+23
-1886	6,226662E+22	6,226688E+22	3,236773E+22	3,236666E+22	1,245335E+23	6,473439E+22	1,892679E+23
-1885	6,226649E+22	6,226774E+22	3,236786E+22	3,236832E+22	1,245342E+23	6,473617E+22	1,892704E+23
-1884	6,226809E+22	6,226683E+22	3,236714E+22	3,236800E+22	1,245349E+23	6,473514E+22	1,892701E+23
-1883	6,226489E+22	6,226705E+22	3,236904E+22	3,236771E+22	1,245319E+23	6,473674E+22	1,892687E+23
-1882	6,226674E+22	6,226680E+22	3,236895E+22	3,236964E+22	1,245335E+23	6,473859E+22	1,892721E+23
-1881	6,226699E+22	6,226507E+22	3,236929E+22	3,236912E+22	1,245321E+23	6,473841E+22	1,892705E+23
-1880	6,226366E+22	6,226564E+22	3,237098E+22	3,237022E+22	1,245293E+23	6,474120E+22	1,892705E+23
-1879	6,226616E+22	6,226536E+22	3,237015E+22	3,237186E+22	1,245315E+23	6,474201E+22	1,892735E+23
-1878	6,226460E+22	6,226429E+22	3,237119E+22	3,237073E+22	1,245289E+23	6,474192E+22	1,892708E+23
-1877	6,226366E+22	6,226485E+22	3,237204E+22	3,237192E+22	1,245285E+23	6,474396E+22	1,892725E+23
-1876	6,226636E+22	6,226414E+22	3,237107E+22	3,237176E+22	1,245305E+23	6,474283E+22	1,892733E+23
-1875	6,226335E+22	6,226444E+22	3,237235E+22	3,237068E+22	1,245278E+23	6,474303E+22	1,892708E+23
-1874	6,226423E+22	6,226541E+22	3,237162E+22	3,237199E+22	1,245296E+23	6,474361E+22	1,892733E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1873	6,226549E+22	6,226446E+22	3,237052E+22	3,237092E+22	1,245299E+23	6,474144E+22	1,892714E+23
-1872	6,226240E+22	6,226516E+22	3,237129E+22	3,237030E+22	1,245276E+23	6,474159E+22	1,892691E+23
-1871	6,226583E+22	6,226544E+22	3,236972E+22	3,237084E+22	1,245313E+23	6,474055E+22	1,892718E+23
-1870	6,226610E+22	6,226453E+22	3,236949E+22	3,236872E+22	1,245306E+23	6,473821E+22	1,892688E+23
-1869	6,226473E+22	6,226579E+22	3,236967E+22	3,236909E+22	1,245305E+23	6,473876E+22	1,892693E+23
-1868	6,226770E+22	6,226611E+22	3,236804E+22	3,236933E+22	1,245338E+23	6,473737E+22	1,892712E+23
-1867	6,226509E+22	6,226614E+22	3,236902E+22	3,236820E+22	1,245312E+23	6,473722E+22	1,892685E+23
-1866	6,226511E+22	6,226696E+22	3,236924E+22	3,236944E+22	1,245321E+23	6,473869E+22	1,892708E+23
-1865	6,226726E+22	6,226562E+22	3,236875E+22	3,236924E+22	1,245329E+23	6,473799E+22	1,892709E+23
-1864	6,226379E+22	6,226527E+22	3,237064E+22	3,236920E+22	1,245291E+23	6,473983E+22	1,892689E+23
-1863	6,226561E+22	6,226547E+22	3,237044E+22	3,237113E+22	1,245311E+23	6,474158E+22	1,892727E+23
-1862	6,226560E+22	6,226405E+22	3,237078E+22	3,237085E+22	1,245296E+23	6,474163E+22	1,892713E+23
-1861	6,226251E+22	6,226437E+22	3,237214E+22	3,237188E+22	1,245269E+23	6,474402E+22	1,892709E+23
-1860	6,226524E+22	6,226425E+22	3,237148E+22	3,237310E+22	1,245295E+23	6,474458E+22	1,892741E+23
-1859	6,226356E+22	6,226316E+22	3,237280E+22	3,237202E+22	1,245267E+23	6,474482E+22	1,892716E+23
-1858	6,226266E+22	6,226399E+22	3,237350E+22	3,237288E+22	1,245267E+23	6,474639E+22	1,892730E+23
-1857	6,226532E+22	6,226342E+22	3,237245E+22	3,237313E+22	1,245287E+23	6,474558E+22	1,892743E+23
-1856	6,226160E+22	6,226326E+22	3,237350E+22	3,237232E+22	1,245249E+23	6,474583E+22	1,892707E+23
-1855	6,226271E+22	6,226431E+22	3,237273E+22	3,237331E+22	1,245270E+23	6,474604E+22	1,892731E+23
-1854	6,226453E+22	6,226322E+22	3,237174E+22	3,237205E+22	1,245278E+23	6,474380E+22	1,892716E+23
-1853	6,226213E+22	6,226354E+22	3,237214E+22	3,237121E+22	1,245257E+23	6,474335E+22	1,892690E+23
-1852	6,226569E+22	6,226435E+22	3,237064E+22	3,237158E+22	1,245300E+23	6,474222E+22	1,892723E+23
-1851	6,226529E+22	6,226397E+22	3,237055E+22	3,236988E+22	1,245293E+23	6,474044E+22	1,892697E+23
-1850	6,226346E+22	6,226563E+22	3,237070E+22	3,237010E+22	1,245291E+23	6,474080E+22	1,892699E+23
-1849	6,226658E+22	6,226574E+22	3,236936E+22	3,237062E+22	1,245323E+23	6,473997E+22	1,892723E+23
-1848	6,226360E+22	6,226477E+22	3,237053E+22	3,236959E+22	1,245284E+23	6,474012E+22	1,892685E+23
-1847	6,226390E+22	6,226551E+22	3,237093E+22	3,237065E+22	1,245294E+23	6,474158E+22	1,892710E+23
-1846	6,226629E+22	6,226412E+22	3,237049E+22	3,237074E+22	1,245304E+23	6,474124E+22	1,892716E+23
-1845	6,226274E+22	6,226359E+22	3,237182E+22	3,237097E+22	1,245263E+23	6,474279E+22	1,892691E+23
-1844	6,226443E+22	6,226429E+22	3,237158E+22	3,237282E+22	1,245287E+23	6,474440E+22	1,892731E+23
-1843	6,226420E+22	6,226300E+22	3,237213E+22	3,237259E+22	1,245272E+23	6,474471E+22	1,892719E+23
-1842	6,226143E+22	6,226350E+22	3,237354E+22	3,237298E+22	1,245249E+23	6,474652E+22	1,892714E+23
-1841	6,226463E+22	6,226333E+22	3,237308E+22	3,237421E+22	1,245280E+23	6,474730E+22	1,892753E+23
-1840	6,226233E+22	6,226187E+22	3,237441E+22	3,237336E+22	1,245242E+23	6,474777E+22	1,892720E+23
-1839	6,226119E+22	6,226316E+22	3,237497E+22	3,237421E+22	1,245243E+23	6,474918E+22	1,892735E+23
-1838	6,226376E+22	6,226256E+22	3,237385E+22	3,237465E+22	1,245263E+23	6,474850E+22	1,892748E+23
-1837	6,226044E+22	6,226182E+22	3,237446E+22	3,237377E+22	1,245223E+23	6,474823E+22	1,892705E+23
-1836	6,226208E+22	6,226293E+22	3,237373E+22	3,237428E+22	1,245250E+23	6,474801E+22	1,892730E+23
-1835	6,226397E+22	6,226207E+22	3,237290E+22	3,237308E+22	1,245260E+23	6,474598E+22	1,892720E+23
-1834	6,226173E+22	6,226287E+22	3,237313E+22	3,237194E+22	1,245246E+23	6,474507E+22	1,892697E+23
-1833	6,226502E+22	6,226399E+22	3,237164E+22	3,237267E+22	1,245290E+23	6,474431E+22	1,892733E+23
-1832	6,226368E+22	6,226325E+22	3,237165E+22	3,237129E+22	1,245269E+23	6,474294E+22	1,892699E+23
-1831	6,226195E+22	6,226477E+22	3,237201E+22	3,237125E+22	1,245267E+23	6,474326E+22	1,892700E+23
-1830	6,226529E+22	6,226450E+22	3,237096E+22	3,237180E+22	1,245298E+23	6,474276E+22	1,892726E+23
-1829	6,226281E+22	6,226294E+22	3,237183E+22	3,237091E+22	1,245258E+23	6,474274E+22	1,892685E+23
-1828	6,226317E+22	6,226393E+22	3,237224E+22	3,237197E+22	1,245271E+23	6,474421E+22	1,892713E+23
-1827	6,226500E+22	6,226310E+22	3,237182E+22	3,237252E+22	1,245281E+23	6,474435E+22	1,892724E+23
-1826	6,226148E+22	6,226291E+22	3,237297E+22	3,237245E+22	1,245244E+23	6,474542E+22	1,892698E+23
-1825	6,226343E+22	6,226360E+22	3,237296E+22	3,237434E+22	1,245270E+23	6,474730E+22	1,892743E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1824	6,226290E+22	6,226175E+22	3,237377E+22	3,237403E+22	1,245246E+23	6,474780E+22	1,892724E+23
-1823	6,226038E+22	6,226230E+22	3,237537E+22	3,237410E+22	1,245227E+23	6,474947E+22	1,892722E+23
-1822	6,226349E+22	6,226220E+22	3,237498E+22	3,237560E+22	1,245257E+23	6,475058E+22	1,892763E+23
-1821	6,226097E+22	6,226046E+22	3,237568E+22	3,237505E+22	1,245214E+23	6,475073E+22	1,892722E+23
-1820	6,225975E+22	6,226189E+22	3,237611E+22	3,237574E+22	1,245216E+23	6,475185E+22	1,892735E+23
-1819	6,226240E+22	6,226136E+22	3,237501E+22	3,237617E+22	1,245238E+23	6,475118E+22	1,892749E+23
-1818	6,225975E+22	6,226069E+22	3,237542E+22	3,237458E+22	1,245204E+23	6,475000E+22	1,892704E+23
-1817	6,226198E+22	6,226205E+22	3,237478E+22	3,237510E+22	1,245240E+23	6,474988E+22	1,892739E+23
-1816	6,226316E+22	6,226113E+22	3,237397E+22	3,237406E+22	1,245243E+23	6,474804E+22	1,892723E+23
-1815	6,226052E+22	6,226252E+22	3,237425E+22	3,237290E+22	1,245230E+23	6,474715E+22	1,892702E+23
-1814	6,226358E+22	6,226360E+22	3,237298E+22	3,237387E+22	1,245272E+23	6,474685E+22	1,892740E+23
-1813	6,226236E+22	6,226204E+22	3,237276E+22	3,237263E+22	1,245244E+23	6,474539E+22	1,892698E+23
-1812	6,226096E+22	6,226332E+22	3,237334E+22	3,237238E+22	1,245243E+23	6,474572E+22	1,892700E+23
-1811	6,226431E+22	6,226305E+22	3,237243E+22	3,237319E+22	1,245274E+23	6,474562E+22	1,892730E+23
-1810	6,226202E+22	6,226173E+22	3,237304E+22	3,237219E+22	1,245238E+23	6,474523E+22	1,892690E+23
-1809	6,226232E+22	6,226309E+22	3,237338E+22	3,237361E+22	1,245254E+23	6,474699E+22	1,892724E+23
-1808	6,226339E+22	6,226201E+22	3,237311E+22	3,237430E+22	1,245254E+23	6,474740E+22	1,892728E+23
-1807	6,226018E+22	6,226196E+22	3,237451E+22	3,237378E+22	1,245221E+23	6,474829E+22	1,892704E+23
-1806	6,226241E+22	6,226247E+22	3,237484E+22	3,237555E+22	1,245249E+23	6,475039E+22	1,892753E+23
-1805	6,226206E+22	6,226019E+22	3,237538E+22	3,237538E+22	1,245223E+23	6,475076E+22	1,892730E+23
-1804	6,225938E+22	6,226099E+22	3,237696E+22	3,237546E+22	1,245204E+23	6,475242E+22	1,892728E+23
-1803	6,226177E+22	6,226130E+22	3,237645E+22	3,237734E+22	1,245231E+23	6,475380E+22	1,892769E+23
-1802	6,225956E+22	6,225959E+22	3,237683E+22	3,237651E+22	1,245192E+23	6,475334E+22	1,892725E+23
-1801	6,225882E+22	6,226086E+22	3,237721E+22	3,237708E+22	1,245197E+23	6,475429E+22	1,892740E+23
-1800	6,226129E+22	6,225999E+22	3,237624E+22	3,237735E+22	1,245213E+23	6,475360E+22	1,892749E+23
-1799	6,225920E+22	6,225965E+22	3,237665E+22	3,237539E+22	1,245188E+23	6,475204E+22	1,892709E+23
-1798	6,226122E+22	6,226128E+22	3,237607E+22	3,237610E+22	1,245225E+23	6,475217E+22	1,892747E+23
-1797	6,226202E+22	6,226029E+22	3,237483E+22	3,237538E+22	1,245223E+23	6,475021E+22	1,892725E+23
-1796	6,225928E+22	6,226157E+22	3,237524E+22	3,237408E+22	1,245209E+23	6,474933E+22	1,892702E+23
-1795	6,226213E+22	6,226262E+22	3,237422E+22	3,237512E+22	1,245247E+23	6,474934E+22	1,892741E+23
-1794	6,226158E+22	6,226081E+22	3,237392E+22	3,237353E+22	1,245224E+23	6,474745E+22	1,892698E+23
-1793	6,226055E+22	6,226210E+22	3,237455E+22	3,237352E+22	1,245227E+23	6,474807E+22	1,892707E+23
-1792	6,226314E+22	6,226183E+22	3,237373E+22	3,237468E+22	1,245250E+23	6,474841E+22	1,892734E+23
-1791	6,226078E+22	6,226100E+22	3,237431E+22	3,237361E+22	1,245218E+23	6,474792E+22	1,892697E+23
-1790	6,226106E+22	6,226236E+22	3,237492E+22	3,237514E+22	1,245234E+23	6,475006E+22	1,892735E+23
-1789	6,226223E+22	6,226073E+22	3,237452E+22	3,237583E+22	1,245230E+23	6,475035E+22	1,892733E+23
-1788	6,225929E+22	6,226055E+22	3,237625E+22	3,237505E+22	1,245198E+23	6,475129E+22	1,892711E+23
-1787	6,226125E+22	6,226124E+22	3,237672E+22	3,237704E+22	1,245225E+23	6,475376E+22	1,892763E+23
-1786	6,226085E+22	6,225907E+22	3,237688E+22	3,237686E+22	1,245199E+23	6,475374E+22	1,892736E+23
-1785	6,225803E+22	6,226007E+22	3,237821E+22	3,237727E+22	1,245181E+23	6,475548E+22	1,892736E+23
-1784	6,225987E+22	6,225995E+22	3,237772E+22	3,237911E+22	1,245198E+23	6,475682E+22	1,892766E+23
-1783	6,225828E+22	6,225833E+22	3,237809E+22	3,237771E+22	1,245166E+23	6,475580E+22	1,892724E+23
-1782	6,225818E+22	6,225963E+22	3,237861E+22	3,237807E+22	1,245178E+23	6,475668E+22	1,892745E+23
-1781	6,226080E+22	6,225860E+22	3,237730E+22	3,237837E+22	1,245194E+23	6,475566E+22	1,892751E+23
-1780	6,225858E+22	6,225876E+22	3,237771E+22	3,237634E+22	1,245173E+23	6,475405E+22	1,892714E+23
-1779	6,225990E+22	6,226088E+22	3,237716E+22	3,237730E+22	1,245208E+23	6,475446E+22	1,892752E+23
-1778	6,226083E+22	6,225976E+22	3,237576E+22	3,237639E+22	1,245206E+23	6,475216E+22	1,892727E+23
-1777	6,225842E+22	6,226077E+22	3,237631E+22	3,237519E+22	1,245192E+23	6,475151E+22	1,892707E+23
-1776	6,226085E+22	6,226125E+22	3,237559E+22	3,237627E+22	1,245221E+23	6,475186E+22	1,892740E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1775	6,226077E+22	6,225961E+22	3,237533E+22	3,237462E+22	1,245204E+23	6,474995E+22	1,892703E+23
-1774	6,225966E+22	6,226106E+22	3,237596E+22	3,237495E+22	1,245207E+23	6,475091E+22	1,892716E+23
-1773	6,226189E+22	6,226064E+22	3,237478E+22	3,237642E+22	1,245225E+23	6,475120E+22	1,892737E+23
-1772	6,225972E+22	6,225980E+22	3,237556E+22	3,237510E+22	1,245195E+23	6,475066E+22	1,892702E+23
-1771	6,225978E+22	6,226131E+22	3,237646E+22	3,237653E+22	1,245211E+23	6,475299E+22	1,892741E+23
-1770	6,226149E+22	6,225960E+22	3,237603E+22	3,237694E+22	1,245211E+23	6,475297E+22	1,892741E+23
-1769	6,225861E+22	6,225942E+22	3,237779E+22	3,237642E+22	1,245180E+23	6,475421E+22	1,892722E+23
-1768	6,225939E+22	6,226011E+22	3,237836E+22	3,237874E+22	1,245195E+23	6,475710E+22	1,892766E+23
-1767	6,225912E+22	6,225819E+22	3,237837E+22	3,237850E+22	1,245173E+23	6,475687E+22	1,892742E+23
-1766	6,225653E+22	6,225891E+22	3,237974E+22	3,237890E+22	1,245154E+23	6,475864E+22	1,892741E+23
-1765	6,225872E+22	6,225830E+22	3,237894E+22	3,238058E+22	1,245170E+23	6,475952E+22	1,892765E+23
-1764	6,225786E+22	6,225670E+22	3,237939E+22	3,237873E+22	1,245146E+23	6,475812E+22	1,892727E+23
-1763	6,225755E+22	6,225858E+22	3,237992E+22	3,237913E+22	1,245161E+23	6,475905E+22	1,892752E+23
-1762	6,226009E+22	6,225798E+22	3,237825E+22	3,237937E+22	1,245181E+23	6,475762E+22	1,892757E+23
-1761	6,225759E+22	6,225837E+22	3,237857E+22	3,237759E+22	1,245160E+23	6,475616E+22	1,892721E+23
-1760	6,225810E+22	6,226006E+22	3,237832E+22	3,237854E+22	1,245182E+23	6,475685E+22	1,892750E+23
-1759	6,225961E+22	6,225880E+22	3,237705E+22	3,237729E+22	1,245184E+23	6,475434E+22	1,892727E+23
-1758	6,225771E+22	6,225951E+22	3,237778E+22	3,237621E+22	1,245172E+23	6,475398E+22	1,892712E+23
-1757	6,226008E+22	6,225970E+22	3,237673E+22	3,237756E+22	1,245198E+23	6,475428E+22	1,892741E+23
-1756	6,225998E+22	6,225843E+22	3,237646E+22	3,237599E+22	1,245184E+23	6,475245E+22	1,892709E+23
-1755	6,225843E+22	6,226041E+22	3,237712E+22	3,237652E+22	1,245188E+23	6,475364E+22	1,892725E+23
-1754	6,226087E+22	6,225981E+22	3,237588E+22	3,237771E+22	1,245207E+23	6,475359E+22	1,892743E+23
-1753	6,225896E+22	6,225894E+22	3,237688E+22	3,237641E+22	1,245179E+23	6,475329E+22	1,892712E+23
-1752	6,225845E+22	6,225999E+22	3,237821E+22	3,237783E+22	1,245184E+23	6,475603E+22	1,892745E+23
-1751	6,226026E+22	6,225845E+22	3,237783E+22	3,237827E+22	1,245187E+23	6,475610E+22	1,892748E+23
-1750	6,225718E+22	6,225834E+22	3,237955E+22	3,237819E+22	1,245155E+23	6,475774E+22	1,892733E+23
-1749	6,225757E+22	6,225858E+22	3,237968E+22	3,238070E+22	1,245161E+23	6,476037E+22	1,892765E+23
-1748	6,225784E+22	6,225650E+22	3,237973E+22	3,238012E+22	1,245143E+23	6,475985E+22	1,892742E+23
-1747	6,225554E+22	6,225747E+22	3,238112E+22	3,238022E+22	1,245130E+23	6,476133E+22	1,892743E+23
-1746	6,225838E+22	6,225698E+22	3,238009E+22	3,238150E+22	1,245154E+23	6,476159E+22	1,892770E+23
-1745	6,225761E+22	6,225597E+22	3,238044E+22	3,237976E+22	1,245136E+23	6,476020E+22	1,892738E+23
-1744	6,225612E+22	6,225805E+22	3,238113E+22	3,238031E+22	1,245142E+23	6,476143E+22	1,892756E+23
-1743	6,225862E+22	6,225774E+22	3,237947E+22	3,238046E+22	1,245164E+23	6,475992E+22	1,892763E+23
-1742	6,225625E+22	6,225770E+22	3,237996E+22	3,237880E+22	1,245140E+23	6,475876E+22	1,892727E+23
-1741	6,225675E+22	6,225864E+22	3,237953E+22	3,237976E+22	1,245154E+23	6,475929E+22	1,892747E+23
-1740	6,225902E+22	6,225711E+22	3,237836E+22	3,237839E+22	1,245161E+23	6,475675E+22	1,892729E+23
-1739	6,225693E+22	6,225821E+22	3,237897E+22	3,237749E+22	1,245151E+23	6,475646E+22	1,892716E+23
-1738	6,225936E+22	6,225873E+22	3,237755E+22	3,237890E+22	1,245181E+23	6,475645E+22	1,892746E+23
-1737	6,225921E+22	6,225773E+22	3,237720E+22	3,237744E+22	1,245169E+23	6,475464E+22	1,892716E+23
-1736	6,225688E+22	6,225944E+22	3,237837E+22	3,237782E+22	1,245163E+23	6,475618E+22	1,892725E+23
-1735	6,225982E+22	6,225893E+22	3,237743E+22	3,237868E+22	1,245188E+23	6,475611E+22	1,892749E+23
-1734	6,225813E+22	6,225779E+22	3,237873E+22	3,237762E+22	1,245159E+23	6,475635E+22	1,892723E+23
-1733	6,225707E+22	6,225854E+22	3,237985E+22	3,237939E+22	1,245156E+23	6,475924E+22	1,892748E+23
-1732	6,225890E+22	6,225706E+22	3,237944E+22	3,237998E+22	1,245160E+23	6,475942E+22	1,892754E+23
-1731	6,225553E+22	6,225717E+22	3,238105E+22	3,238003E+22	1,245127E+23	6,476109E+22	1,892738E+23
-1730	6,225645E+22	6,225721E+22	3,238092E+22	3,238222E+22	1,245137E+23	6,476314E+22	1,892768E+23
-1729	6,225725E+22	6,225529E+22	3,238094E+22	3,238146E+22	1,245125E+23	6,476241E+22	1,892749E+23
-1728	6,225457E+22	6,225624E+22	3,238261E+22	3,238142E+22	1,245108E+23	6,476403E+22	1,892748E+23
-1727	6,225751E+22	6,225629E+22	3,238156E+22	3,238256E+22	1,245138E+23	6,476411E+22	1,892779E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1726	6,225642E+22	6,225553E+22	3,238184E+22	3,238116E+22	1,245120E+23	6,476300E+22	1,892750E+23
-1725	6,225438E+22	6,225709E+22	3,238223E+22	3,238178E+22	1,245115E+23	6,476401E+22	1,892755E+23
-1724	6,225734E+22	6,225639E+22	3,238071E+22	3,238163E+22	1,245137E+23	6,476234E+22	1,892761E+23
-1723	6,225529E+22	6,225638E+22	3,238123E+22	3,237988E+22	1,245117E+23	6,476111E+22	1,892728E+23
-1722	6,225636E+22	6,225711E+22	3,238049E+22	3,238065E+22	1,245135E+23	6,476114E+22	1,892746E+23
-1721	6,225864E+22	6,225618E+22	3,237916E+22	3,237952E+22	1,245148E+23	6,475868E+22	1,892735E+23
-1720	6,225570E+22	6,225751E+22	3,237992E+22	3,237878E+22	1,245132E+23	6,475870E+22	1,892719E+23
-1719	6,225816E+22	6,225830E+22	3,237865E+22	3,238001E+22	1,245165E+23	6,475866E+22	1,892751E+23
-1718	6,225818E+22	6,225715E+22	3,237864E+22	3,237866E+22	1,245153E+23	6,475730E+22	1,892726E+23
-1717	6,225565E+22	6,225810E+22	3,237989E+22	3,237903E+22	1,245138E+23	6,475891E+22	1,892727E+23
-1716	6,225898E+22	6,225734E+22	3,237923E+22	3,237991E+22	1,245163E+23	6,475914E+22	1,892755E+23
-1715	6,225687E+22	6,225654E+22	3,238048E+22	3,237927E+22	1,245134E+23	6,475975E+22	1,892732E+23
-1714	6,225565E+22	6,225725E+22	3,238116E+22	3,238121E+22	1,245129E+23	6,476236E+22	1,892753E+23
-1713	6,225758E+22	6,225592E+22	3,238057E+22	3,238187E+22	1,245135E+23	6,476244E+22	1,892760E+23
-1712	6,225396E+22	6,225573E+22	3,238246E+22	3,238164E+22	1,245097E+23	6,476410E+22	1,892738E+23
-1711	6,225559E+22	6,225601E+22	3,238244E+22	3,238334E+22	1,245116E+23	6,476578E+22	1,892774E+23
-1710	6,225670E+22	6,225432E+22	3,238256E+22	3,238266E+22	1,245110E+23	6,476522E+22	1,892762E+23
-1709	6,225336E+22	6,225521E+22	3,238400E+22	3,238278E+22	1,245086E+23	6,476678E+22	1,892753E+23
-1708	6,225631E+22	6,225542E+22	3,238296E+22	3,238392E+22	1,245117E+23	6,476688E+22	1,892786E+23
-1707	6,225485E+22	6,225476E+22	3,238318E+22	3,238255E+22	1,245096E+23	6,476572E+22	1,892753E+23
-1706	6,225323E+22	6,225588E+22	3,238330E+22	3,238292E+22	1,245091E+23	6,476622E+22	1,892753E+23
-1705	6,225673E+22	6,225512E+22	3,238166E+22	3,238264E+22	1,245118E+23	6,476430E+22	1,892761E+23
-1704	6,225436E+22	6,225494E+22	3,238240E+22	3,238091E+22	1,245093E+23	6,476331E+22	1,892726E+23
-1703	6,225561E+22	6,225628E+22	3,238157E+22	3,238167E+22	1,245119E+23	6,476324E+22	1,892751E+23
-1702	6,225768E+22	6,225568E+22	3,238022E+22	3,238087E+22	1,245134E+23	6,476109E+22	1,892745E+23
-1701	6,225426E+22	6,225656E+22	3,238093E+22	3,238014E+22	1,245108E+23	6,476107E+22	1,892719E+23
-1700	6,225722E+22	6,225706E+22	3,238003E+22	3,238106E+22	1,245143E+23	6,476110E+22	1,892754E+23
-1699	6,225724E+22	6,225602E+22	3,238023E+22	3,237976E+22	1,245133E+23	6,475999E+22	1,892732E+23
-1698	6,225490E+22	6,225673E+22	3,238133E+22	3,238024E+22	1,245116E+23	6,476157E+22	1,892732E+23
-1697	6,225792E+22	6,225637E+22	3,238054E+22	3,238148E+22	1,245143E+23	6,476202E+22	1,892763E+23
-1696	6,225502E+22	6,225552E+22	3,238196E+22	3,238113E+22	1,245105E+23	6,476309E+22	1,892736E+23
-1695	6,225409E+22	6,225626E+22	3,238265E+22	3,238284E+22	1,245104E+23	6,476549E+22	1,892758E+23
-1694	6,225643E+22	6,225486E+22	3,238220E+22	3,238351E+22	1,245113E+23	6,476571E+22	1,892770E+23
-1693	6,225291E+22	6,225411E+22	3,238400E+22	3,238308E+22	1,245070E+23	6,476708E+22	1,892741E+23
-1692	6,225499E+22	6,225445E+22	3,238413E+22	3,238458E+22	1,245094E+23	6,476872E+22	1,892781E+23
-1691	6,225564E+22	6,225349E+22	3,238412E+22	3,238412E+22	1,245091E+23	6,476824E+22	1,892774E+23
-1690	6,225212E+22	6,225425E+22	3,238509E+22	3,238423E+22	1,245064E+23	6,476932E+22	1,892757E+23
-1689	6,225494E+22	6,225454E+22	3,238395E+22	3,238525E+22	1,245095E+23	6,476920E+22	1,892787E+23
-1688	6,225335E+22	6,225351E+22	3,238443E+22	3,238370E+22	1,245069E+23	6,476813E+22	1,892750E+23
-1687	6,225237E+22	6,225463E+22	3,238455E+22	3,238371E+22	1,245070E+23	6,476826E+22	1,892753E+23
-1686	6,225615E+22	6,225418E+22	3,238288E+22	3,238369E+22	1,245103E+23	6,476657E+22	1,892769E+23
-1685	6,225332E+22	6,225389E+22	3,238333E+22	3,238215E+22	1,245072E+23	6,476548E+22	1,892727E+23
-1684	6,225471E+22	6,225540E+22	3,238262E+22	3,238288E+22	1,245101E+23	6,476550E+22	1,892756E+23
-1683	6,225651E+22	6,225512E+22	3,238140E+22	3,238210E+22	1,245116E+23	6,476350E+22	1,892751E+23
-1682	6,225339E+22	6,225553E+22	3,238206E+22	3,238123E+22	1,245089E+23	6,476328E+22	1,892722E+23
-1681	6,225651E+22	6,225602E+22	3,238132E+22	3,238212E+22	1,245125E+23	6,476344E+22	1,892760E+23
-1680	6,225600E+22	6,225477E+22	3,238186E+22	3,238114E+22	1,245108E+23	6,476299E+22	1,892738E+23
-1679	6,225355E+22	6,225578E+22	3,238287E+22	3,238179E+22	1,245093E+23	6,476466E+22	1,892740E+23
-1678	6,225637E+22	6,225554E+22	3,238200E+22	3,238341E+22	1,245119E+23	6,476541E+22	1,892773E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1677	6,225327E+22	6,225396E+22	3,238333E+22	3,238298E+22	1,245072E+23	6,476631E+22	1,892735E+23
-1676	6,225325E+22	6,225447E+22	3,238425E+22	3,238427E+22	1,245077E+23	6,476852E+22	1,892762E+23
-1675	6,225568E+22	6,225343E+22	3,238387E+22	3,238475E+22	1,245091E+23	6,476863E+22	1,892777E+23
-1674	6,225234E+22	6,225280E+22	3,238538E+22	3,238434E+22	1,245051E+23	6,476972E+22	1,892749E+23
-1673	6,225405E+22	6,225373E+22	3,238535E+22	3,238592E+22	1,245078E+23	6,477127E+22	1,892790E+23
-1672	6,225381E+22	6,225279E+22	3,238553E+22	3,238562E+22	1,245066E+23	6,477115E+22	1,892778E+23
-1671	6,225052E+22	6,225354E+22	3,238649E+22	3,238547E+22	1,245041E+23	6,477196E+22	1,892760E+23
-1670	6,225366E+22	6,225361E+22	3,238538E+22	3,238649E+22	1,245073E+23	6,477187E+22	1,892791E+23
-1669	6,225220E+22	6,225186E+22	3,238573E+22	3,238490E+22	1,245041E+23	6,477063E+22	1,892747E+23
-1668	6,225187E+22	6,225301E+22	3,238583E+22	3,238483E+22	1,245049E+23	6,477066E+22	1,892755E+23
-1667	6,225520E+22	6,225336E+22	3,238398E+22	3,238501E+22	1,245086E+23	6,476899E+22	1,892776E+23
-1666	6,225243E+22	6,225306E+22	3,238402E+22	3,238348E+22	1,245055E+23	6,476750E+22	1,892730E+23
-1665	6,225383E+22	6,225469E+22	3,238339E+22	3,238395E+22	1,245085E+23	6,476733E+22	1,892759E+23
-1664	6,225537E+22	6,225420E+22	3,238269E+22	3,238308E+22	1,245096E+23	6,476577E+22	1,892753E+23
-1663	6,225262E+22	6,225457E+22	3,238353E+22	3,238208E+22	1,245072E+23	6,476560E+22	1,892728E+23
-1662	6,225548E+22	6,225527E+22	3,238290E+22	3,238343E+22	1,245108E+23	6,476633E+22	1,892771E+23
-1661	6,225440E+22	6,225358E+22	3,238329E+22	3,238286E+22	1,245080E+23	6,476615E+22	1,892741E+23
-1660	6,225221E+22	6,225434E+22	3,238435E+22	3,238351E+22	1,245065E+23	6,476786E+22	1,892744E+23
-1659	6,225497E+22	6,225436E+22	3,238355E+22	3,238509E+22	1,245093E+23	6,476863E+22	1,892780E+23
-1658	6,225253E+22	6,225231E+22	3,238461E+22	3,238440E+22	1,245048E+23	6,476900E+22	1,892738E+23
-1657	6,225271E+22	6,225308E+22	3,238559E+22	3,238547E+22	1,245058E+23	6,477106E+22	1,892768E+23
-1656	6,225458E+22	6,225237E+22	3,238553E+22	3,238617E+22	1,245070E+23	6,477170E+22	1,892786E+23
-1655	6,225098E+22	6,225215E+22	3,238691E+22	3,238578E+22	1,245031E+23	6,477270E+22	1,892758E+23
-1654	6,225230E+22	6,225327E+22	3,238682E+22	3,238758E+22	1,245056E+23	6,477441E+22	1,892800E+23
-1653	6,225194E+22	6,225140E+22	3,238693E+22	3,238718E+22	1,245033E+23	6,477412E+22	1,892774E+23
-1652	6,224953E+22	6,225172E+22	3,238797E+22	3,238666E+22	1,245012E+23	6,477463E+22	1,892759E+23
-1651	6,225282E+22	6,225221E+22	3,238677E+22	3,238759E+22	1,245050E+23	6,477436E+22	1,892794E+23
-1650	6,225173E+22	6,225049E+22	3,238662E+22	3,238607E+22	1,245022E+23	6,477269E+22	1,892749E+23
-1649	6,225124E+22	6,225232E+22	3,238651E+22	3,238599E+22	1,245036E+23	6,477250E+22	1,892761E+23
-1648	6,225394E+22	6,225286E+22	3,238497E+22	3,238622E+22	1,245068E+23	6,477119E+22	1,892780E+23
-1647	6,225142E+22	6,225262E+22	3,238514E+22	3,238440E+22	1,245040E+23	6,476954E+22	1,892736E+23
-1646	6,225291E+22	6,225416E+22	3,238474E+22	3,238488E+22	1,245071E+23	6,476962E+22	1,892767E+23
-1645	6,225422E+22	6,225281E+22	3,238418E+22	3,238421E+22	1,245070E+23	6,476839E+22	1,892754E+23
-1644	6,225181E+22	6,225305E+22	3,238513E+22	3,238345E+22	1,245049E+23	6,476858E+22	1,892734E+23
-1643	6,225397E+22	6,225421E+22	3,238436E+22	3,238510E+22	1,245082E+23	6,476946E+22	1,892776E+23
-1642	6,225306E+22	6,225215E+22	3,238435E+22	3,238467E+22	1,245052E+23	6,476902E+22	1,892742E+23
-1641	6,225126E+22	6,225292E+22	3,238541E+22	3,238497E+22	1,245042E+23	6,477038E+22	1,892746E+23
-1640	6,225390E+22	6,225292E+22	3,238506E+22	3,238640E+22	1,245068E+23	6,477145E+22	1,892783E+23
-1639	6,225188E+22	6,225127E+22	3,238617E+22	3,238551E+22	1,245031E+23	6,477168E+22	1,892748E+23
-1638	6,225170E+22	6,225255E+22	3,238719E+22	3,238687E+22	1,245043E+23	6,477406E+22	1,892783E+23
-1637	6,225279E+22	6,225147E+22	3,238712E+22	3,238788E+22	1,245043E+23	6,477499E+22	1,892793E+23
-1636	6,224945E+22	6,225098E+22	3,238858E+22	3,238745E+22	1,245004E+23	6,477603E+22	1,892765E+23
-1635	6,225056E+22	6,225215E+22	3,238849E+22	3,238908E+22	1,245027E+23	6,477757E+22	1,892803E+23
-1634	6,225099E+22	6,224966E+22	3,238819E+22	3,238856E+22	1,245007E+23	6,477675E+22	1,892774E+23
-1633	6,224909E+22	6,225009E+22	3,238904E+22	3,238776E+22	1,244992E+23	6,477680E+22	1,892760E+23
-1632	6,225198E+22	6,225107E+22	3,238795E+22	3,238885E+22	1,245031E+23	6,477680E+22	1,892799E+23
-1631	6,225087E+22	6,225000E+22	3,238751E+22	3,238723E+22	1,245009E+23	6,477475E+22	1,892756E+23
-1630	6,225013E+22	6,225214E+22	3,238744E+22	3,238718E+22	1,245023E+23	6,477462E+22	1,892769E+23
-1629	6,225265E+22	6,225190E+22	3,238613E+22	3,238728E+22	1,245046E+23	6,477341E+22	1,892780E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1628	6,225076E+22	6,225123E+22	3,238657E+22	3,238523E+22	1,245020E+23	6,477180E+22	1,892738E+23
-1627	6,225189E+22	6,225312E+22	3,238630E+22	3,238584E+22	1,245050E+23	6,477214E+22	1,892771E+23
-1626	6,225333E+22	6,225148E+22	3,238530E+22	3,238559E+22	1,245048E+23	6,477089E+22	1,892757E+23
-1625	6,225067E+22	6,225192E+22	3,238611E+22	3,238494E+22	1,245026E+23	6,477106E+22	1,892737E+23
-1624	6,225241E+22	6,225318E+22	3,238565E+22	3,238675E+22	1,245056E+23	6,477240E+22	1,892780E+23
-1623	6,225198E+22	6,225114E+22	3,238563E+22	3,238603E+22	1,245031E+23	6,477166E+22	1,892748E+23
-1622	6,225043E+22	6,225204E+22	3,238686E+22	3,238628E+22	1,245025E+23	6,477314E+22	1,892756E+23
-1621	6,225285E+22	6,225146E+22	3,238674E+22	3,238781E+22	1,245043E+23	6,477455E+22	1,892789E+23
-1620	6,225093E+22	6,224998E+22	3,238795E+22	3,238708E+22	1,245009E+23	6,477503E+22	1,892759E+23
-1619	6,224991E+22	6,225181E+22	3,238892E+22	3,238860E+22	1,245017E+23	6,477752E+22	1,892792E+23
-1618	6,225120E+22	6,225009E+22	3,238845E+22	3,238969E+22	1,245013E+23	6,477813E+22	1,892794E+23
-1617	6,224832E+22	6,224936E+22	3,238988E+22	3,238886E+22	1,244977E+23	6,477873E+22	1,892764E+23
-1616	6,224944E+22	6,225052E+22	3,239000E+22	3,239032E+22	1,245000E+23	6,478032E+22	1,892803E+23
-1615	6,225039E+22	6,224847E+22	3,238945E+22	3,238961E+22	1,244989E+23	6,477906E+22	1,892779E+23
-1614	6,224840E+22	6,224960E+22	3,239009E+22	3,238898E+22	1,244980E+23	6,477907E+22	1,892771E+23
-1613	6,225064E+22	6,225030E+22	3,238903E+22	3,239018E+22	1,245009E+23	6,477920E+22	1,892801E+23
-1612	6,224992E+22	6,224926E+22	3,238872E+22	3,238838E+22	1,244992E+23	6,477710E+22	1,892763E+23
-1611	6,224889E+22	6,225146E+22	3,238881E+22	3,238807E+22	1,245004E+23	6,477687E+22	1,892772E+23
-1610	6,225181E+22	6,225054E+22	3,238729E+22	3,238825E+22	1,245024E+23	6,477554E+22	1,892779E+23
-1609	6,225017E+22	6,224983E+22	3,238774E+22	3,238626E+22	1,245000E+23	6,477400E+22	1,892740E+23
-1608	6,225052E+22	6,225199E+22	3,238762E+22	3,238729E+22	1,245025E+23	6,477492E+22	1,892774E+23
-1607	6,225196E+22	6,225071E+22	3,238635E+22	3,238715E+22	1,245027E+23	6,477350E+22	1,892762E+23
-1606	6,224945E+22	6,225120E+22	3,238712E+22	3,238651E+22	1,245006E+23	6,477364E+22	1,892743E+23
-1605	6,225118E+22	6,225165E+22	3,238700E+22	3,238815E+22	1,245028E+23	6,477514E+22	1,892780E+23
-1604	6,225148E+22	6,224963E+22	3,238722E+22	3,238719E+22	1,245011E+23	6,477441E+22	1,892755E+23
-1603	6,224949E+22	6,225107E+22	3,238864E+22	3,238748E+22	1,245006E+23	6,477612E+22	1,892767E+23
-1602	6,225176E+22	6,225035E+22	3,238821E+22	3,238942E+22	1,245021E+23	6,477762E+22	1,892797E+23
-1601	6,224960E+22	6,224896E+22	3,238939E+22	3,238872E+22	1,244986E+23	6,477811E+22	1,892767E+23
-1600	6,224804E+22	6,225076E+22	3,239062E+22	3,239032E+22	1,244988E+23	6,478094E+22	1,892797E+23
-1599	6,224987E+22	6,224891E+22	3,238995E+22	3,239111E+22	1,244988E+23	6,478106E+22	1,892798E+23
-1598	6,224742E+22	6,224817E+22	3,239129E+22	3,239019E+22	1,244956E+23	6,478147E+22	1,892771E+23
-1597	6,224849E+22	6,224887E+22	3,239148E+22	3,239170E+22	1,244974E+23	6,478319E+22	1,892805E+23
-1596	6,224963E+22	6,224728E+22	3,239075E+22	3,239098E+22	1,244969E+23	6,478172E+22	1,892786E+23
-1595	6,224700E+22	6,224912E+22	3,239128E+22	3,239031E+22	1,244961E+23	6,478159E+22	1,892777E+23
-1594	6,224954E+22	6,224925E+22	3,238992E+22	3,239143E+22	1,244988E+23	6,478135E+22	1,892801E+23
-1593	6,224913E+22	6,224803E+22	3,238973E+22	3,238922E+22	1,244972E+23	6,477895E+22	1,892761E+23
-1592	6,224787E+22	6,225034E+22	3,239015E+22	3,238894E+22	1,244982E+23	6,477909E+22	1,892773E+23
-1591	6,225096E+22	6,224964E+22	3,238845E+22	3,238919E+22	1,245006E+23	6,477764E+22	1,892782E+23
-1590	6,224913E+22	6,224930E+22	3,238876E+22	3,238762E+22	1,244984E+23	6,477638E+22	1,892748E+23
-1589	6,224898E+22	6,225084E+22	3,238881E+22	3,238888E+22	1,244998E+23	6,477769E+22	1,892775E+23
-1588	6,225089E+22	6,224953E+22	3,238767E+22	3,238860E+22	1,245004E+23	6,477626E+22	1,892767E+23
-1587	6,224837E+22	6,225023E+22	3,238862E+22	3,238771E+22	1,244986E+23	6,477633E+22	1,892749E+23
-1586	6,225059E+22	6,225006E+22	3,238836E+22	3,238941E+22	1,245006E+23	6,477777E+22	1,892784E+23
-1585	6,225096E+22	6,224826E+22	3,238872E+22	3,238846E+22	1,244992E+23	6,477718E+22	1,892764E+23
-1584	6,224801E+22	6,225016E+22	3,239036E+22	3,238914E+22	1,244982E+23	6,477949E+22	1,892777E+23
-1583	6,225004E+22	6,224965E+22	3,238971E+22	3,239114E+22	1,244997E+23	6,478085E+22	1,892805E+23
-1582	6,224806E+22	6,224810E+22	3,239086E+22	3,239047E+22	1,244962E+23	6,478133E+22	1,892775E+23
-1581	6,224645E+22	6,224889E+22	3,239231E+22	3,239187E+22	1,244953E+23	6,478418E+22	1,892795E+23
-1580	6,224905E+22	6,224720E+22	3,239160E+22	3,239243E+22	1,244963E+23	6,478404E+22	1,892803E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1579	6,224648E+22	6,224704E+22	3,239277E+22	3,239144E+22	1,244935E+23	6,478421E+22	1,892777E+23
-1578	6,224751E+22	6,224767E+22	3,239251E+22	3,239319E+22	1,244952E+23	6,478570E+22	1,892809E+23
-1577	6,224867E+22	6,224647E+22	3,239173E+22	3,239225E+22	1,244951E+23	6,478398E+22	1,892791E+23
-1576	6,224562E+22	6,224843E+22	3,239254E+22	3,239147E+22	1,244940E+23	6,478401E+22	1,892781E+23
-1575	6,224852E+22	6,224852E+22	3,239109E+22	3,239227E+22	1,244970E+23	6,478335E+22	1,892804E+23
-1574	6,224843E+22	6,224723E+22	3,239090E+22	3,239013E+22	1,244957E+23	6,478104E+22	1,892767E+23
-1573	6,224670E+22	6,224890E+22	3,239153E+22	3,239015E+22	1,244956E+23	6,478168E+22	1,892773E+23
-1572	6,224982E+22	6,224862E+22	3,238967E+22	3,239061E+22	1,244984E+23	6,478028E+22	1,892787E+23
-1571	6,224765E+22	6,224855E+22	3,238992E+22	3,238909E+22	1,244962E+23	6,477901E+22	1,892752E+23
-1570	6,224800E+22	6,224934E+22	3,238979E+22	3,239033E+22	1,244973E+23	6,478012E+22	1,892775E+23
-1569	6,225042E+22	6,224801E+22	3,238885E+22	3,238963E+22	1,244984E+23	6,477848E+22	1,892769E+23
-1568	6,224761E+22	6,224909E+22	3,239017E+22	3,238882E+22	1,244967E+23	6,477898E+22	1,892757E+23
-1567	6,224974E+22	6,224933E+22	3,238980E+22	3,239059E+22	1,244991E+23	6,478040E+22	1,892795E+23
-1566	6,224964E+22	6,224792E+22	3,239013E+22	3,239008E+22	1,244976E+23	6,478021E+22	1,892778E+23
-1565	6,224605E+22	6,224905E+22	3,239210E+22	3,239101E+22	1,244951E+23	6,478311E+22	1,892782E+23
-1564	6,224839E+22	6,224833E+22	3,239146E+22	3,239282E+22	1,244967E+23	6,478429E+22	1,892810E+23
-1563	6,224655E+22	6,224673E+22	3,239266E+22	3,239197E+22	1,244933E+23	6,478463E+22	1,892779E+23
-1562	6,224566E+22	6,224679E+22	3,239374E+22	3,239341E+22	1,244925E+23	6,478715E+22	1,892796E+23
-1561	6,224844E+22	6,224550E+22	3,239292E+22	3,239383E+22	1,244939E+23	6,478675E+22	1,892807E+23
-1560	6,224524E+22	6,224621E+22	3,239404E+22	3,239300E+22	1,244914E+23	6,478703E+22	1,892785E+23
-1559	6,224630E+22	6,224712E+22	3,239349E+22	3,239448E+22	1,244934E+23	6,478797E+22	1,892814E+23
-1558	6,224764E+22	6,224598E+22	3,239276E+22	3,239335E+22	1,244936E+23	6,478611E+22	1,892797E+23
-1557	6,224446E+22	6,224708E+22	3,239397E+22	3,239241E+22	1,244915E+23	6,478638E+22	1,892779E+23
-1556	6,224766E+22	6,224735E+22	3,239253E+22	3,239311E+22	1,244950E+23	6,478564E+22	1,892806E+23
-1555	6,224729E+22	6,224646E+22	3,239229E+22	3,239123E+22	1,244937E+23	6,478352E+22	1,892773E+23
-1554	6,224558E+22	6,224760E+22	3,239248E+22	3,239166E+22	1,244932E+23	6,478415E+22	1,892773E+23
-1553	6,224884E+22	6,224745E+22	3,239066E+22	3,239199E+22	1,244963E+23	6,478265E+22	1,892789E+23
-1552	6,224653E+22	6,224761E+22	3,239112E+22	3,239039E+22	1,244941E+23	6,478151E+22	1,892757E+23
-1551	6,224732E+22	6,224841E+22	3,239094E+22	3,239133E+22	1,244957E+23	6,478227E+22	1,892780E+23
-1550	6,224997E+22	6,224729E+22	3,239014E+22	3,239076E+22	1,244973E+23	6,478090E+22	1,892782E+23
-1549	6,224638E+22	6,224783E+22	3,239185E+22	3,239029E+22	1,244942E+23	6,478214E+22	1,892764E+23
-1548	6,224808E+22	6,224856E+22	3,239146E+22	3,239226E+22	1,244966E+23	6,478372E+22	1,892804E+23
-1547	6,224772E+22	6,224708E+22	3,239181E+22	3,239185E+22	1,244948E+23	6,478367E+22	1,892785E+23
-1546	6,224454E+22	6,224706E+22	3,239357E+22	3,239280E+22	1,244916E+23	6,478637E+22	1,892780E+23
-1545	6,224751E+22	6,224630E+22	3,239300E+22	3,239421E+22	1,244938E+23	6,478721E+22	1,892810E+23
-1544	6,224566E+22	6,224515E+22	3,239423E+22	3,239337E+22	1,244908E+23	6,478759E+22	1,892784E+23
-1543	6,224488E+22	6,224578E+22	3,239493E+22	3,239475E+22	1,244907E+23	6,478969E+22	1,892804E+23
-1542	6,224748E+22	6,224514E+22	3,239399E+22	3,239528E+22	1,244926E+23	6,478927E+22	1,892819E+23
-1541	6,224373E+22	6,224534E+22	3,239546E+22	3,239443E+22	1,244891E+23	6,478989E+22	1,892790E+23
-1540	6,224499E+22	6,224640E+22	3,239497E+22	3,239554E+22	1,244914E+23	6,479051E+22	1,892819E+23
-1539	6,224642E+22	6,224517E+22	3,239433E+22	3,239429E+22	1,244916E+23	6,478862E+22	1,892802E+23
-1538	6,224365E+22	6,224533E+22	3,239526E+22	3,239362E+22	1,244890E+23	6,478888E+22	1,892779E+23
-1537	6,224679E+22	6,224589E+22	3,239370E+22	3,239434E+22	1,244927E+23	6,478805E+22	1,892807E+23
-1536	6,224589E+22	6,224559E+22	3,239336E+22	3,239279E+22	1,244915E+23	6,478615E+22	1,892776E+23
-1535	6,224454E+22	6,224674E+22	3,239323E+22	3,239302E+22	1,244913E+23	6,478625E+22	1,892775E+23
-1534	6,224813E+22	6,224666E+22	3,239152E+22	3,239310E+22	1,244948E+23	6,478462E+22	1,892794E+23
-1533	6,224579E+22	6,224627E+22	3,239248E+22	3,239141E+22	1,244921E+23	6,478389E+22	1,892759E+23
-1532	6,224661E+22	6,224748E+22	3,239239E+22	3,239224E+22	1,244941E+23	6,478463E+22	1,892787E+23
-1531	6,224865E+22	6,224678E+22	3,239174E+22	3,239203E+22	1,244954E+23	6,478377E+22	1,892792E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1530	6,224490E+22	6,224657E+22	3,239326E+22	3,239210E+22	1,244915E+23	6,478536E+22	1,892768E+23
-1529	6,224653E+22	6,224712E+22	3,239301E+22	3,239392E+22	1,244936E+23	6,478693E+22	1,892806E+23
-1528	6,224614E+22	6,224571E+22	3,239351E+22	3,239355E+22	1,244919E+23	6,478705E+22	1,892789E+23
-1527	6,224369E+22	6,224542E+22	3,239497E+22	3,239420E+22	1,244891E+23	6,478917E+22	1,892783E+23
-1526	6,224695E+22	6,224500E+22	3,239436E+22	3,239562E+22	1,244919E+23	6,478998E+22	1,892819E+23
-1525	6,224455E+22	6,224380E+22	3,239578E+22	3,239500E+22	1,244883E+23	6,479078E+22	1,892791E+23
-1524	6,224347E+22	6,224519E+22	3,239633E+22	3,239627E+22	1,244887E+23	6,479260E+22	1,892813E+23
-1523	6,224589E+22	6,224469E+22	3,239551E+22	3,239669E+22	1,244906E+23	6,479220E+22	1,892828E+23
-1522	6,224256E+22	6,224379E+22	3,239683E+22	3,239577E+22	1,244864E+23	6,479260E+22	1,892790E+23
-1521	6,224413E+22	6,224482E+22	3,239644E+22	3,239648E+22	1,244890E+23	6,479292E+22	1,892819E+23
-1520	6,224539E+22	6,224402E+22	3,239573E+22	3,239545E+22	1,244894E+23	6,479118E+22	1,892806E+23
-1519	6,224269E+22	6,224436E+22	3,239617E+22	3,239488E+22	1,244871E+23	6,479105E+22	1,892781E+23
-1518	6,224583E+22	6,224537E+22	3,239447E+22	3,239573E+22	1,244912E+23	6,479020E+22	1,892814E+23
-1517	6,224467E+22	6,224447E+22	3,239444E+22	3,239414E+22	1,244891E+23	6,478858E+22	1,892777E+23
-1516	6,224359E+22	6,224597E+22	3,239437E+22	3,239396E+22	1,244896E+23	6,478833E+22	1,892779E+23
-1515	6,224741E+22	6,224589E+22	3,239292E+22	3,239395E+22	1,244933E+23	6,478687E+22	1,892802E+23
-1514	6,224514E+22	6,224468E+22	3,239381E+22	3,239264E+22	1,244898E+23	6,478644E+22	1,892763E+23
-1513	6,224552E+22	6,224631E+22	3,239383E+22	3,239356E+22	1,244918E+23	6,478739E+22	1,892792E+23
-1512	6,224690E+22	6,224597E+22	3,239321E+22	3,239378E+22	1,244929E+23	6,478698E+22	1,892799E+23
-1511	6,224347E+22	6,224531E+22	3,239452E+22	3,239376E+22	1,244888E+23	6,478828E+22	1,892771E+23
-1510	6,224548E+22	6,224580E+22	3,239435E+22	3,239538E+22	1,244913E+23	6,478973E+22	1,892810E+23
-1509	6,224510E+22	6,224384E+22	3,239521E+22	3,239501E+22	1,244889E+23	6,479022E+22	1,892792E+23
-1508	6,224279E+22	6,224427E+22	3,239653E+22	3,239553E+22	1,244871E+23	6,479206E+22	1,892791E+23
-1507	6,224570E+22	6,224441E+22	3,239595E+22	3,239714E+22	1,244901E+23	6,479310E+22	1,892832E+23
-1506	6,224324E+22	6,224265E+22	3,239715E+22	3,239680E+22	1,244859E+23	6,479396E+22	1,892798E+23
-1505	6,224215E+22	6,224408E+22	3,239785E+22	3,239766E+22	1,244862E+23	6,479550E+22	1,892817E+23
-1504	6,224446E+22	6,224373E+22	3,239714E+22	3,239803E+22	1,244882E+23	6,479517E+22	1,892834E+23
-1503	6,224178E+22	6,224242E+22	3,239813E+22	3,239692E+22	1,244842E+23	6,479505E+22	1,892792E+23
-1502	6,224334E+22	6,224366E+22	3,239758E+22	3,239765E+22	1,244870E+23	6,479523E+22	1,892822E+23
-1501	6,224407E+22	6,224277E+22	3,239696E+22	3,239696E+22	1,244868E+23	6,479392E+22	1,892808E+23
-1500	6,224139E+22	6,224364E+22	3,239706E+22	3,239619E+22	1,244850E+23	6,479325E+22	1,892783E+23
-1499	6,224462E+22	6,224464E+22	3,239555E+22	3,239687E+22	1,244893E+23	6,479241E+22	1,892817E+23
-1498	6,224405E+22	6,224291E+22	3,239545E+22	3,239521E+22	1,244870E+23	6,479066E+22	1,892776E+23
-1497	6,224320E+22	6,224456E+22	3,239563E+22	3,239465E+22	1,244878E+23	6,479029E+22	1,892780E+23
-1496	6,224650E+22	6,224514E+22	3,239434E+22	3,239500E+22	1,244916E+23	6,478933E+22	1,892810E+23
-1495	6,224411E+22	6,224392E+22	3,239494E+22	3,239399E+22	1,244880E+23	6,478893E+22	1,892770E+23
-1494	6,224411E+22	6,224571E+22	3,239504E+22	3,239509E+22	1,244898E+23	6,479013E+22	1,892799E+23
-1493	6,224517E+22	6,224468E+22	3,239484E+22	3,239551E+22	1,244899E+23	6,479035E+22	1,892802E+23
-1492	6,224213E+22	6,224409E+22	3,239610E+22	3,239518E+22	1,244862E+23	6,479127E+22	1,892775E+23
-1491	6,224451E+22	6,224449E+22	3,239612E+22	3,239680E+22	1,244890E+23	6,479291E+22	1,892819E+23
-1490	6,224430E+22	6,224195E+22	3,239673E+22	3,239676E+22	1,244863E+23	6,479349E+22	1,892797E+23
-1489	6,224171E+22	6,224301E+22	3,239802E+22	3,239718E+22	1,244847E+23	6,479521E+22	1,892799E+23
-1488	6,224410E+22	6,224371E+22	3,239747E+22	3,239893E+22	1,244878E+23	6,479640E+22	1,892842E+23
-1487	6,224201E+22	6,224154E+22	3,239843E+22	3,239829E+22	1,244836E+23	6,479673E+22	1,892803E+23
-1486	6,224122E+22	6,224301E+22	3,239920E+22	3,239879E+22	1,244842E+23	6,479799E+22	1,892822E+23
-1485	6,224336E+22	6,224213E+22	3,239874E+22	3,239919E+22	1,244855E+23	6,479794E+22	1,892834E+23
-1484	6,224063E+22	6,224143E+22	3,239944E+22	3,239802E+22	1,244821E+23	6,479746E+22	1,892795E+23
-1483	6,224206E+22	6,224300E+22	3,239882E+22	3,239896E+22	1,244851E+23	6,479778E+22	1,892828E+23
-1482	6,224286E+22	6,224141E+22	3,239792E+22	3,239849E+22	1,244843E+23	6,479641E+22	1,892807E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1481	6,224051E+22	6,224248E+22	3,239812E+22	3,239725E+22	1,244830E+23	6,479537E+22	1,892784E+23
-1480	6,224379E+22	6,224377E+22	3,239676E+22	3,239781E+22	1,244876E+23	6,479457E+22	1,892821E+23
-1479	6,224372E+22	6,224178E+22	3,239649E+22	3,239608E+22	1,244855E+23	6,479257E+22	1,892781E+23
-1478	6,224258E+22	6,224382E+22	3,239675E+22	3,239566E+22	1,244864E+23	6,479241E+22	1,892788E+23
-1477	6,224491E+22	6,224427E+22	3,239576E+22	3,239654E+22	1,244892E+23	6,479230E+22	1,892815E+23
-1476	6,224236E+22	6,224331E+22	3,239626E+22	3,239557E+22	1,244857E+23	6,479182E+22	1,892775E+23
-1475	6,224253E+22	6,224467E+22	3,239662E+22	3,239663E+22	1,244872E+23	6,479325E+22	1,892805E+23
-1474	6,224413E+22	6,224262E+22	3,239634E+22	3,239712E+22	1,244867E+23	6,479347E+22	1,892802E+23
-1473	6,224152E+22	6,224224E+22	3,239764E+22	3,239647E+22	1,244838E+23	6,479411E+22	1,892779E+23
-1472	6,224349E+22	6,224339E+22	3,239769E+22	3,239836E+22	1,244869E+23	6,479605E+22	1,892829E+23
-1471	6,224338E+22	6,224104E+22	3,239795E+22	3,239844E+22	1,244844E+23	6,479639E+22	1,892808E+23
-1470	6,224051E+22	6,224233E+22	3,239933E+22	3,239869E+22	1,244828E+23	6,479802E+22	1,892809E+23
-1469	6,224245E+22	6,224262E+22	3,239924E+22	3,240046E+22	1,244851E+23	6,479970E+22	1,892848E+23
-1468	6,224069E+22	6,224055E+22	3,240008E+22	3,239945E+22	1,244812E+23	6,479953E+22	1,892808E+23
-1467	6,224003E+22	6,224177E+22	3,240095E+22	3,239997E+22	1,244818E+23	6,480092E+22	1,892827E+23
-1466	6,224219E+22	6,224035E+22	3,240012E+22	3,240078E+22	1,244825E+23	6,480090E+22	1,892834E+23
-1465	6,223943E+22	6,224009E+22	3,240057E+22	3,239948E+22	1,244795E+23	6,480006E+22	1,892796E+23
-1464	6,224067E+22	6,224212E+22	3,239989E+22	3,240044E+22	1,244828E+23	6,480033E+22	1,892831E+23
-1463	6,224220E+22	6,224025E+22	3,239871E+22	3,239961E+22	1,244825E+23	6,479832E+22	1,892808E+23
-1462	6,224015E+22	6,224156E+22	3,239903E+22	3,239796E+22	1,244817E+23	6,479699E+22	1,892787E+23
-1461	6,224301E+22	6,224276E+22	3,239812E+22	3,239870E+22	1,244858E+23	6,479681E+22	1,892826E+23
-1460	6,224260E+22	6,224143E+22	3,239772E+22	3,239706E+22	1,244840E+23	6,479478E+22	1,892788E+23
-1459	6,224107E+22	6,224347E+22	3,239818E+22	3,239705E+22	1,244845E+23	6,479523E+22	1,892798E+23
-1458	6,224327E+22	6,224291E+22	3,239712E+22	3,239828E+22	1,244862E+23	6,479540E+22	1,892816E+23
-1457	6,224110E+22	6,224179E+22	3,239775E+22	3,239704E+22	1,244829E+23	6,479479E+22	1,892777E+23
-1456	6,224151E+22	6,224319E+22	3,239822E+22	3,239808E+22	1,244847E+23	6,479630E+22	1,892810E+23
-1455	6,224368E+22	6,224087E+22	3,239763E+22	3,239855E+22	1,244846E+23	6,479618E+22	1,892807E+23
-1454	6,224091E+22	6,224118E+22	3,239888E+22	3,239792E+22	1,244821E+23	6,479680E+22	1,892789E+23
-1453	6,224199E+22	6,224244E+22	3,239920E+22	3,240011E+22	1,244844E+23	6,479930E+22	1,892837E+23
-1452	6,224165E+22	6,224050E+22	3,239942E+22	3,239996E+22	1,244822E+23	6,479938E+22	1,892815E+23
-1451	6,223903E+22	6,224144E+22	3,240113E+22	3,240008E+22	1,244805E+23	6,480121E+22	1,892817E+23
-1450	6,224116E+22	6,224070E+22	3,240097E+22	3,240188E+22	1,244819E+23	6,480285E+22	1,892847E+23
-1449	6,223970E+22	6,223885E+22	3,240174E+22	3,240071E+22	1,244786E+23	6,480245E+22	1,892810E+23
-1448	6,223870E+22	6,224062E+22	3,240240E+22	3,240149E+22	1,244793E+23	6,480388E+22	1,892832E+23
-1447	6,224110E+22	6,223922E+22	3,240102E+22	3,240238E+22	1,244803E+23	6,480340E+22	1,892837E+23
-1446	6,223853E+22	6,223930E+22	3,240139E+22	3,240076E+22	1,244778E+23	6,480215E+22	1,892800E+23
-1445	6,223958E+22	6,224112E+22	3,240110E+22	3,240160E+22	1,244807E+23	6,480270E+22	1,892834E+23
-1444	6,224142E+22	6,223966E+22	3,239988E+22	3,240035E+22	1,244811E+23	6,480023E+22	1,892813E+23
-1443	6,223948E+22	6,224085E+22	3,240047E+22	3,239883E+22	1,244803E+23	6,479929E+22	1,892796E+23
-1442	6,224180E+22	6,224154E+22	3,239943E+22	3,240005E+22	1,244833E+23	6,479949E+22	1,892828E+23
-1441	6,224120E+22	6,224043E+22	3,239899E+22	3,239852E+22	1,244816E+23	6,479751E+22	1,892791E+23
-1440	6,223940E+22	6,224243E+22	3,239954E+22	3,239866E+22	1,244818E+23	6,479820E+22	1,892800E+23
-1439	6,224238E+22	6,224130E+22	3,239824E+22	3,239973E+22	1,244837E+23	6,479797E+22	1,892816E+23
-1438	6,224068E+22	6,224022E+22	3,239889E+22	3,239812E+22	1,244809E+23	6,479701E+22	1,892779E+23
-1437	6,224067E+22	6,224175E+22	3,239973E+22	3,239941E+22	1,244824E+23	6,479914E+22	1,892816E+23
-1436	6,224257E+22	6,224034E+22	3,239897E+22	3,239988E+22	1,244829E+23	6,479885E+22	1,892818E+23
-1435	6,223947E+22	6,224073E+22	3,240049E+22	3,239950E+22	1,244802E+23	6,479999E+22	1,892802E+23
-1434	6,224024E+22	6,224122E+22	3,240089E+22	3,240187E+22	1,244815E+23	6,480277E+22	1,892842E+23
-1433	6,224022E+22	6,223915E+22	3,240126E+22	3,240143E+22	1,244794E+23	6,480269E+22	1,892821E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1432	6,223766E+22	6,223999E+22	3,240304E+22	3,240158E+22	1,244776E+23	6,480462E+22	1,892823E+23
-1431	6,224026E+22	6,223890E+22	3,240239E+22	3,240344E+22	1,244792E+23	6,480582E+22	1,892850E+23
-1430	6,223872E+22	6,223758E+22	3,240288E+22	3,240225E+22	1,244763E+23	6,480513E+22	1,892814E+23
-1429	6,223719E+22	6,223952E+22	3,240360E+22	3,240322E+22	1,244767E+23	6,480682E+22	1,892835E+23
-1428	6,223979E+22	6,223860E+22	3,240204E+22	3,240362E+22	1,244784E+23	6,480565E+22	1,892840E+23
-1427	6,223779E+22	6,223855E+22	3,240266E+22	3,240171E+22	1,244763E+23	6,480437E+22	1,892807E+23
-1426	6,223889E+22	6,223969E+22	3,240239E+22	3,240250E+22	1,244786E+23	6,480488E+22	1,892835E+23
-1425	6,224073E+22	6,223866E+22	3,240122E+22	3,240119E+22	1,244794E+23	6,480240E+22	1,892818E+23
-1424	6,223826E+22	6,224023E+22	3,240182E+22	3,240008E+22	1,244785E+23	6,480190E+22	1,892804E+23
-1423	6,224049E+22	6,224052E+22	3,240042E+22	3,240150E+22	1,244810E+23	6,480191E+22	1,892829E+23
-1422	6,224007E+22	6,223944E+22	3,240002E+22	3,239985E+22	1,244795E+23	6,479987E+22	1,892794E+23
-1421	6,223822E+22	6,224099E+22	3,240090E+22	3,240002E+22	1,244792E+23	6,480092E+22	1,892801E+23
-1420	6,224147E+22	6,224017E+22	3,239955E+22	3,240080E+22	1,244816E+23	6,480035E+22	1,892820E+23
-1419	6,224005E+22	6,223922E+22	3,240038E+22	3,239942E+22	1,244793E+23	6,479980E+22	1,892791E+23
-1418	6,223939E+22	6,224044E+22	3,240114E+22	3,240111E+22	1,244798E+23	6,480225E+22	1,892821E+23
-1417	6,224106E+22	6,223945E+22	3,240049E+22	3,240156E+22	1,244805E+23	6,480205E+22	1,892826E+23
-1416	6,223780E+22	6,223972E+22	3,240224E+22	3,240122E+22	1,244775E+23	6,480346E+22	1,892810E+23
-1415	6,223903E+22	6,223956E+22	3,240245E+22	3,240339E+22	1,244786E+23	6,480583E+22	1,892844E+23
-1414	6,223941E+22	6,223758E+22	3,240279E+22	3,240273E+22	1,244770E+23	6,480551E+22	1,892825E+23
-1413	6,223641E+22	6,223844E+22	3,240468E+22	3,240317E+22	1,244748E+23	6,480785E+22	1,892827E+23
-1412	6,223883E+22	6,223814E+22	3,240367E+22	3,240492E+22	1,244770E+23	6,480860E+22	1,892856E+23
-1411	6,223752E+22	6,223689E+22	3,240417E+22	3,240381E+22	1,244744E+23	6,480798E+22	1,892824E+23
-1410	6,223590E+22	6,223822E+22	3,240486E+22	3,240470E+22	1,244741E+23	6,480957E+22	1,892837E+23
-1409	6,223899E+22	6,223752E+22	3,240341E+22	3,240461E+22	1,244765E+23	6,480802E+22	1,892845E+23
-1408	6,223703E+22	6,223752E+22	3,240416E+22	3,240265E+22	1,244745E+23	6,480681E+22	1,892814E+23
-1407	6,223825E+22	6,223848E+22	3,240352E+22	3,240356E+22	1,244767E+23	6,480708E+22	1,892838E+23
-1406	6,223975E+22	6,223783E+22	3,240217E+22	3,240236E+22	1,244776E+23	6,480453E+22	1,892821E+23
-1405	6,223654E+22	6,223926E+22	3,240297E+22	3,240165E+22	1,244758E+23	6,480461E+22	1,892804E+23
-1404	6,223898E+22	6,223973E+22	3,240148E+22	3,240271E+22	1,244787E+23	6,480419E+22	1,892829E+23
-1403	6,223926E+22	6,223826E+22	3,240132E+22	3,240101E+22	1,244775E+23	6,480232E+22	1,892798E+23
-1402	6,223744E+22	6,223925E+22	3,240222E+22	3,240127E+22	1,244767E+23	6,480350E+22	1,892802E+23
-1401	6,224075E+22	6,223900E+22	3,240094E+22	3,240202E+22	1,244798E+23	6,480296E+22	1,892827E+23
-1400	6,223882E+22	6,223854E+22	3,240187E+22	3,240098E+22	1,244774E+23	6,480284E+22	1,892802E+23
-1399	6,223810E+22	6,223944E+22	3,240243E+22	3,240276E+22	1,244775E+23	6,480519E+22	1,892827E+23
-1398	6,223982E+22	6,223844E+22	3,240196E+22	3,240304E+22	1,244783E+23	6,480500E+22	1,892833E+23
-1397	6,223637E+22	6,223830E+22	3,240410E+22	3,240283E+22	1,244747E+23	6,480693E+22	1,892816E+23
-1396	6,223775E+22	6,223831E+22	3,240416E+22	3,240469E+22	1,244761E+23	6,480886E+22	1,892849E+23
-1395	6,223842E+22	6,223634E+22	3,240449E+22	3,240436E+22	1,244748E+23	6,480884E+22	1,892836E+23
-1394	6,223491E+22	6,223688E+22	3,240607E+22	3,240507E+22	1,244718E+23	6,481114E+22	1,892829E+23
-1393	6,223742E+22	6,223701E+22	3,240500E+22	3,240656E+22	1,244744E+23	6,481156E+22	1,892860E+23
-1392	6,223641E+22	6,223586E+22	3,240558E+22	3,240521E+22	1,244723E+23	6,481079E+22	1,892831E+23
-1391	6,223534E+22	6,223672E+22	3,240598E+22	3,240570E+22	1,244721E+23	6,481168E+22	1,892837E+23
-1390	6,223857E+22	6,223645E+22	3,240456E+22	3,240535E+22	1,244750E+23	6,480991E+22	1,892849E+23
-1389	6,223598E+22	6,223664E+22	3,240544E+22	3,240379E+22	1,244726E+23	6,480923E+22	1,892818E+23
-1388	6,223662E+22	6,223813E+22	3,240457E+22	3,240465E+22	1,244747E+23	6,480922E+22	1,892840E+23
-1387	6,223835E+22	6,223730E+22	3,240334E+22	3,240376E+22	1,244757E+23	6,480709E+22	1,892827E+23
-1386	6,223511E+22	6,223776E+22	3,240416E+22	3,240310E+22	1,244729E+23	6,480726E+22	1,892801E+23
-1385	6,223812E+22	6,223830E+22	3,240280E+22	3,240383E+22	1,244764E+23	6,480664E+22	1,892831E+23
-1384	6,223868E+22	6,223691E+22	3,240275E+22	3,240220E+22	1,244756E+23	6,480495E+22	1,892805E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1383	6,223689E+22	6,223785E+22	3,240330E+22	3,240263E+22	1,244747E+23	6,480593E+22	1,892807E+23
-1382	6,223981E+22	6,223822E+22	3,240204E+22	3,240344E+22	1,244780E+23	6,480548E+22	1,892835E+23
-1381	6,223721E+22	6,223768E+22	3,240333E+22	3,240271E+22	1,244749E+23	6,480604E+22	1,892809E+23
-1380	6,223650E+22	6,223863E+22	3,240400E+22	3,240407E+22	1,244751E+23	6,480807E+22	1,892832E+23
-1379	6,223880E+22	6,223722E+22	3,240377E+22	3,240442E+22	1,244760E+23	6,480819E+22	1,892842E+23
-1378	6,223513E+22	6,223638E+22	3,240591E+22	3,240443E+22	1,244715E+23	6,481034E+22	1,892819E+23
-1377	6,223653E+22	6,223692E+22	3,240585E+22	3,240630E+22	1,244735E+23	6,481215E+22	1,892856E+23
-1376	6,223693E+22	6,223527E+22	3,240606E+22	3,240616E+22	1,244722E+23	6,481222E+22	1,892844E+23
-1375	6,223374E+22	6,223558E+22	3,240721E+22	3,240678E+22	1,244693E+23	6,481399E+22	1,892833E+23
-1374	6,223657E+22	6,223588E+22	3,240619E+22	3,240778E+22	1,244725E+23	6,481397E+22	1,892864E+23
-1373	6,223539E+22	6,223472E+22	3,240704E+22	3,240639E+22	1,244701E+23	6,481343E+22	1,892835E+23
-1372	6,223441E+22	6,223597E+22	3,240730E+22	3,240650E+22	1,244704E+23	6,481381E+22	1,892842E+23
-1371	6,223763E+22	6,223577E+22	3,240588E+22	3,240653E+22	1,244734E+23	6,481241E+22	1,892858E+23
-1370	6,223429E+22	6,223551E+22	3,240661E+22	3,240537E+22	1,244698E+23	6,481198E+22	1,892818E+23
-1369	6,223506E+22	6,223708E+22	3,240573E+22	3,240602E+22	1,244721E+23	6,481176E+22	1,892839E+23
-1368	6,223719E+22	6,223604E+22	3,240464E+22	3,240502E+22	1,244732E+23	6,480966E+22	1,892829E+23
-1367	6,223471E+22	6,223602E+22	3,240511E+22	3,240417E+22	1,244707E+23	6,480928E+22	1,892800E+23
-1366	6,223792E+22	6,223698E+22	3,240384E+22	3,240472E+22	1,244749E+23	6,480856E+22	1,892835E+23
-1365	6,223782E+22	6,223613E+22	3,240398E+22	3,240353E+22	1,244739E+23	6,480751E+22	1,892815E+23
-1364	6,223555E+22	6,223759E+22	3,240449E+22	3,240383E+22	1,244731E+23	6,480831E+22	1,892815E+23
-1363	6,223851E+22	6,223778E+22	3,240356E+22	3,240493E+22	1,244763E+23	6,480849E+22	1,892848E+23
-1362	6,223560E+22	6,223631E+22	3,240509E+22	3,240436E+22	1,244719E+23	6,480945E+22	1,892814E+23
-1361	6,223513E+22	6,223715E+22	3,240592E+22	3,240549E+22	1,244723E+23	6,481141E+22	1,892837E+23
-1360	6,223766E+22	6,223566E+22	3,240574E+22	3,240608E+22	1,244733E+23	6,481182E+22	1,892851E+23
-1359	6,223409E+22	6,223452E+22	3,240725E+22	3,240628E+22	1,244686E+23	6,481353E+22	1,892821E+23
-1358	6,223528E+22	6,223560E+22	3,240705E+22	3,240805E+22	1,244709E+23	6,481510E+22	1,892860E+23
-1357	6,223548E+22	6,223414E+22	3,240737E+22	3,240796E+22	1,244696E+23	6,481533E+22	1,892850E+23
-1356	6,223258E+22	6,223465E+22	3,240848E+22	3,240786E+22	1,244672E+23	6,481633E+22	1,892836E+23
-1355	6,223596E+22	6,223498E+22	3,240766E+22	3,240878E+22	1,244709E+23	6,481645E+22	1,892874E+23
-1354	6,223433E+22	6,223342E+22	3,240852E+22	3,240756E+22	1,244678E+23	6,481607E+22	1,892838E+23
-1353	6,223307E+22	6,223517E+22	3,240871E+22	3,240766E+22	1,244682E+23	6,481637E+22	1,892846E+23
-1352	6,223606E+22	6,223504E+22	3,240724E+22	3,240795E+22	1,244711E+23	6,481520E+22	1,892863E+23
-1351	6,223307E+22	6,223411E+22	3,240757E+22	3,240681E+22	1,244672E+23	6,481438E+22	1,892816E+23
-1350	6,223429E+22	6,223570E+22	3,240677E+22	3,240709E+22	1,244700E+23	6,481386E+22	1,892839E+23
-1349	6,223650E+22	6,223473E+22	3,240586E+22	3,240617E+22	1,244712E+23	6,481203E+22	1,892833E+23
-1348	6,223417E+22	6,223516E+22	3,240620E+22	3,240502E+22	1,244693E+23	6,481122E+22	1,892806E+23
-1347	6,223725E+22	6,223649E+22	3,240502E+22	3,240599E+22	1,244737E+23	6,481100E+22	1,892847E+23
-1346	6,223620E+22	6,223531E+22	3,240528E+22	3,240518E+22	1,244715E+23	6,481046E+22	1,892820E+23
-1345	6,223395E+22	6,223676E+22	3,240606E+22	3,240528E+22	1,244707E+23	6,481134E+22	1,892821E+23
-1344	6,223705E+22	6,223651E+22	3,240543E+22	3,240635E+22	1,244736E+23	6,481178E+22	1,892853E+23
-1343	6,223465E+22	6,223436E+22	3,240665E+22	3,240587E+22	1,244690E+23	6,481252E+22	1,892815E+23
-1342	6,223430E+22	6,223540E+22	3,240743E+22	3,240693E+22	1,244697E+23	6,481436E+22	1,892841E+23
-1341	6,223618E+22	6,223439E+22	3,240722E+22	3,240796E+22	1,244706E+23	6,481518E+22	1,892857E+23
-1340	6,223263E+22	6,223375E+22	3,240846E+22	3,240786E+22	1,244664E+23	6,481632E+22	1,892827E+23
-1339	6,223421E+22	6,223478E+22	3,240843E+22	3,240963E+22	1,244690E+23	6,481805E+22	1,892870E+23
-1338	6,223418E+22	6,223286E+22	3,240896E+22	3,240941E+22	1,244670E+23	6,481836E+22	1,892854E+23
-1337	6,223164E+22	6,223352E+22	3,241019E+22	3,240890E+22	1,244652E+23	6,481908E+22	1,892842E+23
-1336	6,223492E+22	6,223390E+22	3,240945E+22	3,240997E+22	1,244688E+23	6,481943E+22	1,892882E+23
-1335	6,223313E+22	6,223212E+22	3,240970E+22	3,240907E+22	1,244653E+23	6,481877E+22	1,892840E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1334	6,223167E+22	6,223403E+22	3,240976E+22	3,240908E+22	1,244657E+23	6,481884E+22	1,892845E+23
-1333	6,223454E+22	6,223391E+22	3,240837E+22	3,240947E+22	1,244684E+23	6,481784E+22	1,892863E+23
-1332	6,223223E+22	6,223297E+22	3,240852E+22	3,240770E+22	1,244652E+23	6,481622E+22	1,892814E+23
-1331	6,223408E+22	6,223466E+22	3,240787E+22	3,240801E+22	1,244687E+23	6,481588E+22	1,892846E+23
-1330	6,223573E+22	6,223364E+22	3,240706E+22	3,240732E+22	1,244694E+23	6,481437E+22	1,892837E+23
-1329	6,223304E+22	6,223469E+22	3,240745E+22	3,240617E+22	1,244677E+23	6,481361E+22	1,892813E+23
-1328	6,223578E+22	6,223605E+22	3,240653E+22	3,240739E+22	1,244718E+23	6,481392E+22	1,892857E+23
-1327	6,223487E+22	6,223403E+22	3,240658E+22	3,240671E+22	1,244689E+23	6,481330E+22	1,892822E+23
-1326	6,223277E+22	6,223522E+22	3,240761E+22	3,240660E+22	1,244680E+23	6,481421E+22	1,892822E+23
-1325	6,223583E+22	6,223495E+22	3,240713E+22	3,240793E+22	1,244708E+23	6,481505E+22	1,892858E+23
-1324	6,223362E+22	6,223293E+22	3,240808E+22	3,240730E+22	1,244666E+23	6,481538E+22	1,892819E+23
-1323	6,223327E+22	6,223434E+22	3,240878E+22	3,240874E+22	1,244676E+23	6,481752E+22	1,892851E+23
-1322	6,223448E+22	6,223312E+22	3,240862E+22	3,240991E+22	1,244676E+23	6,481853E+22	1,892861E+23
-1321	6,223126E+22	6,223269E+22	3,241001E+22	3,240933E+22	1,244640E+23	6,481934E+22	1,892833E+23
-1320	6,223317E+22	6,223362E+22	3,241027E+22	3,241086E+22	1,244668E+23	6,482113E+22	1,892879E+23
-1319	6,223343E+22	6,223127E+22	3,241047E+22	3,241065E+22	1,244647E+23	6,482112E+22	1,892858E+23
-1318	6,223074E+22	6,223227E+22	3,241169E+22	3,241008E+22	1,244630E+23	6,482177E+22	1,892848E+23
-1317	6,223326E+22	6,223307E+22	3,241085E+22	3,241155E+22	1,244663E+23	6,482241E+22	1,892887E+23
-1316	6,223159E+22	6,223139E+22	3,241079E+22	3,241043E+22	1,244630E+23	6,482121E+22	1,892842E+23
-1315	6,223064E+22	6,223311E+22	3,241086E+22	3,241045E+22	1,244637E+23	6,482131E+22	1,892851E+23
-1314	6,223336E+22	6,223254E+22	3,240962E+22	3,241074E+22	1,244659E+23	6,482036E+22	1,892863E+23
-1313	6,223169E+22	6,223189E+22	3,240979E+22	3,240862E+22	1,244636E+23	6,481841E+22	1,892820E+23
-1312	6,223344E+22	6,223372E+22	3,240924E+22	3,240907E+22	1,244672E+23	6,481830E+22	1,892855E+23
-1311	6,223470E+22	6,223267E+22	3,240802E+22	3,240872E+22	1,244674E+23	6,481674E+22	1,892841E+23
-1310	6,223182E+22	6,223374E+22	3,240856E+22	3,240749E+22	1,244656E+23	6,481605E+22	1,892816E+23
-1309	6,223413E+22	6,223498E+22	3,240796E+22	3,240880E+22	1,244691E+23	6,481676E+22	1,892859E+23
-1308	6,223379E+22	6,223279E+22	3,240796E+22	3,240781E+22	1,244666E+23	6,481577E+22	1,892824E+23
-1307	6,223215E+22	6,223383E+22	3,240908E+22	3,240793E+22	1,244660E+23	6,481701E+22	1,892830E+23
-1306	6,223446E+22	6,223349E+22	3,240868E+22	3,240961E+22	1,244679E+23	6,481829E+22	1,892862E+23
-1305	6,223225E+22	6,223201E+22	3,240955E+22	3,240893E+22	1,244643E+23	6,481848E+22	1,892827E+23
-1304	6,223185E+22	6,223341E+22	3,241044E+22	3,241044E+22	1,244653E+23	6,482088E+22	1,892861E+23
-1303	6,223328E+22	6,223173E+22	3,241008E+22	3,241157E+22	1,244650E+23	6,482165E+22	1,892867E+23
-1302	6,223039E+22	6,223125E+22	3,241169E+22	3,241060E+22	1,244616E+23	6,482230E+22	1,892839E+23
-1301	6,223200E+22	6,223240E+22	3,241208E+22	3,241226E+22	1,244644E+23	6,482435E+22	1,892887E+23
-1300	6,223230E+22	6,223026E+22	3,241191E+22	3,241198E+22	1,244626E+23	6,482389E+22	1,892864E+23
-1299	6,222942E+22	6,223145E+22	3,241293E+22	3,241178E+22	1,244609E+23	6,482471E+22	1,892856E+23
-1298	6,223132E+22	6,223189E+22	3,241211E+22	3,241332E+22	1,244632E+23	6,482542E+22	1,892886E+23
-1297	6,223028E+22	6,223017E+22	3,241202E+22	3,241165E+22	1,244605E+23	6,482368E+22	1,892841E+23
-1296	6,222997E+22	6,223180E+22	3,241225E+22	3,241145E+22	1,244618E+23	6,482370E+22	1,892855E+23
-1295	6,223301E+22	6,223097E+22	3,241061E+22	3,241174E+22	1,244640E+23	6,482235E+22	1,892863E+23
-1294	6,223115E+22	6,223084E+22	3,241082E+22	3,240955E+22	1,244620E+23	6,482037E+22	1,892824E+23
-1293	6,223211E+22	6,223328E+22	3,241035E+22	3,241033E+22	1,244654E+23	6,482068E+22	1,892861E+23
-1292	6,223340E+22	6,223213E+22	3,240905E+22	3,240983E+22	1,244655E+23	6,481888E+22	1,892844E+23
-1291	6,223079E+22	6,223290E+22	3,240985E+22	3,240879E+22	1,244637E+23	6,481864E+22	1,892823E+23
-1290	6,223266E+22	6,223355E+22	3,240957E+22	3,241018E+22	1,244662E+23	6,481975E+22	1,892860E+23
-1289	6,223278E+22	6,223141E+22	3,240963E+22	3,240911E+22	1,244642E+23	6,481874E+22	1,892829E+23
-1288	6,223109E+22	6,223254E+22	3,241078E+22	3,240956E+22	1,244636E+23	6,482033E+22	1,892840E+23
-1287	6,223309E+22	6,223204E+22	3,240993E+22	3,241156E+22	1,244651E+23	6,482149E+22	1,892866E+23
-1286	6,223102E+22	6,223067E+22	3,241092E+22	3,241064E+22	1,244617E+23	6,482156E+22	1,892833E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1285	6,223049E+22	6,223223E+22	3,241204E+22	3,241202E+22	1,244627E+23	6,482406E+22	1,892868E+23
-1284	6,223242E+22	6,223056E+22	3,241162E+22	3,241274E+22	1,244630E+23	6,482436E+22	1,892873E+23
-1283	6,222974E+22	6,223019E+22	3,241329E+22	3,241197E+22	1,244599E+23	6,482526E+22	1,892852E+23
-1282	6,223023E+22	6,223132E+22	3,241375E+22	3,241389E+22	1,244616E+23	6,482764E+22	1,892892E+23
-1281	6,223061E+22	6,222952E+22	3,241342E+22	3,241355E+22	1,244601E+23	6,482697E+22	1,892871E+23
-1280	6,222794E+22	6,223031E+22	3,241443E+22	3,241332E+22	1,244583E+23	6,482775E+22	1,892860E+23
-1279	6,223013E+22	6,223023E+22	3,241325E+22	3,241473E+22	1,244604E+23	6,482798E+22	1,892883E+23
-1278	6,222985E+22	6,222856E+22	3,241320E+22	3,241263E+22	1,244584E+23	6,482583E+22	1,892842E+23
-1277	6,222936E+22	6,223061E+22	3,241344E+22	3,241248E+22	1,244600E+23	6,482591E+22	1,892859E+23
-1276	6,223235E+22	6,223030E+22	3,241152E+22	3,241270E+22	1,244627E+23	6,482422E+22	1,892869E+23
-1275	6,223024E+22	6,223045E+22	3,241171E+22	3,241084E+22	1,244607E+23	6,482254E+22	1,892832E+23
-1274	6,223027E+22	6,223249E+22	3,241160E+22	3,241168E+22	1,244628E+23	6,482328E+22	1,892860E+23
-1273	6,223207E+22	6,223118E+22	3,241049E+22	3,241091E+22	1,244632E+23	6,482140E+22	1,892846E+23
-1272	6,222988E+22	6,223149E+22	3,241154E+22	3,240996E+22	1,244614E+23	6,482151E+22	1,892829E+23
-1271	6,223173E+22	6,223180E+22	3,241095E+22	3,241165E+22	1,244635E+23	6,482259E+22	1,892861E+23
-1270	6,223184E+22	6,222999E+22	3,241097E+22	3,241067E+22	1,244618E+23	6,482164E+22	1,892835E+23
-1269	6,222963E+22	6,223162E+22	3,241211E+22	3,241137E+22	1,244613E+23	6,482348E+22	1,892847E+23
-1268	6,223192E+22	6,223110E+22	3,241118E+22	3,241310E+22	1,244630E+23	6,482428E+22	1,892873E+23
-1267	6,223017E+22	6,222973E+22	3,241238E+22	3,241216E+22	1,244599E+23	6,482454E+22	1,892844E+23
-1266	6,222914E+22	6,223095E+22	3,241390E+22	3,241346E+22	1,244601E+23	6,482736E+22	1,892874E+23
-1265	6,223129E+22	6,222940E+22	3,241351E+22	3,241406E+22	1,244607E+23	6,482756E+22	1,892882E+23
-1264	6,222836E+22	6,222908E+22	3,241514E+22	3,241366E+22	1,244574E+23	6,482879E+22	1,892862E+23
-1263	6,222845E+22	6,222982E+22	3,241505E+22	3,241576E+22	1,244583E+23	6,483081E+22	1,892891E+23
-1262	6,222919E+22	6,222785E+22	3,241471E+22	3,241510E+22	1,244570E+23	6,482981E+22	1,892869E+23
-1261	6,222681E+22	6,222887E+22	3,241570E+22	3,241463E+22	1,244557E+23	6,483033E+22	1,892860E+23
-1260	6,222976E+22	6,222884E+22	3,241428E+22	3,241557E+22	1,244586E+23	6,482986E+22	1,892885E+23
-1259	6,222967E+22	6,222774E+22	3,241416E+22	3,241360E+22	1,244574E+23	6,482776E+22	1,892852E+23
-1258	6,222807E+22	6,223006E+22	3,241458E+22	3,241361E+22	1,244581E+23	6,482819E+22	1,892863E+23
-1257	6,223091E+22	6,223009E+22	3,241273E+22	3,241378E+22	1,244610E+23	6,482650E+22	1,892875E+23
-1256	6,222886E+22	6,222983E+22	3,241319E+22	3,241211E+22	1,244587E+23	6,482529E+22	1,892840E+23
-1255	6,222883E+22	6,223105E+22	3,241294E+22	3,241301E+22	1,244599E+23	6,482595E+22	1,892858E+23
-1254	6,223126E+22	6,222946E+22	3,241199E+22	3,241215E+22	1,244607E+23	6,482414E+22	1,892849E+23
-1253	6,222896E+22	6,223001E+22	3,241297E+22	3,241146E+22	1,244590E+23	6,482443E+22	1,892834E+23
-1252	6,223083E+22	6,223060E+22	3,241203E+22	3,241320E+22	1,244614E+23	6,482524E+22	1,892867E+23
-1251	6,223092E+22	6,222918E+22	3,241198E+22	3,241244E+22	1,244601E+23	6,482442E+22	1,892845E+23
-1250	6,222799E+22	6,223055E+22	3,241355E+22	3,241298E+22	1,244585E+23	6,482653E+22	1,892851E+23
-1249	6,223080E+22	6,223014E+22	3,241290E+22	3,241429E+22	1,244609E+23	6,482720E+22	1,892881E+23
-1248	6,222935E+22	6,222846E+22	3,241436E+22	3,241343E+22	1,244578E+23	6,482779E+22	1,892856E+23
-1247	6,222776E+22	6,222939E+22	3,241561E+22	3,241499E+22	1,244572E+23	6,483060E+22	1,892878E+23
-1246	6,222988E+22	6,222805E+22	3,241514E+22	3,241572E+22	1,244579E+23	6,483086E+22	1,892888E+23
-1245	6,222657E+22	6,222789E+22	3,241662E+22	3,241548E+22	1,244545E+23	6,483210E+22	1,892866E+23
-1244	6,222715E+22	6,222848E+22	3,241625E+22	3,241725E+22	1,244556E+23	6,483350E+22	1,892891E+23
-1243	6,222854E+22	6,222664E+22	3,241582E+22	3,241643E+22	1,244552E+23	6,483225E+22	1,892874E+23
-1242	6,222586E+22	6,222759E+22	3,241705E+22	3,241577E+22	1,244534E+23	6,483282E+22	1,892863E+23
-1241	6,222905E+22	6,222810E+22	3,241561E+22	3,241653E+22	1,244571E+23	6,483214E+22	1,892893E+23
-1240	6,222864E+22	6,222726E+22	3,241548E+22	3,241486E+22	1,244559E+23	6,483034E+22	1,892862E+23
-1239	6,222644E+22	6,222916E+22	3,241564E+22	3,241504E+22	1,244556E+23	6,483068E+22	1,892863E+23
-1238	6,222962E+22	6,222883E+22	3,241399E+22	3,241497E+22	1,244585E+23	6,482896E+22	1,892874E+23
-1237	6,222772E+22	6,222847E+22	3,241457E+22	3,241332E+22	1,244562E+23	6,482788E+22	1,892841E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1236	6,222825E+22	6,222950E+22	3,241410E+22	3,241408E+22	1,244577E+23	6,482818E+22	1,892859E+23
-1235	6,223074E+22	6,222836E+22	3,241305E+22	3,241352E+22	1,244591E+23	6,482656E+22	1,892857E+23
-1234	6,222761E+22	6,222913E+22	3,241418E+22	3,241304E+22	1,244567E+23	6,482723E+22	1,892840E+23
-1233	6,222955E+22	6,222993E+22	3,241335E+22	3,241458E+22	1,244595E+23	6,482793E+22	1,892874E+23
-1232	6,222976E+22	6,222837E+22	3,241363E+22	3,241390E+22	1,244581E+23	6,482752E+22	1,892857E+23
-1231	6,222673E+22	6,222908E+22	3,241519E+22	3,241438E+22	1,244558E+23	6,482957E+22	1,892854E+23
-1230	6,222984E+22	6,222846E+22	3,241482E+22	3,241561E+22	1,244583E+23	6,483043E+22	1,892887E+23
-1229	6,222799E+22	6,222714E+22	3,241623E+22	3,241513E+22	1,244551E+23	6,483137E+22	1,892865E+23
-1228	6,222625E+22	6,222809E+22	3,241702E+22	3,241680E+22	1,244543E+23	6,483382E+22	1,892882E+23
-1227	6,222840E+22	6,222694E+22	3,241634E+22	3,241764E+22	1,244553E+23	6,483398E+22	1,892893E+23
-1226	6,222488E+22	6,222645E+22	3,241802E+22	3,241714E+22	1,244513E+23	6,483516E+22	1,892865E+23
-1225	6,222624E+22	6,222720E+22	3,241770E+22	3,241834E+22	1,244534E+23	6,483604E+22	1,892895E+23
-1224	6,222805E+22	6,222559E+22	3,241734E+22	3,241752E+22	1,244536E+23	6,483486E+22	1,892885E+23
-1223	6,222487E+22	6,222650E+22	3,241826E+22	3,241698E+22	1,244514E+23	6,483523E+22	1,892866E+23
-1222	6,222795E+22	6,222730E+22	3,241688E+22	3,241774E+22	1,244553E+23	6,483462E+22	1,892899E+23
-1221	6,222714E+22	6,222663E+22	3,241675E+22	3,241621E+22	1,244538E+23	6,483295E+22	1,892867E+23
-1220	6,222523E+22	6,222808E+22	3,241674E+22	3,241619E+22	1,244533E+23	6,483293E+22	1,892863E+23
-1219	6,222889E+22	6,222771E+22	3,241509E+22	3,241613E+22	1,244566E+23	6,483121E+22	1,892878E+23
-1218	6,222670E+22	6,222700E+22	3,241592E+22	3,241452E+22	1,244537E+23	6,483044E+22	1,892841E+23
-1217	6,222742E+22	6,222847E+22	3,241542E+22	3,241527E+22	1,244559E+23	6,483069E+22	1,892866E+23
-1216	6,222972E+22	6,222761E+22	3,241432E+22	3,241507E+22	1,244573E+23	6,482938E+22	1,892867E+23
-1215	6,222603E+22	6,222795E+22	3,241532E+22	3,241465E+22	1,244540E+23	6,482997E+22	1,892839E+23
-1214	6,222845E+22	6,222858E+22	3,241486E+22	3,241590E+22	1,244570E+23	6,483076E+22	1,892878E+23
-1213	6,222868E+22	6,222707E+22	3,241535E+22	3,241520E+22	1,244558E+23	6,483056E+22	1,892863E+23
-1212	6,222587E+22	6,222762E+22	3,241680E+22	3,241570E+22	1,244535E+23	6,483249E+22	1,892860E+23
-1211	6,222873E+22	6,222743E+22	3,241629E+22	3,241726E+22	1,244562E+23	6,483355E+22	1,892897E+23
-1210	6,222601E+22	6,222608E+22	3,241785E+22	3,241706E+22	1,244521E+23	6,483490E+22	1,892870E+23
-1209	6,222454E+22	6,222708E+22	3,241859E+22	3,241849E+22	1,244516E+23	6,483708E+22	1,892887E+23
-1208	6,222711E+22	6,222577E+22	3,241798E+22	3,241929E+22	1,244529E+23	6,483727E+22	1,892901E+23
-1207	6,222380E+22	6,222476E+22	3,241945E+22	3,241856E+22	1,244486E+23	6,483802E+22	1,892866E+23
-1206	6,222575E+22	6,222557E+22	3,241925E+22	3,241950E+22	1,244513E+23	6,483874E+22	1,892901E+23
-1205	6,222711E+22	6,222470E+22	3,241877E+22	3,241885E+22	1,244518E+23	6,483762E+22	1,892894E+23
-1204	6,222376E+22	6,222570E+22	3,241927E+22	3,241832E+22	1,244495E+23	6,483759E+22	1,892871E+23
-1203	6,222665E+22	6,222662E+22	3,241784E+22	3,241905E+22	1,244533E+23	6,483689E+22	1,892902E+23
-1202	6,222562E+22	6,222553E+22	3,241805E+22	3,241741E+22	1,244511E+23	6,483546E+22	1,892866E+23
-1201	6,222434E+22	6,222682E+22	3,241808E+22	3,241703E+22	1,244512E+23	6,483512E+22	1,892863E+23
-1200	6,222816E+22	6,222660E+22	3,241647E+22	3,241724E+22	1,244548E+23	6,483371E+22	1,892885E+23
-1199	6,222559E+22	6,222575E+22	3,241698E+22	3,241591E+22	1,244513E+23	6,483289E+22	1,892842E+23
-1198	6,222637E+22	6,222735E+22	3,241660E+22	3,241668E+22	1,244537E+23	6,483328E+22	1,892870E+23
-1197	6,222836E+22	6,222686E+22	3,241565E+22	3,241656E+22	1,244552E+23	6,483221E+22	1,892874E+23
-1196	6,222504E+22	6,222680E+22	3,241661E+22	3,241596E+22	1,244518E+23	6,483256E+22	1,892844E+23
-1195	6,222761E+22	6,222748E+22	3,241632E+22	3,241717E+22	1,244551E+23	6,483349E+22	1,892886E+23
-1194	6,222737E+22	6,222577E+22	3,241718E+22	3,241673E+22	1,244531E+23	6,483390E+22	1,892870E+23
-1193	6,222444E+22	6,222655E+22	3,241856E+22	3,241732E+22	1,244510E+23	6,483587E+22	1,892869E+23
-1192	6,222702E+22	6,222653E+22	3,241795E+22	3,241926E+22	1,244536E+23	6,483721E+22	1,892908E+23
-1191	6,222414E+22	6,222444E+22	3,241928E+22	3,241901E+22	1,244486E+23	6,483829E+22	1,892869E+23
-1190	6,222352E+22	6,222518E+22	3,242020E+22	3,242000E+22	1,244487E+23	6,484021E+22	1,892889E+23
-1189	6,222632E+22	6,222428E+22	3,241961E+22	3,242058E+22	1,244506E+23	6,484019E+22	1,892908E+23
-1188	6,222332E+22	6,222343E+22	3,242074E+22	3,241974E+22	1,244468E+23	6,484048E+22	1,892872E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1187	6,222500E+22	6,222497E+22	3,242037E+22	3,242076E+22	1,244500E+23	6,484113E+22	1,892911E+23
-1186	6,222545E+22	6,222413E+22	3,242006E+22	3,242023E+22	1,244496E+23	6,484030E+22	1,892899E+23
-1185	6,222223E+22	6,222511E+22	3,242062E+22	3,241946E+22	1,244473E+23	6,484008E+22	1,892874E+23
-1184	6,222536E+22	6,222577E+22	3,241925E+22	3,242021E+22	1,244511E+23	6,483946E+22	1,892906E+23
-1183	6,222437E+22	6,222385E+22	3,241933E+22	3,241860E+22	1,244482E+23	6,483794E+22	1,892862E+23
-1182	6,222373E+22	6,222510E+22	3,241943E+22	3,241821E+22	1,244488E+23	6,483764E+22	1,892865E+23
-1181	6,222714E+22	6,222555E+22	3,241767E+22	3,241868E+22	1,244527E+23	6,483635E+22	1,892890E+23
-1180	6,222460E+22	6,222476E+22	3,241778E+22	3,241740E+22	1,244494E+23	6,483519E+22	1,892845E+23
-1179	6,222541E+22	6,222653E+22	3,241750E+22	3,241800E+22	1,244519E+23	6,483550E+22	1,892874E+23
-1178	6,222710E+22	6,222580E+22	3,241709E+22	3,241777E+22	1,244529E+23	6,483487E+22	1,892878E+23
-1177	6,222417E+22	6,222574E+22	3,241829E+22	3,241698E+22	1,244499E+23	6,483528E+22	1,892852E+23
-1176	6,222650E+22	6,222656E+22	3,241815E+22	3,241857E+22	1,244531E+23	6,483672E+22	1,892898E+23
-1175	6,222563E+22	6,222446E+22	3,241882E+22	3,241857E+22	1,244501E+23	6,483738E+22	1,892875E+23
-1174	6,222294E+22	6,222502E+22	3,242024E+22	3,241919E+22	1,244480E+23	6,483943E+22	1,892874E+23
-1173	6,222538E+22	6,222520E+22	3,241965E+22	3,242110E+22	1,244506E+23	6,484075E+22	1,892913E+23
-1172	6,222325E+22	6,222278E+22	3,242066E+22	3,242058E+22	1,244460E+23	6,484124E+22	1,892873E+23
-1171	6,222297E+22	6,222376E+22	3,242155E+22	3,242129E+22	1,244467E+23	6,484285E+22	1,892896E+23
-1170	6,222534E+22	6,222318E+22	3,242123E+22	3,242197E+22	1,244485E+23	6,484319E+22	1,892917E+23
-1169	6,222217E+22	6,222280E+22	3,242217E+22	3,242104E+22	1,244450E+23	6,484321E+22	1,892882E+23
-1168	6,222331E+22	6,222456E+22	3,242175E+22	3,242225E+22	1,244479E+23	6,484400E+22	1,892919E+23
-1167	6,222358E+22	6,222292E+22	3,242134E+22	3,242169E+22	1,244465E+23	6,484303E+22	1,892895E+23
-1166	6,222119E+22	6,222333E+22	3,242204E+22	3,242059E+22	1,244445E+23	6,484263E+22	1,892871E+23
-1165	6,222441E+22	6,222433E+22	3,242064E+22	3,242130E+22	1,244487E+23	6,484194E+22	1,892907E+23
-1164	6,222387E+22	6,222241E+22	3,242026E+22	3,241979E+22	1,244463E+23	6,484005E+22	1,892863E+23
-1163	6,222306E+22	6,222428E+22	3,242018E+22	3,241947E+22	1,244473E+23	6,483965E+22	1,892870E+23
-1162	6,222584E+22	6,222493E+22	3,241875E+22	3,242005E+22	1,244508E+23	6,483880E+22	1,892896E+23
-1161	6,222353E+22	6,222419E+22	3,241902E+22	3,241849E+22	1,244477E+23	6,483750E+22	1,892852E+23
-1160	6,222438E+22	6,222591E+22	3,241902E+22	3,241911E+22	1,244503E+23	6,483813E+22	1,892884E+23
-1159	6,222590E+22	6,222435E+22	3,241875E+22	3,241907E+22	1,244502E+23	6,483781E+22	1,892881E+23
-1158	6,222324E+22	6,222409E+22	3,242015E+22	3,241850E+22	1,244473E+23	6,483865E+22	1,892860E+23
-1157	6,222483E+22	6,222544E+22	3,241988E+22	3,242044E+22	1,244503E+23	6,484032E+22	1,892906E+23
-1156	6,222409E+22	6,222300E+22	3,242012E+22	3,242059E+22	1,244471E+23	6,484071E+22	1,892878E+23
-1155	6,222180E+22	6,222355E+22	3,242149E+22	3,242092E+22	1,244453E+23	6,484241E+22	1,892878E+23
-1154	6,222423E+22	6,222359E+22	3,242124E+22	3,242257E+22	1,244478E+23	6,484381E+22	1,892916E+23
-1153	6,222257E+22	6,222157E+22	3,242224E+22	3,242172E+22	1,244441E+23	6,484395E+22	1,892881E+23
-1152	6,222209E+22	6,222312E+22	3,242309E+22	3,242261E+22	1,244452E+23	6,484571E+22	1,892909E+23
-1151	6,222362E+22	6,222227E+22	3,242267E+22	3,242353E+22	1,244459E+23	6,484620E+22	1,892921E+23
-1150	6,222068E+22	6,222174E+22	3,242372E+22	3,242257E+22	1,244424E+23	6,484629E+22	1,892887E+23
-1149	6,222156E+22	6,222353E+22	3,242331E+22	3,242363E+22	1,244451E+23	6,484694E+22	1,892920E+23
-1148	6,222257E+22	6,222130E+22	3,242252E+22	3,242297E+22	1,244439E+23	6,484549E+22	1,892894E+23
-1147	6,222073E+22	6,222174E+22	3,242307E+22	3,242167E+22	1,244425E+23	6,484475E+22	1,892872E+23
-1146	6,222355E+22	6,222307E+22	3,242183E+22	3,242255E+22	1,244466E+23	6,484438E+22	1,892910E+23
-1145	6,222300E+22	6,222180E+22	3,242121E+22	3,242099E+22	1,244448E+23	6,484220E+22	1,892870E+23
-1144	6,222193E+22	6,222397E+22	3,242116E+22	3,242077E+22	1,244459E+23	6,484193E+22	1,892878E+23
-1143	6,222445E+22	6,222388E+22	3,241998E+22	3,242128E+22	1,244483E+23	6,484126E+22	1,892896E+23
-1142	6,222281E+22	6,222275E+22	3,242061E+22	3,241952E+22	1,244456E+23	6,484014E+22	1,892857E+23
-1141	6,222326E+22	6,222476E+22	3,242082E+22	3,242026E+22	1,244480E+23	6,484107E+22	1,892891E+23
-1140	6,222489E+22	6,222301E+22	3,242016E+22	3,242065E+22	1,244479E+23	6,484081E+22	1,892887E+23
-1139	6,222198E+22	6,222289E+22	3,242142E+22	3,242024E+22	1,244449E+23	6,484166E+22	1,892865E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1138	6,222304E+22	6,222427E+22	3,242143E+22	3,242233E+22	1,244473E+23	6,484376E+22	1,892911E+23
-1137	6,222282E+22	6,222181E+22	3,242159E+22	3,242214E+22	1,244446E+23	6,484373E+22	1,892884E+23
-1136	6,222078E+22	6,222244E+22	3,242304E+22	3,242237E+22	1,244432E+23	6,484542E+22	1,892886E+23
-1135	6,222313E+22	6,222203E+22	3,242293E+22	3,242405E+22	1,244452E+23	6,484698E+22	1,892921E+23
-1134	6,222173E+22	6,222016E+22	3,242399E+22	3,242323E+22	1,244419E+23	6,484722E+22	1,892891E+23
-1133	6,222040E+22	6,222240E+22	3,242476E+22	3,242423E+22	1,244428E+23	6,484899E+22	1,892918E+23
-1132	6,222210E+22	6,222107E+22	3,242390E+22	3,242521E+22	1,244432E+23	6,484911E+22	1,892923E+23
-1131	6,221951E+22	6,222029E+22	3,242492E+22	3,242389E+22	1,244398E+23	6,484882E+22	1,892886E+23
-1130	6,222037E+22	6,222201E+22	3,242475E+22	3,242479E+22	1,244424E+23	6,484954E+22	1,892919E+23
-1129	6,222192E+22	6,222008E+22	3,242374E+22	3,242392E+22	1,244420E+23	6,484765E+22	1,892897E+23
-1128	6,222002E+22	6,222114E+22	3,242410E+22	3,242285E+22	1,244412E+23	6,484695E+22	1,892881E+23
-1127	6,222226E+22	6,222222E+22	3,242286E+22	3,242390E+22	1,244445E+23	6,484676E+22	1,892912E+23
-1126	6,222203E+22	6,222095E+22	3,242243E+22	3,242224E+22	1,244430E+23	6,484467E+22	1,892877E+23
-1125	6,222067E+22	6,222330E+22	3,242261E+22	3,242184E+22	1,244440E+23	6,484445E+22	1,892884E+23
-1124	6,222358E+22	6,222256E+22	3,242128E+22	3,242242E+22	1,244461E+23	6,484370E+22	1,892898E+23
-1123	6,222218E+22	6,222136E+22	3,242201E+22	3,242076E+22	1,244435E+23	6,484277E+22	1,892863E+23
-1122	6,222184E+22	6,222350E+22	3,242240E+22	3,242186E+22	1,244453E+23	6,484426E+22	1,892896E+23
-1121	6,222331E+22	6,222208E+22	3,242149E+22	3,242238E+22	1,244454E+23	6,484387E+22	1,892893E+23
-1120	6,222051E+22	6,222198E+22	3,242267E+22	3,242205E+22	1,244425E+23	6,484472E+22	1,892872E+23
-1119	6,222154E+22	6,222249E+22	3,242292E+22	3,242397E+22	1,244440E+23	6,484689E+22	1,892909E+23
-1118	6,222216E+22	6,222006E+22	3,242330E+22	3,242349E+22	1,244422E+23	6,484679E+22	1,892890E+23
-1117	6,221984E+22	6,222127E+22	3,242486E+22	3,242366E+22	1,244411E+23	6,484852E+22	1,892896E+23
-1116	6,222209E+22	6,222085E+22	3,242440E+22	3,242564E+22	1,244429E+23	6,485003E+22	1,892930E+23
-1115	6,222046E+22	6,221924E+22	3,242539E+22	3,242482E+22	1,244397E+23	6,485021E+22	1,892899E+23
-1114	6,221851E+22	6,222142E+22	3,242640E+22	3,242584E+22	1,244399E+23	6,485224E+22	1,892922E+23
-1113	6,222069E+22	6,222001E+22	3,242537E+22	3,242651E+22	1,244407E+23	6,485187E+22	1,892926E+23
-1112	6,221856E+22	6,221914E+22	3,242627E+22	3,242513E+22	1,244377E+23	6,485140E+22	1,892891E+23
-1111	6,221935E+22	6,222033E+22	3,242616E+22	3,242609E+22	1,244397E+23	6,485225E+22	1,892919E+23
-1110	6,222122E+22	6,221885E+22	3,242502E+22	3,242527E+22	1,244401E+23	6,485029E+22	1,892904E+23
-1109	6,221867E+22	6,222063E+22	3,242526E+22	3,242423E+22	1,244393E+23	6,484948E+22	1,892888E+23
-1108	6,222120E+22	6,222124E+22	3,242376E+22	3,242527E+22	1,244424E+23	6,484904E+22	1,892915E+23
-1107	6,222131E+22	6,221975E+22	3,242348E+22	3,242321E+22	1,244411E+23	6,484669E+22	1,892877E+23
-1106	6,221962E+22	6,222212E+22	3,242409E+22	3,242282E+22	1,244417E+23	6,484691E+22	1,892887E+23
-1105	6,222270E+22	6,222159E+22	3,242264E+22	3,242343E+22	1,244443E+23	6,484607E+22	1,892903E+23
-1104	6,222095E+22	6,222068E+22	3,242328E+22	3,242225E+22	1,244416E+23	6,484553E+22	1,892872E+23
-1103	6,222003E+22	6,222225E+22	3,242382E+22	3,242366E+22	1,244423E+23	6,484748E+22	1,892898E+23
-1102	6,222200E+22	6,222068E+22	3,242303E+22	3,242408E+22	1,244427E+23	6,484711E+22	1,892898E+23
-1101	6,221919E+22	6,222078E+22	3,242433E+22	3,242351E+22	1,244400E+23	6,484784E+22	1,892878E+23
-1100	6,222086E+22	6,222075E+22	3,242439E+22	3,242543E+22	1,244416E+23	6,484982E+22	1,892914E+23
-1099	6,222163E+22	6,221857E+22	3,242486E+22	3,242487E+22	1,244402E+23	6,484973E+22	1,892899E+23
-1098	6,221842E+22	6,222033E+22	3,242661E+22	3,242533E+22	1,244387E+23	6,485194E+22	1,892907E+23
-1097	6,222039E+22	6,222019E+22	3,242590E+22	3,242728E+22	1,244406E+23	6,485319E+22	1,892938E+23
-1096	6,221881E+22	6,221848E+22	3,242685E+22	3,242652E+22	1,244373E+23	6,485336E+22	1,892907E+23
-1095	6,221685E+22	6,221966E+22	3,242803E+22	3,242734E+22	1,244365E+23	6,485538E+22	1,892919E+23
-1094	6,221982E+22	6,221828E+22	3,242697E+22	3,242777E+22	1,244381E+23	6,485474E+22	1,892928E+23
-1093	6,221764E+22	6,221800E+22	3,242771E+22	3,242635E+22	1,244356E+23	6,485406E+22	1,892897E+23
-1092	6,221850E+22	6,221910E+22	3,242711E+22	3,242753E+22	1,244376E+23	6,485465E+22	1,892922E+23
-1091	6,222037E+22	6,221806E+22	3,242593E+22	3,242655E+22	1,244384E+23	6,485248E+22	1,892909E+23
-1090	6,221740E+22	6,221990E+22	3,242644E+22	3,242539E+22	1,244373E+23	6,485183E+22	1,892891E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1089	6,222013E+22	6,222050E+22	3,242494E+22	3,242611E+22	1,244406E+23	6,485105E+22	1,892917E+23
-1088	6,222054E+22	6,221898E+22	3,242474E+22	3,242420E+22	1,244395E+23	6,484894E+22	1,892885E+23
-1087	6,221838E+22	6,222058E+22	3,242562E+22	3,242413E+22	1,244390E+23	6,484975E+22	1,892887E+23
-1086	6,222143E+22	6,222041E+22	3,242412E+22	3,242500E+22	1,244418E+23	6,484912E+22	1,892910E+23
-1085	6,221928E+22	6,221978E+22	3,242468E+22	3,242395E+22	1,244391E+23	6,484864E+22	1,892877E+23
-1084	6,221881E+22	6,222056E+22	3,242502E+22	3,242539E+22	1,244394E+23	6,485041E+22	1,892898E+23
-1083	6,222133E+22	6,221898E+22	3,242440E+22	3,242541E+22	1,244403E+23	6,484981E+22	1,892901E+23
-1082	6,221833E+22	6,221940E+22	3,242602E+22	3,242481E+22	1,244377E+23	6,485082E+22	1,892885E+23
-1081	6,221996E+22	6,221988E+22	3,242596E+22	3,242671E+22	1,244398E+23	6,485267E+22	1,892925E+23
-1080	6,222032E+22	6,221817E+22	3,242636E+22	3,242654E+22	1,244385E+23	6,485290E+22	1,892914E+23
-1079	6,221638E+22	6,221924E+22	3,242840E+22	3,242721E+22	1,244356E+23	6,485561E+22	1,892912E+23
-1078	6,221869E+22	6,221897E+22	3,242773E+22	3,242898E+22	1,244377E+23	6,485671E+22	1,892944E+23
-1077	6,221721E+22	6,221720E+22	3,242867E+22	3,242802E+22	1,244344E+23	6,485668E+22	1,892911E+23
-1076	6,221603E+22	6,221765E+22	3,242945E+22	3,242887E+22	1,244337E+23	6,485832E+22	1,892920E+23
-1075	6,221931E+22	6,221655E+22	3,242821E+22	3,242909E+22	1,244359E+23	6,485731E+22	1,892932E+23
-1074	6,221650E+22	6,221708E+22	3,242887E+22	3,242780E+22	1,244336E+23	6,485668E+22	1,892903E+23
-1073	6,221739E+22	6,221856E+22	3,242796E+22	3,242874E+22	1,244360E+23	6,485670E+22	1,892927E+23
-1072	6,221933E+22	6,221758E+22	3,242685E+22	3,242762E+22	1,244369E+23	6,485447E+22	1,892914E+23
-1071	6,221621E+22	6,221861E+22	3,242784E+22	3,242634E+22	1,244348E+23	6,485418E+22	1,892890E+23
-1070	6,221929E+22	6,221928E+22	3,242647E+22	3,242697E+22	1,244386E+23	6,485343E+22	1,892920E+23
-1069	6,221932E+22	6,221814E+22	3,242627E+22	3,242537E+22	1,244375E+23	6,485164E+22	1,892891E+23
-1068	6,221715E+22	6,221923E+22	3,242677E+22	3,242579E+22	1,244364E+23	6,485255E+22	1,892889E+23
-1067	6,222023E+22	6,221911E+22	3,242530E+22	3,242659E+22	1,244393E+23	6,485189E+22	1,892912E+23
-1066	6,221794E+22	6,221863E+22	3,242607E+22	3,242552E+22	1,244366E+23	6,485159E+22	1,892882E+23
-1065	6,221795E+22	6,221940E+22	3,242634E+22	3,242662E+22	1,244373E+23	6,485296E+22	1,892903E+23
-1064	6,222071E+22	6,221805E+22	3,242585E+22	3,242674E+22	1,244388E+23	6,485259E+22	1,892914E+23
-1063	6,221709E+22	6,221804E+22	3,242785E+22	3,242643E+22	1,244351E+23	6,485428E+22	1,892894E+23
-1062	6,221835E+22	6,221902E+22	3,242778E+22	3,242848E+22	1,244374E+23	6,485626E+22	1,892936E+23
-1061	6,221834E+22	6,221742E+22	3,242818E+22	3,242842E+22	1,244358E+23	6,485660E+22	1,892924E+23
-1060	6,221483E+22	6,221731E+22	3,242994E+22	3,242906E+22	1,244321E+23	6,485900E+22	1,892911E+23
-1059	6,221770E+22	6,221696E+22	3,242930E+22	3,243038E+22	1,244347E+23	6,485968E+22	1,892943E+23
-1058	6,221631E+22	6,221552E+22	3,243018E+22	3,242935E+22	1,244318E+23	6,485954E+22	1,892914E+23
-1057	6,221522E+22	6,221649E+22	3,243057E+22	3,243009E+22	1,244317E+23	6,486066E+22	1,892924E+23
-1056	6,221836E+22	6,221617E+22	3,242916E+22	3,243046E+22	1,244345E+23	6,485962E+22	1,892942E+23
-1055	6,221507E+22	6,221620E+22	3,243013E+22	3,242914E+22	1,244313E+23	6,485927E+22	1,892905E+23
-1054	6,221617E+22	6,221785E+22	3,242935E+22	3,242975E+22	1,244340E+23	6,485910E+22	1,892931E+23
-1053	6,221815E+22	6,221686E+22	3,242838E+22	3,242851E+22	1,244350E+23	6,485689E+22	1,892919E+23
-1052	6,221541E+22	6,221692E+22	3,242917E+22	3,242755E+22	1,244323E+23	6,485671E+22	1,892890E+23
-1051	6,221837E+22	6,221784E+22	3,242777E+22	3,242826E+22	1,244362E+23	6,485603E+22	1,892922E+23
-1050	6,221780E+22	6,221717E+22	3,242751E+22	3,242705E+22	1,244350E+23	6,485457E+22	1,892895E+23
-1049	6,221585E+22	6,221823E+22	3,242773E+22	3,242735E+22	1,244341E+23	6,485507E+22	1,892892E+23
-1048	6,221931E+22	6,221814E+22	3,242635E+22	3,242800E+22	1,244375E+23	6,485436E+22	1,892918E+23
-1047	6,221701E+22	6,221705E+22	3,242761E+22	3,242681E+22	1,244341E+23	6,485442E+22	1,892885E+23
-1046	6,221722E+22	6,221828E+22	3,242801E+22	3,242778E+22	1,244355E+23	6,485579E+22	1,892913E+23
-1045	6,221939E+22	6,221744E+22	3,242766E+22	3,242819E+22	1,244368E+23	6,485584E+22	1,892927E+23
-1044	6,221562E+22	6,221680E+22	3,242945E+22	3,242837E+22	1,244324E+23	6,485782E+22	1,892902E+23
-1043	6,221675E+22	6,221760E+22	3,242946E+22	3,243021E+22	1,244344E+23	6,485967E+22	1,892940E+23
-1042	6,221659E+22	6,221600E+22	3,242996E+22	3,243015E+22	1,244326E+23	6,486011E+22	1,892927E+23
-1041	6,221380E+22	6,221568E+22	3,243138E+22	3,243047E+22	1,244295E+23	6,486185E+22	1,892913E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1040	6,221700E+22	6,221556E+22	3,243062E+22	3,243177E+22	1,244326E+23	6,486238E+22	1,892950E+23
-1039	6,221521E+22	6,221409E+22	3,243165E+22	3,243092E+22	1,244293E+23	6,486257E+22	1,892919E+23
-1038	6,221398E+22	6,221583E+22	3,243183E+22	3,243153E+22	1,244298E+23	6,486336E+22	1,892932E+23
-1037	6,221684E+22	6,221576E+22	3,243053E+22	3,243177E+22	1,244326E+23	6,486230E+22	1,892949E+23
-1036	6,221401E+22	6,221478E+22	3,243136E+22	3,243040E+22	1,244288E+23	6,486176E+22	1,892905E+23
-1035	6,221537E+22	6,221634E+22	3,243073E+22	3,243059E+22	1,244317E+23	6,486131E+22	1,892930E+23
-1034	6,221713E+22	6,221572E+22	3,242978E+22	3,242961E+22	1,244329E+23	6,485939E+22	1,892922E+23
-1033	6,221442E+22	6,221591E+22	3,243017E+22	3,242880E+22	1,244303E+23	6,485897E+22	1,892893E+23
-1032	6,221720E+22	6,221725E+22	3,242868E+22	3,242977E+22	1,244345E+23	6,485844E+22	1,892929E+23
-1031	6,221639E+22	6,221597E+22	3,242878E+22	3,242864E+22	1,244324E+23	6,485742E+22	1,892898E+23
-1030	6,221479E+22	6,221724E+22	3,242908E+22	3,242859E+22	1,244320E+23	6,485767E+22	1,892897E+23
-1029	6,221846E+22	6,221723E+22	3,242798E+22	3,242915E+22	1,244357E+23	6,485713E+22	1,892928E+23
-1028	6,221640E+22	6,221530E+22	3,242913E+22	3,242824E+22	1,244317E+23	6,485737E+22	1,892891E+23
-1027	6,221617E+22	6,221697E+22	3,242965E+22	3,242924E+22	1,244331E+23	6,485890E+22	1,892920E+23
-1026	6,221763E+22	6,221657E+22	3,242929E+22	3,243004E+22	1,244342E+23	6,485933E+22	1,892935E+23
-1025	6,221396E+22	6,221549E+22	3,243087E+22	3,243013E+22	1,244294E+23	6,486101E+22	1,892905E+23
-1024	6,221541E+22	6,221628E+22	3,243093E+22	3,243179E+22	1,244317E+23	6,486273E+22	1,892944E+23
-1023	6,221537E+22	6,221403E+22	3,243174E+22	3,243168E+22	1,244294E+23	6,486342E+22	1,892928E+23
-1022	6,221286E+22	6,221433E+22	3,243297E+22	3,243182E+22	1,244272E+23	6,486479E+22	1,892920E+23
-1021	6,221580E+22	6,221487E+22	3,243216E+22	3,243324E+22	1,244307E+23	6,486540E+22	1,892961E+23
-1020	6,221399E+22	6,221293E+22	3,243288E+22	3,243261E+22	1,244269E+23	6,486550E+22	1,892924E+23
-1019	6,221278E+22	6,221480E+22	3,243319E+22	3,243280E+22	1,244276E+23	6,486599E+22	1,892936E+23
-1018	6,221549E+22	6,221489E+22	3,243199E+22	3,243297E+22	1,244304E+23	6,486496E+22	1,892953E+23
-1017	6,221320E+22	6,221355E+22	3,243258E+22	3,243142E+22	1,244267E+23	6,486400E+22	1,892907E+23
-1016	6,221460E+22	6,221530E+22	3,243188E+22	3,243170E+22	1,244299E+23	6,486358E+22	1,892935E+23
-1015	6,221577E+22	6,221447E+22	3,243110E+22	3,243113E+22	1,244302E+23	6,486224E+22	1,892925E+23
-1014	6,221309E+22	6,221516E+22	3,243124E+22	3,243028E+22	1,244282E+23	6,486152E+22	1,892898E+23
-1013	6,221588E+22	6,221643E+22	3,242992E+22	3,243111E+22	1,244323E+23	6,486104E+22	1,892934E+23
-1012	6,221567E+22	6,221427E+22	3,242996E+22	3,242997E+22	1,244299E+23	6,485992E+22	1,892899E+23
-1011	6,221438E+22	6,221564E+22	3,243046E+22	3,242949E+22	1,244300E+23	6,485995E+22	1,892900E+23
-1010	6,221747E+22	6,221624E+22	3,242954E+22	3,243036E+22	1,244337E+23	6,485990E+22	1,892936E+23
-1009	6,221527E+22	6,221447E+22	3,243044E+22	3,242973E+22	1,244297E+23	6,486018E+22	1,892899E+23
-1008	6,221459E+22	6,221631E+22	3,243104E+22	3,243092E+22	1,244309E+23	6,486196E+22	1,892929E+23
-1007	6,221569E+22	6,221522E+22	3,243111E+22	3,243191E+22	1,244309E+23	6,486302E+22	1,892939E+23
-1006	6,221247E+22	6,221415E+22	3,243263E+22	3,243169E+22	1,244266E+23	6,486432E+22	1,892909E+23
-1005	6,221422E+22	6,221485E+22	3,243280E+22	3,243329E+22	1,244291E+23	6,486609E+22	1,892952E+23
-1004	6,221454E+22	6,221203E+22	3,243329E+22	3,243345E+22	1,244266E+23	6,486674E+22	1,892933E+23
-1003	6,221186E+22	6,221295E+22	3,243440E+22	3,243343E+22	1,244248E+23	6,486783E+22	1,892926E+23
-1002	6,221426E+22	6,221414E+22	3,243355E+22	3,243495E+22	1,244284E+23	6,486850E+22	1,892969E+23
-1001	6,221284E+22	6,221192E+22	3,243400E+22	3,243399E+22	1,244248E+23	6,486799E+22	1,892928E+23
-1000	6,221186E+22	6,221383E+22	3,243440E+22	3,243382E+22	1,244257E+23	6,486822E+22	1,892939E+23
-999	6,221444E+22	6,221345E+22	3,243355E+22	3,243403E+22	1,244279E+23	6,486758E+22	1,892955E+23
-998	6,221213E+22	6,221260E+22	3,243393E+22	3,243248E+22	1,244247E+23	6,486641E+22	1,892911E+23
-997	6,221327E+22	6,221469E+22	3,243321E+22	3,243304E+22	1,244280E+23	6,486625E+22	1,892942E+23
-996	6,221455E+22	6,221306E+22	3,243215E+22	3,243275E+22	1,244276E+23	6,486489E+22	1,892925E+23
-995	6,221210E+22	6,221384E+22	3,243238E+22	3,243149E+22	1,244259E+23	6,486387E+22	1,892898E+23
-994	6,221495E+22	6,221538E+22	3,243121E+22	3,243226E+22	1,244303E+23	6,486347E+22	1,892938E+23
-993	6,221520E+22	6,221297E+22	3,243109E+22	3,243101E+22	1,244282E+23	6,486210E+22	1,892903E+23
-992	6,221367E+22	6,221480E+22	3,243175E+22	3,243068E+22	1,244285E+23	6,486243E+22	1,892909E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-991	6,221585E+22	6,221527E+22	3,243118E+22	3,243205E+22	1,244311E+23	6,486323E+22	1,892944E+23
-990	6,221339E+22	6,221378E+22	3,243202E+22	3,243150E+22	1,244272E+23	6,486352E+22	1,892907E+23
-989	6,221278E+22	6,221525E+22	3,243285E+22	3,243266E+22	1,244280E+23	6,486550E+22	1,892935E+23
-988	6,221442E+22	6,221303E+22	3,243279E+22	3,243369E+22	1,244275E+23	6,486647E+22	1,892939E+23
-987	6,221173E+22	6,221212E+22	3,243429E+22	3,243311E+22	1,244239E+23	6,486740E+22	1,892913E+23
-986	6,221317E+22	6,221352E+22	3,243441E+22	3,243489E+22	1,244267E+23	6,486930E+22	1,892960E+23
-985	6,221355E+22	6,221104E+22	3,243448E+22	3,243511E+22	1,244246E+23	6,486960E+22	1,892942E+23
-984	6,221070E+22	6,221237E+22	3,243560E+22	3,243493E+22	1,244231E+23	6,487053E+22	1,892936E+23
-983	6,221269E+22	6,221315E+22	3,243522E+22	3,243641E+22	1,244258E+23	6,487163E+22	1,892975E+23
-982	6,221161E+22	6,221112E+22	3,243559E+22	3,243508E+22	1,244227E+23	6,487067E+22	1,892934E+23
-981	6,221075E+22	6,221274E+22	3,243609E+22	3,243487E+22	1,244235E+23	6,487096E+22	1,892944E+23
-980	6,221335E+22	6,221173E+22	3,243491E+22	3,243550E+22	1,244251E+23	6,487041E+22	1,892955E+23
-979	6,221102E+22	6,221124E+22	3,243505E+22	3,243389E+22	1,244223E+23	6,486894E+22	1,892912E+23
-978	6,221176E+22	6,221370E+22	3,243428E+22	3,243456E+22	1,244255E+23	6,486885E+22	1,892943E+23
-977	6,221371E+22	6,221184E+22	3,243296E+22	3,243400E+22	1,244255E+23	6,486696E+22	1,892925E+23
-976	6,221164E+22	6,221278E+22	3,243332E+22	3,243237E+22	1,244244E+23	6,486569E+22	1,892901E+23
-975	6,221413E+22	6,221420E+22	3,243268E+22	3,243328E+22	1,244283E+23	6,486596E+22	1,892943E+23
-974	6,221413E+22	6,221247E+22	3,243249E+22	3,243213E+22	1,244266E+23	6,486463E+22	1,892912E+23
-973	6,221206E+22	6,221437E+22	3,243339E+22	3,243219E+22	1,244264E+23	6,486559E+22	1,892920E+23
-972	6,221407E+22	6,221388E+22	3,243277E+22	3,243396E+22	1,244279E+23	6,486673E+22	1,892947E+23
-971	6,221194E+22	6,221213E+22	3,243373E+22	3,243316E+22	1,244241E+23	6,486689E+22	1,892910E+23
-970	6,221146E+22	6,221361E+22	3,243464E+22	3,243431E+22	1,244251E+23	6,486895E+22	1,892940E+23
-969	6,221377E+22	6,221114E+22	3,243422E+22	3,243527E+22	1,244249E+23	6,486949E+22	1,892944E+23
-968	6,221104E+22	6,221088E+22	3,243561E+22	3,243468E+22	1,244219E+23	6,487029E+22	1,892922E+23
-967	6,221173E+22	6,221252E+22	3,243598E+22	3,243672E+22	1,244243E+23	6,487270E+22	1,892970E+23
-966	6,221192E+22	6,221053E+22	3,243596E+22	3,243666E+22	1,244225E+23	6,487262E+22	1,892951E+23
-965	6,220926E+22	6,221161E+22	3,243737E+22	3,243627E+22	1,244209E+23	6,487364E+22	1,892945E+23
-964	6,221151E+22	6,221132E+22	3,243686E+22	3,243770E+22	1,244228E+23	6,487456E+22	1,892974E+23
-963	6,221064E+22	6,220945E+22	3,243717E+22	3,243618E+22	1,244201E+23	6,487334E+22	1,892934E+23
-962	6,220941E+22	6,221163E+22	3,243747E+22	3,243627E+22	1,244210E+23	6,487374E+22	1,892948E+23
-961	6,221215E+22	6,221061E+22	3,243575E+22	3,243703E+22	1,244228E+23	6,487277E+22	1,892955E+23
-960	6,221001E+22	6,221045E+22	3,243583E+22	3,243521E+22	1,244205E+23	6,487104E+22	1,892915E+23
-959	6,221064E+22	6,221260E+22	3,243550E+22	3,243581E+22	1,244232E+23	6,487130E+22	1,892945E+23
-958	6,221289E+22	6,221114E+22	3,243419E+22	3,243486E+22	1,244240E+23	6,486905E+22	1,892931E+23
-957	6,221096E+22	6,221201E+22	3,243485E+22	3,243334E+22	1,244230E+23	6,486819E+22	1,892912E+23
-956	6,221298E+22	6,221286E+22	3,243415E+22	3,243472E+22	1,244258E+23	6,486887E+22	1,892947E+23
-955	6,221270E+22	6,221142E+22	3,243397E+22	3,243373E+22	1,244241E+23	6,486770E+22	1,892918E+23
-954	6,221024E+22	6,221325E+22	3,243497E+22	3,243399E+22	1,244235E+23	6,486897E+22	1,892925E+23
-953	6,221283E+22	6,221219E+22	3,243412E+22	3,243562E+22	1,244250E+23	6,486974E+22	1,892948E+23
-952	6,221125E+22	6,221049E+22	3,243510E+22	3,243452E+22	1,244217E+23	6,486962E+22	1,892914E+23
-951	6,221048E+22	6,221194E+22	3,243635E+22	3,243586E+22	1,244224E+23	6,487221E+22	1,892946E+23
-950	6,221264E+22	6,221045E+22	3,243574E+22	3,243679E+22	1,244231E+23	6,487253E+22	1,892956E+23
-949	6,220965E+22	6,221035E+22	3,243727E+22	3,243632E+22	1,244200E+23	6,487359E+22	1,892936E+23
-948	6,221005E+22	6,221126E+22	3,243764E+22	3,243848E+22	1,244213E+23	6,487613E+22	1,892974E+23
-947	6,221059E+22	6,220923E+22	3,243769E+22	3,243805E+22	1,244198E+23	6,487574E+22	1,892956E+23
-946	6,220785E+22	6,221020E+22	3,243915E+22	3,243763E+22	1,244180E+23	6,487678E+22	1,892948E+23
-945	6,221054E+22	6,220964E+22	3,243819E+22	3,243909E+22	1,244202E+23	6,487728E+22	1,892975E+23
-944	6,220969E+22	6,220822E+22	3,243822E+22	3,243761E+22	1,244179E+23	6,487583E+22	1,892937E+23
-943	6,220789E+22	6,221049E+22	3,243863E+22	3,243795E+22	1,244184E+23	6,487659E+22	1,892950E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-942	6,221082E+22	6,220996E+22	3,243672E+22	3,243830E+22	1,244208E+23	6,487503E+22	1,892958E+23
-941	6,220921E+22	6,220961E+22	3,243705E+22	3,243621E+22	1,244188E+23	6,487326E+22	1,892921E+23
-940	6,221000E+22	6,221106E+22	3,243677E+22	3,243677E+22	1,244211E+23	6,487354E+22	1,892946E+23
-939	6,221229E+22	6,220999E+22	3,243558E+22	3,243573E+22	1,244223E+23	6,487131E+22	1,892936E+23
-938	6,220969E+22	6,221130E+22	3,243634E+22	3,243467E+22	1,244210E+23	6,487102E+22	1,892920E+23
-937	6,221154E+22	6,221187E+22	3,243534E+22	3,243631E+22	1,244234E+23	6,487165E+22	1,892951E+23
-936	6,221134E+22	6,221041E+22	3,243525E+22	3,243530E+22	1,244218E+23	6,487055E+22	1,892923E+23
-935	6,220881E+22	6,221175E+22	3,243665E+22	3,243567E+22	1,244206E+23	6,487231E+22	1,892929E+23
-934	6,221172E+22	6,221091E+22	3,243570E+22	3,243698E+22	1,244226E+23	6,487268E+22	1,892953E+23
-933	6,221047E+22	6,220928E+22	3,243683E+22	3,243603E+22	1,244198E+23	6,487286E+22	1,892926E+23
-932	6,220926E+22	6,221038E+22	3,243790E+22	3,243769E+22	1,244196E+23	6,487560E+22	1,892952E+23
-931	6,221111E+22	6,220939E+22	3,243732E+22	3,243855E+22	1,244205E+23	6,487587E+22	1,892964E+23
-930	6,220792E+22	6,220937E+22	3,243901E+22	3,243808E+22	1,244173E+23	6,487709E+22	1,892944E+23
-929	6,220879E+22	6,220965E+22	3,243915E+22	3,243994E+22	1,244184E+23	6,487909E+22	1,892975E+23
-928	6,220973E+22	6,220775E+22	3,243916E+22	3,243924E+22	1,244175E+23	6,487840E+22	1,892959E+23
-927	6,220665E+22	6,220868E+22	3,244075E+22	3,243908E+22	1,244153E+23	6,487983E+22	1,892952E+23
-926	6,220909E+22	6,220891E+22	3,243943E+22	3,244045E+22	1,244180E+23	6,487988E+22	1,892979E+23
-925	6,220843E+22	6,220759E+22	3,243945E+22	3,243908E+22	1,244160E+23	6,487853E+22	1,892946E+23
-924	6,220664E+22	6,220912E+22	3,243980E+22	3,243939E+22	1,244158E+23	6,487919E+22	1,892950E+23
-923	6,221005E+22	6,220881E+22	3,243802E+22	3,243929E+22	1,244189E+23	6,487732E+22	1,892962E+23
-922	6,220850E+22	6,220855E+22	3,243848E+22	3,243716E+22	1,244170E+23	6,487564E+22	1,892927E+23
-921	6,220938E+22	6,220983E+22	3,243792E+22	3,243784E+22	1,244192E+23	6,487576E+22	1,892950E+23
-920	6,221135E+22	6,220925E+22	3,243666E+22	3,243702E+22	1,244206E+23	6,487367E+22	1,892943E+23
-919	6,220793E+22	6,221035E+22	3,243773E+22	3,243643E+22	1,244183E+23	6,487416E+22	1,892924E+23
-918	6,220983E+22	6,221108E+22	3,243670E+22	3,243779E+22	1,244209E+23	6,487448E+22	1,892954E+23
-917	6,221030E+22	6,220909E+22	3,243682E+22	3,243670E+22	1,244194E+23	6,487352E+22	1,892929E+23
-916	6,220785E+22	6,220969E+22	3,243820E+22	3,243715E+22	1,244175E+23	6,487535E+22	1,892929E+23
-915	6,221093E+22	6,220942E+22	3,243727E+22	3,243839E+22	1,244203E+23	6,487566E+22	1,892960E+23
-914	6,220913E+22	6,220833E+22	3,243841E+22	3,243773E+22	1,244175E+23	6,487615E+22	1,892936E+23
-913	6,220788E+22	6,220931E+22	3,243925E+22	3,243946E+22	1,244172E+23	6,487871E+22	1,892959E+23
-912	6,220983E+22	6,220840E+22	3,243881E+22	3,244009E+22	1,244182E+23	6,487890E+22	1,892971E+23
-911	6,220643E+22	6,220798E+22	3,244090E+22	3,243968E+22	1,244144E+23	6,488058E+22	1,892950E+23
-910	6,220745E+22	6,220849E+22	3,244087E+22	3,244118E+22	1,244159E+23	6,488205E+22	1,892980E+23
-909	6,220870E+22	6,220652E+22	3,244085E+22	3,244073E+22	1,244152E+23	6,488158E+22	1,892968E+23
-908	6,220520E+22	6,220708E+22	3,244211E+22	3,244087E+22	1,244123E+23	6,488298E+22	1,892953E+23
-907	6,220773E+22	6,220773E+22	3,244066E+22	3,244200E+22	1,244155E+23	6,488266E+22	1,892981E+23
-906	6,220724E+22	6,220654E+22	3,244074E+22	3,244045E+22	1,244138E+23	6,488119E+22	1,892950E+23
-905	6,220609E+22	6,220768E+22	3,244081E+22	3,244040E+22	1,244138E+23	6,488121E+22	1,892950E+23
-904	6,220969E+22	6,220777E+22	3,243912E+22	3,244005E+22	1,244175E+23	6,487917E+22	1,892966E+23
-903	6,220755E+22	6,220770E+22	3,243984E+22	3,243835E+22	1,244153E+23	6,487819E+22	1,892934E+23
-902	6,220782E+22	6,220951E+22	3,243912E+22	3,243900E+22	1,244173E+23	6,487812E+22	1,892954E+23
-901	6,220983E+22	6,220874E+22	3,243803E+22	3,243853E+22	1,244186E+23	6,487656E+22	1,892951E+23
-900	6,220639E+22	6,220874E+22	3,243914E+22	3,243807E+22	1,244151E+23	6,487720E+22	1,892923E+23
-899	6,220870E+22	6,220943E+22	3,243824E+22	3,243913E+22	1,244181E+23	6,487737E+22	1,892955E+23
-898	6,220944E+22	6,220755E+22	3,243845E+22	3,243814E+22	1,244170E+23	6,487659E+22	1,892936E+23
-897	6,220719E+22	6,220802E+22	3,243945E+22	3,243870E+22	1,244152E+23	6,487815E+22	1,892934E+23
-896	6,220993E+22	6,220846E+22	3,243852E+22	3,244000E+22	1,244184E+23	6,487852E+22	1,892969E+23
-895	6,220752E+22	6,220740E+22	3,244000E+22	3,243962E+22	1,244149E+23	6,487961E+22	1,892945E+23
-894	6,220620E+22	6,220851E+22	3,244089E+22	3,244086E+22	1,244147E+23	6,488175E+22	1,892965E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-893	6,220871E+22	6,220723E+22	3,244069E+22	3,244147E+22	1,244159E+23	6,488216E+22	1,892981E+23
-892	6,220517E+22	6,220601E+22	3,244273E+22	3,244122E+22	1,244112E+23	6,488395E+22	1,892951E+23
-891	6,220618E+22	6,220704E+22	3,244256E+22	3,244269E+22	1,244132E+23	6,488525E+22	1,892985E+23
-890	6,220717E+22	6,220547E+22	3,244235E+22	3,244247E+22	1,244126E+23	6,488482E+22	1,892975E+23
-889	6,220400E+22	6,220577E+22	3,244314E+22	3,244253E+22	1,244098E+23	6,488566E+22	1,892954E+23
-888	6,220693E+22	6,220668E+22	3,244173E+22	3,244322E+22	1,244136E+23	6,488496E+22	1,892986E+23
-887	6,220634E+22	6,220545E+22	3,244209E+22	3,244161E+22	1,244118E+23	6,488370E+22	1,892955E+23
-886	6,220529E+22	6,220700E+22	3,244208E+22	3,244117E+22	1,244123E+23	6,488324E+22	1,892955E+23
-885	6,220889E+22	6,220711E+22	3,244044E+22	3,244115E+22	1,244160E+23	6,488159E+22	1,892976E+23
-884	6,220591E+22	6,220653E+22	3,244110E+22	3,243993E+22	1,244124E+23	6,488103E+22	1,892935E+23
-883	6,220615E+22	6,220847E+22	3,244042E+22	3,244048E+22	1,244146E+23	6,488089E+22	1,892955E+23
-882	6,220840E+22	6,220737E+22	3,243949E+22	3,243998E+22	1,244158E+23	6,487947E+22	1,892952E+23
-881	6,220573E+22	6,220681E+22	3,244028E+22	3,243936E+22	1,244125E+23	6,487965E+22	1,892922E+23
-880	6,220837E+22	6,220787E+22	3,243946E+22	3,244025E+22	1,244162E+23	6,487971E+22	1,892959E+23
-879	6,220847E+22	6,220648E+22	3,243988E+22	3,243969E+22	1,244150E+23	6,487957E+22	1,892945E+23
-878	6,220576E+22	6,220764E+22	3,244080E+22	3,244011E+22	1,244134E+23	6,488091E+22	1,892943E+23
-877	6,220852E+22	6,220794E+22	3,244019E+22	3,244163E+22	1,244165E+23	6,488182E+22	1,892983E+23
-876	6,220582E+22	6,220599E+22	3,244189E+22	3,244137E+22	1,244118E+23	6,488326E+22	1,892951E+23
-875	6,220477E+22	6,220702E+22	3,244290E+22	3,244232E+22	1,244118E+23	6,488522E+22	1,892970E+23
-874	6,220740E+22	6,220566E+22	3,244272E+22	3,244312E+22	1,244131E+23	6,488583E+22	1,892989E+23
-873	6,220408E+22	6,220418E+22	3,244413E+22	3,244307E+22	1,244083E+23	6,488720E+22	1,892955E+23
-872	6,220492E+22	6,220576E+22	3,244376E+22	3,244445E+22	1,244107E+23	6,488820E+22	1,892989E+23
-871	6,220572E+22	6,220440E+22	3,244364E+22	3,244429E+22	1,244101E+23	6,488793E+22	1,892980E+23
-870	6,220291E+22	6,220488E+22	3,244427E+22	3,244358E+22	1,244078E+23	6,488785E+22	1,892956E+23
-869	6,220639E+22	6,220578E+22	3,244308E+22	3,244413E+22	1,244122E+23	6,488721E+22	1,892994E+23
-868	6,220548E+22	6,220414E+22	3,244344E+22	3,244263E+22	1,244096E+23	6,488608E+22	1,892957E+23
-867	6,220405E+22	6,220617E+22	3,244343E+22	3,244220E+22	1,244102E+23	6,488563E+22	1,892959E+23
-866	6,220724E+22	6,220647E+22	3,244184E+22	3,244253E+22	1,244137E+23	6,488437E+22	1,892981E+23
-865	6,220459E+22	6,220516E+22	3,244215E+22	3,244145E+22	1,244097E+23	6,488360E+22	1,892933E+23
-864	6,220517E+22	6,220705E+22	3,244160E+22	3,244172E+22	1,244122E+23	6,488333E+22	1,892955E+23
-863	6,220750E+22	6,220592E+22	3,244089E+22	3,244136E+22	1,244134E+23	6,488225E+22	1,892957E+23
-862	6,220503E+22	6,220574E+22	3,244152E+22	3,244043E+22	1,244108E+23	6,488195E+22	1,892927E+23
-861	6,220764E+22	6,220714E+22	3,244083E+22	3,244170E+22	1,244148E+23	6,488253E+22	1,892973E+23
-860	6,220686E+22	6,220546E+22	3,244134E+22	3,244151E+22	1,244123E+23	6,488285E+22	1,892952E+23
-859	6,220407E+22	6,220671E+22	3,244252E+22	3,244174E+22	1,244108E+23	6,488426E+22	1,892950E+23
-858	6,220692E+22	6,220668E+22	3,244220E+22	3,244321E+22	1,244136E+23	6,488541E+22	1,892990E+23
-857	6,220474E+22	6,220401E+22	3,244360E+22	3,244299E+22	1,244088E+23	6,488659E+22	1,892953E+23
-856	6,220385E+22	6,220529E+22	3,244455E+22	3,244385E+22	1,244091E+23	6,488839E+22	1,892975E+23
-855	6,220589E+22	6,220431E+22	3,244429E+22	3,244503E+22	1,244102E+23	6,488932E+22	1,892995E+23
-854	6,220257E+22	6,220338E+22	3,244534E+22	3,244467E+22	1,244060E+23	6,489001E+22	1,892960E+23
-853	6,220387E+22	6,220488E+22	3,244506E+22	3,244597E+22	1,244087E+23	6,489103E+22	1,892998E+23
-852	6,220445E+22	6,220302E+22	3,244508E+22	3,244566E+22	1,244075E+23	6,489073E+22	1,892982E+23
-851	6,220205E+22	6,220378E+22	3,244581E+22	3,244451E+22	1,244058E+23	6,489031E+22	1,892961E+23
-850	6,220544E+22	6,220472E+22	3,244472E+22	3,244516E+22	1,244102E+23	6,488988E+22	1,893000E+23
-849	6,220440E+22	6,220289E+22	3,244458E+22	3,244402E+22	1,244073E+23	6,488860E+22	1,892959E+23
-848	6,220270E+22	6,220515E+22	3,244450E+22	3,244359E+22	1,244079E+23	6,488809E+22	1,892959E+23
-847	6,220558E+22	6,220538E+22	3,244306E+22	3,244412E+22	1,244110E+23	6,488718E+22	1,892981E+23
-846	6,220353E+22	6,220402E+22	3,244323E+22	3,244251E+22	1,244075E+23	6,488574E+22	1,892933E+23
-845	6,220477E+22	6,220580E+22	3,244287E+22	3,244281E+22	1,244106E+23	6,488568E+22	1,892962E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-844	6,220663E+22	6,220455E+22	3,244226E+22	3,244270E+22	1,244112E+23	6,488497E+22	1,892961E+23
-843	6,220389E+22	6,220502E+22	3,244294E+22	3,244177E+22	1,244089E+23	6,488471E+22	1,892936E+23
-842	6,220604E+22	6,220656E+22	3,244251E+22	3,244330E+22	1,244126E+23	6,488581E+22	1,892984E+23
-841	6,220545E+22	6,220420E+22	3,244284E+22	3,244327E+22	1,244097E+23	6,488612E+22	1,892958E+23
-840	6,220280E+22	6,220522E+22	3,244428E+22	3,244325E+22	1,244080E+23	6,488753E+22	1,892956E+23
-839	6,220555E+22	6,220513E+22	3,244413E+22	3,244494E+22	1,244107E+23	6,488907E+22	1,892998E+23
-838	6,220362E+22	6,220252E+22	3,244519E+22	3,244449E+22	1,244061E+23	6,488968E+22	1,892958E+23
-837	6,220270E+22	6,220408E+22	3,244602E+22	3,244568E+22	1,244068E+23	6,489170E+22	1,892985E+23
-836	6,220416E+22	6,220296E+22	3,244569E+22	3,244700E+22	1,244071E+23	6,489269E+22	1,892998E+23
-835	6,220117E+22	6,220223E+22	3,244678E+22	3,244613E+22	1,244034E+23	6,489291E+22	1,892963E+23
-834	6,220281E+22	6,220371E+22	3,244674E+22	3,244715E+22	1,244065E+23	6,489389E+22	1,893004E+23
-833	6,220383E+22	6,220147E+22	3,244641E+22	3,244675E+22	1,244053E+23	6,489317E+22	1,892985E+23
-832	6,220129E+22	6,220261E+22	3,244717E+22	3,244552E+22	1,244039E+23	6,489269E+22	1,892966E+23
-831	6,220387E+22	6,220401E+22	3,244606E+22	3,244660E+22	1,244079E+23	6,489266E+22	1,893005E+23
-830	6,220280E+22	6,220228E+22	3,244564E+22	3,244530E+22	1,244051E+23	6,489094E+22	1,892960E+23
-829	6,220155E+22	6,220425E+22	3,244566E+22	3,244499E+22	1,244058E+23	6,489065E+22	1,892965E+23
-828	6,220430E+22	6,220390E+22	3,244438E+22	3,244550E+22	1,244082E+23	6,488988E+22	1,892981E+23
-827	6,220283E+22	6,220275E+22	3,244460E+22	3,244358E+22	1,244056E+23	6,488818E+22	1,892938E+23
-826	6,220406E+22	6,220468E+22	3,244438E+22	3,244406E+22	1,244087E+23	6,488844E+22	1,892972E+23
-825	6,220563E+22	6,220340E+22	3,244340E+22	3,244432E+22	1,244090E+23	6,488773E+22	1,892968E+23
-824	6,220266E+22	6,220408E+22	3,244426E+22	3,244335E+22	1,244067E+23	6,488762E+22	1,892944E+23
-823	6,220434E+22	6,220545E+22	3,244415E+22	3,244496E+22	1,244098E+23	6,488911E+22	1,892989E+23
-822	6,220419E+22	6,220293E+22	3,244444E+22	3,244455E+22	1,244071E+23	6,488900E+22	1,892961E+23
-821	6,220204E+22	6,220370E+22	3,244597E+22	3,244469E+22	1,244057E+23	6,489066E+22	1,892964E+23
-820	6,220400E+22	6,220344E+22	3,244585E+22	3,244669E+22	1,244074E+23	6,489255E+22	1,893000E+23
-819	6,220209E+22	6,220145E+22	3,244677E+22	3,244621E+22	1,244035E+23	6,489298E+22	1,892965E+23
-818	6,220115E+22	6,220301E+22	3,244770E+22	3,244744E+22	1,244042E+23	6,489514E+22	1,892993E+23
-817	6,220294E+22	6,220149E+22	3,244710E+22	3,244868E+22	1,244044E+23	6,489578E+22	1,893002E+23
-816	6,220037E+22	6,220085E+22	3,244832E+22	3,244735E+22	1,244012E+23	6,489567E+22	1,892969E+23
-815	6,220174E+22	6,220253E+22	3,244840E+22	3,244842E+22	1,244043E+23	6,489682E+22	1,893011E+23
-814	6,220280E+22	6,220060E+22	3,244774E+22	3,244789E+22	1,244034E+23	6,489562E+22	1,892990E+23
-813	6,220009E+22	6,220188E+22	3,244836E+22	3,244703E+22	1,244020E+23	6,489540E+22	1,892974E+23
-812	6,220188E+22	6,220292E+22	3,244730E+22	3,244829E+22	1,244048E+23	6,489559E+22	1,893004E+23
-811	6,220141E+22	6,220112E+22	3,244689E+22	3,244658E+22	1,244025E+23	6,489348E+22	1,892960E+23
-810	6,220072E+22	6,220284E+22	3,244710E+22	3,244610E+22	1,244036E+23	6,489321E+22	1,892968E+23
-809	6,220392E+22	6,220222E+22	3,244548E+22	3,244666E+22	1,244061E+23	6,489215E+22	1,892983E+23
-808	6,220235E+22	6,220157E+22	3,244575E+22	3,244467E+22	1,244039E+23	6,489042E+22	1,892943E+23
-807	6,220276E+22	6,220413E+22	3,244566E+22	3,244551E+22	1,244069E+23	6,489117E+22	1,892981E+23
-806	6,220428E+22	6,220283E+22	3,244459E+22	3,244560E+22	1,244071E+23	6,489019E+22	1,892973E+23
-805	6,220146E+22	6,220316E+22	3,244578E+22	3,244483E+22	1,244046E+23	6,489060E+22	1,892952E+23
-804	6,220266E+22	6,220397E+22	3,244598E+22	3,244651E+22	1,244066E+23	6,489249E+22	1,892991E+23
-803	6,220297E+22	6,220140E+22	3,244631E+22	3,244600E+22	1,244044E+23	6,489231E+22	1,892967E+23
-802	6,220079E+22	6,220220E+22	3,244787E+22	3,244644E+22	1,244030E+23	6,489431E+22	1,892973E+23
-801	6,220258E+22	6,220182E+22	3,244722E+22	3,244876E+22	1,244044E+23	6,489598E+22	1,893004E+23
-800	6,220078E+22	6,220004E+22	3,244817E+22	3,244802E+22	1,244008E+23	6,489619E+22	1,892970E+23
-799	6,219976E+22	6,220178E+22	3,244926E+22	3,244909E+22	1,244015E+23	6,489835E+22	1,892999E+23
-798	6,220207E+22	6,220031E+22	3,244854E+22	3,244978E+22	1,244024E+23	6,489832E+22	1,893007E+23
-797	6,219981E+22	6,219982E+22	3,244981E+22	3,244856E+22	1,243996E+23	6,489837E+22	1,892980E+23
-796	6,220014E+22	6,220149E+22	3,244996E+22	3,244984E+22	1,244016E+23	6,489979E+22	1,893014E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-795	6,220113E+22	6,219995E+22	3,244915E+22	3,244930E+22	1,244011E+23	6,489845E+22	1,892995E+23
-794	6,219855E+22	6,220088E+22	3,244984E+22	3,244853E+22	1,243994E+23	6,489837E+22	1,892978E+23
-793	6,220065E+22	6,220131E+22	3,244846E+22	3,244974E+22	1,244020E+23	6,489820E+22	1,893002E+23
-792	6,220092E+22	6,219954E+22	3,244811E+22	3,244767E+22	1,244005E+23	6,489579E+22	1,892963E+23
-791	6,220014E+22	6,220150E+22	3,244834E+22	3,244724E+22	1,244016E+23	6,489558E+22	1,892972E+23
-790	6,220325E+22	6,220137E+22	3,244649E+22	3,244770E+22	1,244046E+23	6,489419E+22	1,892988E+23
-789	6,220149E+22	6,220107E+22	3,244675E+22	3,244608E+22	1,244026E+23	6,489283E+22	1,892954E+23
-788	6,220082E+22	6,220324E+22	3,244705E+22	3,244703E+22	1,244041E+23	6,489408E+22	1,892981E+23
-787	6,220276E+22	6,220185E+22	3,244623E+22	3,244689E+22	1,244046E+23	6,489312E+22	1,892977E+23
-786	6,220032E+22	6,220164E+22	3,244772E+22	3,244620E+22	1,244020E+23	6,489391E+22	1,892959E+23
-785	6,220154E+22	6,220204E+22	3,244760E+22	3,244815E+22	1,244036E+23	6,489576E+22	1,892993E+23
-784	6,220189E+22	6,219983E+22	3,244787E+22	3,244773E+22	1,244017E+23	6,489560E+22	1,892973E+23
-783	6,219917E+22	6,220108E+22	3,244935E+22	3,244842E+22	1,244003E+23	6,489777E+22	1,892980E+23
-782	6,220125E+22	6,220078E+22	3,244855E+22	3,245041E+22	1,244020E+23	6,489896E+22	1,893010E+23
-781	6,219991E+22	6,219901E+22	3,244963E+22	3,244957E+22	1,243989E+23	6,489921E+22	1,892981E+23
-780	6,219841E+22	6,220049E+22	3,245105E+22	3,245050E+22	1,243989E+23	6,490154E+22	1,893004E+23
-779	6,220103E+22	6,219925E+22	3,245034E+22	3,245099E+22	1,244003E+23	6,490133E+22	1,893016E+23
-778	6,219851E+22	6,219879E+22	3,245162E+22	3,245008E+22	1,243973E+23	6,490170E+22	1,892990E+23
-777	6,219846E+22	6,220018E+22	3,245123E+22	3,245162E+22	1,243986E+23	6,490285E+22	1,893015E+23
-776	6,219975E+22	6,219846E+22	3,245039E+22	3,245081E+22	1,243982E+23	6,490120E+22	1,892994E+23
-775	6,219737E+22	6,219945E+22	3,245108E+22	3,244987E+22	1,243968E+23	6,490095E+22	1,892978E+23
-774	6,220025E+22	6,219986E+22	3,244943E+22	3,245058E+22	1,244001E+23	6,490001E+22	1,893001E+23
-773	6,220072E+22	6,219853E+22	3,244906E+22	3,244864E+22	1,243993E+23	6,489771E+22	1,892970E+23
-772	6,219888E+22	6,220083E+22	3,244949E+22	3,244844E+22	1,243997E+23	6,489793E+22	1,892976E+23
-771	6,220182E+22	6,220107E+22	3,244775E+22	3,244887E+22	1,244029E+23	6,489662E+22	1,892995E+23
-770	6,220001E+22	6,220040E+22	3,244838E+22	3,244748E+22	1,244004E+23	6,489586E+22	1,892963E+23
-769	6,219931E+22	6,220177E+22	3,244857E+22	3,244853E+22	1,244011E+23	6,489711E+22	1,892982E+23
-768	6,220175E+22	6,220010E+22	3,244794E+22	3,244830E+22	1,244019E+23	6,489625E+22	1,892981E+23
-767	6,219922E+22	6,219998E+22	3,244940E+22	3,244790E+22	1,243992E+23	6,489729E+22	1,892965E+23
-766	6,220045E+22	6,220062E+22	3,244892E+22	3,244985E+22	1,244011E+23	6,489877E+22	1,892998E+23
-765	6,220079E+22	6,219883E+22	3,244907E+22	3,244969E+22	1,243996E+23	6,489875E+22	1,892984E+23
-764	6,219745E+22	6,219986E+22	3,245086E+22	3,245024E+22	1,243973E+23	6,490109E+22	1,892984E+23
-763	6,220005E+22	6,219971E+22	3,245030E+22	3,245173E+22	1,243998E+23	6,490203E+22	1,893018E+23
-762	6,219908E+22	6,219777E+22	3,245163E+22	3,245086E+22	1,243969E+23	6,490250E+22	1,892993E+23
-761	6,219720E+22	6,219896E+22	3,245274E+22	3,245195E+22	1,243962E+23	6,490469E+22	1,893009E+23
-760	6,219974E+22	6,219805E+22	3,245196E+22	3,245253E+22	1,243978E+23	6,490449E+22	1,893023E+23
-759	6,219677E+22	6,219769E+22	3,245305E+22	3,245181E+22	1,243945E+23	6,490486E+22	1,892993E+23
-758	6,219702E+22	6,219890E+22	3,245237E+22	3,245301E+22	1,243959E+23	6,490538E+22	1,893013E+23
-757	6,219900E+22	6,219729E+22	3,245144E+22	3,245210E+22	1,243963E+23	6,490354E+22	1,892998E+23
-756	6,219636E+22	6,219808E+22	3,245232E+22	3,245100E+22	1,243944E+23	6,490332E+22	1,892978E+23
-755	6,219956E+22	6,219900E+22	3,245071E+22	3,245153E+22	1,243986E+23	6,490224E+22	1,893008E+23
-754	6,219980E+22	6,219794E+22	3,245040E+22	3,244991E+22	1,243977E+23	6,490031E+22	1,892981E+23
-753	6,219733E+22	6,219992E+22	3,245061E+22	3,244994E+22	1,243972E+23	6,490055E+22	1,892978E+23
-752	6,220048E+22	6,219990E+22	3,244913E+22	3,245021E+22	1,244004E+23	6,489934E+22	1,892997E+23
-751	6,219871E+22	6,219899E+22	3,244994E+22	3,244888E+22	1,243977E+23	6,489882E+22	1,892965E+23
-750	6,219849E+22	6,220013E+22	3,244998E+22	3,244975E+22	1,243986E+23	6,489972E+22	1,892983E+23
-749	6,220107E+22	6,219879E+22	3,244925E+22	3,244983E+22	1,243999E+23	6,489908E+22	1,892989E+23
-748	6,219765E+22	6,219885E+22	3,245083E+22	3,244968E+22	1,243965E+23	6,490051E+22	1,892970E+23
-747	6,219901E+22	6,219981E+22	3,245042E+22	3,245149E+22	1,243988E+23	6,490190E+22	1,893007E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-746	6,219949E+22	6,219789E+22	3,245087E+22	3,245136E+22	1,243974E+23	6,490223E+22	1,892996E+23
-745	6,219619E+22	6,219839E+22	3,245258E+22	3,245182E+22	1,243946E+23	6,490441E+22	1,892990E+23
-744	6,219917E+22	6,219806E+22	3,245223E+22	3,245308E+22	1,243972E+23	6,490531E+22	1,893025E+23
-743	6,219780E+22	6,219644E+22	3,245351E+22	3,245250E+22	1,243942E+23	6,490601E+22	1,893002E+23
-742	6,219576E+22	6,219774E+22	3,245411E+22	3,245359E+22	1,243935E+23	6,490769E+22	1,893012E+23
-741	6,219819E+22	6,219699E+22	3,245309E+22	3,245433E+22	1,243952E+23	6,490742E+22	1,893026E+23
-740	6,219496E+22	6,219632E+22	3,245435E+22	3,245343E+22	1,243913E+23	6,490778E+22	1,892991E+23
-739	6,219603E+22	6,219758E+22	3,245371E+22	3,245407E+22	1,243936E+23	6,490778E+22	1,893014E+23
-738	6,219849E+22	6,219612E+22	3,245287E+22	3,245313E+22	1,243946E+23	6,490601E+22	1,893006E+23
-737	6,219556E+22	6,219689E+22	3,245343E+22	3,245216E+22	1,243924E+23	6,490559E+22	1,892980E+23
-736	6,219859E+22	6,219817E+22	3,245192E+22	3,245270E+22	1,243968E+23	6,490462E+22	1,893014E+23
-735	6,219832E+22	6,219734E+22	3,245168E+22	3,245130E+22	1,243957E+23	6,490298E+22	1,892986E+23
-734	6,219605E+22	6,219886E+22	3,245181E+22	3,245114E+22	1,243949E+23	6,490295E+22	1,892979E+23
-733	6,219955E+22	6,219876E+22	3,245042E+22	3,245149E+22	1,243983E+23	6,490192E+22	1,893002E+23
-732	6,219749E+22	6,219746E+22	3,245152E+22	3,245030E+22	1,243949E+23	6,490182E+22	1,892968E+23
-731	6,219746E+22	6,219889E+22	3,245157E+22	3,245116E+22	1,243963E+23	6,490273E+22	1,892991E+23
-730	6,219988E+22	6,219785E+22	3,245082E+22	3,245166E+22	1,243977E+23	6,490248E+22	1,893002E+23
-729	6,219602E+22	6,219751E+22	3,245216E+22	3,245159E+22	1,243935E+23	6,490375E+22	1,892973E+23
-728	6,219784E+22	6,219836E+22	3,245208E+22	3,245307E+22	1,243962E+23	6,490516E+22	1,893014E+23
-727	6,219838E+22	6,219647E+22	3,245268E+22	3,245282E+22	1,243948E+23	6,490550E+22	1,893004E+23
-726	6,219526E+22	6,219685E+22	3,245424E+22	3,245313E+22	1,243921E+23	6,490737E+22	1,892995E+23
-725	6,219806E+22	6,219704E+22	3,245375E+22	3,245466E+22	1,243951E+23	6,490841E+22	1,893035E+23
-724	6,219577E+22	6,219539E+22	3,245511E+22	3,245434E+22	1,243912E+23	6,490945E+22	1,893006E+23
-723	6,219393E+22	6,219678E+22	3,245565E+22	3,245521E+22	1,243907E+23	6,491086E+22	1,893016E+23
-722	6,219682E+22	6,219585E+22	3,245468E+22	3,245591E+22	1,243927E+23	6,491058E+22	1,893032E+23
-721	6,219387E+22	6,219464E+22	3,245566E+22	3,245480E+22	1,243885E+23	6,491046E+22	1,892990E+23
-720	6,219564E+22	6,219595E+22	3,245513E+22	3,245515E+22	1,243916E+23	6,491028E+22	1,893019E+23
-719	6,219770E+22	6,219514E+22	3,245419E+22	3,245436E+22	1,243928E+23	6,490855E+22	1,893014E+23
-718	6,219456E+22	6,219612E+22	3,245438E+22	3,245340E+22	1,243907E+23	6,490778E+22	1,892985E+23
-717	6,219735E+22	6,219759E+22	3,245287E+22	3,245401E+22	1,243949E+23	6,490688E+22	1,893018E+23
-716	6,219668E+22	6,219630E+22	3,245305E+22	3,245261E+22	1,243930E+23	6,490566E+22	1,892986E+23
-715	6,219499E+22	6,219764E+22	3,245334E+22	3,245217E+22	1,243926E+23	6,490551E+22	1,892981E+23
-714	6,219866E+22	6,219754E+22	3,245207E+22	3,245279E+22	1,243962E+23	6,490486E+22	1,893011E+23
-713	6,219630E+22	6,219603E+22	3,245286E+22	3,245193E+22	1,243923E+23	6,490479E+22	1,892971E+23
-712	6,219634E+22	6,219754E+22	3,245297E+22	3,245281E+22	1,243939E+23	6,490579E+22	1,892997E+23
-711	6,219836E+22	6,219685E+22	3,245233E+22	3,245341E+22	1,243952E+23	6,490574E+22	1,893009E+23
-710	6,219493E+22	6,219623E+22	3,245355E+22	3,245307E+22	1,243912E+23	6,490663E+22	1,892978E+23
-709	6,219689E+22	6,219714E+22	3,245362E+22	3,245448E+22	1,243940E+23	6,490810E+22	1,893021E+23
-708	6,219698E+22	6,219513E+22	3,245458E+22	3,245440E+22	1,243921E+23	6,490898E+22	1,893011E+23
-707	6,219385E+22	6,219573E+22	3,245609E+22	3,245471E+22	1,243896E+23	6,491080E+22	1,893004E+23
-706	6,219629E+22	6,219612E+22	3,245549E+22	3,245660E+22	1,243924E+23	6,491209E+22	1,893045E+23
-705	6,219385E+22	6,219381E+22	3,245653E+22	3,245629E+22	1,243877E+23	6,491283E+22	1,893005E+23
-704	6,219282E+22	6,219487E+22	3,245720E+22	3,245670E+22	1,243877E+23	6,491390E+22	1,893016E+23
-703	6,219598E+22	6,219429E+22	3,245619E+22	3,245716E+22	1,243903E+23	6,491336E+22	1,893036E+23
-702	6,219350E+22	6,219322E+22	3,245679E+22	3,245583E+22	1,243867E+23	6,491261E+22	1,892993E+23
-701	6,219500E+22	6,219530E+22	3,245612E+22	3,245628E+22	1,243903E+23	6,491240E+22	1,893027E+23
-700	6,219613E+22	6,219469E+22	3,245540E+22	3,245569E+22	1,243908E+23	6,491109E+22	1,893019E+23
-699	6,219304E+22	6,219564E+22	3,245574E+22	3,245456E+22	1,243887E+23	6,491030E+22	1,892990E+23
-698	6,219598E+22	6,219686E+22	3,245443E+22	3,245527E+22	1,243928E+23	6,490970E+22	1,893025E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-697	6,219538E+22	6,219466E+22	3,245449E+22	3,245395E+22	1,243900E+23	6,490845E+22	1,892985E+23
-696	6,219428E+22	6,219580E+22	3,245491E+22	3,245352E+22	1,243901E+23	6,490843E+22	1,892985E+23
-695	6,219756E+22	6,219623E+22	3,245348E+22	3,245442E+22	1,243938E+23	6,490789E+22	1,893017E+23
-694	6,219514E+22	6,219479E+22	3,245384E+22	3,245362E+22	1,243899E+23	6,490746E+22	1,892974E+23
-693	6,219521E+22	6,219659E+22	3,245402E+22	3,245441E+22	1,243918E+23	6,490844E+22	1,893002E+23
-692	6,219694E+22	6,219564E+22	3,245391E+22	3,245487E+22	1,243926E+23	6,490878E+22	1,893014E+23
-691	6,219394E+22	6,219506E+22	3,245540E+22	3,245424E+22	1,243890E+23	6,490964E+22	1,892986E+23
-690	6,219576E+22	6,219613E+22	3,245561E+22	3,245592E+22	1,243919E+23	6,491152E+22	1,893034E+23
-689	6,219524E+22	6,219379E+22	3,245633E+22	3,245624E+22	1,243890E+23	6,491257E+22	1,893016E+23
-688	6,219226E+22	6,219424E+22	3,245785E+22	3,245660E+22	1,243865E+23	6,491444E+22	1,893009E+23
-687	6,219449E+22	6,219476E+22	3,245718E+22	3,245844E+22	1,243893E+23	6,491562E+22	1,893049E+23
-686	6,219282E+22	6,219214E+22	3,245786E+22	3,245783E+22	1,243850E+23	6,491569E+22	1,893006E+23
-685	6,219228E+22	6,219345E+22	3,245842E+22	3,245796E+22	1,243857E+23	6,491638E+22	1,893021E+23
-684	6,219506E+22	6,219314E+22	3,245766E+22	3,245845E+22	1,243882E+23	6,491611E+22	1,893043E+23
-683	6,219254E+22	6,219265E+22	3,245812E+22	3,245701E+22	1,243852E+23	6,491513E+22	1,893003E+23
-682	6,219351E+22	6,219500E+22	3,245744E+22	3,245768E+22	1,243885E+23	6,491512E+22	1,893036E+23
-681	6,219437E+22	6,219366E+22	3,245665E+22	3,245715E+22	1,243880E+23	6,491380E+22	1,893018E+23
-680	6,219202E+22	6,219393E+22	3,245720E+22	3,245573E+22	1,243859E+23	6,491293E+22	1,892989E+23
-679	6,219486E+22	6,219533E+22	3,245593E+22	3,245642E+22	1,243902E+23	6,491235E+22	1,893025E+23
-678	6,219476E+22	6,219308E+22	3,245555E+22	3,245522E+22	1,243878E+23	6,491077E+22	1,892986E+23
-677	6,219348E+22	6,219474E+22	3,245581E+22	3,245494E+22	1,243882E+23	6,491074E+22	1,892990E+23
-676	6,219606E+22	6,219540E+22	3,245472E+22	3,245602E+22	1,243915E+23	6,491074E+22	1,893022E+23
-675	6,219394E+22	6,219405E+22	3,245523E+22	3,245493E+22	1,243880E+23	6,491017E+22	1,892981E+23
-674	6,219406E+22	6,219580E+22	3,245574E+22	3,245574E+22	1,243899E+23	6,491148E+22	1,893013E+23
-673	6,219568E+22	6,219415E+22	3,245572E+22	3,245634E+22	1,243898E+23	6,491206E+22	1,893019E+23
-672	6,219298E+22	6,219331E+22	3,245744E+22	3,245584E+22	1,243863E+23	6,491328E+22	1,892996E+23
-671	6,219400E+22	6,219492E+22	3,245752E+22	3,245782E+22	1,243889E+23	6,491535E+22	1,893043E+23
-670	6,219359E+22	6,219230E+22	3,245773E+22	3,245829E+22	1,243859E+23	6,491602E+22	1,893019E+23
-669	6,219091E+22	6,219274E+22	3,245914E+22	3,245842E+22	1,243836E+23	6,491756E+22	1,893012E+23
-668	6,219318E+22	6,219315E+22	3,245877E+22	3,246000E+22	1,243863E+23	6,491877E+22	1,893051E+23
-667	6,219212E+22	6,219089E+22	3,245938E+22	3,245896E+22	1,243830E+23	6,491834E+22	1,893014E+23
-666	6,219156E+22	6,219278E+22	3,245991E+22	3,245921E+22	1,243843E+23	6,491912E+22	1,893035E+23
-665	6,219362E+22	6,219227E+22	3,245898E+22	3,245988E+22	1,243859E+23	6,491886E+22	1,893047E+23
-664	6,219119E+22	6,219169E+22	3,245957E+22	3,245841E+22	1,243829E+23	6,491797E+22	1,893009E+23
-663	6,219182E+22	6,219409E+22	3,245892E+22	3,245896E+22	1,243859E+23	6,491788E+22	1,893038E+23
-662	6,219325E+22	6,219210E+22	3,245781E+22	3,245836E+22	1,243854E+23	6,491616E+22	1,893015E+23
-661	6,219141E+22	6,219238E+22	3,245829E+22	3,245687E+22	1,243838E+23	6,491516E+22	1,892990E+23
-660	6,219389E+22	6,219393E+22	3,245723E+22	3,245776E+22	1,243878E+23	6,491499E+22	1,893028E+23
-659	6,219379E+22	6,219229E+22	3,245667E+22	3,245657E+22	1,243861E+23	6,491324E+22	1,892993E+23
-658	6,219227E+22	6,219427E+22	3,245695E+22	3,245646E+22	1,243865E+23	6,491341E+22	1,893000E+23
-657	6,219457E+22	6,219422E+22	3,245607E+22	3,245750E+22	1,243888E+23	6,491357E+22	1,893024E+23
-656	6,219313E+22	6,219250E+22	3,245699E+22	3,245620E+22	1,243856E+23	6,491319E+22	1,892988E+23
-655	6,219288E+22	6,219450E+22	3,245769E+22	3,245701E+22	1,243874E+23	6,491470E+22	1,893021E+23
-654	6,219458E+22	6,219270E+22	3,245732E+22	3,245797E+22	1,243873E+23	6,491529E+22	1,893026E+23
-653	6,219161E+22	6,219210E+22	3,245889E+22	3,245770E+22	1,243837E+23	6,491659E+22	1,893003E+23
-652	6,219197E+22	6,219372E+22	3,245921E+22	3,245985E+22	1,243857E+23	6,491906E+22	1,893047E+23
-651	6,219213E+22	6,219111E+22	3,245933E+22	3,245999E+22	1,243832E+23	6,491932E+22	1,893026E+23
-650	6,218984E+22	6,219156E+22	3,246074E+22	3,245996E+22	1,243814E+23	6,492070E+22	1,893021E+23
-649	6,219216E+22	6,219153E+22	3,246040E+22	3,246148E+22	1,243837E+23	6,492188E+22	1,893056E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-648	6,219152E+22	6,218941E+22	3,246102E+22	3,246033E+22	1,243809E+23	6,492135E+22	1,893023E+23
-647	6,219002E+22	6,219201E+22	3,246142E+22	3,246064E+22	1,243820E+23	6,492207E+22	1,893041E+23
-646	6,219217E+22	6,219125E+22	3,246005E+22	3,246139E+22	1,243834E+23	6,492145E+22	1,893049E+23
-645	6,218999E+22	6,219040E+22	3,246065E+22	3,245966E+22	1,243804E+23	6,492032E+22	1,893007E+23
-644	6,219050E+22	6,219263E+22	3,246034E+22	3,246010E+22	1,243831E+23	6,492044E+22	1,893036E+23
-643	6,219252E+22	6,219086E+22	3,245908E+22	3,245930E+22	1,243834E+23	6,491838E+22	1,893018E+23
-642	6,219066E+22	6,219160E+22	3,245944E+22	3,245810E+22	1,243823E+23	6,491754E+22	1,892998E+23
-641	6,219256E+22	6,219294E+22	3,245837E+22	3,245925E+22	1,243855E+23	6,491762E+22	1,893031E+23
-640	6,219274E+22	6,219126E+22	3,245801E+22	3,245800E+22	1,243840E+23	6,491600E+22	1,893000E+23
-639	6,219088E+22	6,219345E+22	3,245852E+22	3,245775E+22	1,243843E+23	6,491627E+22	1,893006E+23
-638	6,219362E+22	6,219285E+22	3,245751E+22	3,245883E+22	1,243865E+23	6,491634E+22	1,893028E+23
-637	6,219235E+22	6,219108E+22	3,245858E+22	3,245760E+22	1,243834E+23	6,491618E+22	1,892996E+23
-636	6,219136E+22	6,219320E+22	3,245953E+22	3,245878E+22	1,243846E+23	6,491831E+22	1,893029E+23
-635	6,219289E+22	6,219173E+22	3,245892E+22	3,245985E+22	1,243846E+23	6,491877E+22	1,893034E+23
-634	6,218998E+22	6,219115E+22	3,246039E+22	3,245973E+22	1,243811E+23	6,492012E+22	1,893012E+23
-633	6,219037E+22	6,219184E+22	3,246081E+22	3,246166E+22	1,243822E+23	6,492247E+22	1,893047E+23
-632	6,219137E+22	6,218919E+22	3,246109E+22	3,246142E+22	1,243806E+23	6,492250E+22	1,893031E+23
-631	6,218895E+22	6,219026E+22	3,246246E+22	3,246121E+22	1,243792E+23	6,492367E+22	1,893029E+23
-630	6,219124E+22	6,219027E+22	3,246173E+22	3,246291E+22	1,243815E+23	6,492464E+22	1,893062E+23
-629	6,219032E+22	6,218862E+22	3,246225E+22	3,246178E+22	1,243789E+23	6,492403E+22	1,893030E+23
-628	6,218819E+22	6,219118E+22	3,246291E+22	3,246210E+22	1,243794E+23	6,492501E+22	1,893044E+23
-627	6,219071E+22	6,219035E+22	3,246145E+22	3,246255E+22	1,243811E+23	6,492400E+22	1,893051E+23
-626	6,218899E+22	6,218937E+22	3,246199E+22	3,246086E+22	1,243784E+23	6,492284E+22	1,893012E+23
-625	6,218942E+22	6,219093E+22	3,246173E+22	3,246139E+22	1,243804E+23	6,492312E+22	1,893035E+23
-624	6,219183E+22	6,218948E+22	3,246043E+22	3,246067E+22	1,243813E+23	6,492110E+22	1,893024E+23
-623	6,218933E+22	6,219090E+22	3,246063E+22	3,245955E+22	1,243802E+23	6,492018E+22	1,893004E+23
-622	6,219142E+22	6,219186E+22	3,245931E+22	3,246077E+22	1,243833E+23	6,492008E+22	1,893034E+23
-621	6,219193E+22	6,219007E+22	3,245915E+22	3,245922E+22	1,243820E+23	6,491837E+22	1,893004E+23
-620	6,218974E+22	6,219219E+22	3,246018E+22	3,245895E+22	1,243819E+23	6,491913E+22	1,893011E+23
-619	6,219267E+22	6,219182E+22	3,245915E+22	3,246002E+22	1,243845E+23	6,491916E+22	1,893037E+23
-618	6,219110E+22	6,219027E+22	3,246015E+22	3,245926E+22	1,243814E+23	6,491941E+22	1,893008E+23
-617	6,218939E+22	6,219186E+22	3,246120E+22	3,246076E+22	1,243813E+23	6,492197E+22	1,893032E+23
-616	6,219141E+22	6,219017E+22	3,246065E+22	3,246172E+22	1,243816E+23	6,492237E+22	1,893040E+23
-615	6,218843E+22	6,218970E+22	3,246215E+22	3,246134E+22	1,243781E+23	6,492349E+22	1,893016E+23
-614	6,218954E+22	6,218999E+22	3,246230E+22	3,246321E+22	1,243795E+23	6,492551E+22	1,893050E+23
-613	6,219084E+22	6,218762E+22	3,246259E+22	3,246280E+22	1,243785E+23	6,492540E+22	1,893039E+23
-612	6,218764E+22	6,218926E+22	3,246415E+22	3,246278E+22	1,243769E+23	6,492693E+22	1,893038E+23
-611	6,218966E+22	6,218973E+22	3,246315E+22	3,246441E+22	1,243794E+23	6,492756E+22	1,893069E+23
-610	6,218869E+22	6,218803E+22	3,246361E+22	3,246336E+22	1,243767E+23	6,492697E+22	1,893037E+23
-609	6,218649E+22	6,218960E+22	3,246446E+22	3,246353E+22	1,243761E+23	6,492798E+22	1,893041E+23
-608	6,218980E+22	6,218862E+22	3,246301E+22	3,246372E+22	1,243784E+23	6,492673E+22	1,893052E+23
-607	6,218803E+22	6,218813E+22	3,246341E+22	3,246201E+22	1,243762E+23	6,492542E+22	1,893016E+23
-606	6,218863E+22	6,218961E+22	3,246268E+22	3,246282E+22	1,243782E+23	6,492549E+22	1,893037E+23
-605	6,219093E+22	6,218862E+22	3,246134E+22	3,246205E+22	1,243796E+23	6,492339E+22	1,893029E+23
-604	6,218801E+22	6,219018E+22	3,246188E+22	3,246090E+22	1,243782E+23	6,492278E+22	1,893010E+23
-603	6,219033E+22	6,219111E+22	3,246064E+22	3,246178E+22	1,243814E+23	6,492242E+22	1,893039E+23
-602	6,219111E+22	6,218930E+22	3,246063E+22	3,246040E+22	1,243804E+23	6,492103E+22	1,893014E+23
-601	6,218850E+22	6,219058E+22	3,246194E+22	3,246038E+22	1,243791E+23	6,492232E+22	1,893014E+23
-600	6,219130E+22	6,219045E+22	3,246091E+22	3,246170E+22	1,243818E+23	6,492261E+22	1,893044E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-599	6,218923E+22	6,218925E+22	3,246178E+22	3,246115E+22	1,243785E+23	6,492293E+22	1,893014E+23
-598	6,218790E+22	6,219002E+22	3,246255E+22	3,246272E+22	1,243779E+23	6,492527E+22	1,893032E+23
-597	6,219047E+22	6,218835E+22	3,246212E+22	3,246329E+22	1,243788E+23	6,492541E+22	1,893042E+23
-596	6,218748E+22	6,218814E+22	3,246388E+22	3,246276E+22	1,243756E+23	6,492664E+22	1,893023E+23
-595	6,218868E+22	6,218896E+22	3,246389E+22	3,246449E+22	1,243776E+23	6,492838E+22	1,893060E+23
-594	6,218965E+22	6,218721E+22	3,246407E+22	3,246440E+22	1,243769E+23	6,492847E+22	1,893053E+23
-593	6,218567E+22	6,218826E+22	3,246583E+22	3,246454E+22	1,243739E+23	6,493036E+22	1,893043E+23
-592	6,218799E+22	6,218859E+22	3,246490E+22	3,246596E+22	1,243766E+23	6,493087E+22	1,893074E+23
-591	6,218708E+22	6,218683E+22	3,246533E+22	3,246473E+22	1,243739E+23	6,493005E+22	1,893040E+23
-590	6,218559E+22	6,218764E+22	3,246577E+22	3,246495E+22	1,243732E+23	6,493072E+22	1,893040E+23
-589	6,218928E+22	6,218696E+22	3,246419E+22	3,246502E+22	1,243762E+23	6,492921E+22	1,893055E+23
-588	6,218696E+22	6,218712E+22	3,246456E+22	3,246348E+22	1,243741E+23	6,492803E+22	1,893021E+23
-587	6,218757E+22	6,218907E+22	3,246357E+22	3,246411E+22	1,243766E+23	6,492768E+22	1,893043E+23
-586	6,218994E+22	6,218811E+22	3,246232E+22	3,246326E+22	1,243781E+23	6,492558E+22	1,893036E+23
-585	6,218679E+22	6,218884E+22	3,246336E+22	3,246199E+22	1,243756E+23	6,492535E+22	1,893010E+23
-584	6,218949E+22	6,218978E+22	3,246232E+22	3,246274E+22	1,243793E+23	6,492506E+22	1,893043E+23
-583	6,218979E+22	6,218828E+22	3,246236E+22	3,246167E+22	1,243781E+23	6,492402E+22	1,893021E+23
-582	6,218709E+22	6,218913E+22	3,246332E+22	3,246220E+22	1,243762E+23	6,492552E+22	1,893017E+23
-581	6,218984E+22	6,218908E+22	3,246229E+22	3,246353E+22	1,243789E+23	6,492582E+22	1,893047E+23
-580	6,218760E+22	6,218791E+22	3,246338E+22	3,246298E+22	1,243755E+23	6,492636E+22	1,893019E+23
-579	6,218684E+22	6,218869E+22	3,246404E+22	3,246418E+22	1,243755E+23	6,492822E+22	1,893038E+23
-578	6,218972E+22	6,218726E+22	3,246368E+22	3,246478E+22	1,243770E+23	6,492847E+22	1,893054E+23
-577	6,218629E+22	6,218668E+22	3,246574E+22	3,246442E+22	1,243730E+23	6,493016E+22	1,893031E+23
-576	6,218724E+22	6,218800E+22	3,246571E+22	3,246619E+22	1,243752E+23	6,493190E+22	1,893071E+23
-575	6,218767E+22	6,218653E+22	3,246584E+22	3,246618E+22	1,243742E+23	6,493202E+22	1,893062E+23
-574	6,218411E+22	6,218654E+22	3,246729E+22	3,246632E+22	1,243707E+23	6,493361E+22	1,893043E+23
-573	6,218690E+22	6,218674E+22	3,246639E+22	3,246730E+22	1,243736E+23	6,493370E+22	1,893073E+23
-572	6,218614E+22	6,218523E+22	3,246682E+22	3,246602E+22	1,243714E+23	6,493284E+22	1,893042E+23
-571	6,218488E+22	6,218645E+22	3,246688E+22	3,246609E+22	1,243713E+23	6,493297E+22	1,893043E+23
-570	6,218841E+22	6,218654E+22	3,246512E+22	3,246637E+22	1,243750E+23	6,493149E+22	1,893064E+23
-569	6,218563E+22	6,218622E+22	3,246572E+22	3,246482E+22	1,243718E+23	6,493054E+22	1,893024E+23
-568	6,218637E+22	6,218824E+22	3,246493E+22	3,246515E+22	1,243746E+23	6,493008E+22	1,893047E+23
-567	6,218870E+22	6,218740E+22	3,246386E+22	3,246422E+22	1,243761E+23	6,492809E+22	1,893042E+23
-566	6,218594E+22	6,218713E+22	3,246478E+22	3,246328E+22	1,243731E+23	6,492806E+22	1,893011E+23
-565	6,218848E+22	6,218829E+22	3,246382E+22	3,246414E+22	1,243768E+23	6,492796E+22	1,893047E+23
-564	6,218817E+22	6,218719E+22	3,246384E+22	3,246351E+22	1,243754E+23	6,492735E+22	1,893027E+23
-563	6,218556E+22	6,218800E+22	3,246453E+22	3,246398E+22	1,243736E+23	6,492851E+22	1,893021E+23
-562	6,218865E+22	6,218796E+22	3,246357E+22	3,246523E+22	1,243766E+23	6,492880E+22	1,893054E+23
-561	6,218647E+22	6,218611E+22	3,246506E+22	3,246450E+22	1,243726E+23	6,492956E+22	1,893021E+23
-560	6,218608E+22	6,218730E+22	3,246584E+22	3,246548E+22	1,243734E+23	6,493132E+22	1,893047E+23
-559	6,218847E+22	6,218646E+22	3,246556E+22	3,246626E+22	1,243749E+23	6,493182E+22	1,893067E+23
-558	6,218484E+22	6,218543E+22	3,246736E+22	3,246633E+22	1,243703E+23	6,493370E+22	1,893040E+23
-557	6,218561E+22	6,218677E+22	3,246740E+22	3,246791E+22	1,243724E+23	6,493531E+22	1,893077E+23
-556	6,218589E+22	6,218523E+22	3,246762E+22	3,246788E+22	1,243711E+23	6,493551E+22	1,893066E+23
-555	6,218301E+22	6,218503E+22	3,246875E+22	3,246769E+22	1,243680E+23	6,493644E+22	1,893045E+23
-554	6,218621E+22	6,218537E+22	3,246767E+22	3,246862E+22	1,243716E+23	6,493629E+22	1,893079E+23
-553	6,218508E+22	6,218371E+22	3,246821E+22	3,246747E+22	1,243688E+23	6,493568E+22	1,893045E+23
-552	6,218378E+22	6,218568E+22	3,246805E+22	3,246745E+22	1,243695E+23	6,493550E+22	1,893050E+23
-551	6,218691E+22	6,218607E+22	3,246636E+22	3,246765E+22	1,243730E+23	6,493401E+22	1,893070E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-550	6,218455E+22	6,218486E+22	3,246687E+22	3,246611E+22	1,243694E+23	6,493297E+22	1,893024E+23
-549	6,218557E+22	6,218679E+22	3,246630E+22	3,246604E+22	1,243724E+23	6,493234E+22	1,893047E+23
-548	6,218765E+22	6,218622E+22	3,246538E+22	3,246537E+22	1,243739E+23	6,493075E+22	1,893046E+23
-547	6,218490E+22	6,218607E+22	3,246600E+22	3,246462E+22	1,243710E+23	6,493062E+22	1,893016E+23
-546	6,218711E+22	6,218760E+22	3,246496E+22	3,246581E+22	1,243747E+23	6,493077E+22	1,893055E+23
-545	6,218650E+22	6,218587E+22	3,246533E+22	3,246533E+22	1,243724E+23	6,493066E+22	1,893030E+23
-544	6,218433E+22	6,218673E+22	3,246609E+22	3,246547E+22	1,243711E+23	6,493156E+22	1,893026E+23
-543	6,218757E+22	6,218682E+22	3,246535E+22	3,246660E+22	1,243744E+23	6,493196E+22	1,893063E+23
-542	6,218582E+22	6,218426E+22	3,246670E+22	3,246611E+22	1,243701E+23	6,493281E+22	1,893029E+23
-541	6,218509E+22	6,218591E+22	3,246760E+22	3,246705E+22	1,243710E+23	6,493465E+22	1,893057E+23
-540	6,218675E+22	6,218564E+22	3,246731E+22	3,246820E+22	1,243724E+23	6,493551E+22	1,893079E+23
-539	6,218318E+22	6,218425E+22	3,246886E+22	3,246813E+22	1,243674E+23	6,493698E+22	1,893044E+23
-538	6,218414E+22	6,218555E+22	3,246890E+22	3,246951E+22	1,243697E+23	6,493842E+22	1,893081E+23
-537	6,218459E+22	6,218328E+22	3,246934E+22	3,246935E+22	1,243679E+23	6,493869E+22	1,893066E+23
-536	6,218207E+22	6,218349E+22	3,247027E+22	3,246892E+22	1,243656E+23	6,493919E+22	1,893048E+23
-535	6,218502E+22	6,218458E+22	3,246910E+22	3,246996E+22	1,243696E+23	6,493906E+22	1,893087E+23
-534	6,218396E+22	6,218253E+22	3,246926E+22	3,246907E+22	1,243665E+23	6,493833E+22	1,893048E+23
-533	6,218265E+22	6,218470E+22	3,246924E+22	3,246868E+22	1,243674E+23	6,493792E+22	1,893053E+23
-532	6,218562E+22	6,218526E+22	3,246773E+22	3,246881E+22	1,243709E+23	6,493654E+22	1,893074E+23
-531	6,218373E+22	6,218371E+22	3,246808E+22	3,246710E+22	1,243674E+23	6,493519E+22	1,893026E+23
-530	6,218477E+22	6,218579E+22	3,246755E+22	3,246718E+22	1,243706E+23	6,493473E+22	1,893053E+23
-529	6,218627E+22	6,218487E+22	3,246687E+22	3,246693E+22	1,243711E+23	6,493380E+22	1,893049E+23
-528	6,218345E+22	6,218513E+22	3,246730E+22	3,246626E+22	1,243686E+23	6,493356E+22	1,893021E+23
-527	6,218557E+22	6,218665E+22	3,246641E+22	3,246742E+22	1,243722E+23	6,493382E+22	1,893060E+23
-526	6,218553E+22	6,218399E+22	3,246669E+22	3,246696E+22	1,243695E+23	6,493365E+22	1,893032E+23
-525	6,218378E+22	6,218500E+22	3,246766E+22	3,246669E+22	1,243688E+23	6,493435E+22	1,893031E+23
-524	6,218660E+22	6,218562E+22	3,246711E+22	3,246803E+22	1,243722E+23	6,493513E+22	1,893073E+23
-523	6,218471E+22	6,218336E+22	3,246822E+22	3,246772E+22	1,243681E+23	6,493593E+22	1,893040E+23
-522	6,218351E+22	6,218527E+22	3,246909E+22	3,246881E+22	1,243688E+23	6,493790E+22	1,893067E+23
-521	6,218467E+22	6,218430E+22	3,246921E+22	3,247008E+22	1,243690E+23	6,493929E+22	1,893083E+23
-520	6,218156E+22	6,218291E+22	3,247066E+22	3,246971E+22	1,243645E+23	6,494037E+22	1,893048E+23
-519	6,218276E+22	6,218409E+22	3,247075E+22	3,247096E+22	1,243668E+23	6,494171E+22	1,893086E+23
-518	6,218371E+22	6,218124E+22	3,247084E+22	3,247105E+22	1,243650E+23	6,494189E+22	1,893068E+23
-517	6,218121E+22	6,218205E+22	3,247159E+22	3,247043E+22	1,243633E+23	6,494202E+22	1,893053E+23
-516	6,218362E+22	6,218382E+22	3,247034E+22	3,247158E+22	1,243674E+23	6,494192E+22	1,893094E+23
-515	6,218288E+22	6,218166E+22	3,247024E+22	3,247037E+22	1,243645E+23	6,494060E+22	1,893051E+23
-514	6,218177E+22	6,218383E+22	3,247034E+22	3,246964E+22	1,243656E+23	6,493997E+22	1,893056E+23
-513	6,218459E+22	6,218389E+22	3,246926E+22	3,246980E+22	1,243685E+23	6,493906E+22	1,893075E+23
-512	6,218276E+22	6,218271E+22	3,246951E+22	3,246813E+22	1,243655E+23	6,493764E+22	1,893031E+23
-511	6,218330E+22	6,218513E+22	3,246903E+22	3,246856E+22	1,243684E+23	6,493759E+22	1,893060E+23
-510	6,218487E+22	6,218348E+22	3,246808E+22	3,246874E+22	1,243684E+23	6,493682E+22	1,893052E+23
-509	6,218229E+22	6,218371E+22	3,246863E+22	3,246776E+22	1,243660E+23	6,493639E+22	1,893024E+23
-508	6,218449E+22	6,218543E+22	3,246792E+22	3,246887E+22	1,243699E+23	6,493679E+22	1,893067E+23
-507	6,218498E+22	6,218254E+22	3,246800E+22	3,246824E+22	1,243675E+23	6,493624E+22	1,893038E+23
-506	6,218304E+22	6,218398E+22	3,246911E+22	3,246805E+22	1,243670E+23	6,493716E+22	1,893042E+23
-505	6,218502E+22	6,218453E+22	3,246889E+22	3,246980E+22	1,243696E+23	6,493870E+22	1,893083E+23
-504	6,218278E+22	6,218256E+22	3,246993E+22	3,246956E+22	1,243653E+23	6,493948E+22	1,893048E+23
-503	6,218148E+22	6,218424E+22	3,247100E+22	3,247061E+22	1,243657E+23	6,494162E+22	1,893073E+23
-502	6,218324E+22	6,218210E+22	3,247093E+22	3,247150E+22	1,243653E+23	6,494243E+22	1,893078E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-501	6,218071E+22	6,218079E+22	3,247235E+22	3,247114E+22	1,243615E+23	6,494349E+22	1,893050E+23
-500	6,218174E+22	6,218262E+22	3,247233E+22	3,247251E+22	1,243644E+23	6,494484E+22	1,893092E+23
-499	6,218277E+22	6,218019E+22	3,247193E+22	3,247259E+22	1,243630E+23	6,494452E+22	1,893075E+23
-498	6,218011E+22	6,218153E+22	3,247262E+22	3,247184E+22	1,243616E+23	6,494446E+22	1,893061E+23
-497	6,218214E+22	6,218287E+22	3,247183E+22	3,247291E+22	1,243650E+23	6,494474E+22	1,893097E+23
-496	6,218169E+22	6,218090E+22	3,247171E+22	3,247135E+22	1,243626E+23	6,494306E+22	1,893057E+23
-495	6,218067E+22	6,218289E+22	3,247199E+22	3,247062E+22	1,243636E+23	6,494261E+22	1,893062E+23
-494	6,218351E+22	6,218222E+22	3,247068E+22	3,247124E+22	1,243657E+23	6,494192E+22	1,893077E+23
-493	6,218164E+22	6,218139E+22	3,247080E+22	3,246966E+22	1,243630E+23	6,494046E+22	1,893035E+23
-492	6,218172E+22	6,218407E+22	3,247028E+22	3,247029E+22	1,243658E+23	6,494057E+22	1,893064E+23
-491	6,218382E+22	6,218217E+22	3,246909E+22	3,247027E+22	1,243660E+23	6,493935E+22	1,893053E+23
-490	6,218169E+22	6,218247E+22	3,246970E+22	3,246891E+22	1,243642E+23	6,493861E+22	1,893028E+23
-489	6,218355E+22	6,218395E+22	3,246952E+22	3,247009E+22	1,243675E+23	6,493961E+22	1,893071E+23
-488	6,218390E+22	6,218182E+22	3,246958E+22	3,246952E+22	1,243657E+23	6,493910E+22	1,893048E+23
-487	6,218138E+22	6,218344E+22	3,247092E+22	3,246967E+22	1,243648E+23	6,494059E+22	1,893054E+23
-486	6,218312E+22	6,218314E+22	3,247065E+22	3,247182E+22	1,243663E+23	6,494247E+22	1,893087E+23
-485	6,218120E+22	6,218092E+22	3,247179E+22	3,247134E+22	1,243621E+23	6,494313E+22	1,893052E+23
-484	6,217995E+22	6,218255E+22	3,247290E+22	3,247236E+22	1,243625E+23	6,494526E+22	1,893078E+23
-483	6,218242E+22	6,218020E+22	3,247241E+22	3,247352E+22	1,243626E+23	6,494593E+22	1,893086E+23
-482	6,218002E+22	6,217943E+22	3,247363E+22	3,247267E+22	1,243595E+23	6,494630E+22	1,893057E+23
-481	6,218039E+22	6,218151E+22	3,247381E+22	3,247425E+22	1,243619E+23	6,494806E+22	1,893100E+23
-480	6,218128E+22	6,217970E+22	3,247325E+22	3,247406E+22	1,243610E+23	6,494730E+22	1,893083E+23
-479	6,217868E+22	6,218089E+22	3,247421E+22	3,247308E+22	1,243596E+23	6,494729E+22	1,893069E+23
-478	6,218103E+22	6,218123E+22	3,247336E+22	3,247413E+22	1,243623E+23	6,494748E+22	1,893097E+23
-477	6,218085E+22	6,217934E+22	3,247326E+22	3,247237E+22	1,243602E+23	6,494563E+22	1,893058E+23
-476	6,217942E+22	6,218179E+22	3,247343E+22	3,247199E+22	1,243612E+23	6,494542E+22	1,893066E+23
-475	6,218230E+22	6,218111E+22	3,247160E+22	3,247278E+22	1,243634E+23	6,494437E+22	1,893078E+23
-474	6,218047E+22	6,218051E+22	3,247166E+22	3,247111E+22	1,243610E+23	6,494277E+22	1,893038E+23
-473	6,218046E+22	6,218281E+22	3,247159E+22	3,247171E+22	1,243633E+23	6,494330E+22	1,893066E+23
-472	6,218286E+22	6,218121E+22	3,247043E+22	3,247134E+22	1,243641E+23	6,494176E+22	1,893058E+23
-471	6,218087E+22	6,218154E+22	3,247137E+22	3,247004E+22	1,243624E+23	6,494142E+22	1,893038E+23
-470	6,218245E+22	6,218245E+22	3,247116E+22	3,247168E+22	1,243649E+23	6,494284E+22	1,893077E+23
-469	6,218247E+22	6,218067E+22	3,247127E+22	3,247126E+22	1,243631E+23	6,494252E+22	1,893057E+23
-468	6,217944E+22	6,218231E+22	3,247270E+22	3,247164E+22	1,243617E+23	6,494434E+22	1,893061E+23
-467	6,218162E+22	6,218143E+22	3,247217E+22	3,247362E+22	1,243630E+23	6,494579E+22	1,893088E+23
-466	6,218026E+22	6,217922E+22	3,247330E+22	3,247284E+22	1,243595E+23	6,494614E+22	1,893056E+23
-465	6,217888E+22	6,218067E+22	3,247470E+22	3,247395E+22	1,243596E+23	6,494865E+22	1,893082E+23
-464	6,218124E+22	6,217929E+22	3,247397E+22	3,247504E+22	1,243605E+23	6,494900E+22	1,893095E+23
-463	6,217863E+22	6,217892E+22	3,247522E+22	3,247429E+22	1,243576E+23	6,494951E+22	1,893071E+23
-462	6,217881E+22	6,218031E+22	3,247535E+22	3,247598E+22	1,243591E+23	6,495133E+22	1,893105E+23
-461	6,218006E+22	6,217856E+22	3,247489E+22	3,247539E+22	1,243586E+23	6,495028E+22	1,893089E+23
-460	6,217740E+22	6,217962E+22	3,247589E+22	3,247434E+22	1,243570E+23	6,495023E+22	1,893073E+23
-459	6,218009E+22	6,217969E+22	3,247465E+22	3,247537E+22	1,243598E+23	6,495001E+22	1,893098E+23
-458	6,217997E+22	6,217817E+22	3,247429E+22	3,247370E+22	1,243581E+23	6,494799E+22	1,893061E+23
-457	6,217786E+22	6,218056E+22	3,247463E+22	3,247365E+22	1,243584E+23	6,494827E+22	1,893067E+23
-456	6,218083E+22	6,218040E+22	3,247263E+22	3,247417E+22	1,243612E+23	6,494680E+22	1,893080E+23
-455	6,217949E+22	6,217956E+22	3,247294E+22	3,247227E+22	1,243590E+23	6,494521E+22	1,893043E+23
-454	6,217974E+22	6,218109E+22	3,247295E+22	3,247286E+22	1,243608E+23	6,494581E+22	1,893066E+23
-453	6,218230E+22	6,217990E+22	3,247195E+22	3,247237E+22	1,243622E+23	6,494432E+22	1,893065E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-452	6,217959E+22	6,218069E+22	3,247304E+22	3,247151E+22	1,243603E+23	6,494455E+22	1,893048E+23
-451	6,218090E+22	6,218147E+22	3,247256E+22	3,247340E+22	1,243624E+23	6,494595E+22	1,893083E+23
-450	6,218093E+22	6,217965E+22	3,247273E+22	3,247299E+22	1,243606E+23	6,494572E+22	1,893063E+23
-449	6,217775E+22	6,218069E+22	3,247458E+22	3,247348E+22	1,243584E+23	6,494806E+22	1,893065E+23
-448	6,218028E+22	6,218005E+22	3,247391E+22	3,247515E+22	1,243603E+23	6,494905E+22	1,893094E+23
-447	6,217929E+22	6,217785E+22	3,247513E+22	3,247446E+22	1,243571E+23	6,494959E+22	1,893067E+23
-446	6,217771E+22	6,217899E+22	3,247632E+22	3,247588E+22	1,243567E+23	6,495220E+22	1,893089E+23
-445	6,217988E+22	6,217817E+22	3,247554E+22	3,247683E+22	1,243581E+23	6,495236E+22	1,893104E+23
-444	6,217702E+22	6,217801E+22	3,247687E+22	3,247603E+22	1,243550E+23	6,495289E+22	1,893079E+23
-443	6,217766E+22	6,217883E+22	3,247670E+22	3,247731E+22	1,243565E+23	6,495401E+22	1,893105E+23
-442	6,217923E+22	6,217718E+22	3,247620E+22	3,247642E+22	1,243564E+23	6,495262E+22	1,893090E+23
-441	6,217626E+22	6,217814E+22	3,247740E+22	3,247561E+22	1,243544E+23	6,495301E+22	1,893074E+23
-440	6,217865E+22	6,217894E+22	3,247584E+22	3,247660E+22	1,243576E+23	6,495245E+22	1,893100E+23
-439	6,217859E+22	6,217756E+22	3,247553E+22	3,247515E+22	1,243561E+23	6,495067E+22	1,893068E+23
-438	6,217657E+22	6,217912E+22	3,247581E+22	3,247517E+22	1,243557E+23	6,495098E+22	1,893067E+23
-437	6,218000E+22	6,217910E+22	3,247398E+22	3,247530E+22	1,243591E+23	6,494928E+22	1,893084E+23
-436	6,217873E+22	6,217840E+22	3,247442E+22	3,247338E+22	1,243571E+23	6,494780E+22	1,893049E+23
-435	6,217911E+22	6,217973E+22	3,247421E+22	3,247403E+22	1,243588E+23	6,494824E+22	1,893071E+23
-434	6,218135E+22	6,217909E+22	3,247321E+22	3,247377E+22	1,243604E+23	6,494698E+22	1,893074E+23
-433	6,217778E+22	6,217968E+22	3,247465E+22	3,247342E+22	1,243575E+23	6,494807E+22	1,893055E+23
-432	6,217891E+22	6,218063E+22	3,247415E+22	3,247509E+22	1,243595E+23	6,494925E+22	1,893088E+23
-431	6,217956E+22	6,217832E+22	3,247455E+22	3,247466E+22	1,243579E+23	6,494921E+22	1,893071E+23
-430	6,217662E+22	6,217845E+22	3,247636E+22	3,247520E+22	1,243551E+23	6,495156E+22	1,893066E+23
-429	6,217946E+22	6,217835E+22	3,247567E+22	3,247674E+22	1,243578E+23	6,495241E+22	1,893102E+23
-428	6,217803E+22	6,217672E+22	3,247679E+22	3,247623E+22	1,243548E+23	6,495302E+22	1,893078E+23
-427	6,217636E+22	6,217788E+22	3,247763E+22	3,247764E+22	1,243542E+23	6,495527E+22	1,893095E+23
-426	6,217866E+22	6,217727E+22	3,247691E+22	3,247830E+22	1,243559E+23	6,495521E+22	1,893111E+23
-425	6,217553E+22	6,217667E+22	3,247863E+22	3,247750E+22	1,243522E+23	6,495612E+22	1,893083E+23
-424	6,217629E+22	6,217781E+22	3,247831E+22	3,247840E+22	1,243541E+23	6,495671E+22	1,893108E+23
-423	6,217821E+22	6,217604E+22	3,247780E+22	3,247772E+22	1,243543E+23	6,495553E+22	1,893098E+23
-422	6,217489E+22	6,217653E+22	3,247873E+22	3,247728E+22	1,243514E+23	6,495601E+22	1,893074E+23
-421	6,217732E+22	6,217778E+22	3,247704E+22	3,247814E+22	1,243551E+23	6,495518E+22	1,893103E+23
-420	6,217731E+22	6,217648E+22	3,247676E+22	3,247657E+22	1,243538E+23	6,495334E+22	1,893071E+23
-419	6,217594E+22	6,217763E+22	3,247679E+22	3,247628E+22	1,243536E+23	6,495306E+22	1,893066E+23
-418	6,217966E+22	6,217793E+22	3,247508E+22	3,247613E+22	1,243576E+23	6,495121E+22	1,893088E+23
-417	6,217781E+22	6,217738E+22	3,247589E+22	3,247463E+22	1,243552E+23	6,495051E+22	1,893057E+23
-416	6,217755E+22	6,217939E+22	3,247558E+22	3,247530E+22	1,243569E+23	6,495088E+22	1,893078E+23
-415	6,217968E+22	6,217858E+22	3,247480E+22	3,247545E+22	1,243583E+23	6,495025E+22	1,893085E+23
-414	6,217608E+22	6,217805E+22	3,247635E+22	3,247533E+22	1,243541E+23	6,495168E+22	1,893058E+23
-413	6,217762E+22	6,217886E+22	3,247597E+22	3,247669E+22	1,243565E+23	6,495266E+22	1,893091E+23
-412	6,217849E+22	6,217660E+22	3,247641E+22	3,247632E+22	1,243551E+23	6,495273E+22	1,893078E+23
-411	6,217592E+22	6,217654E+22	3,247774E+22	3,247688E+22	1,243525E+23	6,495462E+22	1,893071E+23
-410	6,217844E+22	6,217716E+22	3,247698E+22	3,247842E+22	1,243556E+23	6,495541E+22	1,893110E+23
-409	6,217640E+22	6,217575E+22	3,247837E+22	3,247815E+22	1,243522E+23	6,495652E+22	1,893087E+23
-408	6,217466E+22	6,217712E+22	3,247920E+22	3,247903E+22	1,243518E+23	6,495823E+22	1,893100E+23
-407	6,217746E+22	6,217621E+22	3,247872E+22	3,247960E+22	1,243537E+23	6,495832E+22	1,893120E+23
-406	6,217434E+22	6,217478E+22	3,248039E+22	3,247891E+22	1,243491E+23	6,495930E+22	1,893084E+23
-405	6,217507E+22	6,217636E+22	3,247996E+22	3,247975E+22	1,243514E+23	6,495970E+22	1,893111E+23
-404	6,217666E+22	6,217505E+22	3,247925E+22	3,247935E+22	1,243517E+23	6,495860E+22	1,893103E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-403	6,217365E+22	6,217523E+22	3,247966E+22	3,247888E+22	1,243489E+23	6,495854E+22	1,893074E+23
-402	6,217646E+22	6,217671E+22	3,247803E+22	3,247937E+22	1,243532E+23	6,495740E+22	1,893106E+23
-401	6,217642E+22	6,217533E+22	3,247806E+22	3,247778E+22	1,243517E+23	6,495584E+22	1,893076E+23
-400	6,217511E+22	6,217691E+22	3,247805E+22	3,247711E+22	1,243520E+23	6,495516E+22	1,893072E+23
-399	6,217888E+22	6,217730E+22	3,247654E+22	3,247731E+22	1,243562E+23	6,495385E+22	1,893100E+23
-398	6,217627E+22	6,217620E+22	3,247735E+22	3,247634E+22	1,243525E+23	6,495369E+22	1,893062E+23
-397	6,217585E+22	6,217835E+22	3,247715E+22	3,247699E+22	1,243542E+23	6,495414E+22	1,893083E+23
-396	6,217807E+22	6,217717E+22	3,247649E+22	3,247713E+22	1,243552E+23	6,495362E+22	1,893089E+23
-395	6,217515E+22	6,217593E+22	3,247772E+22	3,247685E+22	1,243511E+23	6,495457E+22	1,893056E+23
-394	6,217709E+22	6,217709E+22	3,247736E+22	3,247801E+22	1,243542E+23	6,495537E+22	1,893096E+23
-393	6,217740E+22	6,217522E+22	3,247798E+22	3,247801E+22	1,243526E+23	6,495599E+22	1,893086E+23
-392	6,217440E+22	6,217603E+22	3,247917E+22	3,247843E+22	1,243504E+23	6,495759E+22	1,893080E+23
-391	6,217698E+22	6,217662E+22	3,247868E+22	3,248012E+22	1,243536E+23	6,495880E+22	1,893124E+23
-390	6,217472E+22	6,217433E+22	3,248025E+22	3,247991E+22	1,243490E+23	6,496017E+22	1,893092E+23
-389	6,217327E+22	6,217570E+22	3,248117E+22	3,248043E+22	1,243490E+23	6,496160E+22	1,893106E+23
-388	6,217614E+22	6,217470E+22	3,248067E+22	3,248109E+22	1,243508E+23	6,496176E+22	1,893126E+23
-387	6,217328E+22	6,217299E+22	3,248173E+22	3,248059E+22	1,243463E+23	6,496232E+22	1,893086E+23
-386	6,217387E+22	6,217511E+22	3,248105E+22	3,248138E+22	1,243490E+23	6,496243E+22	1,893114E+23
-385	6,217514E+22	6,217397E+22	3,248044E+22	3,248112E+22	1,243491E+23	6,496156E+22	1,893107E+23
-384	6,217252E+22	6,217440E+22	3,248069E+22	3,247998E+22	1,243469E+23	6,496067E+22	1,893076E+23
-383	6,217593E+22	6,217578E+22	3,247932E+22	3,248032E+22	1,243517E+23	6,495963E+22	1,893113E+23
-382	6,217571E+22	6,217398E+22	3,247944E+22	3,247886E+22	1,243497E+23	6,495830E+22	1,893080E+23
-381	6,217410E+22	6,217600E+22	3,247950E+22	3,247817E+22	1,243501E+23	6,495767E+22	1,893078E+23
-380	6,217722E+22	6,217666E+22	3,247809E+22	3,247876E+22	1,243539E+23	6,495685E+22	1,893107E+23
-379	6,217483E+22	6,217483E+22	3,247857E+22	3,247801E+22	1,243497E+23	6,495658E+22	1,893062E+23
-378	6,217458E+22	6,217682E+22	3,247852E+22	3,247844E+22	1,243514E+23	6,495696E+22	1,893084E+23
-377	6,217684E+22	6,217556E+22	3,247812E+22	3,247875E+22	1,243524E+23	6,495687E+22	1,893093E+23
-376	6,217422E+22	6,217463E+22	3,247914E+22	3,247815E+22	1,243489E+23	6,495729E+22	1,893061E+23
-375	6,217625E+22	6,217609E+22	3,247892E+22	3,247964E+22	1,243523E+23	6,495857E+22	1,893109E+23
-374	6,217582E+22	6,217405E+22	3,247958E+22	3,248000E+22	1,243499E+23	6,495958E+22	1,893095E+23
-373	6,217269E+22	6,217505E+22	3,248096E+22	3,248018E+22	1,243477E+23	6,496113E+22	1,893089E+23
-372	6,217530E+22	6,217541E+22	3,248072E+22	3,248176E+22	1,243507E+23	6,496248E+22	1,893132E+23
-371	6,217361E+22	6,217239E+22	3,248194E+22	3,248147E+22	1,243460E+23	6,496341E+22	1,893094E+23
-370	6,217230E+22	6,217400E+22	3,248278E+22	3,248183E+22	1,243463E+23	6,496462E+22	1,893109E+23
-369	6,217464E+22	6,217339E+22	3,248221E+22	3,248287E+22	1,243480E+23	6,496509E+22	1,893131E+23
-368	6,217170E+22	6,217224E+22	3,248287E+22	3,248211E+22	1,243439E+23	6,496498E+22	1,893089E+23
-367	6,217278E+22	6,217431E+22	3,248230E+22	3,248289E+22	1,243471E+23	6,496519E+22	1,893123E+23
-366	6,217397E+22	6,217260E+22	3,248180E+22	3,248249E+22	1,243466E+23	6,496429E+22	1,893109E+23
-365	6,217179E+22	6,217332E+22	3,248215E+22	3,248090E+22	1,243451E+23	6,496306E+22	1,893082E+23
-364	6,217513E+22	6,217472E+22	3,248089E+22	3,248128E+22	1,243498E+23	6,496218E+22	1,893120E+23
-363	6,217473E+22	6,217269E+22	3,248059E+22	3,248019E+22	1,243474E+23	6,496078E+22	1,893082E+23
-362	6,217273E+22	6,217506E+22	3,248064E+22	3,247961E+22	1,243478E+23	6,496025E+22	1,893080E+23
-361	6,217537E+22	6,217555E+22	3,247945E+22	3,248049E+22	1,243509E+23	6,495994E+22	1,893109E+23
-360	6,217346E+22	6,217364E+22	3,247985E+22	3,247930E+22	1,243471E+23	6,495916E+22	1,893063E+23
-359	6,217394E+22	6,217538E+22	3,248001E+22	3,247976E+22	1,243493E+23	6,495977E+22	1,893091E+23
-358	6,217585E+22	6,217387E+22	3,247970E+22	3,248032E+22	1,243497E+23	6,496002E+22	1,893097E+23
-357	6,217307E+22	6,217366E+22	3,248073E+22	3,247968E+22	1,243467E+23	6,496041E+22	1,893071E+23
-356	6,217460E+22	6,217535E+22	3,248070E+22	3,248139E+22	1,243500E+23	6,496209E+22	1,893120E+23
-355	6,217435E+22	6,217274E+22	3,248115E+22	3,248186E+22	1,243471E+23	6,496301E+22	1,893101E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-354	6,217140E+22	6,217360E+22	3,248275E+22	3,248173E+22	1,243450E+23	6,496448E+22	1,893095E+23
-353	6,217380E+22	6,217387E+22	3,248269E+22	3,248346E+22	1,243477E+23	6,496615E+22	1,893138E+23
-352	6,217239E+22	6,217101E+22	3,248358E+22	3,248295E+22	1,243434E+23	6,496653E+22	1,893099E+23
-351	6,217116E+22	6,217279E+22	3,248430E+22	3,248361E+22	1,243439E+23	6,496791E+22	1,893119E+23
-350	6,217297E+22	6,217205E+22	3,248361E+22	3,248484E+22	1,243450E+23	6,496845E+22	1,893135E+23
-349	6,217042E+22	6,217107E+22	3,248420E+22	3,248355E+22	1,243415E+23	6,496775E+22	1,893092E+23
-348	6,217175E+22	6,217310E+22	3,248384E+22	3,248401E+22	1,243448E+23	6,496785E+22	1,893127E+23
-347	6,217347E+22	6,217106E+22	3,248297E+22	3,248349E+22	1,243445E+23	6,496646E+22	1,893110E+23
-346	6,217115E+22	6,217212E+22	3,248340E+22	3,248179E+22	1,243433E+23	6,496520E+22	1,893085E+23
-345	6,217358E+22	6,217404E+22	3,248225E+22	3,248266E+22	1,243476E+23	6,496491E+22	1,893125E+23
-344	6,217304E+22	6,217218E+22	3,248171E+22	3,248151E+22	1,243452E+23	6,496323E+22	1,893084E+23
-343	6,217140E+22	6,217415E+22	3,248198E+22	3,248114E+22	1,243455E+23	6,496311E+22	1,893087E+23
-342	6,217390E+22	6,217398E+22	3,248096E+22	3,248208E+22	1,243479E+23	6,496304E+22	1,893109E+23
-341	6,217258E+22	6,217216E+22	3,248141E+22	3,248060E+22	1,243447E+23	6,496201E+22	1,893067E+23
-340	6,217309E+22	6,217400E+22	3,248172E+22	3,248121E+22	1,243471E+23	6,496293E+22	1,893100E+23
-339	6,217486E+22	6,217246E+22	3,248101E+22	3,248211E+22	1,243473E+23	6,496311E+22	1,893104E+23
-338	6,217177E+22	6,217262E+22	3,248218E+22	3,248142E+22	1,243444E+23	6,496360E+22	1,893080E+23
-337	6,217282E+22	6,217426E+22	3,248246E+22	3,248323E+22	1,243471E+23	6,496570E+22	1,893128E+23
-336	6,217294E+22	6,217152E+22	3,248287E+22	3,248326E+22	1,243445E+23	6,496614E+22	1,893106E+23
-335	6,217054E+22	6,217214E+22	3,248459E+22	3,248325E+22	1,243427E+23	6,496783E+22	1,893105E+23
-334	6,217229E+22	6,217214E+22	3,248452E+22	3,248521E+22	1,243444E+23	6,496973E+22	1,893142E+23
-333	6,217087E+22	6,216988E+22	3,248521E+22	3,248465E+22	1,243408E+23	6,496985E+22	1,893106E+23
-332	6,216959E+22	6,217168E+22	3,248590E+22	3,248532E+22	1,243413E+23	6,497122E+22	1,893125E+23
-331	6,217172E+22	6,217050E+22	3,248485E+22	3,248644E+22	1,243422E+23	6,497130E+22	1,893135E+23
-330	6,216965E+22	6,216976E+22	3,248553E+22	3,248468E+22	1,243394E+23	6,497020E+22	1,893096E+23
-329	6,217078E+22	6,217194E+22	3,248530E+22	3,248516E+22	1,243427E+23	6,497046E+22	1,893132E+23
-328	6,217252E+22	6,217026E+22	3,248419E+22	3,248447E+22	1,243428E+23	6,496866E+22	1,893114E+23
-327	6,217008E+22	6,217147E+22	3,248460E+22	3,248322E+22	1,243415E+23	6,496782E+22	1,893094E+23
-326	6,217159E+22	6,217301E+22	3,248355E+22	3,248436E+22	1,243446E+23	6,496792E+22	1,893125E+23
-325	6,217154E+22	6,217104E+22	3,248309E+22	3,248293E+22	1,243426E+23	6,496602E+22	1,893086E+23
-324	6,217037E+22	6,217258E+22	3,248357E+22	3,248241E+22	1,243429E+23	6,496598E+22	1,893089E+23
-323	6,217336E+22	6,217204E+22	3,248223E+22	3,248342E+22	1,243454E+23	6,496565E+22	1,893111E+23
-322	6,217206E+22	6,217075E+22	3,248270E+22	3,248187E+22	1,243428E+23	6,496457E+22	1,893074E+23
-321	6,217171E+22	6,217322E+22	3,248316E+22	3,248288E+22	1,243449E+23	6,496604E+22	1,893110E+23
-320	6,217337E+22	6,217190E+22	3,248238E+22	3,248363E+22	1,243453E+23	6,496601E+22	1,893113E+23
-319	6,217050E+22	6,217169E+22	3,248391E+22	3,248310E+22	1,243422E+23	6,496701E+22	1,893092E+23
-318	6,217107E+22	6,217278E+22	3,248451E+22	3,248494E+22	1,243439E+23	6,496945E+22	1,893133E+23
-317	6,217168E+22	6,216996E+22	3,248488E+22	3,248478E+22	1,243416E+23	6,496966E+22	1,893113E+23
-316	6,216918E+22	6,217049E+22	3,248659E+22	3,248499E+22	1,243397E+23	6,497158E+22	1,893113E+23
-315	6,217082E+22	6,217046E+22	3,248590E+22	3,248726E+22	1,243413E+23	6,497315E+22	1,893144E+23
-314	6,216950E+22	6,216845E+22	3,248651E+22	3,248644E+22	1,243379E+23	6,497295E+22	1,893109E+23
-313	6,216814E+22	6,217044E+22	3,248733E+22	3,248697E+22	1,243386E+23	6,497430E+22	1,893129E+23
-312	6,217088E+22	6,216936E+22	3,248613E+22	3,248746E+22	1,243402E+23	6,497359E+22	1,893138E+23
-311	6,216921E+22	6,216874E+22	3,248688E+22	3,248573E+22	1,243379E+23	6,497261E+22	1,893106E+23
-310	6,216940E+22	6,217094E+22	3,248676E+22	3,248641E+22	1,243403E+23	6,497317E+22	1,893135E+23
-309	6,217098E+22	6,216969E+22	3,248554E+22	3,248575E+22	1,243407E+23	6,497129E+22	1,893120E+23
-308	6,216847E+22	6,217056E+22	3,248611E+22	3,248469E+22	1,243390E+23	6,497080E+22	1,893098E+23
-307	6,217026E+22	6,217139E+22	3,248477E+22	3,248588E+22	1,243417E+23	6,497065E+22	1,893123E+23
-306	6,217083E+22	6,216939E+22	3,248441E+22	3,248416E+22	1,243402E+23	6,496857E+22	1,893088E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-305	6,216962E+22	6,217112E+22	3,248495E+22	3,248377E+22	1,243407E+23	6,496872E+22	1,893095E+23
-304	6,217263E+22	6,217101E+22	3,248341E+22	3,248467E+22	1,243436E+23	6,496809E+22	1,893117E+23
-303	6,217120E+22	6,217015E+22	3,248393E+22	3,248352E+22	1,243413E+23	6,496745E+22	1,893088E+23
-302	6,216983E+22	6,217226E+22	3,248473E+22	3,248463E+22	1,243421E+23	6,496935E+22	1,893114E+23
-301	6,217176E+22	6,217088E+22	3,248421E+22	3,248511E+22	1,243426E+23	6,496932E+22	1,893120E+23
-300	6,216923E+22	6,217011E+22	3,248601E+22	3,248459E+22	1,243393E+23	6,497060E+22	1,893099E+23
-299	6,216979E+22	6,217069E+22	3,248626E+22	3,248663E+22	1,243405E+23	6,497289E+22	1,893134E+23
-298	6,217047E+22	6,216829E+22	3,248654E+22	3,248654E+22	1,243388E+23	6,497308E+22	1,893118E+23
-297	6,216747E+22	6,216924E+22	3,248810E+22	3,248701E+22	1,243367E+23	6,497512E+22	1,893118E+23
-296	6,216937E+22	6,216936E+22	3,248719E+22	3,248891E+22	1,243387E+23	6,497609E+22	1,893148E+23
-295	6,216865E+22	6,216741E+22	3,248788E+22	3,248796E+22	1,243361E+23	6,497584E+22	1,893119E+23
-294	6,216689E+22	6,216915E+22	3,248896E+22	3,248828E+22	1,243360E+23	6,497723E+22	1,893133E+23
-293	6,216999E+22	6,216837E+22	3,248777E+22	3,248851E+22	1,243384E+23	6,497628E+22	1,893146E+23
-292	6,216808E+22	6,216774E+22	3,248857E+22	3,248704E+22	1,243358E+23	6,497561E+22	1,893114E+23
-291	6,216779E+22	6,216972E+22	3,248797E+22	3,248804E+22	1,243375E+23	6,497601E+22	1,893135E+23
-290	6,216956E+22	6,216839E+22	3,248676E+22	3,248725E+22	1,243379E+23	6,497401E+22	1,893120E+23
-289	6,216714E+22	6,216912E+22	3,248741E+22	3,248615E+22	1,243363E+23	6,497355E+22	1,893098E+23
-288	6,216966E+22	6,216993E+22	3,248588E+22	3,248689E+22	1,243396E+23	6,497277E+22	1,893124E+23
-287	6,217060E+22	6,216821E+22	3,248553E+22	3,248532E+22	1,243388E+23	6,497085E+22	1,893097E+23
-286	6,216840E+22	6,217024E+22	3,248627E+22	3,248518E+22	1,243386E+23	6,497145E+22	1,893101E+23
-285	6,217122E+22	6,217057E+22	3,248481E+22	3,248604E+22	1,243418E+23	6,497085E+22	1,893126E+23
-284	6,216959E+22	6,216933E+22	3,248572E+22	3,248509E+22	1,243389E+23	6,497081E+22	1,893097E+23
-283	6,216820E+22	6,217075E+22	3,248642E+22	3,248629E+22	1,243390E+23	6,497271E+22	1,893117E+23
-282	6,217059E+22	6,216909E+22	3,248608E+22	3,248665E+22	1,243397E+23	6,497273E+22	1,893124E+23
-281	6,216792E+22	6,216834E+22	3,248789E+22	3,248642E+22	1,243363E+23	6,497431E+22	1,893106E+23
-280	6,216855E+22	6,216917E+22	3,248773E+22	3,248841E+22	1,243377E+23	6,497614E+22	1,893139E+23
-279	6,216925E+22	6,216718E+22	3,248785E+22	3,248857E+22	1,243364E+23	6,497642E+22	1,893128E+23
-278	6,216571E+22	6,216797E+22	3,248960E+22	3,248890E+22	1,243337E+23	6,497851E+22	1,893122E+23
-277	6,216820E+22	6,216822E+22	3,248884E+22	3,249022E+22	1,243364E+23	6,497906E+22	1,893155E+23
-276	6,216786E+22	6,216617E+22	3,248974E+22	3,248912E+22	1,243340E+23	6,497886E+22	1,893129E+23
-275	6,216590E+22	6,216766E+22	3,249048E+22	3,248953E+22	1,243336E+23	6,498001E+22	1,893136E+23
-274	6,216880E+22	6,216729E+22	3,248925E+22	3,248984E+22	1,243361E+23	6,497909E+22	1,893152E+23
-273	6,216634E+22	6,216686E+22	3,248994E+22	3,248870E+22	1,243332E+23	6,497864E+22	1,893118E+23
-272	6,216627E+22	6,216861E+22	3,248910E+22	3,248942E+22	1,243349E+23	6,497853E+22	1,893134E+23
-271	6,216873E+22	6,216726E+22	3,248789E+22	3,248862E+22	1,243360E+23	6,497651E+22	1,893125E+23
-270	6,216614E+22	6,216764E+22	3,248869E+22	3,248738E+22	1,243338E+23	6,497607E+22	1,893098E+23
-269	6,216898E+22	6,216886E+22	3,248723E+22	3,248793E+22	1,243378E+23	6,497516E+22	1,893130E+23
-268	6,216971E+22	6,216744E+22	3,248695E+22	3,248668E+22	1,243371E+23	6,497363E+22	1,893108E+23
-267	6,216686E+22	6,216917E+22	3,248747E+22	3,248682E+22	1,243360E+23	6,497429E+22	1,893103E+23
-266	6,216977E+22	6,216939E+22	3,248634E+22	3,248756E+22	1,243392E+23	6,497390E+22	1,893131E+23
-265	6,216813E+22	6,216788E+22	3,248748E+22	3,248669E+22	1,243360E+23	6,497417E+22	1,893102E+23
-264	6,216715E+22	6,216903E+22	3,248805E+22	3,248765E+22	1,243362E+23	6,497570E+22	1,893119E+23
-263	6,216976E+22	6,216765E+22	3,248761E+22	3,248831E+22	1,243374E+23	6,497592E+22	1,893133E+23
-262	6,216623E+22	6,216700E+22	3,248950E+22	3,248832E+22	1,243332E+23	6,497782E+22	1,893111E+23
-261	6,216698E+22	6,216822E+22	3,248934E+22	3,249016E+22	1,243352E+23	6,497950E+22	1,893147E+23
-260	6,216787E+22	6,216610E+22	3,248967E+22	3,249029E+22	1,243340E+23	6,497996E+22	1,893139E+23
-259	6,216443E+22	6,216644E+22	3,249125E+22	3,249050E+22	1,243309E+23	6,498175E+22	1,893126E+23
-258	6,216737E+22	6,216669E+22	3,249065E+22	3,249152E+22	1,243341E+23	6,498217E+22	1,893162E+23
-257	6,216667E+22	6,216492E+22	3,249151E+22	3,249064E+22	1,243316E+23	6,498215E+22	1,893137E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-256	6,216458E+22	6,216662E+22	3,249180E+22	3,249102E+22	1,243312E+23	6,498282E+22	1,893140E+23
-255	6,216735E+22	6,216643E+22	3,249036E+22	3,249153E+22	1,243338E+23	6,498189E+22	1,893157E+23
-254	6,216450E+22	6,216559E+22	3,249123E+22	3,249031E+22	1,243301E+23	6,498154E+22	1,893116E+23
-253	6,216524E+22	6,216726E+22	3,249043E+22	3,249050E+22	1,243325E+23	6,498093E+22	1,893134E+23
-252	6,216811E+22	6,216590E+22	3,248933E+22	3,248967E+22	1,243340E+23	6,497900E+22	1,893130E+23
-251	6,216536E+22	6,216629E+22	3,248980E+22	3,248859E+22	1,243316E+23	6,497839E+22	1,893100E+23
-250	6,216805E+22	6,216790E+22	3,248846E+22	3,248919E+22	1,243360E+23	6,497765E+22	1,893136E+23
-249	6,216817E+22	6,216677E+22	3,248833E+22	3,248822E+22	1,243349E+23	6,497654E+22	1,893115E+23
-248	6,216549E+22	6,216813E+22	3,248884E+22	3,248816E+22	1,243336E+23	6,497700E+22	1,893106E+23
-247	6,216867E+22	6,216824E+22	3,248786E+22	3,248900E+22	1,243369E+23	6,497686E+22	1,893138E+23
-246	6,216671E+22	6,216630E+22	3,248929E+22	3,248830E+22	1,243330E+23	6,497759E+22	1,893106E+23
-245	6,216596E+22	6,216759E+22	3,248986E+22	3,248921E+22	1,243336E+23	6,497907E+22	1,893126E+23
-244	6,216838E+22	6,216649E+22	3,248939E+22	3,249026E+22	1,243349E+23	6,497965E+22	1,893145E+23
-243	6,216455E+22	6,216553E+22	3,249091E+22	3,249040E+22	1,243301E+23	6,498130E+22	1,893114E+23
-242	6,216571E+22	6,216668E+22	3,249102E+22	3,249189E+22	1,243324E+23	6,498291E+22	1,893153E+23
-241	6,216671E+22	6,216470E+22	3,249148E+22	3,249187E+22	1,243314E+23	6,498334E+22	1,893148E+23
-240	6,216360E+22	6,216495E+22	3,249285E+22	3,249174E+22	1,243286E+23	6,498460E+22	1,893132E+23
-239	6,216644E+22	6,216574E+22	3,249214E+22	3,249297E+22	1,243322E+23	6,498510E+22	1,893173E+23
-238	6,216480E+22	6,216397E+22	3,249301E+22	3,249231E+22	1,243288E+23	6,498533E+22	1,893141E+23
-237	6,216273E+22	6,216574E+22	3,249325E+22	3,249250E+22	1,243285E+23	6,498574E+22	1,893142E+23
-236	6,216588E+22	6,216535E+22	3,249187E+22	3,249300E+22	1,243312E+23	6,498487E+22	1,893161E+23
-235	6,216337E+22	6,216385E+22	3,249244E+22	3,249165E+22	1,243272E+23	6,498409E+22	1,893113E+23
-234	6,216480E+22	6,216557E+22	3,249178E+22	3,249159E+22	1,243304E+23	6,498338E+22	1,893137E+23
-233	6,216737E+22	6,216477E+22	3,249063E+22	3,249094E+22	1,243321E+23	6,498158E+22	1,893137E+23
-232	6,216441E+22	6,216544E+22	3,249078E+22	3,248988E+22	1,243299E+23	6,498066E+22	1,893105E+23
-231	6,216683E+22	6,216734E+22	3,248951E+22	3,249062E+22	1,243342E+23	6,498013E+22	1,893143E+23
-230	6,216645E+22	6,216572E+22	3,248984E+22	3,248969E+22	1,243322E+23	6,497952E+22	1,893117E+23
-229	6,216425E+22	6,216686E+22	3,249059E+22	3,248936E+22	1,243311E+23	6,497995E+22	1,893111E+23
-228	6,216759E+22	6,216685E+22	3,248976E+22	3,249044E+22	1,243344E+23	6,498020E+22	1,893146E+23
-227	6,216534E+22	6,216465E+22	3,249086E+22	3,249012E+22	1,243300E+23	6,498098E+22	1,893110E+23
-226	6,216466E+22	6,216613E+22	3,249148E+22	3,249111E+22	1,243308E+23	6,498259E+22	1,893134E+23
-225	6,216669E+22	6,216533E+22	3,249106E+22	3,249227E+22	1,243320E+23	6,498333E+22	1,893153E+23
-224	6,216338E+22	6,216419E+22	3,249241E+22	3,249206E+22	1,243276E+23	6,498447E+22	1,893120E+23
-223	6,216485E+22	6,216543E+22	3,249259E+22	3,249336E+22	1,243303E+23	6,498595E+22	1,893162E+23
-222	6,216538E+22	6,216337E+22	3,249335E+22	3,249339E+22	1,243288E+23	6,498674E+22	1,893155E+23
-221	6,216232E+22	6,216389E+22	3,249464E+22	3,249317E+22	1,243262E+23	6,498780E+22	1,893140E+23
-220	6,216468E+22	6,216484E+22	3,249382E+22	3,249470E+22	1,243295E+23	6,498852E+22	1,893180E+23
-219	6,216286E+22	6,216253E+22	3,249434E+22	3,249416E+22	1,243254E+23	6,498850E+22	1,893139E+23
-218	6,216156E+22	6,216390E+22	3,249469E+22	3,249393E+22	1,243255E+23	6,498862E+22	1,893141E+23
-217	6,216497E+22	6,216375E+22	3,249329E+22	3,249424E+22	1,243287E+23	6,498753E+22	1,893162E+23
-216	6,216304E+22	6,216239E+22	3,249347E+22	3,249262E+22	1,243254E+23	6,498609E+22	1,893115E+23
-215	6,216428E+22	6,216483E+22	3,249272E+22	3,249270E+22	1,243291E+23	6,498541E+22	1,893145E+23
-214	6,216586E+22	6,216432E+22	3,249184E+22	3,249229E+22	1,243302E+23	6,498413E+22	1,893143E+23
-213	6,216290E+22	6,216495E+22	3,249219E+22	3,249109E+22	1,243278E+23	6,498328E+22	1,893111E+23
-212	6,216532E+22	6,216657E+22	3,249124E+22	3,249195E+22	1,243319E+23	6,498319E+22	1,893151E+23
-211	6,216504E+22	6,216410E+22	3,249145E+22	3,249121E+22	1,243291E+23	6,498266E+22	1,893118E+23
-210	6,216336E+22	6,216492E+22	3,249239E+22	3,249091E+22	1,243283E+23	6,498330E+22	1,893116E+23
-209	6,216631E+22	6,216540E+22	3,249144E+22	3,249233E+22	1,243317E+23	6,498376E+22	1,893155E+23
-208	6,216408E+22	6,216324E+22	3,249208E+22	3,249203E+22	1,243273E+23	6,498411E+22	1,893114E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-207	6,216344E+22	6,216502E+22	3,249271E+22	3,249297E+22	1,243285E+23	6,498568E+22	1,893141E+23
-206	6,216523E+22	6,216398E+22	3,249272E+22	3,249391E+22	1,243292E+23	6,498663E+22	1,893158E+23
-205	6,216234E+22	6,216288E+22	3,249428E+22	3,249328E+22	1,243252E+23	6,498755E+22	1,893128E+23
-204	6,216374E+22	6,216438E+22	3,249458E+22	3,249473E+22	1,243281E+23	6,498931E+22	1,893174E+23
-203	6,216372E+22	6,216202E+22	3,249504E+22	3,249511E+22	1,243257E+23	6,499015E+22	1,893159E+23
-202	6,216071E+22	6,216250E+22	3,249635E+22	3,249494E+22	1,243232E+23	6,499129E+22	1,893145E+23
-201	6,216281E+22	6,216357E+22	3,249544E+22	3,249646E+22	1,243264E+23	6,499190E+22	1,893183E+23
-200	6,216172E+22	6,216091E+22	3,249558E+22	3,249561E+22	1,243226E+23	6,499120E+22	1,893138E+23
-199	6,216101E+22	6,216250E+22	3,249581E+22	3,249515E+22	1,243235E+23	6,499097E+22	1,893145E+23
-198	6,216411E+22	6,216251E+22	3,249464E+22	3,249546E+22	1,243266E+23	6,499010E+22	1,893167E+23
-197	6,216220E+22	6,216175E+22	3,249473E+22	3,249373E+22	1,243239E+23	6,498846E+22	1,893124E+23
-196	6,216291E+22	6,216453E+22	3,249401E+22	3,249407E+22	1,243274E+23	6,498808E+22	1,893155E+23
-195	6,216409E+22	6,216334E+22	3,249311E+22	3,249382E+22	1,243274E+23	6,498693E+22	1,893144E+23
-194	6,216179E+22	6,216335E+22	3,249382E+22	3,249243E+22	1,243251E+23	6,498625E+22	1,893114E+23
-193	6,216407E+22	6,216501E+22	3,249297E+22	3,249331E+22	1,243291E+23	6,498627E+22	1,893153E+23
-192	6,216428E+22	6,216242E+22	3,249280E+22	3,249267E+22	1,243267E+23	6,498547E+22	1,893122E+23
-191	6,216250E+22	6,216365E+22	3,249353E+22	3,249254E+22	1,243262E+23	6,498608E+22	1,893122E+23
-190	6,216464E+22	6,216434E+22	3,249287E+22	3,249415E+22	1,243290E+23	6,498702E+22	1,893160E+23
-189	6,216273E+22	6,216234E+22	3,249360E+22	3,249354E+22	1,243251E+23	6,498715E+22	1,893122E+23
-188	6,216217E+22	6,216405E+22	3,249452E+22	3,249444E+22	1,243262E+23	6,498896E+22	1,893152E+23
-187	6,216389E+22	6,216245E+22	3,249458E+22	3,249548E+22	1,243263E+23	6,499006E+22	1,893164E+23
-186	6,216140E+22	6,216114E+22	3,249635E+22	3,249486E+22	1,243225E+23	6,499121E+22	1,893138E+23
-185	6,216199E+22	6,216315E+22	3,249652E+22	3,249656E+22	1,243251E+23	6,499309E+22	1,893182E+23
-184	6,216207E+22	6,216066E+22	3,249641E+22	3,249706E+22	1,243227E+23	6,499347E+22	1,893162E+23
-183	6,215929E+22	6,216107E+22	3,249757E+22	3,249670E+22	1,243204E+23	6,499427E+22	1,893146E+23
-182	6,216140E+22	6,216199E+22	3,249693E+22	3,249797E+22	1,243234E+23	6,499490E+22	1,893183E+23
-181	6,216105E+22	6,215960E+22	3,249697E+22	3,249663E+22	1,243207E+23	6,499360E+22	1,893143E+23
-180	6,216036E+22	6,216170E+22	3,249718E+22	3,249628E+22	1,243221E+23	6,499346E+22	1,893155E+23
-179	6,216283E+22	6,216167E+22	3,249584E+22	3,249683E+22	1,243245E+23	6,499266E+22	1,893172E+23
-178	6,216096E+22	6,216087E+22	3,249612E+22	3,249510E+22	1,243218E+23	6,499122E+22	1,893130E+23
-177	6,216125E+22	6,216371E+22	3,249555E+22	3,249541E+22	1,243250E+23	6,499096E+22	1,893159E+23
-176	6,216299E+22	6,216187E+22	3,249439E+22	3,249510E+22	1,243249E+23	6,498948E+22	1,893143E+23
-175	6,216107E+22	6,216180E+22	3,249510E+22	3,249373E+22	1,243229E+23	6,498883E+22	1,893117E+23
-174	6,216295E+22	6,216346E+22	3,249447E+22	3,249480E+22	1,243264E+23	6,498927E+22	1,893157E+23
-173	6,216311E+22	6,216135E+22	3,249414E+22	3,249419E+22	1,243245E+23	6,498832E+22	1,893128E+23
-172	6,216110E+22	6,216295E+22	3,249488E+22	3,249430E+22	1,243241E+23	6,498917E+22	1,893132E+23
-171	6,216303E+22	6,216296E+22	3,249435E+22	3,249589E+22	1,243260E+23	6,499024E+22	1,893162E+23
-170	6,216180E+22	6,216066E+22	3,249550E+22	3,249500E+22	1,243225E+23	6,499050E+22	1,893130E+23
-169	6,216095E+22	6,216266E+22	3,249657E+22	3,249583E+22	1,243236E+23	6,499240E+22	1,893160E+23
-168	6,216278E+22	6,216097E+22	3,249627E+22	3,249710E+22	1,243237E+23	6,499336E+22	1,893171E+23
-167	6,216000E+22	6,215999E+22	3,249788E+22	3,249671E+22	1,243200E+23	6,499459E+22	1,893146E+23
-166	6,215984E+22	6,216197E+22	3,249821E+22	3,249855E+22	1,243218E+23	6,499676E+22	1,893186E+23
-165	6,216044E+22	6,215947E+22	3,249801E+22	3,249869E+22	1,243199E+23	6,499670E+22	1,893166E+23
-164	6,215818E+22	6,215987E+22	3,249911E+22	3,249819E+22	1,243180E+23	6,499730E+22	1,893153E+23
-163	6,216040E+22	6,216034E+22	3,249842E+22	3,249938E+22	1,243207E+23	6,499780E+22	1,893185E+23
-162	6,216059E+22	6,215816E+22	3,249850E+22	3,249793E+22	1,243187E+23	6,499643E+22	1,893152E+23
-161	6,215906E+22	6,216096E+22	3,249859E+22	3,249763E+22	1,243200E+23	6,499623E+22	1,893163E+23
-160	6,216154E+22	6,216080E+22	3,249686E+22	3,249827E+22	1,243223E+23	6,499513E+22	1,893175E+23
-159	6,215986E+22	6,215973E+22	3,249719E+22	3,249637E+22	1,243196E+23	6,499356E+22	1,893131E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-158	6,215981E+22	6,216227E+22	3,249703E+22	3,249659E+22	1,243221E+23	6,499362E+22	1,893157E+23
-157	6,216210E+22	6,216060E+22	3,249579E+22	3,249611E+22	1,243227E+23	6,499190E+22	1,893146E+23
-156	6,216017E+22	6,216079E+22	3,249642E+22	3,249508E+22	1,243210E+23	6,499151E+22	1,893125E+23
-155	6,216146E+22	6,216226E+22	3,249578E+22	3,249650E+22	1,243237E+23	6,499228E+22	1,893160E+23
-154	6,216193E+22	6,216014E+22	3,249563E+22	3,249586E+22	1,243221E+23	6,499149E+22	1,893136E+23
-153	6,215958E+22	6,216194E+22	3,249659E+22	3,249583E+22	1,243215E+23	6,499242E+22	1,893139E+23
-152	6,216201E+22	6,216151E+22	3,249591E+22	3,249740E+22	1,243235E+23	6,499331E+22	1,893168E+23
-151	6,216100E+22	6,215919E+22	3,249718E+22	3,249651E+22	1,243202E+23	6,499370E+22	1,893139E+23
-150	6,215939E+22	6,216132E+22	3,249853E+22	3,249761E+22	1,243207E+23	6,499615E+22	1,893169E+23
-149	6,216106E+22	6,215998E+22	3,249797E+22	3,249894E+22	1,243210E+23	6,499691E+22	1,893179E+23
-148	6,215821E+22	6,215902E+22	3,249946E+22	3,249875E+22	1,243172E+23	6,499821E+22	1,893154E+23
-147	6,215809E+22	6,216016E+22	3,249983E+22	3,250042E+22	1,243182E+23	6,500025E+22	1,893185E+23
-146	6,215964E+22	6,215752E+22	3,249974E+22	3,250015E+22	1,243172E+23	6,499988E+22	1,893170E+23
-145	6,215739E+22	6,215852E+22	3,250075E+22	3,249942E+22	1,243159E+23	6,500016E+22	1,893161E+23
-144	6,215975E+22	6,215905E+22	3,249960E+22	3,250067E+22	1,243188E+23	6,500026E+22	1,893191E+23
-143	6,215956E+22	6,215745E+22	3,249958E+22	3,249924E+22	1,243170E+23	6,499881E+22	1,893158E+23
-142	6,215733E+22	6,216026E+22	3,249995E+22	3,249897E+22	1,243176E+23	6,499892E+22	1,893165E+23
-141	6,216002E+22	6,215997E+22	3,249822E+22	3,249933E+22	1,243200E+23	6,499756E+22	1,893175E+23
-140	6,215871E+22	6,215876E+22	3,249860E+22	3,249759E+22	1,243175E+23	6,499619E+22	1,893137E+23
-139	6,215860E+22	6,216054E+22	3,249852E+22	3,249797E+22	1,243191E+23	6,499649E+22	1,893156E+23
-138	6,216129E+22	6,215904E+22	3,249731E+22	3,249762E+22	1,243203E+23	6,499493E+22	1,893153E+23
-137	6,215876E+22	6,215989E+22	3,249777E+22	3,249673E+22	1,243187E+23	6,499450E+22	1,893132E+23
-136	6,216022E+22	6,216101E+22	3,249686E+22	3,249823E+22	1,243212E+23	6,499509E+22	1,893163E+23
-135	6,216100E+22	6,215886E+22	3,249692E+22	3,249733E+22	1,243199E+23	6,499426E+22	1,893141E+23
-134	6,215835E+22	6,216054E+22	3,249839E+22	3,249720E+22	1,243189E+23	6,499559E+22	1,893145E+23
-133	6,216094E+22	6,216038E+22	3,249773E+22	3,249867E+22	1,243213E+23	6,499640E+22	1,893177E+23
-132	6,215968E+22	6,215835E+22	3,249895E+22	3,249825E+22	1,243180E+23	6,499720E+22	1,893152E+23
-131	6,215731E+22	6,215997E+22	3,250034E+22	3,249968E+22	1,243173E+23	6,500001E+22	1,893173E+23
-130	6,215944E+22	6,215846E+22	3,249984E+22	3,250092E+22	1,243179E+23	6,500076E+22	1,893187E+23
-129	6,215660E+22	6,215752E+22	3,250127E+22	3,250045E+22	1,243141E+23	6,500172E+22	1,893158E+23
-128	6,215726E+22	6,215827E+22	3,250129E+22	3,250198E+22	1,243155E+23	6,500327E+22	1,893188E+23
-127	6,215922E+22	6,215595E+22	3,250109E+22	3,250146E+22	1,243152E+23	6,500255E+22	1,893177E+23
-126	6,215620E+22	6,215745E+22	3,250224E+22	3,250083E+22	1,243136E+23	6,500306E+22	1,893167E+23
-125	6,215830E+22	6,215861E+22	3,250085E+22	3,250198E+22	1,243169E+23	6,500283E+22	1,893197E+23
-124	6,215800E+22	6,215699E+22	3,250080E+22	3,250068E+22	1,243150E+23	6,500148E+22	1,893165E+23
-123	6,215561E+22	6,215881E+22	3,250143E+22	3,250033E+22	1,243144E+23	6,500176E+22	1,893162E+23
-122	6,215908E+22	6,215830E+22	3,249981E+22	3,250048E+22	1,243174E+23	6,500029E+22	1,893177E+23
-121	6,215768E+22	6,215742E+22	3,250010E+22	3,249879E+22	1,243151E+23	6,499889E+22	1,893140E+23
-120	6,215776E+22	6,215909E+22	3,249958E+22	3,249949E+22	1,243169E+23	6,499906E+22	1,893159E+23
-119	6,216030E+22	6,215803E+22	3,249832E+22	3,249916E+22	1,243183E+23	6,499748E+22	1,893158E+23
-118	6,215730E+22	6,215899E+22	3,249912E+22	3,249827E+22	1,243163E+23	6,499740E+22	1,893137E+23
-117	6,215905E+22	6,216014E+22	3,249831E+22	3,249944E+22	1,243192E+23	6,499775E+22	1,893169E+23
-116	6,216004E+22	6,215799E+22	3,249857E+22	3,249871E+22	1,243180E+23	6,499728E+22	1,893153E+23
-115	6,215703E+22	6,215893E+22	3,250035E+22	3,249882E+22	1,243160E+23	6,499917E+22	1,893151E+23
-114	6,215957E+22	6,215893E+22	3,249975E+22	3,250049E+22	1,243185E+23	6,500023E+22	1,893187E+23
-113	6,215773E+22	6,215729E+22	3,250082E+22	3,250029E+22	1,243150E+23	6,500111E+22	1,893161E+23
-112	6,215573E+22	6,215810E+22	3,250180E+22	3,250175E+22	1,243138E+23	6,500355E+22	1,893174E+23
-111	6,215832E+22	6,215656E+22	3,250135E+22	3,250258E+22	1,243149E+23	6,500393E+22	1,893188E+23
-110	6,215558E+22	6,215587E+22	3,250292E+22	3,250189E+22	1,243114E+23	6,500481E+22	1,893163E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-109	6,215643E+22	6,215712E+22	3,250276E+22	3,250316E+22	1,243135E+23	6,500592E+22	1,893195E+23
-108	6,215811E+22	6,215554E+22	3,250245E+22	3,250292E+22	1,243136E+23	6,500537E+22	1,893190E+23
-107	6,215436E+22	6,215658E+22	3,250375E+22	3,250243E+22	1,243109E+23	6,500617E+22	1,893171E+23
-106	6,215670E+22	6,215758E+22	3,250250E+22	3,250339E+22	1,243143E+23	6,500589E+22	1,893202E+23
-105	6,215641E+22	6,215592E+22	3,250246E+22	3,250195E+22	1,243123E+23	6,500440E+22	1,893167E+23
-104	6,215469E+22	6,215693E+22	3,250272E+22	3,250169E+22	1,243116E+23	6,500440E+22	1,893160E+23
-103	6,215848E+22	6,215665E+22	3,250103E+22	3,250179E+22	1,243151E+23	6,500282E+22	1,893179E+23
-102	6,215658E+22	6,215626E+22	3,250130E+22	3,250031E+22	1,243128E+23	6,500161E+22	1,893144E+23
-101	6,215659E+22	6,215840E+22	3,250057E+22	3,250090E+22	1,243150E+23	6,500148E+22	1,893165E+23
-100	6,215920E+22	6,215747E+22	3,249943E+22	3,250061E+22	1,243167E+23	6,500004E+22	1,893167E+23
-99	6,215600E+22	6,215759E+22	3,250074E+22	3,249961E+22	1,243136E+23	6,500036E+22	1,893139E+23
-98	6,215820E+22	6,215875E+22	3,250023E+22	3,250062E+22	1,243169E+23	6,500084E+22	1,893178E+23
-97	6,215875E+22	6,215687E+22	3,250053E+22	3,250012E+22	1,243156E+23	6,500064E+22	1,893163E+23
-96	6,215557E+22	6,215741E+22	3,250196E+22	3,250075E+22	1,243130E+23	6,500272E+22	1,893157E+23
-95	6,215794E+22	6,215754E+22	3,250128E+22	3,250243E+22	1,243155E+23	6,500372E+22	1,893192E+23
-94	6,215584E+22	6,215578E+22	3,250252E+22	3,250224E+22	1,243116E+23	6,500476E+22	1,893164E+23
-93	6,215445E+22	6,215665E+22	3,250337E+22	3,250330E+22	1,243111E+23	6,500666E+22	1,893178E+23
-92	6,215750E+22	6,215535E+22	3,250289E+22	3,250411E+22	1,243128E+23	6,500700E+22	1,893198E+23
-91	6,215446E+22	6,215434E+22	3,250469E+22	3,250347E+22	1,243088E+23	6,500816E+22	1,893170E+23
-90	6,215522E+22	6,215613E+22	3,250447E+22	3,250471E+22	1,243114E+23	6,500918E+22	1,893205E+23
-89	6,215626E+22	6,215495E+22	3,250407E+22	3,250452E+22	1,243112E+23	6,500859E+22	1,893198E+23
-88	6,215287E+22	6,215506E+22	3,250508E+22	3,250406E+22	1,243079E+23	6,500914E+22	1,893171E+23
-87	6,215560E+22	6,215586E+22	3,250389E+22	3,250461E+22	1,243115E+23	6,500849E+22	1,893200E+23
-86	6,215538E+22	6,215433E+22	3,250390E+22	3,250317E+22	1,243097E+23	6,500707E+22	1,893168E+23
-85	6,215395E+22	6,215569E+22	3,250383E+22	3,250281E+22	1,243096E+23	6,500664E+22	1,893163E+23
-84	6,215754E+22	6,215611E+22	3,250201E+22	3,250322E+22	1,243136E+23	6,500522E+22	1,893189E+23
-83	6,215519E+22	6,215532E+22	3,250254E+22	3,250182E+22	1,243105E+23	6,500436E+22	1,893149E+23
-82	6,215543E+22	6,215745E+22	3,250206E+22	3,250215E+22	1,243129E+23	6,500421E+22	1,893171E+23
-81	6,215794E+22	6,215667E+22	3,250115E+22	3,250178E+22	1,243146E+23	6,500294E+22	1,893175E+23
-80	6,215516E+22	6,215585E+22	3,250233E+22	3,250105E+22	1,243110E+23	6,500338E+22	1,893144E+23
-79	6,215708E+22	6,215716E+22	3,250193E+22	3,250213E+22	1,243142E+23	6,500406E+22	1,893183E+23
-78	6,215698E+22	6,215570E+22	3,250222E+22	3,250210E+22	1,243127E+23	6,500431E+22	1,893170E+23
-77	6,215381E+22	6,215617E+22	3,250337E+22	3,250269E+22	1,243100E+23	6,500606E+22	1,893160E+23
-76	6,215645E+22	6,215632E+22	3,250273E+22	3,250434E+22	1,243128E+23	6,500708E+22	1,893198E+23
-75	6,215456E+22	6,215384E+22	3,250429E+22	3,250392E+22	1,243084E+23	6,500821E+22	1,893166E+23
-74	6,215369E+22	6,215504E+22	3,250521E+22	3,250467E+22	1,243087E+23	6,500988E+22	1,893186E+23
-73	6,215634E+22	6,215446E+22	3,250473E+22	3,250554E+22	1,243108E+23	6,501027E+22	1,893211E+23
-72	6,215316E+22	6,215312E+22	3,250618E+22	3,250524E+22	1,243063E+23	6,501142E+22	1,893177E+23
-71	6,215367E+22	6,215507E+22	3,250601E+22	3,250627E+22	1,243087E+23	6,501228E+22	1,893210E+23
-70	6,215452E+22	6,215381E+22	3,250570E+22	3,250606E+22	1,243083E+23	6,501176E+22	1,893201E+23
-69	6,215168E+22	6,215367E+22	3,250646E+22	3,250530E+22	1,243054E+23	6,501176E+22	1,893171E+23
-68	6,215480E+22	6,215465E+22	3,250514E+22	3,250589E+22	1,243095E+23	6,501103E+22	1,893205E+23
-67	6,215434E+22	6,215280E+22	3,250530E+22	3,250462E+22	1,243071E+23	6,500992E+22	1,893171E+23
-66	6,215297E+22	6,215482E+22	3,250507E+22	3,250424E+22	1,243078E+23	6,500931E+22	1,893171E+23
-65	6,215613E+22	6,215554E+22	3,250327E+22	3,250459E+22	1,243117E+23	6,500786E+22	1,893195E+23
-64	6,215413E+22	6,215390E+22	3,250372E+22	3,250323E+22	1,243080E+23	6,500695E+22	1,893150E+23
-63	6,215463E+22	6,215598E+22	3,250349E+22	3,250316E+22	1,243106E+23	6,500665E+22	1,893173E+23
-62	6,215680E+22	6,215536E+22	3,250279E+22	3,250303E+22	1,243122E+23	6,500582E+22	1,893180E+23
-61	6,215398E+22	6,215471E+22	3,250378E+22	3,250251E+22	1,243087E+23	6,500629E+22	1,893150E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-60	6,215551E+22	6,215639E+22	3,250330E+22	3,250397E+22	1,243119E+23	6,500728E+22	1,893192E+23
-59	6,215505E+22	6,215426E+22	3,250393E+22	3,250411E+22	1,243093E+23	6,500804E+22	1,893173E+23
-58	6,215243E+22	6,215468E+22	3,250513E+22	3,250439E+22	1,243071E+23	6,500952E+22	1,893166E+23
-57	6,215522E+22	6,215495E+22	3,250463E+22	3,250586E+22	1,243102E+23	6,501049E+22	1,893207E+23
-56	6,215387E+22	6,215190E+22	3,250596E+22	3,250559E+22	1,243058E+23	6,501155E+22	1,893173E+23
-55	6,215282E+22	6,215357E+22	3,250691E+22	3,250621E+22	1,243064E+23	6,501312E+22	1,893195E+23
-54	6,215468E+22	6,215363E+22	3,250642E+22	3,250738E+22	1,243083E+23	6,501379E+22	1,893221E+23
-53	6,215151E+22	6,215216E+22	3,250759E+22	3,250693E+22	1,243037E+23	6,501452E+22	1,893182E+23
-52	6,215214E+22	6,215403E+22	3,250745E+22	3,250779E+22	1,243062E+23	6,501524E+22	1,893214E+23
-51	6,215318E+22	6,215203E+22	3,250739E+22	3,250747E+22	1,243052E+23	6,501486E+22	1,893201E+23
-50	6,215086E+22	6,215211E+22	3,250798E+22	3,250647E+22	1,243030E+23	6,501445E+22	1,893174E+23
-49	6,215368E+22	6,215378E+22	3,250656E+22	3,250718E+22	1,243075E+23	6,501374E+22	1,893212E+23
-48	6,215331E+22	6,215159E+22	3,250628E+22	3,250620E+22	1,243049E+23	6,501247E+22	1,893174E+23
-47	6,215183E+22	6,215375E+22	3,250618E+22	3,250550E+22	1,243056E+23	6,501169E+22	1,893173E+23
-46	6,215481E+22	6,215468E+22	3,250464E+22	3,250582E+22	1,243095E+23	6,501046E+22	1,893200E+23
-45	6,215326E+22	6,215275E+22	3,250500E+22	3,250430E+22	1,243060E+23	6,500930E+22	1,893153E+23
-44	6,215372E+22	6,215497E+22	3,250491E+22	3,250441E+22	1,243087E+23	6,500931E+22	1,893180E+23
-43	6,215536E+22	6,215396E+22	3,250450E+22	3,250470E+22	1,243093E+23	6,500920E+22	1,893185E+23
-42	6,215242E+22	6,215361E+22	3,250536E+22	3,250432E+22	1,243060E+23	6,500968E+22	1,893157E+23
-41	6,215372E+22	6,215533E+22	3,250499E+22	3,250580E+22	1,243090E+23	6,501079E+22	1,893198E+23
-40	6,215387E+22	6,215221E+22	3,250545E+22	3,250596E+22	1,243061E+23	6,501141E+22	1,893175E+23
-39	6,215172E+22	6,215276E+22	3,250681E+22	3,250580E+22	1,243045E+23	6,501260E+22	1,893171E+23
-38	6,215425E+22	6,215358E+22	3,250642E+22	3,250739E+22	1,243078E+23	6,501381E+22	1,893216E+23
-37	6,215276E+22	6,215093E+22	3,250749E+22	3,250720E+22	1,243037E+23	6,501468E+22	1,893184E+23
-36	6,215126E+22	6,215308E+22	3,250840E+22	3,250796E+22	1,243043E+23	6,501636E+22	1,893207E+23
-35	6,215265E+22	6,215243E+22	3,250828E+22	3,250920E+22	1,243051E+23	6,501748E+22	1,893226E+23
-34	6,214996E+22	6,215092E+22	3,250941E+22	3,250845E+22	1,243009E+23	6,501785E+22	1,893187E+23
-33	6,215077E+22	6,215265E+22	3,250922E+22	3,250913E+22	1,243034E+23	6,501835E+22	1,893218E+23
-32	6,215230E+22	6,214999E+22	3,250878E+22	3,250904E+22	1,243023E+23	6,501782E+22	1,893201E+23
-31	6,215007E+22	6,215063E+22	3,250916E+22	3,250788E+22	1,243007E+23	6,501704E+22	1,893177E+23
-30	6,215233E+22	6,215291E+22	3,250766E+22	3,250874E+22	1,243052E+23	6,501641E+22	1,893216E+23
-29	6,215220E+22	6,215073E+22	3,250717E+22	3,250750E+22	1,243029E+23	6,501467E+22	1,893176E+23
-28	6,215095E+22	6,215292E+22	3,250726E+22	3,250653E+22	1,243039E+23	6,501379E+22	1,893177E+23
-27	6,215375E+22	6,215329E+22	3,250624E+22	3,250686E+22	1,243070E+23	6,501310E+22	1,893201E+23
-26	6,215231E+22	6,215167E+22	3,250661E+22	3,250541E+22	1,243040E+23	6,501202E+22	1,893160E+23
-25	6,215215E+22	6,215420E+22	3,250660E+22	3,250588E+22	1,243064E+23	6,501247E+22	1,893188E+23
-24	6,215376E+22	6,215250E+22	3,250593E+22	3,250668E+22	1,243063E+23	6,501261E+22	1,893189E+23
-23	6,215105E+22	6,215202E+22	3,250688E+22	3,250604E+22	1,243031E+23	6,501293E+22	1,893160E+23
-22	6,215237E+22	6,215385E+22	3,250668E+22	3,250750E+22	1,243062E+23	6,501419E+22	1,893204E+23
-21	6,215311E+22	6,215067E+22	3,250692E+22	3,250748E+22	1,243038E+23	6,501441E+22	1,893182E+23
-20	6,215093E+22	6,215165E+22	3,250836E+22	3,250735E+22	1,243026E+23	6,501571E+22	1,893183E+23
-19	6,215275E+22	6,215246E+22	3,250833E+22	3,250925E+22	1,243052E+23	6,501758E+22	1,893228E+23
-18	6,215100E+22	6,215014E+22	3,250926E+22	3,250904E+22	1,243011E+23	6,501830E+22	1,893194E+23
-17	6,214921E+22	6,215214E+22	3,251032E+22	3,250971E+22	1,243013E+23	6,502003E+22	1,893214E+23
-16	6,215121E+22	6,215036E+22	3,250994E+22	3,251093E+22	1,243016E+23	6,502087E+22	1,893224E+23
-15	6,214903E+22	6,214878E+22	3,251100E+22	3,250977E+22	1,242978E+23	6,502077E+22	1,893186E+23
-14	6,214971E+22	6,215113E+22	3,251071E+22	3,251056E+22	1,243008E+23	6,502127E+22	1,893221E+23
-13	6,215137E+22	6,214892E+22	3,250975E+22	3,251046E+22	1,243003E+23	6,502022E+22	1,893205E+23
-12	6,214900E+22	6,215013E+22	3,251005E+22	3,250924E+22	1,242991E+23	6,501929E+22	1,893184E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-11	6,215094E+22	6,215200E+22	3,250904E+22	3,251003E+22	1,243029E+23	6,501908E+22	1,893220E+23
-10	6,215110E+22	6,214996E+22	3,250862E+22	3,250847E+22	1,243011E+23	6,501708E+22	1,893181E+23
-9	6,214983E+22	6,215204E+22	3,250895E+22	3,250751E+22	1,243019E+23	6,501646E+22	1,893183E+23
-8	6,215269E+22	6,215162E+22	3,250776E+22	3,250833E+22	1,243043E+23	6,501608E+22	1,893204E+23
-7	6,215110E+22	6,215027E+22	3,250808E+22	3,250704E+22	1,243014E+23	6,501512E+22	1,893165E+23
-6	6,215040E+22	6,215306E+22	3,250804E+22	3,250781E+22	1,243035E+23	6,501585E+22	1,893193E+23
-5	6,215241E+22	6,215108E+22	3,250714E+22	3,250847E+22	1,243035E+23	6,501561E+22	1,893191E+23
-4	6,215023E+22	6,215068E+22	3,250816E+22	3,250752E+22	1,243009E+23	6,501568E+22	1,893166E+23
-3	6,215141E+22	6,215216E+22	3,250847E+22	3,250896E+22	1,243036E+23	6,501743E+22	1,893210E+23
-2	6,215211E+22	6,214974E+22	3,250869E+22	3,250892E+22	1,243019E+23	6,501760E+22	1,893195E+23
-1	6,214935E+22	6,215102E+22	3,251026E+22	3,250899E+22	1,243004E+23	6,501925E+22	1,893196E+23
1	6,215083E+22	6,215105E+22	3,251011E+22	3,251125E+22	1,243019E+23	6,502136E+22	1,893232E+23
2	6,214934E+22	6,214859E+22	3,251113E+22	3,251078E+22	1,242979E+23	6,502191E+22	1,893198E+23
3	6,214756E+22	6,215045E+22	3,251218E+22	3,251139E+22	1,242980E+23	6,502357E+22	1,893216E+23
4	6,215023E+22	6,214851E+22	3,251137E+22	3,251245E+22	1,242987E+23	6,502382E+22	1,893226E+23
5	6,214835E+22	6,214742E+22	3,251219E+22	3,251121E+22	1,242958E+23	6,502340E+22	1,893192E+23
6	6,214846E+22	6,214993E+22	3,251209E+22	3,251218E+22	1,242984E+23	6,502428E+22	1,893227E+23
7	6,215002E+22	6,214843E+22	3,251095E+22	3,251186E+22	1,242985E+23	6,502281E+22	1,893213E+23
8	6,214763E+22	6,214953E+22	3,251150E+22	3,251040E+22	1,242972E+23	6,502190E+22	1,893191E+23
9	6,214987E+22	6,215044E+22	3,251049E+22	3,251120E+22	1,243003E+23	6,502170E+22	1,893220E+23
10	6,215033E+22	6,214845E+22	3,251015E+22	3,250947E+22	1,242988E+23	6,501962E+22	1,893184E+23
11	6,214853E+22	6,215089E+22	3,251050E+22	3,250893E+22	1,242994E+23	6,501942E+22	1,893188E+23
12	6,215130E+22	6,215056E+22	3,250888E+22	3,250999E+22	1,243019E+23	6,501887E+22	1,893207E+23
13	6,214973E+22	6,214937E+22	3,250916E+22	3,250875E+22	1,242991E+23	6,501791E+22	1,893170E+23
14	6,214897E+22	6,215164E+22	3,250962E+22	3,250952E+22	1,243006E+23	6,501914E+22	1,893197E+23
15	6,215140E+22	6,214989E+22	3,250870E+22	3,250981E+22	1,243013E+23	6,501851E+22	1,893198E+23
16	6,214929E+22	6,214955E+22	3,250999E+22	3,250885E+22	1,242988E+23	6,501884E+22	1,893177E+23
17	6,215035E+22	6,215052E+22	3,251021E+22	3,251067E+22	1,243009E+23	6,502088E+22	1,893218E+23
18	6,215069E+22	6,214848E+22	3,251046E+22	3,251071E+22	1,242992E+23	6,502117E+22	1,893203E+23
19	6,214731E+22	6,214993E+22	3,251211E+22	3,251102E+22	1,242972E+23	6,502313E+22	1,893204E+23
20	6,214917E+22	6,214943E+22	3,251168E+22	3,251306E+22	1,242986E+23	6,502474E+22	1,893233E+23
21	6,214824E+22	6,214692E+22	3,251265E+22	3,251230E+22	1,242952E+23	6,502495E+22	1,893201E+23
22	6,214645E+22	6,214854E+22	3,251396E+22	3,251293E+22	1,242950E+23	6,502689E+22	1,893219E+23
23	6,214910E+22	6,214748E+22	3,251285E+22	3,251386E+22	1,242966E+23	6,502671E+22	1,893233E+23
24	6,214701E+22	6,214689E+22	3,251363E+22	3,251271E+22	1,242939E+23	6,502634E+22	1,893202E+23
25	6,214704E+22	6,214874E+22	3,251342E+22	3,251379E+22	1,242958E+23	6,502721E+22	1,893230E+23
26	6,214888E+22	6,214733E+22	3,251243E+22	3,251307E+22	1,242962E+23	6,502550E+22	1,893217E+23
27	6,214642E+22	6,214840E+22	3,251308E+22	3,251160E+22	1,242948E+23	6,502468E+22	1,893195E+23
28	6,214893E+22	6,214902E+22	3,251178E+22	3,251239E+22	1,242980E+23	6,502417E+22	1,893221E+23
29	6,214946E+22	6,214738E+22	3,251131E+22	3,251086E+22	1,242968E+23	6,502217E+22	1,893190E+23
30	6,214700E+22	6,214960E+22	3,251188E+22	3,251069E+22	1,242966E+23	6,502257E+22	1,893192E+23
31	6,214972E+22	6,214974E+22	3,251012E+22	3,251159E+22	1,242995E+23	6,502172E+22	1,893212E+23
32	6,214858E+22	6,214826E+22	3,251059E+22	3,251014E+22	1,242968E+23	6,502073E+22	1,893176E+23
33	6,214810E+22	6,214963E+22	3,251112E+22	3,251090E+22	1,242977E+23	6,502202E+22	1,893197E+23
34	6,215076E+22	6,214835E+22	3,251037E+22	3,251104E+22	1,242991E+23	6,502141E+22	1,893205E+23
35	6,214800E+22	6,214850E+22	3,251178E+22	3,251044E+22	1,242965E+23	6,502222E+22	1,893187E+23
36	6,214871E+22	6,214952E+22	3,251175E+22	3,251247E+22	1,242982E+23	6,502422E+22	1,893225E+23
37	6,214904E+22	6,214752E+22	3,251204E+22	3,251253E+22	1,242966E+23	6,502458E+22	1,893211E+23
38	6,214547E+22	6,214828E+22	3,251412E+22	3,251291E+22	1,242938E+23	6,502703E+22	1,893208E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
39	6,214767E+22	6,214806E+22	3,251351E+22	3,251462E+22	1,242957E+23	6,502813E+22	1,893239E+23
40	6,214715E+22	6,214550E+22	3,251448E+22	3,251388E+22	1,242926E+23	6,502836E+22	1,893210E+23
41	6,214532E+22	6,214673E+22	3,251552E+22	3,251478E+22	1,242920E+23	6,503030E+22	1,893224E+23
42	6,214789E+22	6,214633E+22	3,251429E+22	3,251556E+22	1,242942E+23	6,502985E+22	1,893241E+23
43	6,214547E+22	6,214603E+22	3,251509E+22	3,251435E+22	1,242915E+23	6,502944E+22	1,893209E+23
44	6,214595E+22	6,214746E+22	3,251463E+22	3,251506E+22	1,242934E+23	6,502969E+22	1,893231E+23
45	6,214815E+22	6,214612E+22	3,251366E+22	3,251404E+22	1,242943E+23	6,502770E+22	1,893220E+23
46	6,214541E+22	6,214699E+22	3,251464E+22	3,251281E+22	1,242924E+23	6,502745E+22	1,893199E+23
47	6,214758E+22	6,214827E+22	3,251306E+22	3,251360E+22	1,242959E+23	6,502666E+22	1,893225E+23
48	6,214792E+22	6,214673E+22	3,251265E+22	3,251235E+22	1,242947E+23	6,502500E+22	1,893197E+23
49	6,214556E+22	6,214807E+22	3,251316E+22	3,251236E+22	1,242936E+23	6,502552E+22	1,893192E+23
50	6,214872E+22	6,214820E+22	3,251159E+22	3,251292E+22	1,242969E+23	6,502451E+22	1,893214E+23
51	6,214764E+22	6,214692E+22	3,251220E+22	3,251147E+22	1,242946E+23	6,502367E+22	1,893182E+23
52	6,214741E+22	6,214814E+22	3,251250E+22	3,251225E+22	1,242956E+23	6,502474E+22	1,893203E+23
53	6,214979E+22	6,214742E+22	3,251179E+22	3,251258E+22	1,242972E+23	6,502437E+22	1,893216E+23
54	6,214619E+22	6,214746E+22	3,251358E+22	3,251246E+22	1,242936E+23	6,502604E+22	1,893197E+23
55	6,214661E+22	6,214867E+22	3,251351E+22	3,251427E+22	1,242953E+23	6,502778E+22	1,893231E+23
56	6,214744E+22	6,214619E+22	3,251401E+22	3,251428E+22	1,242936E+23	6,502828E+22	1,893219E+23
57	6,214425E+22	6,214593E+22	3,251597E+22	3,251468E+22	1,242902E+23	6,503065E+22	1,893208E+23
58	6,214676E+22	6,214617E+22	3,251529E+22	3,251621E+22	1,242929E+23	6,503150E+22	1,893244E+23
59	6,214589E+22	6,214432E+22	3,251610E+22	3,251564E+22	1,242902E+23	6,503174E+22	1,893219E+23
60	6,214403E+22	6,214565E+22	3,251671E+22	3,251650E+22	1,242897E+23	6,503321E+22	1,893229E+23
61	6,214678E+22	6,214556E+22	3,251553E+22	3,251699E+22	1,242923E+23	6,503252E+22	1,893249E+23
62	6,214418E+22	6,214479E+22	3,251672E+22	3,251569E+22	1,242890E+23	6,503241E+22	1,893214E+23
63	6,214469E+22	6,214655E+22	3,251616E+22	3,251600E+22	1,242912E+23	6,503216E+22	1,893234E+23
64	6,214717E+22	6,214511E+22	3,251520E+22	3,251519E+22	1,242923E+23	6,503039E+22	1,893227E+23
65	6,214406E+22	6,214532E+22	3,251598E+22	3,251442E+22	1,242894E+23	6,503039E+22	1,893198E+23
66	6,214615E+22	6,214708E+22	3,251433E+22	3,251519E+22	1,242932E+23	6,502952E+22	1,893227E+23
67	6,214647E+22	6,214556E+22	3,251396E+22	3,251394E+22	1,242920E+23	6,502790E+22	1,893199E+23
68	6,214475E+22	6,214645E+22	3,251424E+22	3,251367E+22	1,242912E+23	6,502791E+22	1,893191E+23
69	6,214830E+22	6,214690E+22	3,251280E+22	3,251397E+22	1,242952E+23	6,502678E+22	1,893220E+23
70	6,214671E+22	6,214570E+22	3,251382E+22	3,251286E+22	1,242924E+23	6,502669E+22	1,893191E+23
71	6,214584E+22	6,214770E+22	3,251406E+22	3,251366E+22	1,242935E+23	6,502772E+22	1,893213E+23
72	6,214801E+22	6,214689E+22	3,251356E+22	3,251437E+22	1,242949E+23	6,502793E+22	1,893228E+23
73	6,214430E+22	6,214576E+22	3,251548E+22	3,251450E+22	1,242901E+23	6,502998E+22	1,893200E+23
74	6,214512E+22	6,214686E+22	3,251550E+22	3,251601E+22	1,242920E+23	6,503151E+22	1,893235E+23
75	6,214614E+22	6,214440E+22	3,251599E+22	3,251606E+22	1,242905E+23	6,503204E+22	1,893226E+23
76	6,214346E+22	6,214397E+22	3,251744E+22	3,251646E+22	1,242874E+23	6,503390E+22	1,893213E+23
77	6,214586E+22	6,214491E+22	3,251662E+22	3,251792E+22	1,242908E+23	6,503453E+22	1,893253E+23
78	6,214440E+22	6,214334E+22	3,251762E+22	3,251752E+22	1,242877E+23	6,503514E+22	1,893229E+23
79	6,214249E+22	6,214498E+22	3,251811E+22	3,251780E+22	1,242875E+23	6,503591E+22	1,893234E+23
80	6,214559E+22	6,214460E+22	3,251718E+22	3,251812E+22	1,242902E+23	6,503530E+22	1,893255E+23
81	6,214307E+22	6,214303E+22	3,251834E+22	3,251694E+22	1,242861E+23	6,503528E+22	1,893214E+23
82	6,214354E+22	6,214513E+22	3,251772E+22	3,251719E+22	1,242887E+23	6,503490E+22	1,893236E+23
83	6,214558E+22	6,214415E+22	3,251663E+22	3,251673E+22	1,242897E+23	6,503336E+22	1,893231E+23
84	6,214276E+22	6,214404E+22	3,251691E+22	3,251604E+22	1,242868E+23	6,503295E+22	1,893197E+23
85	6,214518E+22	6,214593E+22	3,251535E+22	3,251653E+22	1,242911E+23	6,503188E+22	1,893230E+23
86	6,214551E+22	6,214429E+22	3,251533E+22	3,251529E+22	1,242898E+23	6,503062E+22	1,893204E+23
87	6,214387E+22	6,214559E+22	3,251557E+22	3,251465E+22	1,242895E+23	6,503023E+22	1,893197E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
88	6,214747E+22	6,214614E+22	3,251440E+22	3,251526E+22	1,242936E+23	6,502966E+22	1,893233E+23
89	6,214523E+22	6,214440E+22	3,251546E+22	3,251470E+22	1,242896E+23	6,503016E+22	1,893198E+23
90	6,214403E+22	6,214659E+22	3,251583E+22	3,251550E+22	1,242906E+23	6,503133E+22	1,893220E+23
91	6,214616E+22	6,214551E+22	3,251548E+22	3,251627E+22	1,242917E+23	6,503175E+22	1,893234E+23
92	6,214317E+22	6,214359E+22	3,251707E+22	3,251624E+22	1,242868E+23	6,503332E+22	1,893201E+23
93	6,214445E+22	6,214499E+22	3,251708E+22	3,251752E+22	1,242894E+23	6,503460E+22	1,893240E+23
94	6,214507E+22	6,214282E+22	3,251767E+22	3,251783E+22	1,242879E+23	6,503550E+22	1,893234E+23
95	6,214194E+22	6,214332E+22	3,251886E+22	3,251803E+22	1,242853E+23	6,503689E+22	1,893222E+23
96	6,214441E+22	6,214438E+22	3,251821E+22	3,251957E+22	1,242888E+23	6,503778E+22	1,893266E+23
97	6,214277E+22	6,214193E+22	3,251935E+22	3,251917E+22	1,242847E+23	6,503852E+22	1,893232E+23
98	6,214114E+22	6,214367E+22	3,251995E+22	3,251905E+22	1,242848E+23	6,503900E+22	1,893238E+23
99	6,214429E+22	6,214324E+22	3,251899E+22	3,251943E+22	1,242875E+23	6,503843E+22	1,893260E+23
100	6,214204E+22	6,214132E+22	3,251962E+22	3,251846E+22	1,242834E+23	6,503808E+22	1,893214E+23
101	6,214237E+22	6,214396E+22	3,251879E+22	3,251874E+22	1,242863E+23	6,503752E+22	1,893238E+23
102	6,214401E+22	6,214305E+22	3,251781E+22	3,251850E+22	1,242871E+23	6,503631E+22	1,893234E+23
103	6,214152E+22	6,214318E+22	3,251794E+22	3,251723E+22	1,242847E+23	6,503517E+22	1,893199E+23
104	6,214459E+22	6,214487E+22	3,251667E+22	3,251757E+22	1,242895E+23	6,503423E+22	1,893237E+23
105	6,214479E+22	6,214275E+22	3,251678E+22	3,251648E+22	1,242875E+23	6,503326E+22	1,893208E+23
106	6,214291E+22	6,214459E+22	3,251717E+22	3,251584E+22	1,242875E+23	6,503301E+22	1,893205E+23
107	6,214576E+22	6,214547E+22	3,251613E+22	3,251686E+22	1,242912E+23	6,503300E+22	1,893242E+23
108	6,214367E+22	6,214311E+22	3,251693E+22	3,251658E+22	1,242868E+23	6,503351E+22	1,893203E+23
109	6,214264E+22	6,214505E+22	3,251745E+22	3,251716E+22	1,242877E+23	6,503461E+22	1,893223E+23
110	6,214472E+22	6,214380E+22	3,251734E+22	3,251809E+22	1,242885E+23	6,503543E+22	1,893240E+23
111	6,214208E+22	6,214215E+22	3,251864E+22	3,251770E+22	1,242842E+23	6,503634E+22	1,893206E+23
112	6,214348E+22	6,214372E+22	3,251874E+22	3,251922E+22	1,242872E+23	6,503796E+22	1,893252E+23
113	6,214351E+22	6,214150E+22	3,251928E+22	3,251986E+22	1,242850E+23	6,503914E+22	1,893242E+23
114	6,214031E+22	6,214232E+22	3,252056E+22	3,251977E+22	1,242826E+23	6,504033E+22	1,893230E+23
115	6,214273E+22	6,214324E+22	3,252014E+22	3,252113E+22	1,242860E+23	6,504127E+22	1,893272E+23
116	6,214173E+22	6,214013E+22	3,252090E+22	3,252059E+22	1,242819E+23	6,504149E+22	1,893234E+23
117	6,214025E+22	6,214206E+22	3,252145E+22	3,252026E+22	1,242823E+23	6,504171E+22	1,893240E+23
118	6,214286E+22	6,214199E+22	3,252047E+22	3,252104E+22	1,242848E+23	6,504151E+22	1,893264E+23
119	6,214045E+22	6,214061E+22	3,252069E+22	3,251988E+22	1,242811E+23	6,504056E+22	1,893216E+23
120	6,214117E+22	6,214315E+22	3,251999E+22	3,252022E+22	1,242843E+23	6,504021E+22	1,893245E+23
121	6,214283E+22	6,214161E+22	3,251914E+22	3,251993E+22	1,242844E+23	6,503907E+22	1,893235E+23
122	6,214077E+22	6,214198E+22	3,251939E+22	3,251824E+22	1,242827E+23	6,503764E+22	1,893204E+23
123	6,214377E+22	6,214380E+22	3,251831E+22	3,251866E+22	1,242876E+23	6,503697E+22	1,893245E+23
124	6,214392E+22	6,214142E+22	3,251808E+22	3,251793E+22	1,242853E+23	6,503601E+22	1,893213E+23
125	6,214161E+22	6,214367E+22	3,251853E+22	3,251743E+22	1,242853E+23	6,503596E+22	1,893212E+23
126	6,214384E+22	6,214436E+22	3,251772E+22	3,251876E+22	1,242882E+23	6,503648E+22	1,893247E+23
127	6,214199E+22	6,214185E+22	3,251845E+22	3,251809E+22	1,242838E+23	6,503654E+22	1,893204E+23
128	6,214169E+22	6,214348E+22	3,251916E+22	3,251870E+22	1,242852E+23	6,503786E+22	1,893230E+23
129	6,214355E+22	6,214181E+22	3,251909E+22	3,251983E+22	1,242854E+23	6,503892E+22	1,893243E+23
130	6,214086E+22	6,214091E+22	3,252034E+22	3,251937E+22	1,242818E+23	6,503971E+22	1,893215E+23
131	6,214183E+22	6,214286E+22	3,252054E+22	3,252106E+22	1,242847E+23	6,504160E+22	1,893263E+23
132	6,214204E+22	6,214018E+22	3,252083E+22	3,252173E+22	1,242822E+23	6,504255E+22	1,893248E+23
133	6,213907E+22	6,214099E+22	3,252228E+22	3,252125E+22	1,242801E+23	6,504353E+22	1,893236E+23
134	6,214126E+22	6,214180E+22	3,252202E+22	3,252269E+22	1,242831E+23	6,504471E+22	1,893278E+23
135	6,214048E+22	6,213890E+22	3,252246E+22	3,252189E+22	1,242794E+23	6,504435E+22	1,893237E+23
136	6,213915E+22	6,214090E+22	3,252290E+22	3,252186E+22	1,242801E+23	6,504476E+22	1,893248E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
137	6,214117E+22	6,214066E+22	3,252179E+22	3,252290E+22	1,242818E+23	6,504469E+22	1,893265E+23
138	6,213915E+22	6,213952E+22	3,252194E+22	3,252134E+22	1,242787E+23	6,504328E+22	1,893219E+23
139	6,214012E+22	6,214192E+22	3,252146E+22	3,252141E+22	1,242820E+23	6,504288E+22	1,893249E+23
140	6,214240E+22	6,214005E+22	3,252031E+22	3,252101E+22	1,242825E+23	6,504132E+22	1,893238E+23
141	6,214032E+22	6,214075E+22	3,252066E+22	3,251918E+22	1,242811E+23	6,503984E+22	1,893209E+23
142	6,214231E+22	6,214305E+22	3,251977E+22	3,252008E+22	1,242854E+23	6,503985E+22	1,893252E+23
143	6,214218E+22	6,214097E+22	3,251932E+22	3,251934E+22	1,242831E+23	6,503866E+22	1,893218E+23
144	6,214004E+22	6,214267E+22	3,252005E+22	3,251910E+22	1,242827E+23	6,503916E+22	1,893219E+23
145	6,214210E+22	6,214266E+22	3,251946E+22	3,252055E+22	1,242848E+23	6,504001E+22	1,893248E+23
146	6,214089E+22	6,214017E+22	3,252020E+22	3,251961E+22	1,242811E+23	6,503981E+22	1,893209E+23
147	6,214065E+22	6,214184E+22	3,252105E+22	3,252033E+22	1,242825E+23	6,504139E+22	1,893239E+23
148	6,214255E+22	6,214018E+22	3,252053E+22	3,252177E+22	1,242827E+23	6,504230E+22	1,893250E+23
149	6,213959E+22	6,213977E+22	3,252183E+22	3,252120E+22	1,242794E+23	6,504303E+22	1,893224E+23
150	6,214004E+22	6,214178E+22	3,252231E+22	3,252295E+22	1,242818E+23	6,504526E+22	1,893271E+23
151	6,214059E+22	6,213904E+22	3,252250E+22	3,252309E+22	1,242796E+23	6,504559E+22	1,893252E+23
152	6,213814E+22	6,213957E+22	3,252409E+22	3,252266E+22	1,242777E+23	6,504674E+22	1,893245E+23
153	6,213979E+22	6,214012E+22	3,252381E+22	3,252430E+22	1,242799E+23	6,504811E+22	1,893280E+23
154	6,213898E+22	6,213779E+22	3,252404E+22	3,252348E+22	1,242768E+23	6,504752E+22	1,893243E+23
155	6,213754E+22	6,213988E+22	3,252446E+22	3,252354E+22	1,242774E+23	6,504799E+22	1,893254E+23
156	6,213999E+22	6,213913E+22	3,252296E+22	3,252450E+22	1,242791E+23	6,504746E+22	1,893266E+23
157	6,213846E+22	6,213822E+22	3,252318E+22	3,252247E+22	1,242767E+23	6,504565E+22	1,893223E+23
158	6,213927E+22	6,214074E+22	3,252283E+22	3,252255E+22	1,242800E+23	6,504537E+22	1,893254E+23
159	6,214147E+22	6,213922E+22	3,252150E+22	3,252196E+22	1,242807E+23	6,504345E+22	1,893241E+23
160	6,213928E+22	6,214010E+22	3,252195E+22	3,252060E+22	1,242794E+23	6,504255E+22	1,893219E+23
161	6,214029E+22	6,214200E+22	3,252122E+22	3,252185E+22	1,242823E+23	6,504307E+22	1,893254E+23
162	6,214049E+22	6,213980E+22	3,252090E+22	3,252094E+22	1,242803E+23	6,504184E+22	1,893221E+23
163	6,213877E+22	6,214100E+22	3,252187E+22	3,252060E+22	1,242798E+23	6,504247E+22	1,893222E+23
164	6,214135E+22	6,214051E+22	3,252094E+22	3,252211E+22	1,242819E+23	6,504305E+22	1,893249E+23
165	6,214028E+22	6,213855E+22	3,252167E+22	3,252107E+22	1,242788E+23	6,504275E+22	1,893216E+23
166	6,213924E+22	6,214082E+22	3,252261E+22	3,252216E+22	1,242801E+23	6,504478E+22	1,893248E+23
167	6,214094E+22	6,213956E+22	3,252200E+22	3,252340E+22	1,242805E+23	6,504540E+22	1,893259E+23
168	6,213828E+22	6,213885E+22	3,252361E+22	3,252293E+22	1,242771E+23	6,504654E+22	1,893237E+23
169	6,213824E+22	6,214030E+22	3,252437E+22	3,252466E+22	1,242785E+23	6,504903E+22	1,893276E+23
170	6,213931E+22	6,213760E+22	3,252452E+22	3,252459E+22	1,242769E+23	6,504911E+22	1,893260E+23
171	6,213680E+22	6,213798E+22	3,252609E+22	3,252433E+22	1,242748E+23	6,505042E+22	1,893252E+23
172	6,213841E+22	6,213848E+22	3,252519E+22	3,252625E+22	1,242769E+23	6,505144E+22	1,893283E+23
173	6,213772E+22	6,213643E+22	3,252523E+22	3,252519E+22	1,242742E+23	6,505043E+22	1,893246E+23
174	6,213610E+22	6,213861E+22	3,252574E+22	3,252514E+22	1,242747E+23	6,505089E+22	1,893256E+23
175	6,213914E+22	6,213803E+22	3,252407E+22	3,252545E+22	1,242772E+23	6,504952E+22	1,893267E+23
176	6,213808E+22	6,213712E+22	3,252441E+22	3,252342E+22	1,242752E+23	6,504783E+22	1,893230E+23
177	6,213801E+22	6,213969E+22	3,252425E+22	3,252372E+22	1,242777E+23	6,504797E+22	1,893257E+23
178	6,214002E+22	6,213866E+22	3,252288E+22	3,252321E+22	1,242787E+23	6,504609E+22	1,893248E+23
179	6,213757E+22	6,213921E+22	3,252358E+22	3,252214E+22	1,242768E+23	6,504572E+22	1,893225E+23
180	6,213881E+22	6,214037E+22	3,252261E+22	3,252352E+22	1,242792E+23	6,504613E+22	1,893253E+23
181	6,213956E+22	6,213806E+22	3,252241E+22	3,252237E+22	1,242776E+23	6,504478E+22	1,893224E+23
182	6,213781E+22	6,213933E+22	3,252346E+22	3,252219E+22	1,242771E+23	6,504564E+22	1,893228E+23
183	6,214049E+22	6,213923E+22	3,252230E+22	3,252355E+22	1,242797E+23	6,504585E+22	1,893256E+23
184	6,213932E+22	6,213771E+22	3,252308E+22	3,252288E+22	1,242770E+23	6,504596E+22	1,893230E+23
185	6,213733E+22	6,213982E+22	3,252430E+22	3,252411E+22	1,242771E+23	6,504841E+22	1,893256E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
186	6,213928E+22	6,213855E+22	3,252392E+22	3,252505E+22	1,242778E+23	6,504897E+22	1,893268E+23
187	6,213692E+22	6,213735E+22	3,252584E+22	3,252452E+22	1,242743E+23	6,505036E+22	1,893246E+23
188	6,213702E+22	6,213823E+22	3,252620E+22	3,252634E+22	1,242752E+23	6,505253E+22	1,893278E+23
189	6,213812E+22	6,213594E+22	3,252621E+22	3,252627E+22	1,242741E+23	6,505248E+22	1,893265E+23
190	6,213511E+22	6,213670E+22	3,252755E+22	3,252626E+22	1,242718E+23	6,505381E+22	1,893256E+23
191	6,213685E+22	6,213737E+22	3,252635E+22	3,252781E+22	1,242742E+23	6,505415E+22	1,893284E+23
192	6,213682E+22	6,213541E+22	3,252646E+22	3,252663E+22	1,242722E+23	6,505309E+22	1,893253E+23
193	6,213494E+22	6,213731E+22	3,252718E+22	3,252636E+22	1,242723E+23	6,505355E+22	1,893258E+23
194	6,213835E+22	6,213706E+22	3,252558E+22	3,252639E+22	1,242754E+23	6,505197E+22	1,893274E+23
195	6,213711E+22	6,213617E+22	3,252604E+22	3,252461E+22	1,242733E+23	6,505066E+22	1,893239E+23
196	6,213653E+22	6,213851E+22	3,252547E+22	3,252528E+22	1,242750E+23	6,505076E+22	1,893258E+23
197	6,213857E+22	6,213750E+22	3,252417E+22	3,252475E+22	1,242761E+23	6,504893E+22	1,893250E+23
198	6,213607E+22	6,213774E+22	3,252500E+22	3,252376E+22	1,242738E+23	6,504875E+22	1,893226E+23
199	6,213790E+22	6,213880E+22	3,252390E+22	3,252471E+22	1,242767E+23	6,504861E+22	1,893253E+23
200	6,213916E+22	6,213669E+22	3,252372E+22	3,252373E+22	1,242759E+23	6,504745E+22	1,893233E+23
201	6,213651E+22	6,213816E+22	3,252495E+22	3,252381E+22	1,242747E+23	6,504876E+22	1,893234E+23
202	6,213905E+22	6,213864E+22	3,252389E+22	3,252516E+22	1,242777E+23	6,504905E+22	1,893267E+23
203	6,213769E+22	6,213684E+22	3,252503E+22	3,252464E+22	1,242745E+23	6,504967E+22	1,893242E+23
204	6,213573E+22	6,213829E+22	3,252615E+22	3,252591E+22	1,242740E+23	6,505206E+22	1,893261E+23
205	6,213811E+22	6,213681E+22	3,252587E+22	3,252663E+22	1,242749E+23	6,505249E+22	1,893274E+23
206	6,213550E+22	6,213554E+22	3,252778E+22	3,252634E+22	1,242710E+23	6,505412E+22	1,893252E+23
207	6,213565E+22	6,213672E+22	3,252770E+22	3,252803E+22	1,242724E+23	6,505573E+22	1,893281E+23
208	6,213684E+22	6,213476E+22	3,252750E+22	3,252822E+22	1,242716E+23	6,505572E+22	1,893273E+23
209	6,213331E+22	6,213540E+22	3,252895E+22	3,252812E+22	1,242687E+23	6,505708E+22	1,893258E+23
210	6,213572E+22	6,213622E+22	3,252784E+22	3,252908E+22	1,242719E+23	6,505692E+22	1,893288E+23
211	6,213609E+22	6,213416E+22	3,252816E+22	3,252767E+22	1,242702E+23	6,505583E+22	1,893261E+23
212	6,213417E+22	6,213586E+22	3,252855E+22	3,252747E+22	1,242700E+23	6,505602E+22	1,893260E+23
213	6,213734E+22	6,213605E+22	3,252696E+22	3,252755E+22	1,242734E+23	6,505451E+22	1,893279E+23
214	6,213537E+22	6,213540E+22	3,252740E+22	3,252622E+22	1,242708E+23	6,505362E+22	1,893244E+23
215	6,213488E+22	6,213751E+22	3,252666E+22	3,252669E+22	1,242724E+23	6,505335E+22	1,893257E+23
216	6,213749E+22	6,213633E+22	3,252545E+22	3,252625E+22	1,242738E+23	6,505169E+22	1,893255E+23
217	6,213487E+22	6,213619E+22	3,252646E+22	3,252523E+22	1,242711E+23	6,505168E+22	1,893227E+23
218	6,213712E+22	6,213752E+22	3,252544E+22	3,252600E+22	1,242746E+23	6,505144E+22	1,893261E+23
219	6,213825E+22	6,213570E+22	3,252538E+22	3,252532E+22	1,242740E+23	6,505070E+22	1,893247E+23
220	6,213509E+22	6,213694E+22	3,252632E+22	3,252566E+22	1,242720E+23	6,505197E+22	1,893240E+23
221	6,213756E+22	6,213744E+22	3,252555E+22	3,252687E+22	1,242750E+23	6,505243E+22	1,893274E+23
222	6,213612E+22	6,213539E+22	3,252690E+22	3,252640E+22	1,242715E+23	6,505330E+22	1,893248E+23
223	6,213447E+22	6,213652E+22	3,252788E+22	3,252731E+22	1,242710E+23	6,505520E+22	1,893262E+23
224	6,213713E+22	6,213531E+22	3,252754E+22	3,252829E+22	1,242724E+23	6,505582E+22	1,893283E+23
225	6,213376E+22	6,213410E+22	3,252945E+22	3,252825E+22	1,242679E+23	6,505770E+22	1,893256E+23
226	6,213398E+22	6,213570E+22	3,252931E+22	3,252978E+22	1,242697E+23	6,505909E+22	1,893288E+23
227	6,213540E+22	6,213368E+22	3,252925E+22	3,252992E+22	1,242691E+23	6,505917E+22	1,893282E+23
228	6,213212E+22	6,213385E+22	3,253043E+22	3,252964E+22	1,242660E+23	6,506007E+22	1,893260E+23
229	6,213501E+22	6,213478E+22	3,252945E+22	3,253025E+22	1,242698E+23	6,505970E+22	1,893295E+23
230	6,213506E+22	6,213296E+22	3,252973E+22	3,252901E+22	1,242680E+23	6,505874E+22	1,893268E+23
231	6,213294E+22	6,213489E+22	3,252977E+22	3,252875E+22	1,242678E+23	6,505852E+22	1,893263E+23
232	6,213595E+22	6,213537E+22	3,252804E+22	3,252915E+22	1,242713E+23	6,505719E+22	1,893285E+23
233	6,213346E+22	6,213424E+22	3,252873E+22	3,252790E+22	1,242677E+23	6,505663E+22	1,893243E+23
234	6,213370E+22	6,213620E+22	3,252811E+22	3,252794E+22	1,242699E+23	6,505605E+22	1,893260E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
235	6,213678E+22	6,213483E+22	3,252706E+22	3,252747E+22	1,242716E+23	6,505453E+22	1,893261E+23
236	6,213413E+22	6,213458E+22	3,252772E+22	3,252662E+22	1,242687E+23	6,505433E+22	1,893230E+23
237	6,213627E+22	6,213636E+22	3,252678E+22	3,252741E+22	1,242726E+23	6,505419E+22	1,893268E+23
238	6,213662E+22	6,213486E+22	3,252686E+22	3,252704E+22	1,242715E+23	6,505390E+22	1,893254E+23
239	6,213355E+22	6,213590E+22	3,252782E+22	3,252715E+22	1,242694E+23	6,505497E+22	1,893244E+23
240	6,213632E+22	6,213624E+22	3,252724E+22	3,252844E+22	1,242726E+23	6,505569E+22	1,893282E+23
241	6,213452E+22	6,213376E+22	3,252890E+22	3,252812E+22	1,242683E+23	6,505703E+22	1,893253E+23
242	6,213316E+22	6,213501E+22	3,252985E+22	3,252895E+22	1,242682E+23	6,505881E+22	1,893270E+23
243	6,213563E+22	6,213401E+22	3,252945E+22	3,253026E+22	1,242696E+23	6,505971E+22	1,893293E+23
244	6,213206E+22	6,213257E+22	3,253088E+22	3,253037E+22	1,242646E+23	6,506125E+22	1,893259E+23
245	6,213270E+22	6,213413E+22	3,253090E+22	3,253152E+22	1,242668E+23	6,506242E+22	1,893292E+23
246	6,213421E+22	6,213227E+22	3,253092E+22	3,253146E+22	1,242665E+23	6,506238E+22	1,893289E+23
247	6,213137E+22	6,213243E+22	3,253184E+22	3,253075E+22	1,242638E+23	6,506259E+22	1,893264E+23
248	6,213421E+22	6,213386E+22	3,253080E+22	3,253150E+22	1,242681E+23	6,506231E+22	1,893304E+23
249	6,213332E+22	6,213218E+22	3,253117E+22	3,253055E+22	1,242655E+23	6,506172E+22	1,893272E+23
250	6,213116E+22	6,213417E+22	3,253120E+22	3,253017E+22	1,242653E+23	6,506137E+22	1,893267E+23
251	6,213442E+22	6,213439E+22	3,252963E+22	3,253063E+22	1,242688E+23	6,506026E+22	1,893291E+23
252	6,213234E+22	6,213248E+22	3,252999E+22	3,252932E+22	1,242648E+23	6,505931E+22	1,893241E+23
253	6,213316E+22	6,213439E+22	3,252954E+22	3,252914E+22	1,242675E+23	6,505868E+22	1,893262E+23
254	6,213598E+22	6,213352E+22	3,252843E+22	3,252889E+22	1,242695E+23	6,505732E+22	1,893268E+23
255	6,213314E+22	6,213354E+22	3,252879E+22	3,252801E+22	1,242667E+23	6,505680E+22	1,893235E+23
256	6,213499E+22	6,213573E+22	3,252797E+22	3,252902E+22	1,242707E+23	6,505699E+22	1,893277E+23
257	6,213480E+22	6,213380E+22	3,252852E+22	3,252871E+22	1,242686E+23	6,505723E+22	1,893258E+23
258	6,213216E+22	6,213457E+22	3,252977E+22	3,252852E+22	1,242667E+23	6,505828E+22	1,893250E+23
259	6,213508E+22	6,213478E+22	3,252936E+22	3,252998E+22	1,242699E+23	6,505934E+22	1,893292E+23
260	6,213308E+22	6,213195E+22	3,253064E+22	3,253002E+22	1,242650E+23	6,506066E+22	1,893257E+23
261	6,213175E+22	6,213342E+22	3,253158E+22	3,253092E+22	1,242652E+23	6,506251E+22	1,893277E+23
262	6,213383E+22	6,213273E+22	3,253112E+22	3,253234E+22	1,242666E+23	6,506346E+22	1,893300E+23
263	6,213077E+22	6,213116E+22	3,253231E+22	3,253203E+22	1,242619E+23	6,506435E+22	1,893263E+23
264	6,213188E+22	6,213293E+22	3,253236E+22	3,253298E+22	1,242648E+23	6,506534E+22	1,893301E+23
265	6,213298E+22	6,213102E+22	3,253265E+22	3,253289E+22	1,242640E+23	6,506554E+22	1,893295E+23
266	6,213029E+22	6,213149E+22	3,253355E+22	3,253201E+22	1,242618E+23	6,506556E+22	1,893273E+23
267	6,213267E+22	6,213306E+22	3,253244E+22	3,253304E+22	1,242657E+23	6,506548E+22	1,893312E+23
268	6,213148E+22	6,213088E+22	3,253244E+22	3,253231E+22	1,242624E+23	6,506475E+22	1,893271E+23
269	6,212997E+22	6,213244E+22	3,253259E+22	3,253159E+22	1,242624E+23	6,506418E+22	1,893266E+23
270	6,213333E+22	6,213269E+22	3,253103E+22	3,253192E+22	1,242660E+23	6,506295E+22	1,893290E+23
271	6,213188E+22	6,213089E+22	3,253104E+22	3,253034E+22	1,242628E+23	6,506138E+22	1,893242E+23
272	6,213265E+22	6,213344E+22	3,253053E+22	3,253034E+22	1,242661E+23	6,506087E+22	1,893270E+23
273	6,213444E+22	6,213291E+22	3,252974E+22	3,253038E+22	1,242674E+23	6,506012E+22	1,893275E+23
274	6,213158E+22	6,213302E+22	3,253033E+22	3,252939E+22	1,242646E+23	6,505972E+22	1,893243E+23
275	6,213335E+22	6,213489E+22	3,252990E+22	3,253050E+22	1,242682E+23	6,506040E+22	1,893286E+23
276	6,213327E+22	6,213216E+22	3,253033E+22	3,253041E+22	1,242654E+23	6,506074E+22	1,893262E+23
277	6,213112E+22	6,213255E+22	3,253176E+22	3,253020E+22	1,242637E+23	6,506196E+22	1,893256E+23
278	6,213359E+22	6,213314E+22	3,253124E+22	3,253199E+22	1,242667E+23	6,506322E+22	1,893300E+23
279	6,213169E+22	6,213043E+22	3,253200E+22	3,253204E+22	1,242621E+23	6,506404E+22	1,893262E+23
280	6,213042E+22	6,213222E+22	3,253289E+22	3,253293E+22	1,242626E+23	6,506582E+22	1,893285E+23
281	6,213229E+22	6,213138E+22	3,253281E+22	3,253413E+22	1,242637E+23	6,506694E+22	1,893306E+23
282	6,212983E+22	6,212985E+22	3,253413E+22	3,253326E+22	1,242597E+23	6,506739E+22	1,893271E+23
283	6,213095E+22	6,213188E+22	3,253430E+22	3,253422E+22	1,242628E+23	6,506852E+22	1,893313E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
284	6,213161E+22	6,212974E+22	3,253420E+22	3,253440E+22	1,242614E+23	6,506860E+22	1,893299E+23
285	6,212876E+22	6,213022E+22	3,253513E+22	3,253359E+22	1,242590E+23	6,506872E+22	1,893277E+23
286	6,213072E+22	6,213197E+22	3,253395E+22	3,253469E+22	1,242627E+23	6,506864E+22	1,893313E+23
287	6,213022E+22	6,212932E+22	3,253359E+22	3,253368E+22	1,242595E+23	6,506728E+22	1,893268E+23
288	6,212932E+22	6,213102E+22	3,253368E+22	3,253283E+22	1,242603E+23	6,506651E+22	1,893268E+23
289	6,213245E+22	6,213135E+22	3,253236E+22	3,253319E+22	1,242638E+23	6,506555E+22	1,893293E+23
290	6,213109E+22	6,213008E+22	3,253233E+22	3,253148E+22	1,242612E+23	6,506381E+22	1,893250E+23
291	6,213137E+22	6,213304E+22	3,253191E+22	3,253177E+22	1,242644E+23	6,506368E+22	1,893281E+23
292	6,213271E+22	6,213192E+22	3,253109E+22	3,253204E+22	1,242646E+23	6,506313E+22	1,893278E+23
293	6,213034E+22	6,213144E+22	3,253212E+22	3,253091E+22	1,242618E+23	6,506302E+22	1,893248E+23
294	6,213193E+22	6,213325E+22	3,253182E+22	3,253202E+22	1,242652E+23	6,506384E+22	1,893290E+23
295	6,213229E+22	6,213032E+22	3,253190E+22	3,253199E+22	1,242626E+23	6,506389E+22	1,893265E+23
296	6,213012E+22	6,213114E+22	3,253315E+22	3,253203E+22	1,242613E+23	6,506518E+22	1,893264E+23
297	6,213178E+22	6,213193E+22	3,253285E+22	3,253403E+22	1,242637E+23	6,506687E+22	1,893306E+23
298	6,213024E+22	6,212945E+22	3,253367E+22	3,253375E+22	1,242597E+23	6,506742E+22	1,893271E+23
299	6,212918E+22	6,213114E+22	3,253476E+22	3,253450E+22	1,242603E+23	6,506926E+22	1,893296E+23
300	6,213102E+22	6,212982E+22	3,253463E+22	3,253570E+22	1,242608E+23	6,507033E+22	1,893312E+23
301	6,212899E+22	6,212818E+22	3,253609E+22	3,253472E+22	1,242572E+23	6,507081E+22	1,893280E+23
302	6,212928E+22	6,213064E+22	3,253612E+22	3,253586E+22	1,242599E+23	6,507198E+22	1,893319E+23
303	6,212996E+22	6,212853E+22	3,253547E+22	3,253615E+22	1,242585E+23	6,507161E+22	1,893301E+23
304	6,212732E+22	6,212896E+22	3,253625E+22	3,253527E+22	1,242563E+23	6,507152E+22	1,893278E+23
305	6,212918E+22	6,213045E+22	3,253536E+22	3,253617E+22	1,242596E+23	6,507154E+22	1,893312E+23
306	6,212949E+22	6,212799E+22	3,253494E+22	3,253469E+22	1,242575E+23	6,506963E+22	1,893271E+23
307	6,212871E+22	6,213005E+22	3,253503E+22	3,253393E+22	1,242588E+23	6,506896E+22	1,893277E+23
308	6,213131E+22	6,213038E+22	3,253355E+22	3,253457E+22	1,242617E+23	6,506812E+22	1,893298E+23
309	6,212994E+22	6,212915E+22	3,253373E+22	3,253290E+22	1,242591E+23	6,506663E+22	1,893257E+23
310	6,212963E+22	6,213219E+22	3,253353E+22	3,253322E+22	1,242618E+23	6,506675E+22	1,893286E+23
311	6,213149E+22	6,213052E+22	3,253252E+22	3,253345E+22	1,242620E+23	6,506597E+22	1,893280E+23
312	6,212946E+22	6,212989E+22	3,253363E+22	3,253240E+22	1,242594E+23	6,506603E+22	1,893254E+23
313	6,213062E+22	6,213165E+22	3,253361E+22	3,253375E+22	1,242623E+23	6,506735E+22	1,893296E+23
314	6,213105E+22	6,212908E+22	3,253353E+22	3,253371E+22	1,242601E+23	6,506723E+22	1,893274E+23
315	6,212863E+22	6,213023E+22	3,253473E+22	3,253399E+22	1,242589E+23	6,506872E+22	1,893276E+23
316	6,213013E+22	6,213043E+22	3,253440E+22	3,253596E+22	1,242606E+23	6,507036E+22	1,893309E+23
317	6,212921E+22	6,212765E+22	3,253556E+22	3,253531E+22	1,242569E+23	6,507088E+22	1,893277E+23
318	6,212794E+22	6,212970E+22	3,253675E+22	3,253590E+22	1,242576E+23	6,507265E+22	1,893303E+23
319	6,212998E+22	6,212832E+22	3,253623E+22	3,253717E+22	1,242583E+23	6,507340E+22	1,893317E+23
320	6,212766E+22	6,212713E+22	3,253755E+22	3,253642E+22	1,242548E+23	6,507397E+22	1,893288E+23
321	6,212713E+22	6,212962E+22	3,253772E+22	3,253770E+22	1,242568E+23	6,507542E+22	1,893322E+23
322	6,212826E+22	6,212745E+22	3,253698E+22	3,253765E+22	1,242557E+23	6,507463E+22	1,893303E+23
323	6,212617E+22	6,212778E+22	3,253772E+22	3,253667E+22	1,242539E+23	6,507439E+22	1,893283E+23
324	6,212822E+22	6,212875E+22	3,253672E+22	3,253752E+22	1,242570E+23	6,507424E+22	1,893312E+23
325	6,212909E+22	6,212647E+22	3,253638E+22	3,253592E+22	1,242556E+23	6,507230E+22	1,893279E+23
326	6,212757E+22	6,212922E+22	3,253638E+22	3,253526E+22	1,242568E+23	6,507164E+22	1,893284E+23
327	6,213005E+22	6,212952E+22	3,253457E+22	3,253603E+22	1,242596E+23	6,507060E+22	1,893302E+23
328	6,212880E+22	6,212816E+22	3,253490E+22	3,253434E+22	1,242570E+23	6,506923E+22	1,893262E+23
329	6,212810E+22	6,213079E+22	3,253519E+22	3,253459E+22	1,242589E+23	6,506978E+22	1,893287E+23
330	6,213048E+22	6,212921E+22	3,253420E+22	3,253464E+22	1,242597E+23	6,506884E+22	1,893285E+23
331	6,212849E+22	6,212868E+22	3,253524E+22	3,253392E+22	1,242572E+23	6,506916E+22	1,893263E+23
332	6,212897E+22	6,213021E+22	3,253514E+22	3,253564E+22	1,242592E+23	6,507077E+22	1,893299E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
333	6,212967E+22	6,212773E+22	3,253518E+22	3,253560E+22	1,242574E+23	6,507078E+22	1,893282E+23
334	6,212692E+22	6,212899E+22	3,253652E+22	3,253573E+22	1,242559E+23	6,507225E+22	1,893282E+23
335	6,212899E+22	6,212888E+22	3,253603E+22	3,253759E+22	1,242579E+23	6,507361E+22	1,893315E+23
336	6,212840E+22	6,212619E+22	3,253725E+22	3,253686E+22	1,242546E+23	6,507411E+22	1,893287E+23
337	6,212643E+22	6,212835E+22	3,253871E+22	3,253760E+22	1,242548E+23	6,507631E+22	1,893311E+23
338	6,212835E+22	6,212741E+22	3,253794E+22	3,253886E+22	1,242558E+23	6,507680E+22	1,893326E+23
339	6,212587E+22	6,212624E+22	3,253910E+22	3,253833E+22	1,242521E+23	6,507743E+22	1,893295E+23
340	6,212530E+22	6,212792E+22	3,253925E+22	3,253951E+22	1,242532E+23	6,507876E+22	1,893320E+23
341	6,212742E+22	6,212551E+22	3,253859E+22	3,253904E+22	1,242529E+23	6,507763E+22	1,893306E+23
342	6,212536E+22	6,212631E+22	3,253922E+22	3,253782E+22	1,242517E+23	6,507704E+22	1,893287E+23
343	6,212770E+22	6,212744E+22	3,253778E+22	3,253872E+22	1,242551E+23	6,507650E+22	1,893316E+23
344	6,212822E+22	6,212581E+22	3,253737E+22	3,253721E+22	1,242540E+23	6,507458E+22	1,893286E+23
345	6,212590E+22	6,212865E+22	3,253773E+22	3,253666E+22	1,242545E+23	6,507439E+22	1,893289E+23
346	6,212858E+22	6,212879E+22	3,253602E+22	3,253715E+22	1,242574E+23	6,507317E+22	1,893305E+23
347	6,212757E+22	6,212720E+22	3,253649E+22	3,253567E+22	1,242548E+23	6,507216E+22	1,893269E+23
348	6,212678E+22	6,212903E+22	3,253684E+22	3,253610E+22	1,242558E+23	6,507294E+22	1,893288E+23
349	6,212949E+22	6,212742E+22	3,253592E+22	3,253629E+22	1,242569E+23	6,507221E+22	1,893291E+23
350	6,212692E+22	6,212752E+22	3,253678E+22	3,253576E+22	1,242544E+23	6,507254E+22	1,893270E+23
351	6,212760E+22	6,212877E+22	3,253635E+22	3,253758E+22	1,242564E+23	6,507392E+22	1,893303E+23
352	6,212857E+22	6,212634E+22	3,253657E+22	3,253732E+22	1,242549E+23	6,507389E+22	1,893288E+23
353	6,212563E+22	6,212752E+22	3,253838E+22	3,253727E+22	1,242531E+23	6,507565E+22	1,893288E+23
354	6,212792E+22	6,212766E+22	3,253791E+22	3,253887E+22	1,242556E+23	6,507679E+22	1,893324E+23
355	6,212714E+22	6,212531E+22	3,253909E+22	3,253853E+22	1,242525E+23	6,507762E+22	1,893301E+23
356	6,212438E+22	6,212703E+22	3,254049E+22	3,253956E+22	1,242514E+23	6,508005E+22	1,893315E+23
357	6,212663E+22	6,212596E+22	3,253977E+22	3,254074E+22	1,242526E+23	6,508051E+22	1,893331E+23
358	6,212416E+22	6,212480E+22	3,254084E+22	3,253998E+22	1,242490E+23	6,508082E+22	1,893298E+23
359	6,212440E+22	6,212605E+22	3,254061E+22	3,254100E+22	1,242504E+23	6,508160E+22	1,893321E+23
360	6,212702E+22	6,212403E+22	3,253984E+22	3,254034E+22	1,242510E+23	6,508018E+22	1,893312E+23
361	6,212437E+22	6,212521E+22	3,254060E+22	3,253916E+22	1,242496E+23	6,507976E+22	1,893293E+23
362	6,212647E+22	6,212703E+22	3,253898E+22	3,253996E+22	1,242535E+23	6,507894E+22	1,893324E+23
363	6,212681E+22	6,212545E+22	3,253855E+22	3,253862E+22	1,242523E+23	6,507718E+22	1,893294E+23
364	6,212414E+22	6,212727E+22	3,253922E+22	3,253806E+22	1,242514E+23	6,507728E+22	1,893287E+23
365	6,212750E+22	6,212714E+22	3,253773E+22	3,253838E+22	1,242546E+23	6,507610E+22	1,893307E+23
366	6,212638E+22	6,212571E+22	3,253815E+22	3,253699E+22	1,242521E+23	6,507514E+22	1,893272E+23
367	6,212578E+22	6,212737E+22	3,253811E+22	3,253777E+22	1,242532E+23	6,507587E+22	1,893290E+23
368	6,212836E+22	6,212625E+22	3,253710E+22	3,253806E+22	1,242546E+23	6,507516E+22	1,893298E+23
369	6,212528E+22	6,212644E+22	3,253827E+22	3,253753E+22	1,242517E+23	6,507581E+22	1,893275E+23
370	6,212633E+22	6,212777E+22	3,253795E+22	3,253898E+22	1,242541E+23	6,507693E+22	1,893310E+23
371	6,212755E+22	6,212538E+22	3,253835E+22	3,253882E+22	1,242529E+23	6,507716E+22	1,893301E+23
372	6,212427E+22	6,212589E+22	3,254043E+22	3,253893E+22	1,242502E+23	6,507937E+22	1,893295E+23
373	6,212660E+22	6,212616E+22	3,254002E+22	3,254065E+22	1,242528E+23	6,508067E+22	1,893334E+23
374	6,212513E+22	6,212423E+22	3,254101E+22	3,254054E+22	1,242494E+23	6,508154E+22	1,893309E+23
375	6,212270E+22	6,212532E+22	3,254196E+22	3,254164E+22	1,242480E+23	6,508360E+22	1,893316E+23
376	6,212541E+22	6,212418E+22	3,254122E+22	3,254244E+22	1,242496E+23	6,508367E+22	1,893333E+23
377	6,212314E+22	6,212316E+22	3,254241E+22	3,254141E+22	1,242463E+23	6,508383E+22	1,893301E+23
378	6,212377E+22	6,212482E+22	3,254195E+22	3,254206E+22	1,242486E+23	6,508401E+22	1,893326E+23
379	6,212610E+22	6,212355E+22	3,254107E+22	3,254164E+22	1,242496E+23	6,508271E+22	1,893324E+23
380	6,212272E+22	6,212444E+22	3,254192E+22	3,254062E+22	1,242472E+23	6,508255E+22	1,893297E+23
381	6,212491E+22	6,212604E+22	3,254053E+22	3,254126E+22	1,242510E+23	6,508179E+22	1,893327E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
382	6,212515E+22	6,212444E+22	3,254020E+22	3,253987E+22	1,242496E+23	6,508007E+22	1,893297E+23
383	6,212314E+22	6,212543E+22	3,254057E+22	3,253944E+22	1,242486E+23	6,508001E+22	1,893286E+23
384	6,212675E+22	6,212546E+22	3,253907E+22	3,253978E+22	1,242522E+23	6,507885E+22	1,893311E+23
385	6,212519E+22	6,212438E+22	3,253953E+22	3,253866E+22	1,242496E+23	6,507819E+22	1,893278E+23
386	6,212450E+22	6,212646E+22	3,253929E+22	3,253936E+22	1,242510E+23	6,507865E+22	1,893296E+23
387	6,212709E+22	6,212554E+22	3,253839E+22	3,253977E+22	1,242526E+23	6,507816E+22	1,893308E+23
388	6,212388E+22	6,212490E+22	3,254000E+22	3,253910E+22	1,242488E+23	6,507910E+22	1,893279E+23
389	6,212539E+22	6,212620E+22	3,254000E+22	3,254032E+22	1,242516E+23	6,508032E+22	1,893319E+23
390	6,212622E+22	6,212419E+22	3,254044E+22	3,254032E+22	1,242504E+23	6,508076E+22	1,893312E+23
391	6,212280E+22	6,212435E+22	3,254217E+22	3,254090E+22	1,242472E+23	6,508307E+22	1,893302E+23
392	6,212487E+22	6,212490E+22	3,254168E+22	3,254268E+22	1,242498E+23	6,508436E+22	1,893341E+23
393	6,212315E+22	6,212276E+22	3,254278E+22	3,254255E+22	1,242459E+23	6,508533E+22	1,893312E+23
394	6,212132E+22	6,212384E+22	3,254355E+22	3,254321E+22	1,242452E+23	6,508676E+22	1,893319E+23
395	6,212459E+22	6,212293E+22	3,254268E+22	3,254393E+22	1,242475E+23	6,508661E+22	1,893341E+23
396	6,212210E+22	6,212154E+22	3,254399E+22	3,254286E+22	1,242436E+23	6,508685E+22	1,893305E+23
397	6,212277E+22	6,212379E+22	3,254350E+22	3,254343E+22	1,242466E+23	6,508694E+22	1,893335E+23
398	6,212442E+22	6,212302E+22	3,254252E+22	3,254307E+22	1,242474E+23	6,508559E+22	1,893330E+23
399	6,212129E+22	6,212310E+22	3,254315E+22	3,254216E+22	1,242444E+23	6,508531E+22	1,893297E+23
400	6,212379E+22	6,212453E+22	3,254188E+22	3,254247E+22	1,242483E+23	6,508435E+22	1,893327E+23
401	6,212403E+22	6,212286E+22	3,254170E+22	3,254111E+22	1,242469E+23	6,508281E+22	1,893297E+23
402	6,212234E+22	6,212411E+22	3,254183E+22	3,254061E+22	1,242464E+23	6,508244E+22	1,893289E+23
403	6,212573E+22	6,212473E+22	3,254020E+22	3,254132E+22	1,242505E+23	6,508152E+22	1,893320E+23
404	6,212363E+22	6,212330E+22	3,254089E+22	3,254036E+22	1,242469E+23	6,508125E+22	1,893282E+23
405	6,212325E+22	6,212535E+22	3,254091E+22	3,254084E+22	1,242486E+23	6,508175E+22	1,893304E+23
406	6,212569E+22	6,212457E+22	3,254026E+22	3,254116E+22	1,242503E+23	6,508142E+22	1,893317E+23
407	6,212297E+22	6,212317E+22	3,254175E+22	3,254073E+22	1,242461E+23	6,508248E+22	1,893286E+23
408	6,212430E+22	6,212461E+22	3,254188E+22	3,254196E+22	1,242489E+23	6,508384E+22	1,893328E+23
409	6,212448E+22	6,212296E+22	3,254233E+22	3,254237E+22	1,242474E+23	6,508470E+22	1,893321E+23
410	6,212102E+22	6,212312E+22	3,254371E+22	3,254288E+22	1,242441E+23	6,508659E+22	1,893307E+23
411	6,212318E+22	6,212366E+22	3,254319E+22	3,254465E+22	1,242468E+23	6,508784E+22	1,893347E+23
412	6,212171E+22	6,212081E+22	3,254450E+22	3,254426E+22	1,242425E+23	6,508876E+22	1,893313E+23
413	6,212057E+22	6,212204E+22	3,254530E+22	3,254453E+22	1,242426E+23	6,508983E+22	1,893324E+23
414	6,212354E+22	6,212190E+22	3,254439E+22	3,254522E+22	1,242454E+23	6,508961E+22	1,893350E+23
415	6,212103E+22	6,212036E+22	3,254528E+22	3,254444E+22	1,242414E+23	6,508972E+22	1,893311E+23
416	6,212136E+22	6,212289E+22	3,254485E+22	3,254483E+22	1,242442E+23	6,508968E+22	1,893339E+23
417	6,212272E+22	6,212206E+22	3,254403E+22	3,254448E+22	1,242448E+23	6,508851E+22	1,893333E+23
418	6,212007E+22	6,212184E+22	3,254451E+22	3,254331E+22	1,242419E+23	6,508781E+22	1,893297E+23
419	6,212286E+22	6,212338E+22	3,254319E+22	3,254375E+22	1,242462E+23	6,508693E+22	1,893332E+23
420	6,212292E+22	6,212125E+22	3,254317E+22	3,254261E+22	1,242442E+23	6,508578E+22	1,893299E+23
421	6,212130E+22	6,212297E+22	3,254320E+22	3,254216E+22	1,242443E+23	6,508536E+22	1,893296E+23
422	6,212422E+22	6,212404E+22	3,254160E+22	3,254292E+22	1,242483E+23	6,508452E+22	1,893328E+23
423	6,212250E+22	6,212182E+22	3,254218E+22	3,254204E+22	1,242443E+23	6,508422E+22	1,893285E+23
424	6,212240E+22	6,212386E+22	3,254251E+22	3,254214E+22	1,242463E+23	6,508465E+22	1,893309E+23
425	6,212458E+22	6,212316E+22	3,254208E+22	3,254259E+22	1,242477E+23	6,508467E+22	1,893324E+23
426	6,212176E+22	6,212193E+22	3,254344E+22	3,254228E+22	1,242437E+23	6,508572E+22	1,893294E+23
427	6,212264E+22	6,212381E+22	3,254344E+22	3,254388E+22	1,242464E+23	6,508732E+22	1,893338E+23
428	6,212233E+22	6,212144E+22	3,254414E+22	3,254447E+22	1,242438E+23	6,508861E+22	1,893324E+23
429	6,211945E+22	6,212150E+22	3,254557E+22	3,254468E+22	1,242410E+23	6,509025E+22	1,893312E+23
430	6,212181E+22	6,212218E+22	3,254509E+22	3,254621E+22	1,242440E+23	6,509130E+22	1,893353E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
431	6,212100E+22	6,211883E+22	3,254609E+22	3,254591E+22	1,242398E+23	6,509200E+22	1,893318E+23
432	6,211986E+22	6,212058E+22	3,254686E+22	3,254597E+22	1,242404E+23	6,509283E+22	1,893333E+23
433	6,212206E+22	6,212108E+22	3,254591E+22	3,254688E+22	1,242431E+23	6,509279E+22	1,893359E+23
434	6,211949E+22	6,211961E+22	3,254654E+22	3,254595E+22	1,242391E+23	6,509249E+22	1,893316E+23
435	6,211986E+22	6,212203E+22	3,254614E+22	3,254622E+22	1,242419E+23	6,509236E+22	1,893342E+23
436	6,212131E+22	6,212041E+22	3,254563E+22	3,254579E+22	1,242417E+23	6,509142E+22	1,893331E+23
437	6,211925E+22	6,212026E+22	3,254603E+22	3,254445E+22	1,242395E+23	6,509048E+22	1,893300E+23
438	6,212168E+22	6,212237E+22	3,254466E+22	3,254506E+22	1,242441E+23	6,508972E+22	1,893338E+23
439	6,212187E+22	6,211999E+22	3,254424E+22	3,254432E+22	1,242419E+23	6,508856E+22	1,893304E+23
440	6,212017E+22	6,212185E+22	3,254439E+22	3,254363E+22	1,242420E+23	6,508802E+22	1,893300E+23
441	6,212288E+22	6,212305E+22	3,254309E+22	3,254437E+22	1,242459E+23	6,508746E+22	1,893334E+23
442	6,212161E+22	6,212060E+22	3,254359E+22	3,254325E+22	1,242422E+23	6,508684E+22	1,893291E+23
443	6,212139E+22	6,212275E+22	3,254408E+22	3,254350E+22	1,242441E+23	6,508758E+22	1,893317E+23
444	6,212306E+22	6,212170E+22	3,254398E+22	3,254434E+22	1,242448E+23	6,508832E+22	1,893331E+23
445	6,212013E+22	6,212066E+22	3,254524E+22	3,254419E+22	1,242408E+23	6,508944E+22	1,893302E+23
446	6,212060E+22	6,212267E+22	3,254530E+22	3,254585E+22	1,242433E+23	6,509115E+22	1,893344E+23
447	6,212096E+22	6,211935E+22	3,254577E+22	3,254648E+22	1,242403E+23	6,509225E+22	1,893326E+23
448	6,211861E+22	6,211946E+22	3,254727E+22	3,254619E+22	1,242381E+23	6,509346E+22	1,893315E+23
449	6,212086E+22	6,212066E+22	3,254685E+22	3,254773E+22	1,242415E+23	6,509458E+22	1,893361E+23
450	6,212002E+22	6,211780E+22	3,254752E+22	3,254737E+22	1,242378E+23	6,509489E+22	1,893327E+23
451	6,211840E+22	6,212017E+22	3,254820E+22	3,254757E+22	1,242386E+23	6,509578E+22	1,893343E+23
452	6,212010E+22	6,212008E+22	3,254760E+22	3,254854E+22	1,242402E+23	6,509614E+22	1,893363E+23
453	6,211793E+22	6,211845E+22	3,254826E+22	3,254734E+22	1,242364E+23	6,509560E+22	1,893320E+23
454	6,211841E+22	6,212082E+22	3,254788E+22	3,254749E+22	1,242392E+23	6,509537E+22	1,893346E+23
455	6,212044E+22	6,211844E+22	3,254701E+22	3,254732E+22	1,242389E+23	6,509434E+22	1,893332E+23
456	6,211856E+22	6,211874E+22	3,254727E+22	3,254589E+22	1,242373E+23	6,509316E+22	1,893305E+23
457	6,212046E+22	6,212138E+22	3,254581E+22	3,254668E+22	1,242418E+23	6,509249E+22	1,893343E+23
458	6,212072E+22	6,211908E+22	3,254518E+22	3,254574E+22	1,242398E+23	6,509092E+22	1,893307E+23
459	6,211921E+22	6,212102E+22	3,254550E+22	3,254483E+22	1,242402E+23	6,509034E+22	1,893306E+23
460	6,212172E+22	6,212155E+22	3,254478E+22	3,254555E+22	1,242433E+23	6,509033E+22	1,893336E+23
461	6,212062E+22	6,211938E+22	3,254540E+22	3,254448E+22	1,242400E+23	6,508988E+22	1,893299E+23
462	6,211976E+22	6,212187E+22	3,254599E+22	3,254506E+22	1,242416E+23	6,509105E+22	1,893327E+23
463	6,212130E+22	6,212020E+22	3,254561E+22	3,254645E+22	1,242415E+23	6,509206E+22	1,893336E+23
464	6,211855E+22	6,211904E+22	3,254694E+22	3,254611E+22	1,242376E+23	6,509305E+22	1,893306E+23
465	6,211903E+22	6,212102E+22	3,254712E+22	3,254772E+22	1,242400E+23	6,509484E+22	1,893349E+23
466	6,212002E+22	6,211772E+22	3,254732E+22	3,254809E+22	1,242377E+23	6,509541E+22	1,893332E+23
467	6,211784E+22	6,211824E+22	3,254877E+22	3,254777E+22	1,242361E+23	6,509654E+22	1,893326E+23
468	6,211947E+22	6,211943E+22	3,254867E+22	3,254950E+22	1,242389E+23	6,509817E+22	1,893371E+23
469	6,211844E+22	6,211709E+22	3,254919E+22	3,254909E+22	1,242355E+23	6,509828E+22	1,893338E+23
470	6,211641E+22	6,211942E+22	3,255000E+22	3,254919E+22	1,242358E+23	6,509919E+22	1,893350E+23
471	6,211869E+22	6,211825E+22	3,254918E+22	3,255018E+22	1,242369E+23	6,509936E+22	1,893363E+23
472	6,211708E+22	6,211644E+22	3,254979E+22	3,254859E+22	1,242335E+23	6,509838E+22	1,893319E+23
473	6,211740E+22	6,211924E+22	3,254934E+22	3,254885E+22	1,242366E+23	6,509819E+22	1,893348E+23
474	6,211956E+22	6,211732E+22	3,254795E+22	3,254868E+22	1,242369E+23	6,509663E+22	1,893335E+23
475	6,211744E+22	6,211814E+22	3,254809E+22	3,254727E+22	1,242356E+23	6,509537E+22	1,893309E+23
476	6,211901E+22	6,212040E+22	3,254716E+22	3,254804E+22	1,242394E+23	6,509521E+22	1,893346E+23
477	6,211961E+22	6,211820E+22	3,254668E+22	3,254682E+22	1,242378E+23	6,509349E+22	1,893313E+23
478	6,211799E+22	6,212009E+22	3,254732E+22	3,254593E+22	1,242381E+23	6,509325E+22	1,893313E+23
479	6,212063E+22	6,211986E+22	3,254648E+22	3,254712E+22	1,242405E+23	6,509360E+22	1,893341E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
480	6,211935E+22	6,211789E+22	3,254710E+22	3,254625E+22	1,242372E+23	6,509335E+22	1,893306E+23
481	6,211784E+22	6,212064E+22	3,254766E+22	3,254718E+22	1,242385E+23	6,509484E+22	1,893333E+23
482	6,211968E+22	6,211870E+22	3,254700E+22	3,254844E+22	1,242384E+23	6,509544E+22	1,893338E+23
483	6,211745E+22	6,211755E+22	3,254836E+22	3,254782E+22	1,242350E+23	6,509617E+22	1,893312E+23
484	6,211797E+22	6,211914E+22	3,254898E+22	3,254933E+22	1,242371E+23	6,509831E+22	1,893354E+23
485	6,211906E+22	6,211656E+22	3,254913E+22	3,254957E+22	1,242356E+23	6,509870E+22	1,893343E+23
486	6,211635E+22	6,211763E+22	3,255067E+22	3,254939E+22	1,242340E+23	6,510006E+22	1,893340E+23
487	6,211772E+22	6,211816E+22	3,255039E+22	3,255143E+22	1,242359E+23	6,510182E+22	1,893377E+23
488	6,211688E+22	6,211573E+22	3,255098E+22	3,255074E+22	1,242326E+23	6,510172E+22	1,893343E+23
489	6,211482E+22	6,211787E+22	3,255175E+22	3,255073E+22	1,242327E+23	6,510249E+22	1,893352E+23
490	6,211761E+22	6,211652E+22	3,255052E+22	3,255154E+22	1,242341E+23	6,510206E+22	1,893362E+23
491	6,211636E+22	6,211514E+22	3,255088E+22	3,254993E+22	1,242315E+23	6,510081E+22	1,893323E+23
492	6,211620E+22	6,211792E+22	3,255064E+22	3,255039E+22	1,242341E+23	6,510103E+22	1,893351E+23
493	6,211826E+22	6,211674E+22	3,254910E+22	3,255009E+22	1,242350E+23	6,509919E+22	1,893342E+23
494	6,211608E+22	6,211755E+22	3,254948E+22	3,254850E+22	1,242336E+23	6,509797E+22	1,893316E+23
495	6,211796E+22	6,211884E+22	3,254861E+22	3,254930E+22	1,242368E+23	6,509790E+22	1,893347E+23
496	6,211887E+22	6,211668E+22	3,254829E+22	3,254790E+22	1,242356E+23	6,509620E+22	1,893317E+23
497	6,211670E+22	6,211882E+22	3,254903E+22	3,254740E+22	1,242355E+23	6,509643E+22	1,893320E+23
498	6,211911E+22	6,211876E+22	3,254782E+22	3,254887E+22	1,242379E+23	6,509669E+22	1,893346E+23
499	6,211777E+22	6,211693E+22	3,254838E+22	3,254815E+22	1,242347E+23	6,509653E+22	1,893312E+23
500	6,211611E+22	6,211901E+22	3,254943E+22	3,254911E+22	1,242351E+23	6,509854E+22	1,893337E+23
501	6,211847E+22	6,211733E+22	3,254875E+22	3,255003E+22	1,242358E+23	6,509878E+22	1,893346E+23
502	6,211642E+22	6,211627E+22	3,255029E+22	3,254932E+22	1,242327E+23	6,509961E+22	1,893323E+23
503	6,211703E+22	6,211742E+22	3,255081E+22	3,255114E+22	1,242344E+23	6,510195E+22	1,893364E+23
504	6,211786E+22	6,211528E+22	3,255093E+22	3,255135E+22	1,242331E+23	6,510228E+22	1,893354E+23
505	6,211440E+22	6,211660E+22	3,255249E+22	3,255135E+22	1,242310E+23	6,510384E+22	1,893348E+23
506	6,211603E+22	6,211674E+22	3,255188E+22	3,255313E+22	1,242328E+23	6,510500E+22	1,893378E+23
507	6,211565E+22	6,211416E+22	3,255240E+22	3,255216E+22	1,242298E+23	6,510456E+22	1,893344E+23
508	6,211363E+22	6,211595E+22	3,255345E+22	3,255215E+22	1,242296E+23	6,510560E+22	1,893352E+23
509	6,211655E+22	6,211540E+22	3,255191E+22	3,255284E+22	1,242319E+23	6,510475E+22	1,893367E+23
510	6,211504E+22	6,211456E+22	3,255223E+22	3,255133E+22	1,242296E+23	6,510356E+22	1,893332E+23
511	6,211487E+22	6,211675E+22	3,255185E+22	3,255198E+22	1,242316E+23	6,510383E+22	1,893355E+23
512	6,211716E+22	6,211562E+22	3,255051E+22	3,255132E+22	1,242328E+23	6,510182E+22	1,893346E+23
513	6,211488E+22	6,211643E+22	3,255106E+22	3,254973E+22	1,242313E+23	6,510079E+22	1,893321E+23
514	6,211700E+22	6,211745E+22	3,254996E+22	3,255050E+22	1,242345E+23	6,510045E+22	1,893349E+23
515	6,211792E+22	6,211559E+22	3,254960E+22	3,254936E+22	1,242335E+23	6,509896E+22	1,893325E+23
516	6,211510E+22	6,211748E+22	3,255063E+22	3,254930E+22	1,242326E+23	6,509993E+22	1,893325E+23
517	6,211732E+22	6,211783E+22	3,254931E+22	3,255070E+22	1,242352E+23	6,510001E+22	1,893352E+23
518	6,211633E+22	6,211576E+22	3,255007E+22	3,254984E+22	1,242321E+23	6,509991E+22	1,893320E+23
519	6,211516E+22	6,211683E+22	3,255113E+22	3,255078E+22	1,242320E+23	6,510191E+22	1,893339E+23
520	6,211783E+22	6,211557E+22	3,255059E+22	3,255146E+22	1,242334E+23	6,510205E+22	1,893354E+23
521	6,211525E+22	6,211506E+22	3,255213E+22	3,255097E+22	1,242303E+23	6,510310E+22	1,893334E+23
522	6,211540E+22	6,211638E+22	3,255234E+22	3,255291E+22	1,242318E+23	6,510525E+22	1,893370E+23
523	6,211615E+22	6,211447E+22	3,255246E+22	3,255314E+22	1,242306E+23	6,510560E+22	1,893362E+23
524	6,211249E+22	6,211503E+22	3,255444E+22	3,255316E+22	1,242275E+23	6,510760E+22	1,893351E+23
525	6,211443E+22	6,211541E+22	3,255367E+22	3,255458E+22	1,242298E+23	6,510825E+22	1,893381E+23
526	6,211451E+22	6,211279E+22	3,255415E+22	3,255361E+22	1,242273E+23	6,510776E+22	1,893351E+23
527	6,211261E+22	6,211407E+22	3,255490E+22	3,255387E+22	1,242267E+23	6,510877E+22	1,893355E+23
528	6,211550E+22	6,211422E+22	3,255322E+22	3,255443E+22	1,242297E+23	6,510765E+22	1,893374E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
529	6,211362E+22	6,211370E+22	3,255350E+22	3,255290E+22	1,242273E+23	6,510640E+22	1,893337E+23
530	6,211380E+22	6,211555E+22	3,255293E+22	3,255320E+22	1,242294E+23	6,510614E+22	1,893355E+23
531	6,211647E+22	6,211450E+22	3,255167E+22	3,255228E+22	1,242310E+23	6,510395E+22	1,893349E+23
532	6,211388E+22	6,211497E+22	3,255268E+22	3,255095E+22	1,242288E+23	6,510363E+22	1,893325E+23
533	6,211563E+22	6,211668E+22	3,255144E+22	3,255178E+22	1,242323E+23	6,510322E+22	1,893355E+23
534	6,211628E+22	6,211491E+22	3,255117E+22	3,255101E+22	1,242312E+23	6,510217E+22	1,893334E+23
535	6,211353E+22	6,211586E+22	3,255216E+22	3,255123E+22	1,242294E+23	6,510339E+22	1,893328E+23
536	6,211621E+22	6,211612E+22	3,255098E+22	3,255229E+22	1,242323E+23	6,510327E+22	1,893356E+23
537	6,211520E+22	6,211419E+22	3,255183E+22	3,255141E+22	1,242294E+23	6,510324E+22	1,893326E+23
538	6,211437E+22	6,211521E+22	3,255261E+22	3,255229E+22	1,242296E+23	6,510490E+22	1,893345E+23
539	6,211683E+22	6,211448E+22	3,255208E+22	3,255310E+22	1,242313E+23	6,510519E+22	1,893365E+23
540	6,211343E+22	6,211396E+22	3,255401E+22	3,255302E+22	1,242274E+23	6,510703E+22	1,893344E+23
541	6,211328E+22	6,211559E+22	3,255414E+22	3,255472E+22	1,242289E+23	6,510885E+22	1,893377E+23
542	6,211440E+22	6,211323E+22	3,255444E+22	3,255485E+22	1,242276E+23	6,510929E+22	1,893369E+23
543	6,211122E+22	6,211273E+22	3,255627E+22	3,255488E+22	1,242240E+23	6,511116E+22	1,893351E+23
544	6,211352E+22	6,211347E+22	3,255539E+22	3,255606E+22	1,242270E+23	6,511145E+22	1,893384E+23
545	6,211329E+22	6,211155E+22	3,255566E+22	3,255525E+22	1,242248E+23	6,511091E+22	1,893358E+23
546	6,211142E+22	6,211299E+22	3,255591E+22	3,255546E+22	1,242244E+23	6,511137E+22	1,893358E+23
547	6,211441E+22	6,211348E+22	3,255428E+22	3,255576E+22	1,242279E+23	6,511004E+22	1,893379E+23
548	6,211241E+22	6,211257E+22	3,255501E+22	3,255417E+22	1,242250E+23	6,510919E+22	1,893342E+23
549	6,211261E+22	6,211474E+22	3,255442E+22	3,255411E+22	1,242274E+23	6,510853E+22	1,893359E+23
550	6,211551E+22	6,211363E+22	3,255331E+22	3,255343E+22	1,242291E+23	6,510674E+22	1,893359E+23
551	6,211266E+22	6,211329E+22	3,255418E+22	3,255262E+22	1,242260E+23	6,510680E+22	1,893328E+23
552	6,211414E+22	6,211544E+22	3,255291E+22	3,255352E+22	1,242296E+23	6,510642E+22	1,893360E+23
553	6,211466E+22	6,211368E+22	3,255262E+22	3,255281E+22	1,242283E+23	6,510543E+22	1,893338E+23
554	6,211245E+22	6,211404E+22	3,255337E+22	3,255277E+22	1,242265E+23	6,510614E+22	1,893326E+23
555	6,211560E+22	6,211461E+22	3,255233E+22	3,255357E+22	1,242302E+23	6,510590E+22	1,893361E+23
556	6,211425E+22	6,211272E+22	3,255357E+22	3,255294E+22	1,242270E+23	6,510651E+22	1,893335E+23
557	6,211282E+22	6,211461E+22	3,255430E+22	3,255380E+22	1,242274E+23	6,510809E+22	1,893355E+23
558	6,211501E+22	6,211398E+22	3,255396E+22	3,255493E+22	1,242290E+23	6,510889E+22	1,893379E+23
559	6,211149E+22	6,211230E+22	3,255598E+22	3,255510E+22	1,242238E+23	6,511108E+22	1,893349E+23
560	6,211168E+22	6,211382E+22	3,255619E+22	3,255645E+22	1,242255E+23	6,511264E+22	1,893381E+23
561	6,211299E+22	6,211142E+22	3,255640E+22	3,255658E+22	1,242244E+23	6,511298E+22	1,893374E+23
562	6,211036E+22	6,211072E+22	3,255768E+22	3,255656E+22	1,242211E+23	6,511425E+22	1,893353E+23
563	6,211270E+22	6,211218E+22	3,255660E+22	3,255767E+22	1,242249E+23	6,511427E+22	1,893391E+23
564	6,211189E+22	6,211056E+22	3,255703E+22	3,255702E+22	1,242225E+23	6,511405E+22	1,893365E+23
565	6,210997E+22	6,211246E+22	3,255718E+22	3,255673E+22	1,242224E+23	6,511390E+22	1,893363E+23
566	6,211332E+22	6,211266E+22	3,255583E+22	3,255684E+22	1,242260E+23	6,511266E+22	1,893386E+23
567	6,211146E+22	6,211090E+22	3,255661E+22	3,255537E+22	1,242224E+23	6,511198E+22	1,893343E+23
568	6,211162E+22	6,211335E+22	3,255600E+22	3,255524E+22	1,242250E+23	6,511124E+22	1,893362E+23
569	6,211387E+22	6,211263E+22	3,255481E+22	3,255497E+22	1,242265E+23	6,510978E+22	1,893363E+23
570	6,211117E+22	6,211203E+22	3,255522E+22	3,255435E+22	1,242232E+23	6,510957E+22	1,893328E+23
571	6,211293E+22	6,211416E+22	3,255405E+22	3,255505E+22	1,242271E+23	6,510910E+22	1,893362E+23
572	6,211346E+22	6,211219E+22	3,255416E+22	3,255439E+22	1,242257E+23	6,510856E+22	1,893342E+23
573	6,211147E+22	6,211299E+22	3,255485E+22	3,255397E+22	1,242245E+23	6,510882E+22	1,893333E+23
574	6,211472E+22	6,211367E+22	3,255408E+22	3,255501E+22	1,242284E+23	6,510910E+22	1,893375E+23
575	6,211286E+22	6,211132E+22	3,255537E+22	3,255488E+22	1,242242E+23	6,511025E+22	1,893344E+23
576	6,211104E+22	6,211347E+22	3,255620E+22	3,255570E+22	1,242245E+23	6,511190E+22	1,893364E+23
577	6,211301E+22	6,211266E+22	3,255598E+22	3,255690E+22	1,242257E+23	6,511287E+22	1,893386E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
578	6,211018E+22	6,211018E+22	3,255765E+22	3,255689E+22	1,242204E+23	6,511453E+22	1,893349E+23
579	6,211081E+22	6,211189E+22	3,255780E+22	3,255797E+22	1,242227E+23	6,511577E+22	1,893385E+23
580	6,211188E+22	6,210979E+22	3,255809E+22	3,255833E+22	1,242217E+23	6,511642E+22	1,893381E+23
581	6,210893E+22	6,211003E+22	3,255903E+22	3,255809E+22	1,242190E+23	6,511712E+22	1,893361E+23
582	6,211135E+22	6,211172E+22	3,255808E+22	3,255926E+22	1,242231E+23	6,511734E+22	1,893404E+23
583	6,211049E+22	6,210924E+22	3,255858E+22	3,255857E+22	1,242197E+23	6,511715E+22	1,893369E+23
584	6,210878E+22	6,211123E+22	3,255887E+22	3,255784E+22	1,242200E+23	6,511671E+22	1,893367E+23
585	6,211210E+22	6,211146E+22	3,255750E+22	3,255800E+22	1,242236E+23	6,511550E+22	1,893391E+23
586	6,211044E+22	6,210923E+22	3,255783E+22	3,255678E+22	1,242197E+23	6,511461E+22	1,893343E+23
587	6,211041E+22	6,211219E+22	3,255711E+22	3,255676E+22	1,242226E+23	6,511387E+22	1,893365E+23
588	6,211221E+22	6,211149E+22	3,255607E+22	3,255682E+22	1,242237E+23	6,511289E+22	1,893366E+23
589	6,210975E+22	6,211107E+22	3,255637E+22	3,255572E+22	1,242208E+23	6,511209E+22	1,893329E+23
590	6,211218E+22	6,211295E+22	3,255551E+22	3,255629E+22	1,242251E+23	6,511181E+22	1,893369E+23
591	6,211271E+22	6,211042E+22	3,255575E+22	3,255577E+22	1,242231E+23	6,511152E+22	1,893346E+23
592	6,211054E+22	6,211180E+22	3,255660E+22	3,255531E+22	1,242223E+23	6,511190E+22	1,893342E+23
593	6,211301E+22	6,211288E+22	3,255594E+22	3,255673E+22	1,242259E+23	6,511267E+22	1,893385E+23
594	6,211114E+22	6,211002E+22	3,255698E+22	3,255685E+22	1,242212E+23	6,511383E+22	1,893350E+23
595	6,210947E+22	6,211201E+22	3,255795E+22	3,255749E+22	1,242215E+23	6,511544E+22	1,893369E+23
596	6,211136E+22	6,211092E+22	3,255798E+22	3,255882E+22	1,242223E+23	6,511679E+22	1,893391E+23
597	6,210893E+22	6,210873E+22	3,255934E+22	3,255845E+22	1,242177E+23	6,511780E+22	1,893355E+23
598	6,210986E+22	6,211053E+22	3,255952E+22	3,255970E+22	1,242204E+23	6,511922E+22	1,893396E+23
599	6,211047E+22	6,210838E+22	3,255967E+22	3,256034E+22	1,242188E+23	6,512001E+22	1,893389E+23
600	6,210750E+22	6,210905E+22	3,256055E+22	3,255975E+22	1,242165E+23	6,512030E+22	1,893368E+23
601	6,210973E+22	6,211064E+22	3,255979E+22	3,256071E+22	1,242204E+23	6,512049E+22	1,893409E+23
602	6,210948E+22	6,210761E+22	3,255995E+22	3,255983E+22	1,242171E+23	6,511978E+22	1,893369E+23
603	6,210798E+22	6,210973E+22	3,256023E+22	3,255888E+22	1,242177E+23	6,511911E+22	1,893368E+23
604	6,211071E+22	6,211024E+22	3,255896E+22	3,255945E+22	1,242209E+23	6,511842E+22	1,893394E+23
605	6,210885E+22	6,210859E+22	3,255893E+22	3,255817E+22	1,242174E+23	6,511710E+22	1,893345E+23
606	6,210907E+22	6,211137E+22	3,255839E+22	3,255830E+22	1,242204E+23	6,511670E+22	1,893371E+23
607	6,211092E+22	6,210995E+22	3,255749E+22	3,255840E+22	1,242209E+23	6,511589E+22	1,893368E+23
608	6,210893E+22	6,210969E+22	3,255789E+22	3,255691E+22	1,242186E+23	6,511480E+22	1,893334E+23
609	6,211128E+22	6,211172E+22	3,255724E+22	3,255755E+22	1,242230E+23	6,511479E+22	1,893378E+23
610	6,211186E+22	6,210899E+22	3,255716E+22	3,255735E+22	1,242208E+23	6,511451E+22	1,893354E+23
611	6,210920E+22	6,211081E+22	3,255811E+22	3,255703E+22	1,242200E+23	6,511514E+22	1,893352E+23
612	6,211097E+22	6,211182E+22	3,255774E+22	3,255880E+22	1,242228E+23	6,511654E+22	1,893393E+23
613	6,210930E+22	6,210880E+22	3,255871E+22	3,255856E+22	1,242181E+23	6,511727E+22	1,893354E+23
614	6,210834E+22	6,211039E+22	3,255987E+22	3,255918E+22	1,242187E+23	6,511906E+22	1,893378E+23
615	6,211019E+22	6,210878E+22	3,255983E+22	3,256064E+22	1,242190E+23	6,512047E+22	1,893394E+23
616	6,210774E+22	6,210728E+22	3,256106E+22	3,256013E+22	1,242150E+23	6,512119E+22	1,893362E+23
617	6,210825E+22	6,210960E+22	3,256121E+22	3,256149E+22	1,242178E+23	6,512270E+22	1,893405E+23
618	6,210904E+22	6,210706E+22	3,256103E+22	3,256210E+22	1,242161E+23	6,512314E+22	1,893392E+23
619	6,210631E+22	6,210782E+22	3,256208E+22	3,256109E+22	1,242141E+23	6,512317E+22	1,893373E+23
620	6,210836E+22	6,210931E+22	3,256151E+22	3,256207E+22	1,242177E+23	6,512358E+22	1,893413E+23
621	6,210829E+22	6,210652E+22	3,256140E+22	3,256094E+22	1,242148E+23	6,512234E+22	1,893371E+23
622	6,210694E+22	6,210865E+22	3,256166E+22	3,256032E+22	1,242156E+23	6,512198E+22	1,893376E+23
623	6,210905E+22	6,210892E+22	3,256028E+22	3,256125E+22	1,242180E+23	6,512154E+22	1,893395E+23
624	6,210747E+22	6,210748E+22	3,256021E+22	3,255970E+22	1,242149E+23	6,511990E+22	1,893348E+23
625	6,210790E+22	6,211003E+22	3,255988E+22	3,255963E+22	1,242179E+23	6,511951E+22	1,893374E+23
626	6,211036E+22	6,210821E+22	3,255872E+22	3,255963E+22	1,242186E+23	6,511835E+22	1,893369E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
627	6,210847E+22	6,210838E+22	3,255924E+22	3,255800E+22	1,242169E+23	6,511724E+22	1,893341E+23
628	6,210987E+22	6,211085E+22	3,255886E+22	3,255912E+22	1,242207E+23	6,511797E+22	1,893387E+23
629	6,211007E+22	6,210857E+22	3,255864E+22	3,255896E+22	1,242186E+23	6,511759E+22	1,893362E+23
630	6,210756E+22	6,210983E+22	3,255989E+22	3,255888E+22	1,242174E+23	6,511877E+22	1,893362E+23
631	6,210906E+22	6,211006E+22	3,255973E+22	3,256076E+22	1,242191E+23	6,512049E+22	1,893396E+23
632	6,210805E+22	6,210702E+22	3,256063E+22	3,256023E+22	1,242151E+23	6,512086E+22	1,893359E+23
633	6,210711E+22	6,210853E+22	3,256185E+22	3,256092E+22	1,242156E+23	6,512277E+22	1,893384E+23
634	6,210912E+22	6,210698E+22	3,256132E+22	3,256260E+22	1,242161E+23	6,512392E+22	1,893400E+23
635	6,210654E+22	6,210609E+22	3,256246E+22	3,256194E+22	1,242126E+23	6,512440E+22	1,893370E+23
636	6,210652E+22	6,210855E+22	3,256286E+22	3,256333E+22	1,242151E+23	6,512619E+22	1,893413E+23
637	6,210763E+22	6,210609E+22	3,256256E+22	3,256336E+22	1,242137E+23	6,512592E+22	1,893396E+23
638	6,210544E+22	6,210654E+22	3,256377E+22	3,256232E+22	1,242120E+23	6,512608E+22	1,893381E+23
639	6,210700E+22	6,210773E+22	3,256320E+22	3,256348E+22	1,242147E+23	6,512668E+22	1,893414E+23
640	6,210689E+22	6,210544E+22	3,256289E+22	3,256236E+22	1,242123E+23	6,512525E+22	1,893376E+23
641	6,210527E+22	6,210766E+22	3,256314E+22	3,256193E+22	1,242129E+23	6,512507E+22	1,893380E+23
642	6,210779E+22	6,210742E+22	3,256140E+22	3,256288E+22	1,242152E+23	6,512428E+22	1,893395E+23
643	6,210670E+22	6,210611E+22	3,256142E+22	3,256092E+22	1,242128E+23	6,512233E+22	1,893351E+23
644	6,210703E+22	6,210879E+22	3,256130E+22	3,256092E+22	1,242158E+23	6,512222E+22	1,893380E+23
645	6,210950E+22	6,210732E+22	3,256001E+22	3,256071E+22	1,242168E+23	6,512073E+22	1,893375E+23
646	6,210753E+22	6,210766E+22	3,256073E+22	3,255954E+22	1,242152E+23	6,512027E+22	1,893355E+23
647	6,210792E+22	6,210976E+22	3,256049E+22	3,256101E+22	1,242177E+23	6,512150E+22	1,893392E+23
648	6,210823E+22	6,210736E+22	3,256040E+22	3,256072E+22	1,242156E+23	6,512112E+22	1,893367E+23
649	6,210601E+22	6,210810E+22	3,256189E+22	3,256056E+22	1,242141E+23	6,512246E+22	1,893366E+23
650	6,210807E+22	6,210772E+22	3,256136E+22	3,256248E+22	1,242158E+23	6,512384E+22	1,893396E+23
651	6,210728E+22	6,210519E+22	3,256223E+22	3,256182E+22	1,242125E+23	6,512405E+22	1,893365E+23
652	6,210569E+22	6,210730E+22	3,256347E+22	3,256283E+22	1,242130E+23	6,512631E+22	1,893393E+23
653	6,210749E+22	6,210630E+22	3,256277E+22	3,256427E+22	1,242138E+23	6,512703E+22	1,893408E+23
654	6,210525E+22	6,210523E+22	3,256417E+22	3,256362E+22	1,242105E+23	6,512780E+22	1,893383E+23
655	6,210482E+22	6,210712E+22	3,256481E+22	3,256491E+22	1,242119E+23	6,512972E+22	1,893417E+23
656	6,210639E+22	6,210478E+22	3,256446E+22	3,256469E+22	1,242112E+23	6,512915E+22	1,893403E+23
657	6,210414E+22	6,210505E+22	3,256566E+22	3,256380E+22	1,242092E+23	6,512946E+22	1,893386E+23
658	6,210562E+22	6,210612E+22	3,256450E+22	3,256528E+22	1,242117E+23	6,512978E+22	1,893415E+23
659	6,210561E+22	6,210423E+22	3,256402E+22	3,256405E+22	1,242098E+23	6,512806E+22	1,893379E+23
660	6,210382E+22	6,210640E+22	3,256439E+22	3,256360E+22	1,242102E+23	6,512799E+22	1,893382E+23
661	6,210693E+22	6,210632E+22	3,256253E+22	3,256394E+22	1,242132E+23	6,512647E+22	1,893397E+23
662	6,210644E+22	6,210494E+22	3,256267E+22	3,256193E+22	1,242114E+23	6,512461E+22	1,893360E+23
663	6,210590E+22	6,210760E+22	3,256279E+22	3,256215E+22	1,242135E+23	6,512493E+22	1,893384E+23
664	6,210813E+22	6,210672E+22	3,256149E+22	3,256203E+22	1,242149E+23	6,512353E+22	1,893384E+23
665	6,210569E+22	6,210673E+22	3,256250E+22	3,256118E+22	1,242124E+23	6,512368E+22	1,893361E+23
666	6,210622E+22	6,210811E+22	3,256209E+22	3,256282E+22	1,242143E+23	6,512491E+22	1,893392E+23
667	6,210707E+22	6,210556E+22	3,256210E+22	3,256232E+22	1,242126E+23	6,512443E+22	1,893371E+23
668	6,210481E+22	6,210624E+22	3,256368E+22	3,256234E+22	1,242111E+23	6,512602E+22	1,893371E+23
669	6,210706E+22	6,210628E+22	3,256288E+22	3,256407E+22	1,242133E+23	6,512694E+22	1,893403E+23
670	6,210629E+22	6,210417E+22	3,256373E+22	3,256371E+22	1,242105E+23	6,512745E+22	1,893379E+23
671	6,210383E+22	6,210623E+22	3,256517E+22	3,256485E+22	1,242101E+23	6,513002E+22	1,893401E+23
672	6,210588E+22	6,210529E+22	3,256462E+22	3,256590E+22	1,242112E+23	6,513053E+22	1,893417E+23
673	6,210386E+22	6,210380E+22	3,256631E+22	3,256511E+22	1,242077E+23	6,513142E+22	1,893391E+23
674	6,210366E+22	6,210518E+22	3,256654E+22	3,256643E+22	1,242088E+23	6,513297E+22	1,893418E+23
675	6,210528E+22	6,210322E+22	3,256605E+22	3,256619E+22	1,242085E+23	6,513224E+22	1,893407E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
676	6,210251E+22	6,210387E+22	3,256707E+22	3,256565E+22	1,242064E+23	6,513272E+22	1,893391E+23
677	6,210408E+22	6,210512E+22	3,256559E+22	3,256678E+22	1,242092E+23	6,513237E+22	1,893416E+23
678	6,210471E+22	6,210321E+22	3,256520E+22	3,256547E+22	1,242079E+23	6,513067E+22	1,893386E+23
679	6,210276E+22	6,210504E+22	3,256573E+22	3,256482E+22	1,242078E+23	6,513055E+22	1,893384E+23
680	6,210618E+22	6,210522E+22	3,256397E+22	3,256487E+22	1,242114E+23	6,512884E+22	1,893403E+23
681	6,210550E+22	6,210395E+22	3,256432E+22	3,256312E+22	1,242094E+23	6,512744E+22	1,893369E+23
682	6,210450E+22	6,210638E+22	3,256409E+22	3,256373E+22	1,242109E+23	6,512782E+22	1,893387E+23
683	6,210659E+22	6,210562E+22	3,256293E+22	3,256368E+22	1,242122E+23	6,512661E+22	1,893388E+23
684	6,210400E+22	6,210525E+22	3,256413E+22	3,256301E+22	1,242092E+23	6,512714E+22	1,893364E+23
685	6,210499E+22	6,210645E+22	3,256361E+22	3,256423E+22	1,242114E+23	6,512784E+22	1,893393E+23
686	6,210644E+22	6,210400E+22	3,256365E+22	3,256389E+22	1,242104E+23	6,512755E+22	1,893380E+23
687	6,210345E+22	6,210477E+22	3,256533E+22	3,256413E+22	1,242082E+23	6,512947E+22	1,893377E+23
688	6,210556E+22	6,210547E+22	3,256457E+22	3,256582E+22	1,242110E+23	6,513039E+22	1,893414E+23
689	6,210461E+22	6,210326E+22	3,256571E+22	3,256556E+22	1,242079E+23	6,513127E+22	1,893391E+23
690	6,210222E+22	6,210469E+22	3,256699E+22	3,256667E+22	1,242069E+23	6,513366E+22	1,893406E+23
691	6,210471E+22	6,210372E+22	3,256655E+22	3,256746E+22	1,242084E+23	6,513401E+22	1,893424E+23
692	6,210249E+22	6,210210E+22	3,256823E+22	3,256686E+22	1,242046E+23	6,513509E+22	1,893397E+23
693	6,210233E+22	6,210379E+22	3,256804E+22	3,256800E+22	1,242061E+23	6,513604E+22	1,893422E+23
694	6,210410E+22	6,210213E+22	3,256729E+22	3,256800E+22	1,242062E+23	6,513529E+22	1,893415E+23
695	6,210073E+22	6,210257E+22	3,256836E+22	3,256742E+22	1,242033E+23	6,513578E+22	1,893391E+23
696	6,210296E+22	6,210398E+22	3,256693E+22	3,256801E+22	1,242069E+23	6,513494E+22	1,893419E+23
697	6,210397E+22	6,210189E+22	3,256675E+22	3,256646E+22	1,242059E+23	6,513321E+22	1,893391E+23
698	6,210208E+22	6,210354E+22	3,256701E+22	3,256588E+22	1,242056E+23	6,513288E+22	1,893385E+23
699	6,210531E+22	6,210424E+22	3,256531E+22	3,256599E+22	1,242096E+23	6,513130E+22	1,893409E+23
700	6,210379E+22	6,210320E+22	3,256574E+22	3,256476E+22	1,242070E+23	6,513050E+22	1,893375E+23
701	6,210271E+22	6,210548E+22	3,256542E+22	3,256522E+22	1,242082E+23	6,513064E+22	1,893388E+23
702	6,210531E+22	6,210442E+22	3,256440E+22	3,256531E+22	1,242097E+23	6,512972E+22	1,893394E+23
703	6,210258E+22	6,210355E+22	3,256581E+22	3,256468E+22	1,242061E+23	6,513048E+22	1,893366E+23
704	6,210407E+22	6,210492E+22	3,256532E+22	3,256571E+22	1,242090E+23	6,513104E+22	1,893400E+23
705	6,210538E+22	6,210273E+22	3,256548E+22	3,256564E+22	1,242081E+23	6,513112E+22	1,893392E+23
706	6,210204E+22	6,210344E+22	3,256680E+22	3,256616E+22	1,242055E+23	6,513296E+22	1,893384E+23
707	6,210409E+22	6,210427E+22	3,256629E+22	3,256768E+22	1,242084E+23	6,513397E+22	1,893423E+23
708	6,210304E+22	6,210187E+22	3,256766E+22	3,256743E+22	1,242049E+23	6,513508E+22	1,893400E+23
709	6,210100E+22	6,210303E+22	3,256876E+22	3,256805E+22	1,242040E+23	6,513681E+22	1,893408E+23
710	6,210375E+22	6,210225E+22	3,256825E+22	3,256901E+22	1,242060E+23	6,513726E+22	1,893433E+23
711	6,210080E+22	6,210068E+22	3,256985E+22	3,256864E+22	1,242015E+23	6,513849E+22	1,893400E+23
712	6,210060E+22	6,210273E+22	3,256954E+22	3,256963E+22	1,242033E+23	6,513917E+22	1,893425E+23
713	6,210254E+22	6,210106E+22	3,256892E+22	3,256960E+22	1,242036E+23	6,513852E+22	1,893421E+23
714	6,209959E+22	6,210100E+22	3,256965E+22	3,256887E+22	1,242006E+23	6,513852E+22	1,893391E+23
715	6,210232E+22	6,210256E+22	3,256838E+22	3,256910E+22	1,242049E+23	6,513748E+22	1,893424E+23
716	6,210306E+22	6,210073E+22	3,256821E+22	3,256773E+22	1,242038E+23	6,513594E+22	1,893397E+23
717	6,210095E+22	6,210262E+22	3,256820E+22	3,256707E+22	1,242036E+23	6,513528E+22	1,893388E+23
718	6,210396E+22	6,210365E+22	3,256648E+22	3,256758E+22	1,242076E+23	6,513405E+22	1,893417E+23
719	6,210181E+22	6,210207E+22	3,256719E+22	3,256653E+22	1,242039E+23	6,513372E+22	1,893376E+23
720	6,210130E+22	6,210409E+22	3,256705E+22	3,256665E+22	1,242054E+23	6,513370E+22	1,893391E+23
721	6,210435E+22	6,210278E+22	3,256622E+22	3,256674E+22	1,242071E+23	6,513296E+22	1,893401E+23
722	6,210172E+22	6,210168E+22	3,256725E+22	3,256628E+22	1,242034E+23	6,513353E+22	1,893369E+23
723	6,210317E+22	6,210359E+22	3,256686E+22	3,256736E+22	1,242068E+23	6,513422E+22	1,893410E+23
724	6,210376E+22	6,210176E+22	3,256711E+22	3,256759E+22	1,242055E+23	6,513470E+22	1,893402E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
725	6,210047E+22	6,210240E+22	3,256842E+22	3,256780E+22	1,242029E+23	6,513622E+22	1,893391E+23
726	6,210287E+22	6,210310E+22	3,256806E+22	3,256931E+22	1,242060E+23	6,513737E+22	1,893433E+23
727	6,210136E+22	6,210025E+22	3,256969E+22	3,256914E+22	1,242016E+23	6,513883E+22	1,893404E+23
728	6,209962E+22	6,210155E+22	3,257074E+22	3,256961E+22	1,242012E+23	6,514035E+22	1,893415E+23
729	6,210219E+22	6,210091E+22	3,257014E+22	3,257085E+22	1,242031E+23	6,514098E+22	1,893441E+23
730	6,209910E+22	6,209914E+22	3,257120E+22	3,257068E+22	1,241982E+23	6,514188E+22	1,893401E+23
731	6,209936E+22	6,210121E+22	3,257098E+22	3,257130E+22	1,242006E+23	6,514228E+22	1,893429E+23
732	6,210138E+22	6,209964E+22	3,257041E+22	3,257108E+22	1,242010E+23	6,514149E+22	1,893425E+23
733	6,209894E+22	6,209964E+22	3,257089E+22	3,256984E+22	1,241986E+23	6,514072E+22	1,893393E+23
734	6,210171E+22	6,210165E+22	3,256960E+22	3,257020E+22	1,242034E+23	6,513979E+22	1,893432E+23
735	6,210145E+22	6,210000E+22	3,256959E+22	3,256915E+22	1,242014E+23	6,513874E+22	1,893402E+23
736	6,209922E+22	6,210198E+22	3,256964E+22	3,256846E+22	1,242012E+23	6,513810E+22	1,893393E+23
737	6,210224E+22	6,210267E+22	3,256818E+22	3,256909E+22	1,242049E+23	6,513727E+22	1,893422E+23
738	6,210053E+22	6,210031E+22	3,256862E+22	3,256814E+22	1,242008E+23	6,513676E+22	1,893376E+23
739	6,210062E+22	6,210218E+22	3,256866E+22	3,256807E+22	1,242028E+23	6,513674E+22	1,893395E+23
740	6,210346E+22	6,210127E+22	3,256782E+22	3,256842E+22	1,242047E+23	6,513624E+22	1,893410E+23
741	6,210074E+22	6,210046E+22	3,256849E+22	3,256786E+22	1,242012E+23	6,513635E+22	1,893376E+23
742	6,210189E+22	6,210282E+22	3,256819E+22	3,256916E+22	1,242047E+23	6,513735E+22	1,893421E+23
743	6,210188E+22	6,210069E+22	3,256886E+22	3,256942E+22	1,242026E+23	6,513828E+22	1,893408E+23
744	6,209896E+22	6,210101E+22	3,257046E+22	3,256925E+22	1,242000E+23	6,513971E+22	1,893397E+23
745	6,210147E+22	6,210160E+22	3,257030E+22	3,257084E+22	1,242031E+23	6,514114E+22	1,893442E+23
746	6,209990E+22	6,209839E+22	3,257148E+22	3,257101E+22	1,241983E+23	6,514249E+22	1,893408E+23
747	6,209815E+22	6,209994E+22	3,257248E+22	3,257154E+22	1,241981E+23	6,514401E+22	1,893421E+23
748	6,210032E+22	6,209964E+22	3,257175E+22	3,257291E+22	1,242000E+23	6,514466E+22	1,893446E+23
749	6,209777E+22	6,209775E+22	3,257249E+22	3,257226E+22	1,241955E+23	6,514476E+22	1,893403E+23
750	6,209860E+22	6,210002E+22	3,257229E+22	3,257266E+22	1,241986E+23	6,514495E+22	1,893436E+23
751	6,210030E+22	6,209842E+22	3,257195E+22	3,257235E+22	1,241987E+23	6,514430E+22	1,893430E+23
752	6,209799E+22	6,209873E+22	3,257245E+22	3,257093E+22	1,241967E+23	6,514337E+22	1,893401E+23
753	6,210029E+22	6,210098E+22	3,257119E+22	3,257159E+22	1,242013E+23	6,514278E+22	1,893441E+23
754	6,209968E+22	6,209884E+22	3,257086E+22	3,257089E+22	1,241985E+23	6,514175E+22	1,893403E+23
755	6,209796E+22	6,210039E+22	3,257113E+22	3,257000E+22	1,241984E+23	6,514114E+22	1,893395E+23
756	6,210104E+22	6,210094E+22	3,256972E+22	3,257057E+22	1,242020E+23	6,514030E+22	1,893423E+23
757	6,209992E+22	6,209859E+22	3,256983E+22	3,256934E+22	1,241985E+23	6,513918E+22	1,893377E+23
758	6,210011E+22	6,210101E+22	3,256980E+22	3,256945E+22	1,242011E+23	6,513924E+22	1,893404E+23
759	6,210185E+22	6,210040E+22	3,256924E+22	3,257009E+22	1,242023E+23	6,513933E+22	1,893416E+23
760	6,209909E+22	6,209984E+22	3,257014E+22	3,256940E+22	1,241989E+23	6,513954E+22	1,893385E+23
761	6,210016E+22	6,210189E+22	3,257024E+22	3,257075E+22	1,242021E+23	6,514099E+22	1,893430E+23
762	6,210028E+22	6,209902E+22	3,257080E+22	3,257120E+22	1,241993E+23	6,514201E+22	1,893413E+23
763	6,209785E+22	6,209901E+22	3,257256E+22	3,257099E+22	1,241969E+23	6,514355E+22	1,893404E+23
764	6,209988E+22	6,209989E+22	3,257227E+22	3,257286E+22	1,241998E+23	6,514513E+22	1,893449E+23
765	6,209844E+22	6,209686E+22	3,257289E+22	3,257300E+22	1,241953E+23	6,514589E+22	1,893412E+23
766	6,209680E+22	6,209869E+22	3,257374E+22	3,257352E+22	1,241955E+23	6,514726E+22	1,893428E+23
767	6,209874E+22	6,209825E+22	3,257332E+22	3,257467E+22	1,241970E+23	6,514799E+22	1,893450E+23
768	6,209690E+22	6,209646E+22	3,257413E+22	3,257339E+22	1,241934E+23	6,514751E+22	1,893409E+23
769	6,209779E+22	6,209895E+22	3,257405E+22	3,257373E+22	1,241967E+23	6,514779E+22	1,893445E+23
770	6,209914E+22	6,209726E+22	3,257337E+22	3,257372E+22	1,241964E+23	6,514708E+22	1,893435E+23
771	6,209665E+22	6,209762E+22	3,257396E+22	3,257239E+22	1,241943E+23	6,514635E+22	1,893406E+23
772	6,209836E+22	6,210003E+22	3,257272E+22	3,257322E+22	1,241984E+23	6,514594E+22	1,893443E+23
773	6,209837E+22	6,209737E+22	3,257206E+22	3,257228E+22	1,241957E+23	6,514434E+22	1,893401E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
774	6,209716E+22	6,209889E+22	3,257232E+22	3,257135E+22	1,241961E+23	6,514367E+22	1,893397E+23
775	6,210001E+22	6,209947E+22	3,257115E+22	3,257199E+22	1,241995E+23	6,514314E+22	1,893426E+23
776	6,209905E+22	6,209752E+22	3,257122E+22	3,257063E+22	1,241966E+23	6,514185E+22	1,893384E+23
777	6,209877E+22	6,210039E+22	3,257133E+22	3,257103E+22	1,241992E+23	6,514236E+22	1,893415E+23
778	6,210013E+22	6,209934E+22	3,257071E+22	3,257194E+22	1,241995E+23	6,514265E+22	1,893421E+23
779	6,209777E+22	6,209825E+22	3,257208E+22	3,257109E+22	1,241960E+23	6,514317E+22	1,893392E+23
780	6,209862E+22	6,210023E+22	3,257234E+22	3,257241E+22	1,241988E+23	6,514475E+22	1,893436E+23
781	6,209917E+22	6,209713E+22	3,257252E+22	3,257283E+22	1,241963E+23	6,514536E+22	1,893417E+23
782	6,209674E+22	6,209752E+22	3,257410E+22	3,257286E+22	1,241943E+23	6,514696E+22	1,893412E+23
783	6,209795E+22	6,209860E+22	3,257392E+22	3,257493E+22	1,241966E+23	6,514885E+22	1,893454E+23
784	6,209683E+22	6,209580E+22	3,257454E+22	3,257472E+22	1,241926E+23	6,514926E+22	1,893419E+23
785	6,209552E+22	6,209760E+22	3,257554E+22	3,257508E+22	1,241931E+23	6,515063E+22	1,893438E+23
786	6,209760E+22	6,209673E+22	3,257500E+22	3,257617E+22	1,241943E+23	6,515117E+22	1,893455E+23
787	6,209625E+22	6,209494E+22	3,257595E+22	3,257473E+22	1,241912E+23	6,515067E+22	1,893419E+23
788	6,209641E+22	6,209781E+22	3,257574E+22	3,257520E+22	1,241942E+23	6,515094E+22	1,893452E+23
789	6,209763E+22	6,209622E+22	3,257453E+22	3,257527E+22	1,241939E+23	6,514980E+22	1,893437E+23
790	6,209527E+22	6,209655E+22	3,257500E+22	3,257399E+22	1,241918E+23	6,514899E+22	1,893408E+23
791	6,209667E+22	6,209853E+22	3,257410E+22	3,257470E+22	1,241952E+23	6,514880E+22	1,893440E+23
792	6,209747E+22	6,209598E+22	3,257345E+22	3,257334E+22	1,241935E+23	6,514679E+22	1,893402E+23
793	6,209650E+22	6,209771E+22	3,257374E+22	3,257252E+22	1,241942E+23	6,514626E+22	1,893405E+23
794	6,209889E+22	6,209827E+22	3,257243E+22	3,257349E+22	1,241972E+23	6,514592E+22	1,893431E+23
795	6,209792E+22	6,209651E+22	3,257271E+22	3,257219E+22	1,241944E+23	6,514491E+22	1,893393E+23
796	6,209697E+22	6,209946E+22	3,257306E+22	3,257265E+22	1,241964E+23	6,514571E+22	1,893421E+23
797	6,209879E+22	6,209794E+22	3,257230E+22	3,257348E+22	1,241967E+23	6,514578E+22	1,893425E+23
798	6,209677E+22	6,209668E+22	3,257377E+22	3,257271E+22	1,241934E+23	6,514648E+22	1,893399E+23
799	6,209708E+22	6,209854E+22	3,257431E+22	3,257423E+22	1,241956E+23	6,514855E+22	1,893442E+23
800	6,209777E+22	6,209580E+22	3,257432E+22	3,257463E+22	1,241936E+23	6,514896E+22	1,893425E+23
801	6,209512E+22	6,209646E+22	3,257581E+22	3,257491E+22	1,241916E+23	6,515072E+22	1,893423E+23
802	6,209625E+22	6,209707E+22	3,257553E+22	3,257700E+22	1,241933E+23	6,515253E+22	1,893458E+23
803	6,209587E+22	6,209400E+22	3,257639E+22	3,257634E+22	1,241899E+23	6,515273E+22	1,893426E+23
804	6,209441E+22	6,209616E+22	3,257744E+22	3,257646E+22	1,241906E+23	6,515390E+22	1,893445E+23
805	6,209677E+22	6,209532E+22	3,257643E+22	3,257746E+22	1,241921E+23	6,515389E+22	1,893460E+23
806	6,209505E+22	6,209397E+22	3,257724E+22	3,257622E+22	1,241890E+23	6,515346E+22	1,893425E+23
807	6,209427E+22	6,209697E+22	3,257721E+22	3,257686E+22	1,241912E+23	6,515407E+22	1,893453E+23
808	6,209586E+22	6,209525E+22	3,257596E+22	3,257665E+22	1,241911E+23	6,515261E+22	1,893437E+23
809	6,209400E+22	6,209536E+22	3,257649E+22	3,257535E+22	1,241894E+23	6,515184E+22	1,893412E+23
810	6,209568E+22	6,209679E+22	3,257546E+22	3,257608E+22	1,241925E+23	6,515154E+22	1,893440E+23
811	6,209704E+22	6,209434E+22	3,257493E+22	3,257464E+22	1,241914E+23	6,514957E+22	1,893409E+23
812	6,209540E+22	6,209674E+22	3,257514E+22	3,257396E+22	1,241921E+23	6,514910E+22	1,893412E+23
813	6,209767E+22	6,209734E+22	3,257351E+22	3,257504E+22	1,241950E+23	6,514856E+22	1,893436E+23
814	6,209671E+22	6,209554E+22	3,257400E+22	3,257378E+22	1,241923E+23	6,514778E+22	1,893400E+23
815	6,209533E+22	6,209806E+22	3,257487E+22	3,257417E+22	1,241934E+23	6,514905E+22	1,893424E+23
816	6,209758E+22	6,209655E+22	3,257419E+22	3,257479E+22	1,241941E+23	6,514898E+22	1,893431E+23
817	6,209562E+22	6,209538E+22	3,257565E+22	3,257438E+22	1,241910E+23	6,515003E+22	1,893410E+23
818	6,209534E+22	6,209698E+22	3,257603E+22	3,257629E+22	1,241923E+23	6,515233E+22	1,893447E+23
819	6,209630E+22	6,209436E+22	3,257614E+22	3,257670E+22	1,241907E+23	6,515284E+22	1,893435E+23
820	6,209342E+22	6,209511E+22	3,257762E+22	3,257678E+22	1,241885E+23	6,515440E+22	1,893429E+23
821	6,209511E+22	6,209544E+22	3,257710E+22	3,257862E+22	1,241906E+23	6,515572E+22	1,893463E+23
822	6,209514E+22	6,209262E+22	3,257793E+22	3,257780E+22	1,241878E+23	6,515573E+22	1,893435E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
823	6,209299E+22	6,209483E+22	3,257921E+22	3,257797E+22	1,241878E+23	6,515718E+22	1,893450E+23
824	6,209523E+22	6,209450E+22	3,257802E+22	3,257891E+22	1,241897E+23	6,515692E+22	1,893467E+23
825	6,209333E+22	6,209324E+22	3,257870E+22	3,257793E+22	1,241866E+23	6,515663E+22	1,893432E+23
826	6,209241E+22	6,209541E+22	3,257865E+22	3,257857E+22	1,241878E+23	6,515722E+22	1,893450E+23
827	6,209496E+22	6,209339E+22	3,257753E+22	3,257800E+22	1,241884E+23	6,515553E+22	1,893439E+23
828	6,209317E+22	6,209378E+22	3,257794E+22	3,257651E+22	1,241869E+23	6,515445E+22	1,893414E+23
829	6,209519E+22	6,209535E+22	3,257651E+22	3,257729E+22	1,241905E+23	6,515379E+22	1,893443E+23
830	6,209626E+22	6,209358E+22	3,257590E+22	3,257599E+22	1,241898E+23	6,515189E+22	1,893417E+23
831	6,209367E+22	6,209611E+22	3,257653E+22	3,257546E+22	1,241898E+23	6,515199E+22	1,893418E+23
832	6,209611E+22	6,209665E+22	3,257510E+22	3,257631E+22	1,241928E+23	6,515140E+22	1,893442E+23
833	6,209536E+22	6,209456E+22	3,257582E+22	3,257528E+22	1,241899E+23	6,515110E+22	1,893410E+23
834	6,209388E+22	6,209630E+22	3,257678E+22	3,257590E+22	1,241902E+23	6,515268E+22	1,893429E+23
835	6,209651E+22	6,209466E+22	3,257617E+22	3,257663E+22	1,241912E+23	6,515280E+22	1,893440E+23
836	6,209395E+22	6,209401E+22	3,257742E+22	3,257641E+22	1,241880E+23	6,515384E+22	1,893418E+23
837	6,209390E+22	6,209542E+22	3,257736E+22	3,257837E+22	1,241893E+23	6,515573E+22	1,893451E+23
838	6,209506E+22	6,209287E+22	3,257756E+22	3,257855E+22	1,241879E+23	6,515610E+22	1,893440E+23
839	6,209204E+22	6,209358E+22	3,257944E+22	3,257837E+22	1,241856E+23	6,515781E+22	1,893434E+23
840	6,209411E+22	6,209418E+22	3,257891E+22	3,257983E+22	1,241883E+23	6,515874E+22	1,893470E+23
841	6,209397E+22	6,209176E+22	3,257971E+22	3,257930E+22	1,241857E+23	6,515900E+22	1,893447E+23
842	6,209109E+22	6,209366E+22	3,258088E+22	3,257974E+22	1,241847E+23	6,516062E+22	1,893454E+23
843	6,209352E+22	6,209320E+22	3,257975E+22	3,258061E+22	1,241867E+23	6,516036E+22	1,893471E+23
844	6,209158E+22	6,209191E+22	3,258035E+22	3,257948E+22	1,241835E+23	6,515984E+22	1,893433E+23
845	6,209148E+22	6,209357E+22	3,257990E+22	3,257997E+22	1,241850E+23	6,515987E+22	1,893449E+23
846	6,209451E+22	6,209190E+22	3,257869E+22	3,257927E+22	1,241864E+23	6,515796E+22	1,893444E+23
847	6,209224E+22	6,209262E+22	3,257923E+22	3,257785E+22	1,241849E+23	6,515708E+22	1,893419E+23
848	6,209403E+22	6,209484E+22	3,257769E+22	3,257854E+22	1,241889E+23	6,515623E+22	1,893451E+23
849	6,209488E+22	6,209327E+22	3,257717E+22	3,257751E+22	1,241881E+23	6,515468E+22	1,893428E+23
850	6,209196E+22	6,209479E+22	3,257814E+22	3,257701E+22	1,241867E+23	6,515515E+22	1,893419E+23
851	6,209500E+22	6,209501E+22	3,257703E+22	3,257769E+22	1,241900E+23	6,515473E+22	1,893447E+23
852	6,209411E+22	6,209297E+22	3,257770E+22	3,257676E+22	1,241871E+23	6,515446E+22	1,893415E+23
853	6,209272E+22	6,209446E+22	3,257825E+22	3,257769E+22	1,241872E+23	6,515595E+22	1,893431E+23
854	6,209518E+22	6,209339E+22	3,257751E+22	3,257857E+22	1,241886E+23	6,515608E+22	1,893446E+23
855	6,209211E+22	6,209272E+22	3,257899E+22	3,257837E+22	1,241848E+23	6,515736E+22	1,893422E+23
856	6,209249E+22	6,209425E+22	3,257904E+22	3,257991E+22	1,241867E+23	6,515895E+22	1,893457E+23
857	6,209402E+22	6,209182E+22	3,257936E+22	3,258010E+22	1,241858E+23	6,515946E+22	1,893453E+23
858	6,209075E+22	6,209196E+22	3,258144E+22	3,258000E+22	1,241827E+23	6,516144E+22	1,893441E+23
859	6,209292E+22	6,209274E+22	3,258098E+22	3,258147E+22	1,241857E+23	6,516245E+22	1,893481E+23
860	6,209205E+22	6,209075E+22	3,258154E+22	3,258113E+22	1,241828E+23	6,516268E+22	1,893455E+23
861	6,208939E+22	6,209210E+22	3,258225E+22	3,258166E+22	1,241815E+23	6,516391E+22	1,893454E+23
862	6,209225E+22	6,209158E+22	3,258107E+22	3,258223E+22	1,241838E+23	6,516329E+22	1,893471E+23
863	6,209045E+22	6,209024E+22	3,258180E+22	3,258086E+22	1,241807E+23	6,516266E+22	1,893433E+23
864	6,209086E+22	6,209232E+22	3,258117E+22	3,258099E+22	1,241832E+23	6,516217E+22	1,893453E+23
865	6,209370E+22	6,209134E+22	3,257989E+22	3,258057E+22	1,241850E+23	6,516045E+22	1,893455E+23
866	6,209074E+22	6,209187E+22	3,258055E+22	3,257935E+22	1,241826E+23	6,515990E+22	1,893425E+23
867	6,209263E+22	6,209390E+22	3,257928E+22	3,257990E+22	1,241865E+23	6,515918E+22	1,893457E+23
868	6,209321E+22	6,209226E+22	3,257892E+22	3,257885E+22	1,241855E+23	6,515777E+22	1,893432E+23
869	6,209090E+22	6,209299E+22	3,257963E+22	3,257848E+22	1,241839E+23	6,515811E+22	1,893420E+23
870	6,209404E+22	6,209326E+22	3,257854E+22	3,257922E+22	1,241873E+23	6,515776E+22	1,893451E+23
871	6,209269E+22	6,209148E+22	3,257929E+22	3,257859E+22	1,241842E+23	6,515789E+22	1,893421E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
872	6,209129E+22	6,209334E+22	3,257965E+22	3,257946E+22	1,241846E+23	6,515911E+22	1,893437E+23
873	6,209374E+22	6,209249E+22	3,257897E+22	3,258050E+22	1,241862E+23	6,515947E+22	1,893457E+23
874	6,209064E+22	6,209109E+22	3,258079E+22	3,258012E+22	1,241817E+23	6,516091E+22	1,893426E+23
875	6,209156E+22	6,209256E+22	3,258114E+22	3,258133E+22	1,241841E+23	6,516247E+22	1,893466E+23
876	6,209274E+22	6,209059E+22	3,258146E+22	3,258158E+22	1,241833E+23	6,516304E+22	1,893464E+23
877	6,208938E+22	6,209046E+22	3,258312E+22	3,258183E+22	1,241798E+23	6,516495E+22	1,893448E+23
878	6,209115E+22	6,209160E+22	3,258256E+22	3,258336E+22	1,241828E+23	6,516592E+22	1,893487E+23
879	6,208999E+22	6,208944E+22	3,258322E+22	3,258304E+22	1,241794E+23	6,516626E+22	1,893457E+23
880	6,208794E+22	6,209067E+22	3,258376E+22	3,258313E+22	1,241786E+23	6,516689E+22	1,893455E+23
881	6,209141E+22	6,209038E+22	3,258246E+22	3,258367E+22	1,241818E+23	6,516613E+22	1,893479E+23
882	6,208957E+22	6,208862E+22	3,258325E+22	3,258225E+22	1,241782E+23	6,516551E+22	1,893437E+23
883	6,209011E+22	6,209121E+22	3,258265E+22	3,258230E+22	1,241813E+23	6,516495E+22	1,893463E+23
884	6,209224E+22	6,209082E+22	3,258123E+22	3,258193E+22	1,241831E+23	6,516316E+22	1,893462E+23
885	6,208936E+22	6,209059E+22	3,258172E+22	3,258086E+22	1,241800E+23	6,516258E+22	1,893425E+23
886	6,209142E+22	6,209250E+22	3,258068E+22	3,258115E+22	1,241839E+23	6,516183E+22	1,893457E+23
887	6,209196E+22	6,209064E+22	3,258054E+22	3,258017E+22	1,241826E+23	6,516071E+22	1,893433E+23
888	6,208991E+22	6,209153E+22	3,258111E+22	3,257977E+22	1,241814E+23	6,516087E+22	1,893423E+23
889	6,209285E+22	6,209236E+22	3,257990E+22	3,258094E+22	1,241852E+23	6,516084E+22	1,893461E+23
890	6,209095E+22	6,209023E+22	3,258083E+22	3,258052E+22	1,241812E+23	6,516134E+22	1,893425E+23
891	6,208992E+22	6,209204E+22	3,258144E+22	3,258118E+22	1,241820E+23	6,516262E+22	1,893446E+23
892	6,209224E+22	6,209133E+22	3,258095E+22	3,258207E+22	1,241836E+23	6,516303E+22	1,893466E+23
893	6,208967E+22	6,208931E+22	3,258261E+22	3,258183E+22	1,241790E+23	6,516444E+22	1,893434E+23
894	6,209049E+22	6,209101E+22	3,258302E+22	3,258299E+22	1,241815E+23	6,516601E+22	1,893475E+23
895	6,209098E+22	6,208935E+22	3,258336E+22	3,258357E+22	1,241803E+23	6,516693E+22	1,893473E+23
896	6,208757E+22	6,208937E+22	3,258470E+22	3,258375E+22	1,241769E+23	6,516845E+22	1,893454E+23
897	6,208941E+22	6,209049E+22	3,258408E+22	3,258531E+22	1,241799E+23	6,516938E+22	1,893493E+23
898	6,208853E+22	6,208757E+22	3,258491E+22	3,258475E+22	1,241761E+23	6,516966E+22	1,893458E+23
899	6,208733E+22	6,208881E+22	3,258542E+22	3,258438E+22	1,241761E+23	6,516980E+22	1,893459E+23
900	6,209047E+22	6,208924E+22	3,258403E+22	3,258484E+22	1,241797E+23	6,516887E+22	1,893486E+23
901	6,208868E+22	6,208748E+22	3,258435E+22	3,258367E+22	1,241762E+23	6,516802E+22	1,893442E+23
902	6,208880E+22	6,209038E+22	3,258381E+22	3,258359E+22	1,241792E+23	6,516740E+22	1,893466E+23
903	6,209052E+22	6,208995E+22	3,258268E+22	3,258328E+22	1,241805E+23	6,516596E+22	1,893464E+23
904	6,208810E+22	6,208943E+22	3,258313E+22	3,258201E+22	1,241775E+23	6,516513E+22	1,893427E+23
905	6,209034E+22	6,209138E+22	3,258213E+22	3,258250E+22	1,241817E+23	6,516463E+22	1,893463E+23
906	6,209072E+22	6,208898E+22	3,258218E+22	3,258180E+22	1,241797E+23	6,516398E+22	1,893437E+23
907	6,208881E+22	6,209014E+22	3,258269E+22	3,258147E+22	1,241789E+23	6,516415E+22	1,893431E+23
908	6,209121E+22	6,209146E+22	3,258147E+22	3,258274E+22	1,241827E+23	6,516421E+22	1,893469E+23
909	6,208972E+22	6,208860E+22	3,258221E+22	3,258239E+22	1,241783E+23	6,516460E+22	1,893429E+23
910	6,208894E+22	6,209043E+22	3,258311E+22	3,258267E+22	1,241794E+23	6,516578E+22	1,893451E+23
911	6,209107E+22	6,208986E+22	3,258287E+22	3,258363E+22	1,241809E+23	6,516650E+22	1,893474E+23
912	6,208847E+22	6,208805E+22	3,258441E+22	3,258341E+22	1,241765E+23	6,516782E+22	1,893443E+23
913	6,208884E+22	6,209026E+22	3,258472E+22	3,258492E+22	1,241791E+23	6,516964E+22	1,893487E+23
914	6,208885E+22	6,208792E+22	3,258523E+22	3,258565E+22	1,241768E+23	6,517088E+22	1,893477E+23
915	6,208597E+22	6,208773E+22	3,258659E+22	3,258553E+22	1,241737E+23	6,517212E+22	1,893458E+23
916	6,208800E+22	6,208900E+22	3,258590E+22	3,258679E+22	1,241770E+23	6,517269E+22	1,893497E+23
917	6,208780E+22	6,208555E+22	3,258632E+22	3,258627E+22	1,241733E+23	6,517259E+22	1,893459E+23
918	6,208669E+22	6,208736E+22	3,258678E+22	3,258570E+22	1,241741E+23	6,517248E+22	1,893465E+23
919	6,208917E+22	6,208839E+22	3,258537E+22	3,258634E+22	1,241776E+23	6,517171E+22	1,893493E+23
920	6,208725E+22	6,208684E+22	3,258549E+22	3,258504E+22	1,241741E+23	6,517053E+22	1,893446E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
921	6,208735E+22	6,208970E+22	3,258505E+22	3,258493E+22	1,241770E+23	6,516998E+22	1,893470E+23
922	6,208907E+22	6,208840E+22	3,258430E+22	3,258458E+22	1,241775E+23	6,516888E+22	1,893464E+23
923	6,208724E+22	6,208782E+22	3,258479E+22	3,258321E+22	1,241751E+23	6,516800E+22	1,893431E+23
924	6,208906E+22	6,209022E+22	3,258375E+22	3,258390E+22	1,241793E+23	6,516765E+22	1,893469E+23
925	6,208950E+22	6,208756E+22	3,258340E+22	3,258366E+22	1,241771E+23	6,516707E+22	1,893441E+23
926	6,208752E+22	6,208892E+22	3,258399E+22	3,258318E+22	1,241764E+23	6,516717E+22	1,893436E+23
927	6,208971E+22	6,209025E+22	3,258310E+22	3,258443E+22	1,241800E+23	6,516753E+22	1,893475E+23
928	6,208873E+22	6,208734E+22	3,258381E+22	3,258382E+22	1,241761E+23	6,516763E+22	1,893437E+23
929	6,208796E+22	6,208930E+22	3,258485E+22	3,258420E+22	1,241773E+23	6,516904E+22	1,893463E+23
930	6,208960E+22	6,208840E+22	3,258494E+22	3,258546E+22	1,241780E+23	6,517040E+22	1,893484E+23
931	6,208692E+22	6,208676E+22	3,258635E+22	3,258534E+22	1,241737E+23	6,517169E+22	1,893454E+23
932	6,208665E+22	6,208912E+22	3,258664E+22	3,258690E+22	1,241758E+23	6,517354E+22	1,893493E+23
933	6,208732E+22	6,208591E+22	3,258683E+22	3,258765E+22	1,241732E+23	6,517448E+22	1,893477E+23
934	6,208504E+22	6,208565E+22	3,258818E+22	3,258702E+22	1,241707E+23	6,517520E+22	1,893459E+23
935	6,208705E+22	6,208736E+22	3,258752E+22	3,258822E+22	1,241744E+23	6,517575E+22	1,893502E+23
936	6,208697E+22	6,208453E+22	3,258757E+22	3,258756E+22	1,241715E+23	6,517513E+22	1,893466E+23
937	6,208540E+22	6,208702E+22	3,258794E+22	3,258714E+22	1,241724E+23	6,517508E+22	1,893475E+23
938	6,208733E+22	6,208757E+22	3,258689E+22	3,258784E+22	1,241749E+23	6,517474E+22	1,893496E+23
939	6,208579E+22	6,208577E+22	3,258713E+22	3,258632E+22	1,241716E+23	6,517344E+22	1,893450E+23
940	6,208585E+22	6,208857E+22	3,258679E+22	3,258613E+22	1,241744E+23	6,517292E+22	1,893473E+23
941	6,208815E+22	6,208649E+22	3,258571E+22	3,258611E+22	1,241746E+23	6,517182E+22	1,893465E+23
942	6,208643E+22	6,208618E+22	3,258611E+22	3,258473E+22	1,241726E+23	6,517084E+22	1,893435E+23
943	6,208773E+22	6,208909E+22	3,258505E+22	3,258569E+22	1,241768E+23	6,517074E+22	1,893476E+23
944	6,208825E+22	6,208657E+22	3,258450E+22	3,258531E+22	1,241748E+23	6,516981E+22	1,893446E+23
945	6,208649E+22	6,208801E+22	3,258529E+22	3,258467E+22	1,241745E+23	6,516996E+22	1,893445E+23
946	6,208858E+22	6,208865E+22	3,258495E+22	3,258582E+22	1,241772E+23	6,517077E+22	1,893480E+23
947	6,208777E+22	6,208595E+22	3,258580E+22	3,258518E+22	1,241737E+23	6,517098E+22	1,893447E+23
948	6,208630E+22	6,208835E+22	3,258689E+22	3,258579E+22	1,241747E+23	6,517268E+22	1,893473E+23
949	6,208773E+22	6,208686E+22	3,258665E+22	3,258758E+22	1,241746E+23	6,517424E+22	1,893488E+23
950	6,208513E+22	6,208515E+22	3,258813E+22	3,258732E+22	1,241703E+23	6,517544E+22	1,893457E+23
951	6,208490E+22	6,208740E+22	3,258849E+22	3,258880E+22	1,241723E+23	6,517729E+22	1,893496E+23
952	6,208624E+22	6,208423E+22	3,258837E+22	3,258926E+22	1,241705E+23	6,517762E+22	1,893481E+23
953	6,208429E+22	6,208443E+22	3,258958E+22	3,258855E+22	1,241687E+23	6,517812E+22	1,893468E+23
954	6,208583E+22	6,208608E+22	3,258919E+22	3,258984E+22	1,241719E+23	6,517903E+22	1,893509E+23
955	6,208561E+22	6,208386E+22	3,258909E+22	3,258910E+22	1,241695E+23	6,517819E+22	1,893477E+23
956	6,208355E+22	6,208641E+22	3,258955E+22	3,258856E+22	1,241700E+23	6,517812E+22	1,893481E+23
957	6,208593E+22	6,208592E+22	3,258835E+22	3,258934E+22	1,241719E+23	6,517770E+22	1,893495E+23
958	6,208492E+22	6,208394E+22	3,258863E+22	3,258752E+22	1,241689E+23	6,517615E+22	1,893450E+23
959	6,208478E+22	6,208696E+22	3,258829E+22	3,258750E+22	1,241717E+23	6,517579E+22	1,893475E+23
960	6,208719E+22	6,208534E+22	3,258678E+22	3,258756E+22	1,241725E+23	6,517435E+22	1,893469E+23
961	6,208531E+22	6,208551E+22	3,258706E+22	3,258630E+22	1,241708E+23	6,517335E+22	1,893442E+23
962	6,208624E+22	6,208798E+22	3,258653E+22	3,258726E+22	1,241742E+23	6,517379E+22	1,893480E+23
963	6,208716E+22	6,208554E+22	3,258611E+22	3,258658E+22	1,241727E+23	6,517269E+22	1,893454E+23
964	6,208517E+22	6,208695E+22	3,258722E+22	3,258590E+22	1,241721E+23	6,517312E+22	1,893452E+23
965	6,208742E+22	6,208694E+22	3,258678E+22	3,258749E+22	1,241744E+23	6,517427E+22	1,893486E+23
966	6,208645E+22	6,208441E+22	3,258766E+22	3,258701E+22	1,241709E+23	6,517467E+22	1,893455E+23
967	6,208425E+22	6,208705E+22	3,258872E+22	3,258799E+22	1,241713E+23	6,517671E+22	1,893480E+23
968	6,208591E+22	6,208540E+22	3,258817E+22	3,258965E+22	1,241713E+23	6,517781E+22	1,893491E+23
969	6,208385E+22	6,208361E+22	3,258960E+22	3,258912E+22	1,241675E+23	6,517873E+22	1,893462E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
970	6,208379E+22	6,208543E+22	3,259035E+22	3,259043E+22	1,241692E+23	6,518078E+22	1,893500E+23
971	6,208540E+22	6,208292E+22	3,259010E+22	3,259066E+22	1,241683E+23	6,518076E+22	1,893491E+23
972	6,208292E+22	6,208377E+22	3,259131E+22	3,259001E+22	1,241667E+23	6,518133E+22	1,893480E+23
973	6,208426E+22	6,208495E+22	3,259068E+22	3,259159E+22	1,241692E+23	6,518227E+22	1,893515E+23
974	6,208410E+22	6,208266E+22	3,259070E+22	3,259058E+22	1,241668E+23	6,518128E+22	1,893480E+23
975	6,208199E+22	6,208503E+22	3,259123E+22	3,259000E+22	1,241670E+23	6,518123E+22	1,893482E+23
976	6,208484E+22	6,208437E+22	3,258968E+22	3,259062E+22	1,241692E+23	6,518030E+22	1,893495E+23
977	6,208419E+22	6,208271E+22	3,258978E+22	3,258890E+22	1,241669E+23	6,517868E+22	1,893456E+23
978	6,208365E+22	6,208554E+22	3,258966E+22	3,258909E+22	1,241692E+23	6,517875E+22	1,893479E+23
979	6,208589E+22	6,208457E+22	3,258802E+22	3,258908E+22	1,241705E+23	6,517710E+22	1,893476E+23
980	6,208385E+22	6,208484E+22	3,258847E+22	3,258767E+22	1,241687E+23	6,517615E+22	1,893448E+23
981	6,208513E+22	6,208629E+22	3,258801E+22	3,258869E+22	1,241714E+23	6,517670E+22	1,893481E+23
982	6,208634E+22	6,208394E+22	3,258786E+22	3,258782E+22	1,241703E+23	6,517568E+22	1,893460E+23
983	6,208385E+22	6,208558E+22	3,258910E+22	3,258749E+22	1,241694E+23	6,517659E+22	1,893460E+23
984	6,208577E+22	6,208579E+22	3,258834E+22	3,258932E+22	1,241716E+23	6,517766E+22	1,893492E+23
985	6,208469E+22	6,208345E+22	3,258914E+22	3,258906E+22	1,241681E+23	6,517820E+22	1,893463E+23
986	6,208233E+22	6,208532E+22	3,259065E+22	3,259005E+22	1,241676E+23	6,518070E+22	1,893483E+23
987	6,208454E+22	6,208386E+22	3,259004E+22	3,259135E+22	1,241684E+23	6,518139E+22	1,893498E+23
988	6,208275E+22	6,208221E+22	3,259152E+22	3,259065E+22	1,241650E+23	6,518217E+22	1,893471E+23
989	6,208289E+22	6,208359E+22	3,259208E+22	3,259220E+22	1,241665E+23	6,518428E+22	1,893508E+23
990	6,208435E+22	6,208169E+22	3,259178E+22	3,259234E+22	1,241660E+23	6,518412E+22	1,893502E+23
991	6,208113E+22	6,208288E+22	3,259298E+22	3,259184E+22	1,241640E+23	6,518482E+22	1,893488E+23
992	6,208265E+22	6,208380E+22	3,259208E+22	3,259316E+22	1,241665E+23	6,518523E+22	1,893517E+23
993	6,208297E+22	6,208131E+22	3,259203E+22	3,259190E+22	1,241643E+23	6,518393E+22	1,893482E+23
994	6,208084E+22	6,208319E+22	3,259288E+22	3,259132E+22	1,241640E+23	6,518419E+22	1,893482E+23
995	6,208384E+22	6,208321E+22	3,259103E+22	3,259184E+22	1,241671E+23	6,518287E+22	1,893499E+23
996	6,208283E+22	6,208200E+22	3,259108E+22	3,259027E+22	1,241648E+23	6,518134E+22	1,893462E+23
997	6,208227E+22	6,208429E+22	3,259084E+22	3,259074E+22	1,241666E+23	6,518158E+22	1,893482E+23
998	6,208477E+22	6,208335E+22	3,258943E+22	3,259042E+22	1,241681E+23	6,517985E+22	1,893480E+23
999	6,208261E+22	6,208361E+22	3,259012E+22	3,258903E+22	1,241662E+23	6,517915E+22	1,893454E+23
1000	6,208413E+22	6,208492E+22	3,258949E+22	3,258998E+22	1,241691E+23	6,517947E+22	1,893485E+23
1001	6,208534E+22	6,208280E+22	3,258934E+22	3,258938E+22	1,241681E+23	6,517872E+22	1,893469E+23
1002	6,208218E+22	6,208416E+22	3,259093E+22	3,258948E+22	1,241663E+23	6,518041E+22	1,893468E+23
1003	6,208385E+22	6,208476E+22	3,259003E+22	3,259129E+22	1,241686E+23	6,518132E+22	1,893499E+23
1004	6,208295E+22	6,208218E+22	3,259099E+22	3,259092E+22	1,241651E+23	6,518191E+22	1,893470E+23
1005	6,208121E+22	6,208301E+22	3,259244E+22	3,259190E+22	1,241642E+23	6,518433E+22	1,893486E+23
1006	6,208383E+22	6,208191E+22	3,259191E+22	3,259288E+22	1,241657E+23	6,518480E+22	1,893505E+23
1007	6,208165E+22	6,208092E+22	3,259335E+22	3,259234E+22	1,241626E+23	6,518568E+22	1,893482E+23
1008	6,208146E+22	6,208261E+22	3,259354E+22	3,259390E+22	1,241641E+23	6,518744E+22	1,893515E+23
1009	6,208276E+22	6,208107E+22	3,259321E+22	3,259404E+22	1,241638E+23	6,518725E+22	1,893511E+23
1010	6,207934E+22	6,208148E+22	3,259481E+22	3,259348E+22	1,241608E+23	6,518829E+22	1,893491E+23
1011	6,208104E+22	6,208255E+22	3,259378E+22	3,259445E+22	1,241636E+23	6,518823E+22	1,893518E+23
1012	6,208173E+22	6,208007E+22	3,259369E+22	3,259321E+22	1,241618E+23	6,518690E+22	1,893487E+23
1013	6,207984E+22	6,208125E+22	3,259424E+22	3,259295E+22	1,241611E+23	6,518719E+22	1,893483E+23
1014	6,208282E+22	6,208192E+22	3,259231E+22	3,259340E+22	1,241647E+23	6,518571E+22	1,893505E+23
1015	6,208144E+22	6,208109E+22	3,259230E+22	3,259187E+22	1,241625E+23	6,518417E+22	1,893467E+23
1016	6,208118E+22	6,208310E+22	3,259192E+22	3,259205E+22	1,241643E+23	6,518397E+22	1,893482E+23
1017	6,208406E+22	6,208225E+22	3,259066E+22	3,259151E+22	1,241663E+23	6,518218E+22	1,893485E+23
1018	6,208162E+22	6,208208E+22	3,259188E+22	3,259032E+22	1,241637E+23	6,518220E+22	1,893459E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1019	6,208272E+22	6,208404E+22	3,259119E+22	3,259135E+22	1,241668E+23	6,518254E+22	1,893493E+23
1020	6,208356E+22	6,208209E+22	3,259110E+22	3,259114E+22	1,241657E+23	6,518224E+22	1,893479E+23
1021	6,208038E+22	6,208244E+22	3,259265E+22	3,259160E+22	1,241628E+23	6,518424E+22	1,893471E+23
1022	6,208249E+22	6,208296E+22	3,259190E+22	3,259311E+22	1,241654E+23	6,518501E+22	1,893505E+23
1023	6,208167E+22	6,208046E+22	3,259289E+22	3,259270E+22	1,241621E+23	6,518559E+22	1,893477E+23
1024	6,208039E+22	6,208132E+22	3,259401E+22	3,259356E+22	1,241617E+23	6,518757E+22	1,893493E+23
1025	6,208299E+22	6,208077E+22	3,259342E+22	3,259456E+22	1,241638E+23	6,518799E+22	1,893517E+23
1026	6,208000E+22	6,207980E+22	3,259518E+22	3,259429E+22	1,241598E+23	6,518947E+22	1,893493E+23
1027	6,207947E+22	6,208195E+22	3,259522E+22	3,259556E+22	1,241614E+23	6,519077E+22	1,893522E+23
1028	6,208097E+22	6,207998E+22	3,259503E+22	3,259557E+22	1,241609E+23	6,519060E+22	1,893515E+23
1029	6,207804E+22	6,207929E+22	3,259652E+22	3,259506E+22	1,241573E+23	6,519158E+22	1,893489E+23
1030	6,208015E+22	6,208064E+22	3,259539E+22	3,259578E+22	1,241608E+23	6,519118E+22	1,893520E+23
1031	6,208053E+22	6,207877E+22	3,259510E+22	3,259474E+22	1,241593E+23	6,518985E+22	1,893491E+23
1032	6,207870E+22	6,208017E+22	3,259516E+22	3,259448E+22	1,241589E+23	6,518964E+22	1,893485E+23
1033	6,208176E+22	6,208117E+22	3,259328E+22	3,259475E+22	1,241629E+23	6,518802E+22	1,893509E+23
1034	6,208025E+22	6,207992E+22	3,259378E+22	3,259316E+22	1,241602E+23	6,518695E+22	1,893471E+23
1035	6,208005E+22	6,208225E+22	3,259342E+22	3,259299E+22	1,241623E+23	6,518641E+22	1,893487E+23
1036	6,208300E+22	6,208137E+22	3,259239E+22	3,259270E+22	1,241644E+23	6,518510E+22	1,893495E+23
1037	6,208036E+22	6,208040E+22	3,259356E+22	3,259211E+22	1,241608E+23	6,518568E+22	1,893464E+23
1038	6,208112E+22	6,208272E+22	3,259290E+22	3,259325E+22	1,241638E+23	6,518615E+22	1,893500E+23
1039	6,208172E+22	6,208081E+22	3,259281E+22	3,259322E+22	1,241625E+23	6,518603E+22	1,893486E+23
1040	6,207914E+22	6,208051E+22	3,259408E+22	3,259341E+22	1,241596E+23	6,518749E+22	1,893471E+23
1041	6,208176E+22	6,208128E+22	3,259341E+22	3,259464E+22	1,241630E+23	6,518806E+22	1,893511E+23
1042	6,208074E+22	6,207882E+22	3,259471E+22	3,259433E+22	1,241596E+23	6,518904E+22	1,893486E+23
1043	6,207890E+22	6,208054E+22	3,259571E+22	3,259508E+22	1,241594E+23	6,519079E+22	1,893502E+23
1044	6,208115E+22	6,208030E+22	3,259527E+22	3,259633E+22	1,241615E+23	6,519160E+22	1,893531E+23
1045	6,207808E+22	6,207825E+22	3,259707E+22	3,259627E+22	1,241563E+23	6,519333E+22	1,893497E+23
1046	6,207784E+22	6,208027E+22	3,259721E+22	3,259716E+22	1,241581E+23	6,519438E+22	1,893525E+23
1047	6,207953E+22	6,207829E+22	3,259690E+22	3,259715E+22	1,241578E+23	6,519405E+22	1,893519E+23
1048	6,207716E+22	6,207735E+22	3,259784E+22	3,259659E+22	1,241545E+23	6,519442E+22	1,893489E+23
1049	6,207938E+22	6,207938E+22	3,259650E+22	3,259728E+22	1,241588E+23	6,519378E+22	1,893525E+23
1050	6,207924E+22	6,207774E+22	3,259635E+22	3,259641E+22	1,241570E+23	6,519276E+22	1,893497E+23
1051	6,207729E+22	6,207965E+22	3,259630E+22	3,259572E+22	1,241569E+23	6,519203E+22	1,893490E+23
1052	6,208067E+22	6,208042E+22	3,259474E+22	3,259582E+22	1,241611E+23	6,519056E+22	1,893517E+23
1053	6,207934E+22	6,207824E+22	3,259537E+22	3,259440E+22	1,241576E+23	6,518977E+22	1,893473E+23
1054	6,207911E+22	6,208086E+22	3,259513E+22	3,259418E+22	1,241600E+23	6,518931E+22	1,893493E+23
1055	6,208139E+22	6,208035E+22	3,259408E+22	3,259435E+22	1,241617E+23	6,518842E+22	1,893502E+23
1056	6,207878E+22	6,207914E+22	3,259485E+22	3,259402E+22	1,241579E+23	6,518887E+22	1,893468E+23
1057	6,207975E+22	6,208138E+22	3,259424E+22	3,259501E+22	1,241611E+23	6,518925E+22	1,893504E+23
1058	6,208029E+22	6,207910E+22	3,259455E+22	3,259502E+22	1,241594E+23	6,518957E+22	1,893490E+23
1059	6,207801E+22	6,207927E+22	3,259567E+22	3,259481E+22	1,241573E+23	6,519048E+22	1,893478E+23
1060	6,208079E+22	6,208012E+22	3,259523E+22	3,259618E+22	1,241609E+23	6,519142E+22	1,893523E+23
1061	6,207941E+22	6,207728E+22	3,259656E+22	3,259630E+22	1,241567E+23	6,519286E+22	1,893495E+23
1062	6,207723E+22	6,207942E+22	3,259761E+22	3,259696E+22	1,241566E+23	6,519457E+22	1,893512E+23
1063	6,207913E+22	6,207910E+22	3,259726E+22	3,259824E+22	1,241582E+23	6,519550E+22	1,893537E+23
1064	6,207669E+22	6,207629E+22	3,259870E+22	3,259799E+22	1,241530E+23	6,519668E+22	1,893497E+23
1065	6,207690E+22	6,207841E+22	3,259875E+22	3,259858E+22	1,241553E+23	6,519733E+22	1,893526E+23
1066	6,207840E+22	6,207662E+22	3,259852E+22	3,259876E+22	1,241550E+23	6,519728E+22	1,893523E+23
1067	6,207582E+22	6,207660E+22	3,259904E+22	3,259798E+22	1,241524E+23	6,519702E+22	1,893494E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1068	6,207803E+22	6,207889E+22	3,259782E+22	3,259876E+22	1,241569E+23	6,519658E+22	1,893535E+23
1069	6,207789E+22	6,207650E+22	3,259776E+22	3,259793E+22	1,241544E+23	6,519570E+22	1,893501E+23
1070	6,207621E+22	6,207846E+22	3,259792E+22	3,259684E+22	1,241547E+23	6,519476E+22	1,893494E+23
1071	6,207951E+22	6,207931E+22	3,259645E+22	3,259702E+22	1,241588E+23	6,519347E+22	1,893523E+23
1072	6,207843E+22	6,207665E+22	3,259669E+22	3,259584E+22	1,241551E+23	6,519253E+22	1,893476E+23
1073	6,207789E+22	6,207970E+22	3,259641E+22	3,259578E+22	1,241576E+23	6,519220E+22	1,893498E+23
1074	6,207962E+22	6,207918E+22	3,259551E+22	3,259631E+22	1,241588E+23	6,519182E+22	1,893506E+23
1075	6,207710E+22	6,207803E+22	3,259616E+22	3,259561E+22	1,241551E+23	6,519177E+22	1,893469E+23
1076	6,207871E+22	6,207999E+22	3,259589E+22	3,259648E+22	1,241587E+23	6,519237E+22	1,893511E+23
1077	6,207944E+22	6,207709E+22	3,259628E+22	3,259660E+22	1,241565E+23	6,519287E+22	1,893494E+23
1078	6,207709E+22	6,207785E+22	3,259753E+22	3,259628E+22	1,241549E+23	6,519381E+22	1,893488E+23
1079	6,207913E+22	6,207926E+22	3,259717E+22	3,259797E+22	1,241584E+23	6,519514E+22	1,893535E+23
1080	6,207767E+22	6,207605E+22	3,259820E+22	3,259828E+22	1,241537E+23	6,519648E+22	1,893502E+23
1081	6,207558E+22	6,207809E+22	3,259938E+22	3,259872E+22	1,241537E+23	6,519809E+22	1,893518E+23
1082	6,207740E+22	6,207740E+22	3,259924E+22	3,260007E+22	1,241548E+23	6,519931E+22	1,893541E+23
1083	6,207531E+22	6,207488E+22	3,260035E+22	3,259947E+22	1,241502E+23	6,519982E+22	1,893500E+23
1084	6,207590E+22	6,207707E+22	3,260040E+22	3,260019E+22	1,241530E+23	6,520058E+22	1,893536E+23
1085	6,207709E+22	6,207514E+22	3,259998E+22	3,260066E+22	1,241522E+23	6,520064E+22	1,893529E+23
1086	6,207455E+22	6,207566E+22	3,260042E+22	3,259959E+22	1,241502E+23	6,520000E+22	1,893502E+23
1087	6,207659E+22	6,207790E+22	3,259936E+22	3,260017E+22	1,241545E+23	6,519953E+22	1,893540E+23
1088	6,207704E+22	6,207500E+22	3,259903E+22	3,259914E+22	1,241520E+23	6,519817E+22	1,893502E+23
1089	6,207557E+22	6,207707E+22	3,259922E+22	3,259780E+22	1,241526E+23	6,519702E+22	1,893497E+23
1090	6,207815E+22	6,207806E+22	3,259796E+22	3,259840E+22	1,241562E+23	6,519636E+22	1,893526E+23
1091	6,207675E+22	6,207602E+22	3,259791E+22	3,259727E+22	1,241528E+23	6,519517E+22	1,893479E+23
1092	6,207632E+22	6,207879E+22	3,259783E+22	3,259745E+22	1,241551E+23	6,519528E+22	1,893504E+23
1093	6,207810E+22	6,207746E+22	3,259711E+22	3,259810E+22	1,241556E+23	6,519521E+22	1,893508E+23
1094	6,207615E+22	6,207645E+22	3,259784E+22	3,259701E+22	1,241526E+23	6,519485E+22	1,893474E+23
1095	6,207770E+22	6,207854E+22	3,259774E+22	3,259795E+22	1,241562E+23	6,519569E+22	1,893519E+23
1096	6,207857E+22	6,207555E+22	3,259782E+22	3,259831E+22	1,241541E+23	6,519613E+22	1,893503E+23
1097	6,207580E+22	6,207681E+22	3,259914E+22	3,259808E+22	1,241526E+23	6,519722E+22	1,893498E+23
1098	6,207704E+22	6,207822E+22	3,259907E+22	3,260008E+22	1,241553E+23	6,519915E+22	1,893544E+23
1099	6,207571E+22	6,207493E+22	3,259998E+22	3,260003E+22	1,241506E+23	6,520001E+22	1,893507E+23
1100	6,207424E+22	6,207648E+22	3,260133E+22	3,260041E+22	1,241507E+23	6,520174E+22	1,893525E+23
1101	6,207614E+22	6,207526E+22	3,260112E+22	3,260188E+22	1,241514E+23	6,520300E+22	1,893544E+23
1102	6,207421E+22	6,207335E+22	3,260203E+22	3,260110E+22	1,241476E+23	6,520313E+22	1,893507E+23
1103	6,207442E+22	6,207611E+22	3,260201E+22	3,260193E+22	1,241505E+23	6,520394E+22	1,893545E+23
1104	6,207584E+22	6,207390E+22	3,260117E+22	3,260233E+22	1,241497E+23	6,520350E+22	1,893532E+23
1105	6,207349E+22	6,207453E+22	3,260175E+22	3,260082E+22	1,241480E+23	6,520256E+22	1,893506E+23
1106	6,207535E+22	6,207669E+22	3,260092E+22	3,260138E+22	1,241520E+23	6,520230E+22	1,893543E+23
1107	6,207587E+22	6,207401E+22	3,260037E+22	3,260011E+22	1,241499E+23	6,520049E+22	1,893504E+23
1108	6,207451E+22	6,207604E+22	3,260069E+22	3,259916E+22	1,241506E+23	6,519986E+22	1,893504E+23
1109	6,207648E+22	6,207673E+22	3,259938E+22	3,260021E+22	1,241532E+23	6,519958E+22	1,893528E+23
1110	6,207524E+22	6,207486E+22	3,259932E+22	3,259894E+22	1,241501E+23	6,519826E+22	1,893484E+23
1111	6,207497E+22	6,207736E+22	3,259946E+22	3,259900E+22	1,241523E+23	6,519846E+22	1,893508E+23
1112	6,207740E+22	6,207553E+22	3,259847E+22	3,259956E+22	1,241529E+23	6,519803E+22	1,893510E+23
1113	6,207564E+22	6,207496E+22	3,259930E+22	3,259828E+22	1,241506E+23	6,519758E+22	1,893482E+23
1114	6,207635E+22	6,207747E+22	3,259946E+22	3,259962E+22	1,241538E+23	6,519908E+22	1,893529E+23
1115	6,207671E+22	6,207508E+22	3,259940E+22	3,260000E+22	1,241518E+23	6,519940E+22	1,893512E+23
1116	6,207402E+22	6,207592E+22	3,260105E+22	3,260001E+22	1,241499E+23	6,520106E+22	1,893510E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1117	6,207501E+22	6,207645E+22	3,260118E+22	3,260212E+22	1,241515E+23	6,520330E+22	1,893548E+23
1118	6,207436E+22	6,207315E+22	3,260204E+22	3,260178E+22	1,241475E+23	6,520382E+22	1,893513E+23
1119	6,207301E+22	6,207457E+22	3,260335E+22	3,260216E+22	1,241476E+23	6,520551E+22	1,893531E+23
1120	6,207515E+22	6,207339E+22	3,260258E+22	3,260379E+22	1,241485E+23	6,520636E+22	1,893549E+23
1121	6,207319E+22	6,207217E+22	3,260326E+22	3,260279E+22	1,241454E+23	6,520606E+22	1,893514E+23
1122	6,207280E+22	6,207505E+22	3,260343E+22	3,260364E+22	1,241479E+23	6,520707E+22	1,893549E+23
1123	6,207446E+22	6,207308E+22	3,260249E+22	3,260345E+22	1,241475E+23	6,520595E+22	1,893535E+23
1124	6,207268E+22	6,207335E+22	3,260328E+22	3,260187E+22	1,241460E+23	6,520515E+22	1,893512E+23
1125	6,207408E+22	6,207514E+22	3,260256E+22	3,260264E+22	1,241492E+23	6,520520E+22	1,893544E+23
1126	6,207457E+22	6,207297E+22	3,260188E+22	3,260145E+22	1,241475E+23	6,520333E+22	1,893509E+23
1127	6,207278E+22	6,207505E+22	3,260223E+22	3,260079E+22	1,241478E+23	6,520302E+22	1,893508E+23
1128	6,207506E+22	6,207524E+22	3,260058E+22	3,260196E+22	1,241503E+23	6,520254E+22	1,893528E+23
1129	6,207431E+22	6,207339E+22	3,260061E+22	3,260034E+22	1,241477E+23	6,520095E+22	1,893486E+23
1130	6,207394E+22	6,207591E+22	3,260100E+22	3,260048E+22	1,241499E+23	6,520148E+22	1,893513E+23
1131	6,207645E+22	6,207452E+22	3,259988E+22	3,260083E+22	1,241510E+23	6,520071E+22	1,893517E+23
1132	6,207465E+22	6,207407E+22	3,260095E+22	3,259995E+22	1,241487E+23	6,520090E+22	1,893496E+23
1133	6,207444E+22	6,207635E+22	3,260129E+22	3,260166E+22	1,241508E+23	6,520295E+22	1,893537E+23
1134	6,207488E+22	6,207390E+22	3,260135E+22	3,260192E+22	1,241488E+23	6,520327E+22	1,893521E+23
1135	6,207235E+22	6,207422E+22	3,260324E+22	3,260185E+22	1,241466E+23	6,520509E+22	1,893517E+23
1136	6,207393E+22	6,207411E+22	3,260292E+22	3,260390E+22	1,241480E+23	6,520682E+22	1,893549E+23
1137	6,207351E+22	6,207122E+22	3,260366E+22	3,260338E+22	1,241447E+23	6,520704E+22	1,893518E+23
1138	6,207160E+22	6,207323E+22	3,260493E+22	3,260403E+22	1,241448E+23	6,520896E+22	1,893538E+23
1139	6,207352E+22	6,207267E+22	3,260387E+22	3,260537E+22	1,241462E+23	6,520924E+22	1,893554E+23
1140	6,207191E+22	6,207138E+22	3,260480E+22	3,260434E+22	1,241433E+23	6,520914E+22	1,893524E+23
1141	6,207125E+22	6,207372E+22	3,260518E+22	3,260506E+22	1,241450E+23	6,521024E+22	1,893552E+23
1142	6,207333E+22	6,207189E+22	3,260424E+22	3,260459E+22	1,241452E+23	6,520883E+22	1,893541E+23
1143	6,207147E+22	6,207201E+22	3,260508E+22	3,260319E+22	1,241435E+23	6,520827E+22	1,893518E+23
1144	6,207278E+22	6,207360E+22	3,260382E+22	3,260431E+22	1,241464E+23	6,520813E+22	1,893545E+23
1145	6,207327E+22	6,207181E+22	3,260301E+22	3,260311E+22	1,241451E+23	6,520612E+22	1,893512E+23
1146	6,207125E+22	6,207375E+22	3,260348E+22	3,260255E+22	1,241450E+23	6,520603E+22	1,893510E+23
1147	6,207399E+22	6,207401E+22	3,260176E+22	3,260317E+22	1,241480E+23	6,520493E+22	1,893529E+23
1148	6,207393E+22	6,207211E+22	3,260198E+22	3,260153E+22	1,241460E+23	6,520351E+22	1,893495E+23
1149	6,207289E+22	6,207454E+22	3,260262E+22	3,260188E+22	1,241474E+23	6,520450E+22	1,893519E+23
1150	6,207518E+22	6,207380E+22	3,260157E+22	3,260233E+22	1,241490E+23	6,520390E+22	1,893529E+23
1151	6,207285E+22	6,207314E+22	3,260291E+22	3,260175E+22	1,241460E+23	6,520466E+22	1,893506E+23
1152	6,207262E+22	6,207471E+22	3,260308E+22	3,260361E+22	1,241473E+23	6,520669E+22	1,893540E+23
1153	6,207356E+22	6,207212E+22	3,260318E+22	3,260363E+22	1,241457E+23	6,520681E+22	1,893525E+23
1154	6,207093E+22	6,207222E+22	3,260512E+22	3,260371E+22	1,241431E+23	6,520883E+22	1,893520E+23
1155	6,207271E+22	6,207257E+22	3,260451E+22	3,260553E+22	1,241453E+23	6,521004E+22	1,893553E+23
1156	6,207249E+22	6,207007E+22	3,260517E+22	3,260525E+22	1,241426E+23	6,521043E+22	1,893530E+23
1157	6,206982E+22	6,207209E+22	3,260654E+22	3,260602E+22	1,241419E+23	6,521255E+22	1,893545E+23
1158	6,207202E+22	6,207173E+22	3,260558E+22	3,260694E+22	1,241438E+23	6,521253E+22	1,893563E+23
1159	6,207058E+22	6,207006E+22	3,260675E+22	3,260569E+22	1,241406E+23	6,521244E+22	1,893531E+23
1160	6,207021E+22	6,207192E+22	3,260676E+22	3,260638E+22	1,241421E+23	6,521314E+22	1,893553E+23
1161	6,207236E+22	6,207046E+22	3,260568E+22	3,260588E+22	1,241428E+23	6,521156E+22	1,893544E+23
1162	6,206985E+22	6,207086E+22	3,260644E+22	3,260491E+22	1,241407E+23	6,521135E+22	1,893521E+23
1163	6,207112E+22	6,207273E+22	3,260489E+22	3,260579E+22	1,241438E+23	6,521068E+22	1,893545E+23
1164	6,207221E+22	6,207077E+22	3,260423E+22	3,260461E+22	1,241430E+23	6,520885E+22	1,893518E+23
1165	6,207014E+22	6,207229E+22	3,260492E+22	3,260393E+22	1,241424E+23	6,520885E+22	1,893513E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1166	6,207334E+22	6,207278E+22	3,260331E+22	3,260427E+22	1,241461E+23	6,520758E+22	1,893537E+23
1167	6,207307E+22	6,207101E+22	3,260376E+22	3,260285E+22	1,241441E+23	6,520661E+22	1,893507E+23
1168	6,207163E+22	6,207327E+22	3,260405E+22	3,260356E+22	1,241449E+23	6,520761E+22	1,893525E+23
1169	6,207358E+22	6,207271E+22	3,260313E+22	3,260409E+22	1,241463E+23	6,520722E+22	1,893535E+23
1170	6,207094E+22	6,207169E+22	3,260471E+22	3,260374E+22	1,241426E+23	6,520846E+22	1,893511E+23
1171	6,207108E+22	6,207301E+22	3,260476E+22	3,260517E+22	1,241441E+23	6,520992E+22	1,893540E+23
1172	6,207268E+22	6,207040E+22	3,260492E+22	3,260531E+22	1,241431E+23	6,521022E+22	1,893533E+23
1173	6,206956E+22	6,207053E+22	3,260687E+22	3,260557E+22	1,241401E+23	6,521245E+22	1,893525E+23
1174	6,207126E+22	6,207157E+22	3,260621E+22	3,260731E+22	1,241428E+23	6,521352E+22	1,893564E+23
1175	6,207083E+22	6,206917E+22	3,260706E+22	3,260706E+22	1,241400E+23	6,521413E+22	1,893541E+23
1176	6,206832E+22	6,207060E+22	3,260819E+22	3,260774E+22	1,241389E+23	6,521593E+22	1,893549E+23
1177	6,207093E+22	6,207030E+22	3,260734E+22	3,260832E+22	1,241412E+23	6,521566E+22	1,893569E+23
1178	6,206930E+22	6,206852E+22	3,260849E+22	3,260725E+22	1,241378E+23	6,521574E+22	1,893536E+23
1179	6,206888E+22	6,207064E+22	3,260814E+22	3,260774E+22	1,241395E+23	6,521588E+22	1,893554E+23
1180	6,207120E+22	6,206949E+22	3,260690E+22	3,260756E+22	1,241407E+23	6,521446E+22	1,893551E+23
1181	6,206814E+22	6,206962E+22	3,260771E+22	3,260669E+22	1,241378E+23	6,521440E+22	1,893522E+23
1182	6,207000E+22	6,207158E+22	3,260626E+22	3,260713E+22	1,241416E+23	6,521339E+22	1,893550E+23
1183	6,207149E+22	6,206938E+22	3,260580E+22	3,260571E+22	1,241409E+23	6,521151E+22	1,893524E+23
1184	6,206953E+22	6,207064E+22	3,260621E+22	3,260509E+22	1,241402E+23	6,521130E+22	1,893515E+23
1185	6,207255E+22	6,207173E+22	3,260469E+22	3,260545E+22	1,241443E+23	6,521014E+22	1,893544E+23
1186	6,207134E+22	6,207017E+22	3,260527E+22	3,260458E+22	1,241415E+23	6,520985E+22	1,893514E+23
1187	6,206963E+22	6,207240E+22	3,260555E+22	3,260517E+22	1,241420E+23	6,521071E+22	1,893528E+23
1188	6,207207E+22	6,207150E+22	3,260482E+22	3,260586E+22	1,241436E+23	6,521069E+22	1,893543E+23
1189	6,206929E+22	6,206987E+22	3,260662E+22	3,260559E+22	1,241392E+23	6,521222E+22	1,893514E+23
1190	6,206998E+22	6,207131E+22	3,260666E+22	3,260682E+22	1,241413E+23	6,521348E+22	1,893548E+23
1191	6,207151E+22	6,206890E+22	3,260688E+22	3,260716E+22	1,241404E+23	6,521404E+22	1,893544E+23
1192	6,206819E+22	6,206903E+22	3,260836E+22	3,260766E+22	1,241372E+23	6,521602E+22	1,893533E+23
1193	6,206988E+22	6,207037E+22	3,260784E+22	3,260917E+22	1,241403E+23	6,521701E+22	1,893573E+23
1194	6,206924E+22	6,206785E+22	3,260888E+22	3,260888E+22	1,241371E+23	6,521776E+22	1,893549E+23
1195	6,206709E+22	6,206915E+22	3,260984E+22	3,260899E+22	1,241362E+23	6,521882E+22	1,893551E+23
1196	6,207005E+22	6,206896E+22	3,260895E+22	3,260969E+22	1,241390E+23	6,521864E+22	1,893576E+23
1197	6,206774E+22	6,206721E+22	3,261009E+22	3,260889E+22	1,241349E+23	6,521898E+22	1,893539E+23
1198	6,206729E+22	6,206966E+22	3,260959E+22	3,260928E+22	1,241370E+23	6,521887E+22	1,893558E+23
1199	6,206961E+22	6,206849E+22	3,260847E+22	3,260913E+22	1,241381E+23	6,521760E+22	1,893557E+23
1200	6,206704E+22	6,206804E+22	3,260889E+22	3,260813E+22	1,241351E+23	6,521702E+22	1,893521E+23
1201	6,206936E+22	6,207007E+22	3,260761E+22	3,260822E+22	1,241394E+23	6,521583E+22	1,893553E+23
1202	6,207057E+22	6,206816E+22	3,260722E+22	3,260702E+22	1,241387E+23	6,521424E+22	1,893530E+23
1203	6,206843E+22	6,206968E+22	3,260744E+22	3,260630E+22	1,241381E+23	6,521374E+22	1,893518E+23
1204	6,207121E+22	6,207110E+22	3,260600E+22	3,260709E+22	1,241423E+23	6,521309E+22	1,893554E+23
1205	6,206931E+22	6,206908E+22	3,260689E+22	3,260649E+22	1,241384E+23	6,521338E+22	1,893518E+23
1206	6,206804E+22	6,207096E+22	3,260738E+22	3,260678E+22	1,241390E+23	6,521416E+22	1,893532E+23
1207	6,207086E+22	6,206976E+22	3,260686E+22	3,260746E+22	1,241406E+23	6,521432E+22	1,893549E+23
1208	6,206832E+22	6,206776E+22	3,260822E+22	3,260735E+22	1,241361E+23	6,521557E+22	1,893517E+23
1209	6,206902E+22	6,206974E+22	3,260831E+22	3,260858E+22	1,241388E+23	6,521689E+22	1,893556E+23
1210	6,206986E+22	6,206783E+22	3,260853E+22	3,260922E+22	1,241377E+23	6,521775E+22	1,893554E+23
1211	6,206654E+22	6,206800E+22	3,260994E+22	3,260935E+22	1,241345E+23	6,521929E+22	1,893538E+23
1212	6,206866E+22	6,206929E+22	3,260960E+22	3,261079E+22	1,241380E+23	6,522040E+22	1,893583E+23
1213	6,206769E+22	6,206634E+22	3,261087E+22	3,261051E+22	1,241340E+23	6,522138E+22	1,893554E+23
1214	6,206583E+22	6,206779E+22	3,261178E+22	3,261042E+22	1,241336E+23	6,522219E+22	1,893558E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1215	6,206859E+22	6,206771E+22	3,261078E+22	3,261133E+22	1,241363E+23	6,522211E+22	1,893584E+23
1216	6,206609E+22	6,206570E+22	3,261133E+22	3,261080E+22	1,241318E+23	6,522213E+22	1,893539E+23
1217	6,206601E+22	6,206824E+22	3,261089E+22	3,261090E+22	1,241343E+23	6,522178E+22	1,893560E+23
1218	6,206838E+22	6,206702E+22	3,260982E+22	3,261061E+22	1,241354E+23	6,522043E+22	1,893558E+23
1219	6,206635E+22	6,206665E+22	3,261003E+22	3,260908E+22	1,241330E+23	6,521911E+22	1,893521E+23
1220	6,206887E+22	6,206910E+22	3,260879E+22	3,260930E+22	1,241380E+23	6,521809E+22	1,893561E+23
1221	6,206909E+22	6,206737E+22	3,260864E+22	3,260845E+22	1,241365E+23	6,521709E+22	1,893535E+23
1222	6,206674E+22	6,206908E+22	3,260899E+22	3,260775E+22	1,241358E+23	6,521674E+22	1,893526E+23
1223	6,206935E+22	6,207013E+22	3,260788E+22	3,260870E+22	1,241395E+23	6,521658E+22	1,893561E+23
1224	6,206783E+22	6,206726E+22	3,260854E+22	3,260827E+22	1,241351E+23	6,521681E+22	1,893519E+23
1225	6,206716E+22	6,206894E+22	3,260917E+22	3,260839E+22	1,241361E+23	6,521755E+22	1,893536E+23
1226	6,206972E+22	6,206801E+22	3,260863E+22	3,260934E+22	1,241377E+23	6,521796E+22	1,893557E+23
1227	6,206723E+22	6,206640E+22	3,260961E+22	3,260909E+22	1,241336E+23	6,521870E+22	1,893523E+23
1228	6,206777E+22	6,206888E+22	3,260974E+22	3,261053E+22	1,241366E+23	6,522028E+22	1,893569E+23
1229	6,206802E+22	6,206679E+22	3,261035E+22	3,261119E+22	1,241348E+23	6,522153E+22	1,893563E+23
1230	6,206514E+22	6,206669E+22	3,261197E+22	3,261083E+22	1,241318E+23	6,522280E+22	1,893546E+23
1231	6,206730E+22	6,206783E+22	3,261182E+22	3,261223E+22	1,241351E+23	6,522405E+22	1,893592E+23
1232	6,206635E+22	6,206455E+22	3,261257E+22	3,261220E+22	1,241309E+23	6,522477E+22	1,893557E+23
1233	6,206440E+22	6,206619E+22	3,261338E+22	3,261215E+22	1,241306E+23	6,522553E+22	1,893561E+23
1234	6,206665E+22	6,206650E+22	3,261225E+22	3,261327E+22	1,241332E+23	6,522552E+22	1,893587E+23
1235	6,206469E+22	6,206438E+22	3,261246E+22	3,261228E+22	1,241291E+23	6,522474E+22	1,893538E+23
1236	6,206528E+22	6,206702E+22	3,261207E+22	3,261219E+22	1,241323E+23	6,522426E+22	1,893566E+23
1237	6,206740E+22	6,206579E+22	3,261124E+22	3,261183E+22	1,241332E+23	6,522307E+22	1,893563E+23
1238	6,206555E+22	6,206569E+22	3,261151E+22	3,261010E+22	1,241312E+23	6,522161E+22	1,893529E+23
1239	6,206758E+22	6,206842E+22	3,261043E+22	3,261061E+22	1,241360E+23	6,522104E+22	1,893570E+23
1240	6,206741E+22	6,206625E+22	3,260996E+22	3,261020E+22	1,241337E+23	6,522016E+22	1,893538E+23
1241	6,206531E+22	6,206755E+22	3,261061E+22	3,260941E+22	1,241329E+23	6,522003E+22	1,893529E+23
1242	6,206787E+22	6,206840E+22	3,260960E+22	3,261040E+22	1,241363E+23	6,522001E+22	1,893563E+23
1243	6,206695E+22	6,206540E+22	3,260995E+22	3,260970E+22	1,241323E+23	6,521965E+22	1,893520E+23
1244	6,206653E+22	6,206754E+22	3,261055E+22	3,261001E+22	1,241341E+23	6,522056E+22	1,893546E+23
1245	6,206816E+22	6,206691E+22	3,261023E+22	3,261124E+22	1,241351E+23	6,522147E+22	1,893565E+23
1246	6,206559E+22	6,206568E+22	3,261137E+22	3,261082E+22	1,241313E+23	6,522219E+22	1,893535E+23
1247	6,206605E+22	6,206794E+22	3,261184E+22	3,261221E+22	1,241340E+23	6,522405E+22	1,893580E+23
1248	6,206639E+22	6,206510E+22	3,261229E+22	3,261297E+22	1,241315E+23	6,522526E+22	1,893568E+23
1249	6,206398E+22	6,206481E+22	3,261405E+22	3,261249E+22	1,241288E+23	6,522654E+22	1,893553E+23
1250	6,206567E+22	6,206613E+22	3,261375E+22	3,261412E+22	1,241318E+23	6,522786E+22	1,893597E+23
1251	6,206485E+22	6,206305E+22	3,261394E+22	3,261404E+22	1,241279E+23	6,522797E+22	1,893559E+23
1252	6,206309E+22	6,206501E+22	3,261455E+22	3,261403E+22	1,241281E+23	6,522858E+22	1,893567E+23
1253	6,206507E+22	6,206515E+22	3,261367E+22	3,261497E+22	1,241302E+23	6,522864E+22	1,893589E+23
1254	6,206387E+22	6,206313E+22	3,261393E+22	3,261333E+22	1,241270E+23	6,522726E+22	1,893543E+23
1255	6,206461E+22	6,206590E+22	3,261369E+22	3,261313E+22	1,241305E+23	6,522682E+22	1,893573E+23
1256	6,206642E+22	6,206462E+22	3,261256E+22	3,261307E+22	1,241310E+23	6,522563E+22	1,893567E+23
1257	6,206436E+22	6,206469E+22	3,261297E+22	3,261150E+22	1,241290E+23	6,522447E+22	1,893535E+23
1258	6,206556E+22	6,206753E+22	3,261198E+22	3,261229E+22	1,241331E+23	6,522427E+22	1,893574E+23
1259	6,206589E+22	6,206491E+22	3,261131E+22	3,261172E+22	1,241308E+23	6,522303E+22	1,893538E+23
1260	6,206438E+22	6,206600E+22	3,261201E+22	3,261096E+22	1,241304E+23	6,522298E+22	1,893534E+23
1261	6,206670E+22	6,206680E+22	3,261126E+22	3,261206E+22	1,241335E+23	6,522332E+22	1,893568E+23
1262	6,206606E+22	6,206412E+22	3,261153E+22	3,261118E+22	1,241302E+23	6,522271E+22	1,893529E+23
1263	6,206519E+22	6,206665E+22	3,261225E+22	3,261175E+22	1,241318E+23	6,522400E+22	1,893558E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1264	6,206646E+22	6,206577E+22	3,261177E+22	3,261324E+22	1,241322E+23	6,522500E+22	1,893572E+23
1265	6,206421E+22	6,206406E+22	3,261332E+22	3,261259E+22	1,241283E+23	6,522592E+22	1,893542E+23
1266	6,206440E+22	6,206626E+22	3,261398E+22	3,261391E+22	1,241307E+23	6,522789E+22	1,893586E+23
1267	6,206524E+22	6,206326E+22	3,261403E+22	3,261452E+22	1,241285E+23	6,522855E+22	1,893571E+23
1268	6,206287E+22	6,206329E+22	3,261561E+22	3,261427E+22	1,241262E+23	6,522988E+22	1,893560E+23
1269	6,206372E+22	6,206488E+22	3,261537E+22	3,261610E+22	1,241286E+23	6,523147E+22	1,893601E+23
1270	6,206319E+22	6,206201E+22	3,261547E+22	3,261568E+22	1,241252E+23	6,523115E+22	1,893564E+23
1271	6,206179E+22	6,206390E+22	3,261623E+22	3,261549E+22	1,241257E+23	6,523173E+22	1,893574E+23
1272	6,206405E+22	6,206361E+22	3,261514E+22	3,261636E+22	1,241277E+23	6,523150E+22	1,893592E+23
1273	6,206332E+22	6,206164E+22	3,261555E+22	3,261452E+22	1,241250E+23	6,523007E+22	1,893550E+23
1274	6,206336E+22	6,206485E+22	3,261526E+22	3,261449E+22	1,241282E+23	6,522974E+22	1,893580E+23
1275	6,206502E+22	6,206370E+22	3,261370E+22	3,261454E+22	1,241287E+23	6,522824E+22	1,893570E+23
1276	6,206300E+22	6,206379E+22	3,261412E+22	3,261318E+22	1,241268E+23	6,522729E+22	1,893541E+23
1277	6,206380E+22	6,206611E+22	3,261351E+22	3,261392E+22	1,241299E+23	6,522743E+22	1,893573E+23
1278	6,206484E+22	6,206343E+22	3,261289E+22	3,261297E+22	1,241283E+23	6,522586E+22	1,893541E+23
1279	6,206362E+22	6,206460E+22	3,261361E+22	3,261228E+22	1,241282E+23	6,522589E+22	1,893541E+23
1280	6,206554E+22	6,206526E+22	3,261267E+22	3,261372E+22	1,241308E+23	6,522639E+22	1,893572E+23
1281	6,206485E+22	6,206294E+22	3,261313E+22	3,261291E+22	1,241278E+23	6,522604E+22	1,893538E+23
1282	6,206332E+22	6,206562E+22	3,261405E+22	3,261355E+22	1,241289E+23	6,522759E+22	1,893565E+23
1283	6,206499E+22	6,206436E+22	3,261347E+22	3,261487E+22	1,241294E+23	6,522834E+22	1,893577E+23
1284	6,206316E+22	6,206255E+22	3,261513E+22	3,261427E+22	1,241257E+23	6,522940E+22	1,893551E+23
1285	6,206278E+22	6,206459E+22	3,261602E+22	3,261572E+22	1,241274E+23	6,523175E+22	1,893591E+23
1286	6,206379E+22	6,206192E+22	3,261590E+22	3,261626E+22	1,241257E+23	6,523216E+22	1,893579E+23
1287	6,206124E+22	6,206217E+22	3,261733E+22	3,261623E+22	1,241234E+23	6,523356E+22	1,893570E+23
1288	6,206198E+22	6,206335E+22	3,261687E+22	3,261812E+22	1,241253E+23	6,523499E+22	1,893603E+23
1289	6,206222E+22	6,206031E+22	3,261714E+22	3,261725E+22	1,241225E+23	6,523440E+22	1,893569E+23
1290	6,206073E+22	6,206243E+22	3,261791E+22	3,261680E+22	1,241232E+23	6,523471E+22	1,893579E+23
1291	6,206339E+22	6,206227E+22	3,261642E+22	3,261749E+22	1,241257E+23	6,523392E+22	1,893596E+23
1292	6,206244E+22	6,206078E+22	3,261673E+22	3,261586E+22	1,241232E+23	6,523259E+22	1,893558E+23
1293	6,206141E+22	6,206416E+22	3,261668E+22	3,261606E+22	1,241256E+23	6,523274E+22	1,893583E+23
1294	6,206330E+22	6,206290E+22	3,261512E+22	3,261588E+22	1,241262E+23	6,523099E+22	1,893572E+23
1295	6,206159E+22	6,206257E+22	3,261570E+22	3,261457E+22	1,241242E+23	6,523027E+22	1,893544E+23
1296	6,206265E+22	6,206430E+22	3,261496E+22	3,261541E+22	1,241270E+23	6,523038E+22	1,893573E+23
1297	6,206427E+22	6,206160E+22	3,261446E+22	3,261440E+22	1,241259E+23	6,522887E+22	1,893547E+23
1298	6,206244E+22	6,206335E+22	3,261514E+22	3,261390E+22	1,241258E+23	6,522904E+22	1,893548E+23
1299	6,206432E+22	6,206419E+22	3,261387E+22	3,261543E+22	1,241285E+23	6,522930E+22	1,893578E+23
1300	6,206360E+22	6,206195E+22	3,261453E+22	3,261468E+22	1,241256E+23	6,522921E+22	1,893548E+23
1301	6,206158E+22	6,206425E+22	3,261599E+22	3,261522E+22	1,241258E+23	6,523122E+22	1,893570E+23
1302	6,206369E+22	6,206294E+22	3,261549E+22	3,261626E+22	1,241266E+23	6,523175E+22	1,893584E+23
1303	6,206189E+22	6,206117E+22	3,261717E+22	3,261596E+22	1,241231E+23	6,523313E+22	1,893562E+23
1304	6,206101E+22	6,206295E+22	3,261781E+22	3,261778E+22	1,241240E+23	6,523559E+22	1,893595E+23
1305	6,206218E+22	6,206043E+22	3,261771E+22	3,261833E+22	1,241226E+23	6,523604E+22	1,893586E+23
1306	6,205942E+22	6,206083E+22	3,261908E+22	3,261815E+22	1,241203E+23	6,523723E+22	1,893575E+23
1307	6,206088E+22	6,206171E+22	3,261833E+22	3,261970E+22	1,241226E+23	6,523803E+22	1,893606E+23
1308	6,206164E+22	6,205902E+22	3,261856E+22	3,261864E+22	1,241207E+23	6,523720E+22	1,893579E+23
1309	6,205959E+22	6,206120E+22	3,261951E+22	3,261815E+22	1,241208E+23	6,523765E+22	1,893584E+23
1310	6,206207E+22	6,206154E+22	3,261789E+22	3,261873E+22	1,241236E+23	6,523663E+22	1,893602E+23
1311	6,206085E+22	6,206021E+22	3,261812E+22	3,261740E+22	1,241211E+23	6,523552E+22	1,893566E+23
1312	6,205951E+22	6,206271E+22	3,261805E+22	3,261772E+22	1,241222E+23	6,523577E+22	1,893580E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1313	6,206221E+22	6,206110E+22	3,261673E+22	3,261727E+22	1,241233E+23	6,523400E+22	1,893573E+23
1314	6,206062E+22	6,206087E+22	3,261721E+22	3,261584E+22	1,241215E+23	6,523305E+22	1,893545E+23
1315	6,206208E+22	6,206265E+22	3,261612E+22	3,261672E+22	1,241247E+23	6,523283E+22	1,893576E+23
1316	6,206350E+22	6,206069E+22	3,261555E+22	3,261591E+22	1,241242E+23	6,523146E+22	1,893557E+23
1317	6,206068E+22	6,206262E+22	3,261661E+22	3,261557E+22	1,241233E+23	6,523217E+22	1,893555E+23
1318	6,206266E+22	6,206347E+22	3,261559E+22	3,261685E+22	1,241261E+23	6,523243E+22	1,893586E+23
1319	6,206216E+22	6,206092E+22	3,261652E+22	3,261628E+22	1,241231E+23	6,523280E+22	1,893559E+23
1320	6,205999E+22	6,206245E+22	3,261804E+22	3,261703E+22	1,241224E+23	6,523507E+22	1,893575E+23
1321	6,206249E+22	6,206105E+22	3,261762E+22	3,261814E+22	1,241235E+23	6,523576E+22	1,893593E+23
1322	6,206013E+22	6,205966E+22	3,261907E+22	3,261806E+22	1,241198E+23	6,523713E+22	1,893569E+23
1323	6,205950E+22	6,206137E+22	3,261921E+22	3,261993E+22	1,241209E+23	6,523914E+22	1,893600E+23
1324	6,206099E+22	6,205897E+22	3,261910E+22	3,262025E+22	1,241200E+23	6,523934E+22	1,893593E+23
1325	6,205812E+22	6,205931E+22	3,262077E+22	3,261974E+22	1,241174E+23	6,524051E+22	1,893579E+23
1326	6,206006E+22	6,206049E+22	3,261996E+22	3,262076E+22	1,241205E+23	6,524072E+22	1,893613E+23
1327	6,206064E+22	6,205815E+22	3,262015E+22	3,261989E+22	1,241188E+23	6,524004E+22	1,893588E+23
1328	6,205786E+22	6,206014E+22	3,262101E+22	3,261968E+22	1,241180E+23	6,524069E+22	1,893587E+23
1329	6,206041E+22	6,206041E+22	3,261949E+22	3,262026E+22	1,241208E+23	6,523975E+22	1,893606E+23
1330	6,205900E+22	6,205897E+22	3,261972E+22	3,261891E+22	1,241180E+23	6,523863E+22	1,893566E+23
1331	6,205848E+22	6,206091E+22	3,261931E+22	3,261911E+22	1,241194E+23	6,523843E+22	1,893578E+23
1332	6,206165E+22	6,205956E+22	3,261793E+22	3,261862E+22	1,241212E+23	6,523654E+22	1,893578E+23
1333	6,205965E+22	6,205958E+22	3,261856E+22	3,261729E+22	1,241192E+23	6,523584E+22	1,893551E+23
1334	6,206096E+22	6,206194E+22	3,261739E+22	3,261807E+22	1,241229E+23	6,523546E+22	1,893584E+23
1335	6,206208E+22	6,206028E+22	3,261694E+22	3,261757E+22	1,241224E+23	6,523452E+22	1,893569E+23
1336	6,205892E+22	6,206132E+22	3,261831E+22	3,261731E+22	1,241202E+23	6,523562E+22	1,893559E+23
1337	6,206140E+22	6,206178E+22	3,261769E+22	3,261840E+22	1,241232E+23	6,523608E+22	1,893593E+23
1338	6,206077E+22	6,205928E+22	3,261862E+22	3,261792E+22	1,241201E+23	6,523654E+22	1,893566E+23
1339	6,205879E+22	6,206052E+22	3,261972E+22	3,261893E+22	1,241193E+23	6,523865E+22	1,893580E+23
1340	6,206111E+22	6,205972E+22	3,261914E+22	3,262022E+22	1,241208E+23	6,523936E+22	1,893602E+23
1341	6,205825E+22	6,205833E+22	3,262069E+22	3,262012E+22	1,241166E+23	6,524080E+22	1,893574E+23
1342	6,205801E+22	6,206010E+22	3,262089E+22	3,262150E+22	1,241181E+23	6,524239E+22	1,893605E+23
1343	6,205994E+22	6,205791E+22	3,262082E+22	3,262174E+22	1,241179E+23	6,524256E+22	1,893604E+23
1344	6,205692E+22	6,205771E+22	3,262256E+22	3,262122E+22	1,241146E+23	6,524378E+22	1,893584E+23
1345	6,205902E+22	6,205909E+22	3,262187E+22	3,262219E+22	1,241181E+23	6,524406E+22	1,893622E+23
1346	6,205889E+22	6,205726E+22	3,262184E+22	3,262150E+22	1,241161E+23	6,524334E+22	1,893595E+23
1347	6,205622E+22	6,205879E+22	3,262225E+22	3,262143E+22	1,241150E+23	6,524368E+22	1,893587E+23
1348	6,205908E+22	6,205902E+22	3,262072E+22	3,262181E+22	1,241181E+23	6,524254E+22	1,893606E+23
1349	6,205777E+22	6,205732E+22	3,262112E+22	3,262028E+22	1,241151E+23	6,524141E+22	1,893565E+23
1350	6,205781E+22	6,205954E+22	3,262060E+22	3,262015E+22	1,241174E+23	6,524075E+22	1,893581E+23
1351	6,206091E+22	6,205879E+22	3,261915E+22	3,261994E+22	1,241197E+23	6,523909E+22	1,893588E+23
1352	6,205818E+22	6,205868E+22	3,261988E+22	3,261887E+22	1,241169E+23	6,523875E+22	1,893556E+23
1353	6,205955E+22	6,206100E+22	3,261905E+22	3,261958E+22	1,241205E+23	6,523863E+22	1,893592E+23
1354	6,206035E+22	6,205925E+22	3,261883E+22	3,261909E+22	1,241196E+23	6,523792E+22	1,893575E+23
1355	6,205778E+22	6,205955E+22	3,262003E+22	3,261894E+22	1,241173E+23	6,523898E+22	1,893563E+23
1356	6,206041E+22	6,206005E+22	3,261941E+22	3,262008E+22	1,241205E+23	6,523949E+22	1,893599E+23
1357	6,205925E+22	6,205766E+22	3,262043E+22	3,261989E+22	1,241169E+23	6,524032E+22	1,893572E+23
1358	6,205728E+22	6,205927E+22	3,262126E+22	3,262079E+22	1,241165E+23	6,524206E+22	1,893586E+23
1359	6,205949E+22	6,205867E+22	3,262067E+22	3,262225E+22	1,241182E+23	6,524292E+22	1,893611E+23
1360	6,205665E+22	6,205665E+22	3,262245E+22	3,262196E+22	1,241133E+23	6,524441E+22	1,893577E+23
1361	6,205711E+22	6,205834E+22	3,262289E+22	3,262293E+22	1,241155E+23	6,524582E+22	1,893613E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1362	6,205874E+22	6,205664E+22	3,262280E+22	3,262311E+22	1,241154E+23	6,524591E+22	1,893613E+23
1363	6,205576E+22	6,205631E+22	3,262411E+22	3,262283E+22	1,241121E+23	6,524694E+22	1,893590E+23
1364	6,205738E+22	6,205814E+22	3,262330E+22	3,262387E+22	1,241155E+23	6,524717E+22	1,893627E+23
1365	6,205681E+22	6,205615E+22	3,262338E+22	3,262327E+22	1,241130E+23	6,524665E+22	1,893596E+23
1366	6,205472E+22	6,205744E+22	3,262368E+22	3,262279E+22	1,241122E+23	6,524646E+22	1,893586E+23
1367	6,205811E+22	6,205780E+22	3,262209E+22	3,262320E+22	1,241159E+23	6,524529E+22	1,893612E+23
1368	6,205687E+22	6,205568E+22	3,262250E+22	3,262169E+22	1,241126E+23	6,524419E+22	1,893567E+23
1369	6,205714E+22	6,205825E+22	3,262207E+22	3,262149E+22	1,241154E+23	6,524357E+22	1,893590E+23
1370	6,205954E+22	6,205819E+22	3,262057E+22	3,262141E+22	1,241177E+23	6,524198E+22	1,893597E+23
1371	6,205692E+22	6,205745E+22	3,262113E+22	3,262051E+22	1,241144E+23	6,524164E+22	1,893560E+23
1372	6,205834E+22	6,205971E+22	3,262060E+22	3,262101E+22	1,241181E+23	6,524160E+22	1,893597E+23
1373	6,205905E+22	6,205765E+22	3,262061E+22	3,262056E+22	1,241167E+23	6,524117E+22	1,893579E+23
1374	6,205665E+22	6,205795E+22	3,262173E+22	3,262033E+22	1,241146E+23	6,524206E+22	1,893567E+23
1375	6,205902E+22	6,205901E+22	3,262099E+22	3,262190E+22	1,241180E+23	6,524290E+22	1,893609E+23
1376	6,205732E+22	6,205625E+22	3,262208E+22	3,262197E+22	1,241136E+23	6,524405E+22	1,893576E+23
1377	6,205574E+22	6,205779E+22	3,262315E+22	3,262267E+22	1,241135E+23	6,524582E+22	1,893593E+23
1378	6,205792E+22	6,205737E+22	3,262268E+22	3,262393E+22	1,241153E+23	6,524661E+22	1,893619E+23
1379	6,205572E+22	6,205484E+22	3,262420E+22	3,262364E+22	1,241106E+23	6,524784E+22	1,893584E+23
1380	6,205618E+22	6,205689E+22	3,262466E+22	3,262447E+22	1,241131E+23	6,524913E+22	1,893622E+23
1381	6,205715E+22	6,205546E+22	3,262458E+22	3,262490E+22	1,241126E+23	6,524947E+22	1,893621E+23
1382	6,205402E+22	6,205536E+22	3,262558E+22	3,262453E+22	1,241094E+23	6,525011E+22	1,893595E+23
1383	6,205563E+22	6,205722E+22	3,262469E+22	3,262566E+22	1,241128E+23	6,525035E+22	1,893632E+23
1384	6,205524E+22	6,205438E+22	3,262494E+22	3,262489E+22	1,241096E+23	6,524983E+22	1,893595E+23
1385	6,205409E+22	6,205558E+22	3,262528E+22	3,262401E+22	1,241097E+23	6,524929E+22	1,893590E+23
1386	6,205728E+22	6,205653E+22	3,262360E+22	3,262437E+22	1,241138E+23	6,524797E+22	1,893618E+23
1387	6,205618E+22	6,205448E+22	3,262358E+22	3,262311E+22	1,241107E+23	6,524669E+22	1,893573E+23
1388	6,205603E+22	6,205748E+22	3,262319E+22	3,262284E+22	1,241135E+23	6,524603E+22	1,893595E+23
1389	6,205782E+22	6,205735E+22	3,262204E+22	3,262285E+22	1,241152E+23	6,524490E+22	1,893601E+23
1390	6,205558E+22	6,205635E+22	3,262265E+22	3,262173E+22	1,241119E+23	6,524439E+22	1,893563E+23
1391	6,205707E+22	6,205852E+22	3,262223E+22	3,262246E+22	1,241156E+23	6,524468E+22	1,893603E+23
1392	6,205758E+22	6,205591E+22	3,262245E+22	3,262233E+22	1,241135E+23	6,524478E+22	1,893583E+23
1393	6,205542E+22	6,205634E+22	3,262354E+22	3,262219E+22	1,241118E+23	6,524573E+22	1,893575E+23
1394	6,205721E+22	6,205789E+22	3,262275E+22	3,262390E+22	1,241151E+23	6,524665E+22	1,893617E+23
1395	6,205596E+22	6,205456E+22	3,262356E+22	3,262403E+22	1,241105E+23	6,524760E+22	1,893581E+23
1396	6,205469E+22	6,205611E+22	3,262484E+22	3,262433E+22	1,241108E+23	6,524916E+22	1,893600E+23
1397	6,205675E+22	6,205583E+22	3,262460E+22	3,262552E+22	1,241126E+23	6,525011E+22	1,893627E+23
1398	6,205463E+22	6,205357E+22	3,262595E+22	3,262510E+22	1,241082E+23	6,525105E+22	1,893592E+23
1399	6,205459E+22	6,205617E+22	3,262631E+22	3,262623E+22	1,241108E+23	6,525253E+22	1,893633E+23
1400	6,205503E+22	6,205424E+22	3,262632E+22	3,262683E+22	1,241093E+23	6,525315E+22	1,893624E+23
1401	6,205240E+22	6,205383E+22	3,262739E+22	3,262621E+22	1,241062E+23	6,525360E+22	1,893598E+23
1402	6,205415E+22	6,205581E+22	3,262646E+22	3,262709E+22	1,241100E+23	6,525355E+22	1,893635E+23
1403	6,205461E+22	6,205242E+22	3,262626E+22	3,262635E+22	1,241070E+23	6,525261E+22	1,893596E+23
1404	6,205360E+22	6,205414E+22	3,262653E+22	3,262529E+22	1,241077E+23	6,525181E+22	1,893596E+23
1405	6,205618E+22	6,205564E+22	3,262483E+22	3,262579E+22	1,241118E+23	6,525063E+22	1,893624E+23
1406	6,205482E+22	6,205384E+22	3,262464E+22	3,262443E+22	1,241087E+23	6,524907E+22	1,893577E+23
1407	6,205454E+22	6,205691E+22	3,262444E+22	3,262421E+22	1,241114E+23	6,524865E+22	1,893601E+23
1408	6,205629E+22	6,205585E+22	3,262372E+22	3,262422E+22	1,241121E+23	6,524795E+22	1,893601E+23
1409	6,205462E+22	6,205464E+22	3,262451E+22	3,262305E+22	1,241093E+23	6,524756E+22	1,893568E+23
1410	6,205567E+22	6,205721E+22	3,262406E+22	3,262397E+22	1,241129E+23	6,524803E+22	1,893609E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1411	6,205625E+22	6,205432E+22	3,262387E+22	3,262433E+22	1,241106E+23	6,524820E+22	1,893588E+23
1412	6,205400E+22	6,205501E+22	3,262498E+22	3,262411E+22	1,241090E+23	6,524909E+22	1,893581E+23
1413	6,205558E+22	6,205649E+22	3,262447E+22	3,262578E+22	1,241121E+23	6,525025E+22	1,893623E+23
1414	6,205484E+22	6,205318E+22	3,262524E+22	3,262555E+22	1,241080E+23	6,525080E+22	1,893588E+23
1415	6,205371E+22	6,205498E+22	3,262658E+22	3,262589E+22	1,241087E+23	6,525247E+22	1,893612E+23
1416	6,205531E+22	6,205435E+22	3,262664E+22	3,262729E+22	1,241097E+23	6,525392E+22	1,893636E+23
1417	6,205318E+22	6,205234E+22	3,262792E+22	3,262694E+22	1,241055E+23	6,525487E+22	1,893604E+23
1418	6,205246E+22	6,205515E+22	3,262820E+22	3,262811E+22	1,241076E+23	6,525631E+22	1,893639E+23
1419	6,205350E+22	6,205241E+22	3,262788E+22	3,262877E+22	1,241059E+23	6,525665E+22	1,893626E+23
1420	6,205151E+22	6,205187E+22	3,262886E+22	3,262765E+22	1,241034E+23	6,525650E+22	1,893599E+23
1421	6,205323E+22	6,205409E+22	3,262795E+22	3,262843E+22	1,241073E+23	6,525638E+22	1,893637E+23
1422	6,205386E+22	6,205138E+22	3,262736E+22	3,262750E+22	1,241052E+23	6,525485E+22	1,893601E+23
1423	6,205243E+22	6,205375E+22	3,262752E+22	3,262663E+22	1,241062E+23	6,525415E+22	1,893603E+23
1424	6,205438E+22	6,205487E+22	3,262626E+22	3,262725E+22	1,241093E+23	6,525351E+22	1,893628E+23
1425	6,205342E+22	6,205283E+22	3,262630E+22	3,262571E+22	1,241062E+23	6,525200E+22	1,893582E+23
1426	6,205297E+22	6,205578E+22	3,262629E+22	3,262544E+22	1,241087E+23	6,525173E+22	1,893605E+23
1427	6,205528E+22	6,205398E+22	3,262528E+22	3,262582E+22	1,241093E+23	6,525110E+22	1,893604E+23
1428	6,205371E+22	6,205291E+22	3,262602E+22	3,262470E+22	1,241066E+23	6,525072E+22	1,893573E+23
1429	6,205420E+22	6,205587E+22	3,262557E+22	3,262592E+22	1,241101E+23	6,525149E+22	1,893616E+23
1430	6,205484E+22	6,205320E+22	3,262512E+22	3,262617E+22	1,241080E+23	6,525129E+22	1,893593E+23
1431	6,205275E+22	6,205396E+22	3,262639E+22	3,262584E+22	1,241067E+23	6,525223E+22	1,893589E+23
1432	6,205434E+22	6,205483E+22	3,262640E+22	3,262737E+22	1,241092E+23	6,525377E+22	1,893629E+23
1433	6,205394E+22	6,205169E+22	3,262733E+22	3,262700E+22	1,241056E+23	6,525433E+22	1,893600E+23
1434	6,205216E+22	6,205401E+22	3,262872E+22	3,262749E+22	1,241062E+23	6,525620E+22	1,893624E+23
1435	6,205360E+22	6,205292E+22	3,262837E+22	3,262935E+22	1,241065E+23	6,525772E+22	1,893642E+23
1436	6,205137E+22	6,205089E+22	3,262966E+22	3,262888E+22	1,241023E+23	6,525854E+22	1,893608E+23
1437	6,205063E+22	6,205352E+22	3,262996E+22	3,262993E+22	1,241041E+23	6,525989E+22	1,893640E+23
1438	6,205230E+22	6,205074E+22	3,262929E+22	3,263024E+22	1,241030E+23	6,525953E+22	1,893626E+23
1439	6,205074E+22	6,205063E+22	3,263010E+22	3,262905E+22	1,241014E+23	6,525914E+22	1,893605E+23
1440	6,205217E+22	6,205275E+22	3,262941E+22	3,262989E+22	1,241049E+23	6,525931E+22	1,893642E+23
1441	6,205272E+22	6,205066E+22	3,262874E+22	3,262888E+22	1,241034E+23	6,525762E+22	1,893610E+23
1442	6,205074E+22	6,205325E+22	3,262901E+22	3,262796E+22	1,241040E+23	6,525697E+22	1,893610E+23
1443	6,205304E+22	6,205339E+22	3,262766E+22	3,262870E+22	1,241064E+23	6,525636E+22	1,893628E+23
1444	6,205251E+22	6,205111E+22	3,262784E+22	3,262695E+22	1,241036E+23	6,525479E+22	1,893584E+23
1445	6,205182E+22	6,205410E+22	3,262790E+22	3,262687E+22	1,241059E+23	6,525477E+22	1,893607E+23
1446	6,205414E+22	6,205270E+22	3,262653E+22	3,262736E+22	1,241068E+23	6,525389E+22	1,893607E+23
1447	6,205241E+22	6,205213E+22	3,262712E+22	3,262646E+22	1,241045E+23	6,525358E+22	1,893581E+23
1448	6,205253E+22	6,205458E+22	3,262718E+22	3,262774E+22	1,241071E+23	6,525492E+22	1,893620E+23
1449	6,205365E+22	6,205200E+22	3,262693E+22	3,262771E+22	1,241056E+23	6,525464E+22	1,893603E+23
1450	6,205145E+22	6,205280E+22	3,262845E+22	3,262726E+22	1,241043E+23	6,525572E+22	1,893600E+23
1451	6,205325E+22	6,205311E+22	3,262835E+22	3,262915E+22	1,241064E+23	6,525750E+22	1,893639E+23
1452	6,205272E+22	6,205018E+22	3,262925E+22	3,262884E+22	1,241029E+23	6,525809E+22	1,893610E+23
1453	6,205008E+22	6,205268E+22	3,263059E+22	3,262963E+22	1,241028E+23	6,526022E+22	1,893630E+23
1454	6,205163E+22	6,205159E+22	3,262988E+22	3,263134E+22	1,241032E+23	6,526122E+22	1,893644E+23
1455	6,204993E+22	6,204940E+22	3,263108E+22	3,263066E+22	1,240993E+23	6,526174E+22	1,893611E+23
1456	6,204943E+22	6,205149E+22	3,263173E+22	3,263149E+22	1,241009E+23	6,526322E+22	1,893641E+23
1457	6,205159E+22	6,204932E+22	3,263089E+22	3,263153E+22	1,241009E+23	6,526242E+22	1,893633E+23
1458	6,204956E+22	6,204992E+22	3,263165E+22	3,263034E+22	1,240995E+23	6,526199E+22	1,893615E+23
1459	6,205083E+22	6,205173E+22	3,263071E+22	3,263148E+22	1,241026E+23	6,526219E+22	1,893648E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1460	6,205134E+22	6,204964E+22	3,263017E+22	3,263024E+22	1,241010E+23	6,526042E+22	1,893614E+23
1461	6,204917E+22	6,205199E+22	3,263064E+22	3,262931E+22	1,241012E+23	6,525995E+22	1,893611E+23
1462	6,205187E+22	6,205198E+22	3,262900E+22	3,262993E+22	1,241039E+23	6,525893E+22	1,893628E+23
1463	6,205162E+22	6,204988E+22	3,262910E+22	3,262838E+22	1,241015E+23	6,525748E+22	1,893590E+23
1464	6,205058E+22	6,205258E+22	3,262944E+22	3,262859E+22	1,241032E+23	6,525803E+22	1,893612E+23
1465	6,205282E+22	6,205174E+22	3,262797E+22	3,262909E+22	1,241046E+23	6,525706E+22	1,893616E+23
1466	6,205088E+22	6,205134E+22	3,262870E+22	3,262810E+22	1,241022E+23	6,525681E+22	1,893590E+23
1467	6,205145E+22	6,205281E+22	3,262877E+22	3,262941E+22	1,241043E+23	6,525818E+22	1,893624E+23
1468	6,205281E+22	6,205030E+22	3,262877E+22	3,262912E+22	1,241031E+23	6,525789E+22	1,893610E+23
1469	6,205016E+22	6,205135E+22	3,263042E+22	3,262889E+22	1,241015E+23	6,525931E+22	1,893608E+23
1470	6,205157E+22	6,205190E+22	3,263000E+22	3,263093E+22	1,241035E+23	6,526093E+22	1,893644E+23
1471	6,205084E+22	6,204927E+22	3,263081E+22	3,263089E+22	1,241001E+23	6,526170E+22	1,893618E+23
1472	6,204801E+22	6,205098E+22	3,263253E+22	3,263169E+22	1,240990E+23	6,526422E+22	1,893632E+23
1473	6,205013E+22	6,204998E+22	3,263176E+22	3,263303E+22	1,241001E+23	6,526479E+22	1,893649E+23
1474	6,204878E+22	6,204798E+22	3,263290E+22	3,263212E+22	1,240968E+23	6,526503E+22	1,893618E+23
1475	6,204867E+22	6,204960E+22	3,263329E+22	3,263313E+22	1,240983E+23	6,526642E+22	1,893647E+23
1476	6,205074E+22	6,204811E+22	3,263239E+22	3,263303E+22	1,240988E+23	6,526542E+22	1,893643E+23
1477	6,204799E+22	6,204910E+22	3,263309E+22	3,263198E+22	1,240971E+23	6,526506E+22	1,893622E+23
1478	6,204925E+22	6,205078E+22	3,263194E+22	3,263289E+22	1,241000E+23	6,526483E+22	1,893649E+23
1479	6,205017E+22	6,204854E+22	3,263143E+22	3,263151E+22	1,240987E+23	6,526295E+22	1,893617E+23
1480	6,204798E+22	6,205020E+22	3,263231E+22	3,263063E+22	1,240982E+23	6,526293E+22	1,893611E+23
1481	6,205086E+22	6,205076E+22	3,263052E+22	3,263121E+22	1,241016E+23	6,526173E+22	1,893634E+23
1482	6,205027E+22	6,204906E+22	3,263054E+22	3,262988E+22	1,240993E+23	6,526042E+22	1,893597E+23
1483	6,204918E+22	6,205122E+22	3,263075E+22	3,263045E+22	1,241004E+23	6,526120E+22	1,893616E+23
1484	6,205163E+22	6,205041E+22	3,262947E+22	3,263066E+22	1,241020E+23	6,526013E+22	1,893622E+23
1485	6,204952E+22	6,204991E+22	3,263044E+22	3,262963E+22	1,240994E+23	6,526007E+22	1,893595E+23
1486	6,205035E+22	6,205138E+22	3,263037E+22	3,263082E+22	1,241017E+23	6,526119E+22	1,893629E+23
1487	6,205176E+22	6,204913E+22	3,263038E+22	3,263076E+22	1,241009E+23	6,526114E+22	1,893620E+23
1488	6,204844E+22	6,204986E+22	3,263242E+22	3,263092E+22	1,240983E+23	6,526334E+22	1,893616E+23
1489	6,204960E+22	6,205086E+22	3,263184E+22	3,263293E+22	1,241005E+23	6,526477E+22	1,893652E+23
1490	6,204892E+22	6,204801E+22	3,263274E+22	3,263281E+22	1,240969E+23	6,526554E+22	1,893625E+23
1491	6,204678E+22	6,204867E+22	3,263433E+22	3,263359E+22	1,240955E+23	6,526791E+22	1,893634E+23
1492	6,204942E+22	6,204795E+22	3,263356E+22	3,263453E+22	1,240974E+23	6,526809E+22	1,893655E+23
1493	6,204776E+22	6,204658E+22	3,263458E+22	3,263368E+22	1,240943E+23	6,526826E+22	1,893626E+23
1494	6,204742E+22	6,204869E+22	3,263454E+22	3,263465E+22	1,240961E+23	6,526918E+22	1,893653E+23
1495	6,204925E+22	6,204764E+22	3,263360E+22	3,263456E+22	1,240969E+23	6,526816E+22	1,893651E+23
1496	6,204627E+22	6,204792E+22	3,263479E+22	3,263349E+22	1,240942E+23	6,526828E+22	1,893625E+23
1497	6,204777E+22	6,204965E+22	3,263361E+22	3,263408E+22	1,240974E+23	6,526769E+22	1,893651E+23
1498	6,204896E+22	6,204741E+22	3,263312E+22	3,263277E+22	1,240964E+23	6,526589E+22	1,893623E+23
1499	6,204709E+22	6,204826E+22	3,263370E+22	3,263225E+22	1,240954E+23	6,526595E+22	1,893613E+23
1500	6,204982E+22	6,204933E+22	3,263186E+22	3,263283E+22	1,240991E+23	6,526469E+22	1,893638E+23
1501	6,204880E+22	6,204805E+22	3,263179E+22	3,263161E+22	1,240969E+23	6,526340E+22	1,893603E+23
1502	6,204796E+22	6,204992E+22	3,263186E+22	3,263191E+22	1,240979E+23	6,526378E+22	1,893617E+23
1503	6,205079E+22	6,204921E+22	3,263081E+22	3,263194E+22	1,241000E+23	6,526275E+22	1,893628E+23
1504	6,204851E+22	6,204828E+22	3,263233E+22	3,263105E+22	1,240968E+23	6,526338E+22	1,893602E+23
1505	6,204896E+22	6,205036E+22	3,263226E+22	3,263226E+22	1,240993E+23	6,526452E+22	1,893638E+23
1506	6,204992E+22	6,204839E+22	3,263232E+22	3,263258E+22	1,240983E+23	6,526490E+22	1,893632E+23
1507	6,204653E+22	6,204812E+22	3,263426E+22	3,263313E+22	1,240947E+23	6,526739E+22	1,893620E+23
1508	6,204800E+22	6,204903E+22	3,263380E+22	3,263486E+22	1,240970E+23	6,526866E+22	1,893657E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1509	6,204748E+22	6,204620E+22	3,263465E+22	3,263465E+22	1,240937E+23	6,526930E+22	1,893630E+23
1510	6,204585E+22	6,204689E+22	3,263585E+22	3,263524E+22	1,240927E+23	6,527108E+22	1,893638E+23
1511	6,204864E+22	6,204680E+22	3,263497E+22	3,263616E+22	1,240954E+23	6,527114E+22	1,893666E+23
1512	6,204632E+22	6,204549E+22	3,263626E+22	3,263550E+22	1,240918E+23	6,527176E+22	1,893636E+23
1513	6,204567E+22	6,204818E+22	3,263609E+22	3,263618E+22	1,240938E+23	6,527227E+22	1,893661E+23
1514	6,204762E+22	6,204679E+22	3,263528E+22	3,263595E+22	1,240944E+23	6,527123E+22	1,893656E+23
1515	6,204506E+22	6,204589E+22	3,263641E+22	3,263496E+22	1,240910E+23	6,527137E+22	1,893623E+23
1516	6,204690E+22	6,204784E+22	3,263517E+22	3,263531E+22	1,240947E+23	6,527048E+22	1,893652E+23
1517	6,204772E+22	6,204600E+22	3,263451E+22	3,263425E+22	1,240937E+23	6,526876E+22	1,893625E+23
1518	6,204586E+22	6,204711E+22	3,263464E+22	3,263380E+22	1,240930E+23	6,526844E+22	1,893614E+23
1519	6,204868E+22	6,204850E+22	3,263284E+22	3,263430E+22	1,240972E+23	6,526714E+22	1,893643E+23
1520	6,204753E+22	6,204677E+22	3,263334E+22	3,263304E+22	1,240943E+23	6,526638E+22	1,893607E+23
1521	6,204683E+22	6,204898E+22	3,263348E+22	3,263300E+22	1,240958E+23	6,526648E+22	1,893623E+23
1522	6,204968E+22	6,204829E+22	3,263267E+22	3,263323E+22	1,240980E+23	6,526590E+22	1,893639E+23
1523	6,204725E+22	6,204658E+22	3,263421E+22	3,263293E+22	1,240938E+23	6,526714E+22	1,893610E+23
1524	6,204730E+22	6,204897E+22	3,263415E+22	3,263425E+22	1,240963E+23	6,526839E+22	1,893647E+23
1525	6,204784E+22	6,204705E+22	3,263418E+22	3,263478E+22	1,240949E+23	6,526896E+22	1,893639E+23
1526	6,204504E+22	6,204620E+22	3,263579E+22	3,263509E+22	1,240912E+23	6,527088E+22	1,893621E+23
1527	6,204710E+22	6,204724E+22	3,263536E+22	3,263652E+22	1,240943E+23	6,527188E+22	1,893662E+23
1528	6,204656E+22	6,204445E+22	3,263649E+22	3,263632E+22	1,240910E+23	6,527281E+22	1,893638E+23
1529	6,204463E+22	6,204602E+22	3,263748E+22	3,263672E+22	1,240906E+23	6,527420E+22	1,893648E+23
1530	6,204701E+22	6,204641E+22	3,263670E+22	3,263780E+22	1,240934E+23	6,527450E+22	1,893679E+23
1531	6,204462E+22	6,204414E+22	3,263795E+22	3,263730E+22	1,240888E+23	6,527525E+22	1,893640E+23
1532	6,204409E+22	6,204663E+22	3,263792E+22	3,263758E+22	1,240907E+23	6,527550E+22	1,893662E+23
1533	6,204614E+22	6,204527E+22	3,263701E+22	3,263735E+22	1,240914E+23	6,527436E+22	1,893658E+23
1534	6,204414E+22	6,204404E+22	3,263762E+22	3,263634E+22	1,240882E+23	6,527396E+22	1,893621E+23
1535	6,204610E+22	6,204655E+22	3,263624E+22	3,263674E+22	1,240926E+23	6,527298E+22	1,893656E+23
1536	6,204645E+22	6,204491E+22	3,263574E+22	3,263592E+22	1,240914E+23	6,527166E+22	1,893630E+23
1537	6,204447E+22	6,204651E+22	3,263578E+22	3,263514E+22	1,240910E+23	6,527092E+22	1,893619E+23
1538	6,204754E+22	6,204772E+22	3,263435E+22	3,263550E+22	1,240953E+23	6,526985E+22	1,893651E+23
1539	6,204664E+22	6,204502E+22	3,263499E+22	3,263439E+22	1,240917E+23	6,526939E+22	1,893610E+23
1540	6,204588E+22	6,204751E+22	3,263533E+22	3,263428E+22	1,240934E+23	6,526961E+22	1,893630E+23
1541	6,204804E+22	6,204721E+22	3,263451E+22	3,263497E+22	1,240952E+23	6,526947E+22	1,893647E+23
1542	6,204546E+22	6,204527E+22	3,263568E+22	3,263497E+22	1,240907E+23	6,527065E+22	1,893614E+23
1543	6,204565E+22	6,204765E+22	3,263569E+22	3,263623E+22	1,240933E+23	6,527192E+22	1,893652E+23
1544	6,204623E+22	6,204522E+22	3,263611E+22	3,263677E+22	1,240914E+23	6,527289E+22	1,893643E+23
1545	6,204386E+22	6,204481E+22	3,263754E+22	3,263666E+22	1,240887E+23	6,527420E+22	1,893629E+23
1546	6,204621E+22	6,204597E+22	3,263722E+22	3,263810E+22	1,240922E+23	6,527532E+22	1,893675E+23
1547	6,204539E+22	6,204283E+22	3,263829E+22	3,263822E+22	1,240882E+23	6,527651E+22	1,893647E+23
1548	6,204314E+22	6,204498E+22	3,263924E+22	3,263845E+22	1,240881E+23	6,527768E+22	1,893658E+23
1549	6,204504E+22	6,204534E+22	3,263849E+22	3,263954E+22	1,240904E+23	6,527804E+22	1,893684E+23
1550	6,204318E+22	6,204242E+22	3,263944E+22	3,263885E+22	1,240856E+23	6,527828E+22	1,893639E+23
1551	6,204313E+22	6,204494E+22	3,263933E+22	3,263885E+22	1,240881E+23	6,527818E+22	1,893663E+23
1552	6,204501E+22	6,204361E+22	3,263856E+22	3,263880E+22	1,240886E+23	6,527735E+22	1,893660E+23
1553	6,204288E+22	6,204325E+22	3,263878E+22	3,263765E+22	1,240861E+23	6,527642E+22	1,893626E+23
1554	6,204476E+22	6,204602E+22	3,263749E+22	3,263819E+22	1,240908E+23	6,527568E+22	1,893665E+23
1555	6,204513E+22	6,204365E+22	3,263710E+22	3,263748E+22	1,240888E+23	6,527459E+22	1,893634E+23
1556	6,204343E+22	6,204527E+22	3,263736E+22	3,263632E+22	1,240887E+23	6,527368E+22	1,893624E+23
1557	6,204633E+22	6,204655E+22	3,263609E+22	3,263677E+22	1,240929E+23	6,527286E+22	1,893657E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1558	6,204569E+22	6,204348E+22	3,263644E+22	3,263592E+22	1,240892E+23	6,527236E+22	1,893615E+23
1559	6,204464E+22	6,204631E+22	3,263680E+22	3,263599E+22	1,240910E+23	6,527280E+22	1,893637E+23
1560	6,204618E+22	6,204601E+22	3,263620E+22	3,263709E+22	1,240922E+23	6,527329E+22	1,893655E+23
1561	6,204369E+22	6,204411E+22	3,263722E+22	3,263678E+22	1,240878E+23	6,527400E+22	1,893618E+23
1562	6,204441E+22	6,204614E+22	3,263753E+22	3,263791E+22	1,240906E+23	6,527544E+22	1,893660E+23
1563	6,204533E+22	6,204306E+22	3,263793E+22	3,263850E+22	1,240884E+23	6,527643E+22	1,893648E+23
1564	6,204296E+22	6,204315E+22	3,263939E+22	3,263818E+22	1,240861E+23	6,527757E+22	1,893637E+23
1565	6,204460E+22	6,204501E+22	3,263910E+22	3,263985E+22	1,240896E+23	6,527896E+22	1,893686E+23
1566	6,204371E+22	6,204170E+22	3,263980E+22	3,264009E+22	1,240854E+23	6,527989E+22	1,893653E+23
1567	6,204149E+22	6,204382E+22	3,264088E+22	3,264007E+22	1,240853E+23	6,528095E+22	1,893663E+23
1568	6,204332E+22	6,204380E+22	3,264039E+22	3,264118E+22	1,240871E+23	6,528157E+22	1,893687E+23
1569	6,204178E+22	6,204111E+22	3,264101E+22	3,264017E+22	1,240829E+23	6,528118E+22	1,893641E+23
1570	6,204210E+22	6,204366E+22	3,264090E+22	3,264032E+22	1,240858E+23	6,528122E+22	1,893670E+23
1571	6,204379E+22	6,204207E+22	3,263993E+22	3,264060E+22	1,240859E+23	6,528053E+22	1,893664E+23
1572	6,204166E+22	6,204225E+22	3,264004E+22	3,263922E+22	1,240839E+23	6,527926E+22	1,893632E+23
1573	6,204336E+22	6,204505E+22	3,263891E+22	3,263963E+22	1,240884E+23	6,527854E+22	1,893669E+23
1574	6,204426E+22	6,204215E+22	3,263832E+22	3,263873E+22	1,240864E+23	6,527706E+22	1,893635E+23
1575	6,204282E+22	6,204394E+22	3,263874E+22	3,263737E+22	1,240868E+23	6,527611E+22	1,893629E+23
1576	6,204508E+22	6,204527E+22	3,263777E+22	3,263822E+22	1,240904E+23	6,527599E+22	1,893663E+23
1577	6,204403E+22	6,204284E+22	3,263790E+22	3,263748E+22	1,240869E+23	6,527538E+22	1,893623E+23
1578	6,204295E+22	6,204541E+22	3,263843E+22	3,263781E+22	1,240884E+23	6,527625E+22	1,893646E+23
1579	6,204442E+22	6,204416E+22	3,263799E+22	3,263908E+22	1,240886E+23	6,527707E+22	1,893657E+23
1580	6,204252E+22	6,204236E+22	3,263905E+22	3,263838E+22	1,240849E+23	6,527743E+22	1,893623E+23
1581	6,204326E+22	6,204447E+22	3,263945E+22	3,263952E+22	1,240877E+23	6,527898E+22	1,893667E+23
1582	6,204440E+22	6,204138E+22	3,263952E+22	3,264028E+22	1,240858E+23	6,527980E+22	1,893656E+23
1583	6,204177E+22	6,204210E+22	3,264098E+22	3,263997E+22	1,240839E+23	6,528095E+22	1,893648E+23
1584	6,204261E+22	6,204402E+22	3,264095E+22	3,264188E+22	1,240866E+23	6,528284E+22	1,893695E+23
1585	6,204178E+22	6,204077E+22	3,264151E+22	3,264174E+22	1,240825E+23	6,528325E+22	1,893658E+23
1586	6,204011E+22	6,204234E+22	3,264275E+22	3,264160E+22	1,240825E+23	6,528436E+22	1,893668E+23
1587	6,204206E+22	6,204172E+22	3,264217E+22	3,264282E+22	1,240838E+23	6,528499E+22	1,893688E+23
1588	6,204077E+22	6,203956E+22	3,264255E+22	3,264165E+22	1,240803E+23	6,528420E+22	1,893645E+23
1589	6,204065E+22	6,204262E+22	3,264236E+22	3,264194E+22	1,240833E+23	6,528430E+22	1,893676E+23
1590	6,204257E+22	6,204091E+22	3,264097E+22	3,264223E+22	1,240835E+23	6,528320E+22	1,893667E+23
1591	6,204070E+22	6,204118E+22	3,264124E+22	3,264045E+22	1,240819E+23	6,528168E+22	1,893636E+23
1592	6,204224E+22	6,204387E+22	3,264047E+22	3,264085E+22	1,240861E+23	6,528132E+22	1,893674E+23
1593	6,204324E+22	6,204124E+22	3,263970E+22	3,263973E+22	1,240845E+23	6,527944E+22	1,893639E+23
1594	6,204178E+22	6,204292E+22	3,264035E+22	3,263875E+22	1,240847E+23	6,527910E+22	1,893638E+23
1595	6,204340E+22	6,204393E+22	3,263935E+22	3,264008E+22	1,240873E+23	6,527943E+22	1,893668E+23
1596	6,204233E+22	6,204157E+22	3,263947E+22	3,263931E+22	1,240839E+23	6,527879E+22	1,893627E+23
1597	6,204128E+22	6,204383E+22	3,264024E+22	3,263960E+22	1,240851E+23	6,527985E+22	1,893650E+23
1598	6,204349E+22	6,204206E+22	3,263950E+22	3,264077E+22	1,240855E+23	6,528027E+22	1,893658E+23
1599	6,204190E+22	6,204067E+22	3,264061E+22	3,263983E+22	1,240826E+23	6,528043E+22	1,893630E+23
1600	6,204198E+22	6,204322E+22	3,264124E+22	3,264129E+22	1,240852E+23	6,528253E+22	1,893677E+23
1601	6,204260E+22	6,204087E+22	3,264113E+22	3,264199E+22	1,240835E+23	6,528313E+22	1,893666E+23
1602	6,203996E+22	6,204132E+22	3,264289E+22	3,264186E+22	1,240813E+23	6,528475E+22	1,893660E+23
1603	6,204058E+22	6,204233E+22	3,264304E+22	3,264383E+22	1,240829E+23	6,528687E+22	1,893698E+23
1604	6,204034E+22	6,203903E+22	3,264353E+22	3,264338E+22	1,240794E+23	6,528690E+22	1,893663E+23
1605	6,203882E+22	6,204052E+22	3,264468E+22	3,264325E+22	1,240793E+23	6,528792E+22	1,893673E+23
1606	6,204109E+22	6,203985E+22	3,264351E+22	3,264461E+22	1,240809E+23	6,528812E+22	1,893691E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1607	6,203986E+22	6,203844E+22	3,264367E+22	3,264326E+22	1,240783E+23	6,528693E+22	1,893652E+23
1608	6,203925E+22	6,204161E+22	3,264364E+22	3,264360E+22	1,240809E+23	6,528724E+22	1,893681E+23
1609	6,204131E+22	6,204020E+22	3,264219E+22	3,264332E+22	1,240815E+23	6,528551E+22	1,893670E+23
1610	6,204001E+22	6,204012E+22	3,264269E+22	3,264144E+22	1,240801E+23	6,528413E+22	1,893643E+23
1611	6,204106E+22	6,204230E+22	3,264209E+22	3,264205E+22	1,240834E+23	6,528414E+22	1,893675E+23
1612	6,204197E+22	6,204020E+22	3,264128E+22	3,264106E+22	1,240822E+23	6,528234E+22	1,893645E+23
1613	6,203995E+22	6,204189E+22	3,264198E+22	3,264045E+22	1,240818E+23	6,528243E+22	1,893643E+23
1614	6,204174E+22	6,204240E+22	3,264071E+22	3,264198E+22	1,240841E+23	6,528269E+22	1,893668E+23
1615	6,204119E+22	6,204001E+22	3,264092E+22	3,264092E+22	1,240812E+23	6,528184E+22	1,893630E+23
1616	6,204011E+22	6,204215E+22	3,264194E+22	3,264128E+22	1,240823E+23	6,528322E+22	1,893655E+23
1617	6,204247E+22	6,204088E+22	3,264105E+22	3,264221E+22	1,240834E+23	6,528325E+22	1,893666E+23
1618	6,204094E+22	6,203963E+22	3,264235E+22	3,264156E+22	1,240806E+23	6,528392E+22	1,893645E+23
1619	6,204014E+22	6,204203E+22	3,264314E+22	3,264335E+22	1,240822E+23	6,528649E+22	1,893687E+23
1620	6,204079E+22	6,203977E+22	3,264309E+22	3,264391E+22	1,240806E+23	6,528699E+22	1,893676E+23
1621	6,203816E+22	6,203970E+22	3,264507E+22	3,264368E+22	1,240779E+23	6,528875E+22	1,893666E+23
1622	6,203939E+22	6,204011E+22	3,264479E+22	3,264557E+22	1,240795E+23	6,529036E+22	1,893698E+23
1623	6,203952E+22	6,203714E+22	3,264511E+22	3,264491E+22	1,240767E+23	6,529002E+22	1,893667E+23
1624	6,203754E+22	6,203912E+22	3,264620E+22	3,264504E+22	1,240767E+23	6,529124E+22	1,893679E+23
1625	6,203962E+22	6,203917E+22	3,264466E+22	3,264609E+22	1,240788E+23	6,529075E+22	1,893695E+23
1626	6,203864E+22	6,203770E+22	3,264501E+22	3,264469E+22	1,240763E+23	6,528970E+22	1,893660E+23
1627	6,203784E+22	6,204036E+22	3,264520E+22	3,264489E+22	1,240782E+23	6,529009E+22	1,893683E+23
1628	6,204026E+22	6,203905E+22	3,264379E+22	3,264434E+22	1,240793E+23	6,528813E+22	1,893674E+23
1629	6,203881E+22	6,203884E+22	3,264447E+22	3,264269E+22	1,240776E+23	6,528715E+22	1,893648E+23
1630	6,203977E+22	6,204080E+22	3,264342E+22	3,264368E+22	1,240806E+23	6,528711E+22	1,893677E+23
1631	6,204059E+22	6,203906E+22	3,264253E+22	3,264278E+22	1,240796E+23	6,528532E+22	1,893650E+23
1632	6,203829E+22	6,204053E+22	3,264340E+22	3,264237E+22	1,240788E+23	6,528577E+22	1,893646E+23
1633	6,204046E+22	6,204104E+22	3,264205E+22	3,264341E+22	1,240815E+23	6,528546E+22	1,893670E+23
1634	6,204063E+22	6,203856E+22	3,264246E+22	3,264231E+22	1,240792E+23	6,528477E+22	1,893639E+23
1635	6,203908E+22	6,204054E+22	3,264367E+22	3,264284E+22	1,240796E+23	6,528651E+22	1,893661E+23
1636	6,204119E+22	6,203997E+22	3,264285E+22	3,264382E+22	1,240812E+23	6,528667E+22	1,893678E+23
1637	6,203909E+22	6,203874E+22	3,264440E+22	3,264345E+22	1,240778E+23	6,528786E+22	1,893657E+23
1638	6,203826E+22	6,204046E+22	3,264500E+22	3,264536E+22	1,240787E+23	6,529035E+22	1,893691E+23
1639	6,203940E+22	6,203812E+22	3,264501E+22	3,264565E+22	1,240775E+23	6,529067E+22	1,893682E+23
1640	6,203675E+22	6,203774E+22	3,264700E+22	3,264554E+22	1,240745E+23	6,529253E+22	1,893670E+23
1641	6,203810E+22	6,203860E+22	3,264636E+22	3,264715E+22	1,240767E+23	6,529351E+22	1,893702E+23
1642	6,203855E+22	6,203600E+22	3,264653E+22	3,264666E+22	1,240746E+23	6,529319E+22	1,893677E+23
1643	6,203587E+22	6,203791E+22	3,264762E+22	3,264689E+22	1,240738E+23	6,529451E+22	1,893683E+23
1644	6,203821E+22	6,203827E+22	3,264616E+22	3,264754E+22	1,240765E+23	6,529370E+22	1,893702E+23
1645	6,203742E+22	6,203647E+22	3,264674E+22	3,264589E+22	1,240739E+23	6,529263E+22	1,893665E+23
1646	6,203693E+22	6,203865E+22	3,264663E+22	3,264605E+22	1,240756E+23	6,529268E+22	1,893683E+23
1647	6,203943E+22	6,203775E+22	3,264516E+22	3,264548E+22	1,240772E+23	6,529064E+22	1,893678E+23
1648	6,203724E+22	6,203772E+22	3,264585E+22	3,264435E+22	1,240750E+23	6,529020E+22	1,893652E+23
1649	6,203797E+22	6,204001E+22	3,264458E+22	3,264522E+22	1,240780E+23	6,528980E+22	1,893678E+23
1650	6,203933E+22	6,203795E+22	3,264388E+22	3,264441E+22	1,240773E+23	6,528828E+22	1,893656E+23
1651	6,203700E+22	6,203886E+22	3,264497E+22	3,264394E+22	1,240759E+23	6,528891E+22	1,893648E+23
1652	6,203970E+22	6,203961E+22	3,264371E+22	3,264471E+22	1,240793E+23	6,528843E+22	1,893677E+23
1653	6,203969E+22	6,203726E+22	3,264435E+22	3,264379E+22	1,240770E+23	6,528814E+22	1,893651E+23
1654	6,203786E+22	6,203920E+22	3,264526E+22	3,264467E+22	1,240771E+23	6,528993E+22	1,893670E+23
1655	6,203968E+22	6,203893E+22	3,264454E+22	3,264571E+22	1,240786E+23	6,529025E+22	1,893689E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1656	6,203715E+22	6,203737E+22	3,264637E+22	3,264557E+22	1,240745E+23	6,529194E+22	1,893665E+23
1657	6,203661E+22	6,203886E+22	3,264678E+22	3,264698E+22	1,240755E+23	6,529375E+22	1,893692E+23
1658	6,203835E+22	6,203634E+22	3,264681E+22	3,264733E+22	1,240747E+23	6,529414E+22	1,893688E+23
1659	6,203533E+22	6,203594E+22	3,264873E+22	3,264736E+22	1,240713E+23	6,529609E+22	1,893674E+23
1660	6,203670E+22	6,203745E+22	3,264796E+22	3,264884E+22	1,240742E+23	6,529680E+22	1,893710E+23
1661	6,203690E+22	6,203510E+22	3,264825E+22	3,264837E+22	1,240720E+23	6,529662E+22	1,893686E+23
1662	6,203450E+22	6,203651E+22	3,264906E+22	3,264848E+22	1,240710E+23	6,529754E+22	1,893686E+23
1663	6,203725E+22	6,203696E+22	3,264771E+22	3,264874E+22	1,240742E+23	6,529646E+22	1,893707E+23
1664	6,203626E+22	6,203510E+22	3,264834E+22	3,264727E+22	1,240714E+23	6,529562E+22	1,893670E+23
1665	6,203567E+22	6,203750E+22	3,264794E+22	3,264724E+22	1,240732E+23	6,529518E+22	1,893683E+23
1666	6,203826E+22	6,203686E+22	3,264641E+22	3,264706E+22	1,240751E+23	6,529347E+22	1,893686E+23
1667	6,203550E+22	6,203650E+22	3,264716E+22	3,264615E+22	1,240720E+23	6,529331E+22	1,893653E+23
1668	6,203668E+22	6,203876E+22	3,264603E+22	3,264669E+22	1,240754E+23	6,529272E+22	1,893682E+23
1669	6,203841E+22	6,203648E+22	3,264557E+22	3,264572E+22	1,240749E+23	6,529129E+22	1,893662E+23
1670	6,203638E+22	6,203705E+22	3,264637E+22	3,264531E+22	1,240734E+23	6,529168E+22	1,893651E+23
1671	6,203901E+22	6,203843E+22	3,264525E+22	3,264609E+22	1,240774E+23	6,529134E+22	1,893688E+23
1672	6,203810E+22	6,203636E+22	3,264600E+22	3,264566E+22	1,240745E+23	6,529165E+22	1,893661E+23
1673	6,203582E+22	6,203838E+22	3,264688E+22	3,264638E+22	1,240742E+23	6,529326E+22	1,893675E+23
1674	6,203804E+22	6,203779E+22	3,264637E+22	3,264754E+22	1,240758E+23	6,529391E+22	1,893697E+23
1675	6,203532E+22	6,203546E+22	3,264839E+22	3,264747E+22	1,240708E+23	6,529586E+22	1,893666E+23
1676	6,203531E+22	6,203707E+22	3,264877E+22	3,264866E+22	1,240724E+23	6,529743E+22	1,893698E+23
1677	6,203709E+22	6,203472E+22	3,264879E+22	3,264916E+22	1,240718E+23	6,529794E+22	1,893698E+23
1678	6,203404E+22	6,203434E+22	3,265015E+22	3,264938E+22	1,240684E+23	6,529953E+22	1,893679E+23
1679	6,203547E+22	6,203630E+22	3,264941E+22	3,265060E+22	1,240718E+23	6,530002E+22	1,893718E+23
1680	6,203543E+22	6,203387E+22	3,264985E+22	3,265005E+22	1,240693E+23	6,529990E+22	1,893692E+23
1681	6,203335E+22	6,203524E+22	3,265051E+22	3,264954E+22	1,240686E+23	6,530005E+22	1,893686E+23
1682	6,203649E+22	6,203575E+22	3,264918E+22	3,264989E+22	1,240722E+23	6,529907E+22	1,893713E+23
1683	6,203478E+22	6,203384E+22	3,264986E+22	3,264874E+22	1,240686E+23	6,529860E+22	1,893672E+23
1684	6,203408E+22	6,203661E+22	3,264936E+22	3,264871E+22	1,240707E+23	6,529808E+22	1,893688E+23
1685	6,203654E+22	6,203588E+22	3,264800E+22	3,264865E+22	1,240724E+23	6,529666E+22	1,893691E+23
1686	6,203432E+22	6,203489E+22	3,264843E+22	3,264774E+22	1,240692E+23	6,529617E+22	1,893654E+23
1687	6,203606E+22	6,203716E+22	3,264746E+22	3,264796E+22	1,240732E+23	6,529542E+22	1,893686E+23
1688	6,203751E+22	6,203513E+22	3,264710E+22	3,264722E+22	1,240726E+23	6,529432E+22	1,893670E+23
1689	6,203531E+22	6,203604E+22	3,264769E+22	3,264665E+22	1,240713E+23	6,529434E+22	1,893657E+23
1690	6,203765E+22	6,203770E+22	3,264670E+22	3,264782E+22	1,240753E+23	6,529453E+22	1,893699E+23
1691	6,203598E+22	6,203527E+22	3,264777E+22	3,264768E+22	1,240712E+23	6,529546E+22	1,893667E+23
1692	6,203407E+22	6,203691E+22	3,264887E+22	3,264811E+22	1,240710E+23	6,529697E+22	1,893679E+23
1693	6,203657E+22	6,203597E+22	3,264858E+22	3,264922E+22	1,240725E+23	6,529780E+22	1,893703E+23
1694	6,203427E+22	6,203324E+22	3,265010E+22	3,264930E+22	1,240675E+23	6,529940E+22	1,893669E+23
1695	6,203432E+22	6,203536E+22	3,265045E+22	3,265044E+22	1,240697E+23	6,530089E+22	1,893706E+23
1696	6,203546E+22	6,203359E+22	3,265040E+22	3,265121E+22	1,240690E+23	6,530161E+22	1,893707E+23
1697	6,203242E+22	6,203336E+22	3,265156E+22	3,265099E+22	1,240658E+23	6,530255E+22	1,893683E+23
1698	6,203431E+22	6,203529E+22	3,265102E+22	3,265208E+22	1,240696E+23	6,530310E+22	1,893727E+23
1699	6,203399E+22	6,203252E+22	3,265164E+22	3,265148E+22	1,240665E+23	6,530312E+22	1,893696E+23
1700	6,203217E+22	6,203400E+22	3,265228E+22	3,265076E+22	1,240662E+23	6,530305E+22	1,893692E+23
1701	6,203508E+22	6,203465E+22	3,265095E+22	3,265136E+22	1,240697E+23	6,530230E+22	1,893720E+23
1702	6,203327E+22	6,203243E+22	3,265108E+22	3,265058E+22	1,240657E+23	6,530166E+22	1,893674E+23
1703	6,203285E+22	6,203528E+22	3,265066E+22	3,265038E+22	1,240681E+23	6,530104E+22	1,893692E+23
1704	6,203532E+22	6,203440E+22	3,264935E+22	3,265025E+22	1,240697E+23	6,529960E+22	1,893693E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1705	6,203356E+22	6,203340E+22	3,264956E+22	3,264879E+22	1,240670E+23	6,529835E+22	1,893653E+23
1706	6,203560E+22	6,203607E+22	3,264868E+22	3,264911E+22	1,240717E+23	6,529779E+22	1,893695E+23
1707	6,203608E+22	6,203417E+22	3,264858E+22	3,264872E+22	1,240703E+23	6,529730E+22	1,893675E+23
1708	6,203359E+22	6,203536E+22	3,264939E+22	3,264818E+22	1,240690E+23	6,529757E+22	1,893665E+23
1709	6,203566E+22	6,203674E+22	3,264875E+22	3,264953E+22	1,240724E+23	6,529828E+22	1,893707E+23
1710	6,203434E+22	6,203340E+22	3,264962E+22	3,264959E+22	1,240677E+23	6,529921E+22	1,893669E+23
1711	6,203300E+22	6,203484E+22	3,265082E+22	3,264984E+22	1,240678E+23	6,530066E+22	1,893685E+23
1712	6,203527E+22	6,203408E+22	3,265046E+22	3,265121E+22	1,240694E+23	6,530166E+22	1,893710E+23
1713	6,203306E+22	6,203176E+22	3,265154E+22	3,265109E+22	1,240648E+23	6,530263E+22	1,893675E+23
1714	6,203312E+22	6,203439E+22	3,265185E+22	3,265240E+22	1,240675E+23	6,530425E+22	1,893718E+23
1715	6,203362E+22	6,203254E+22	3,265210E+22	3,265315E+22	1,240662E+23	6,530525E+22	1,893714E+23
1716	6,203108E+22	6,203218E+22	3,265345E+22	3,265240E+22	1,240633E+23	6,530584E+22	1,893691E+23
1717	6,203304E+22	6,203394E+22	3,265311E+22	3,265336E+22	1,240670E+23	6,530647E+22	1,893735E+23
1718	6,203284E+22	6,203087E+22	3,265325E+22	3,265302E+22	1,240637E+23	6,530627E+22	1,893700E+23
1719	6,203096E+22	6,203255E+22	3,265380E+22	3,265233E+22	1,240635E+23	6,530613E+22	1,893696E+23
1720	6,203317E+22	6,203356E+22	3,265235E+22	3,265322E+22	1,240667E+23	6,530557E+22	1,893723E+23
1721	6,203179E+22	6,203122E+22	3,265212E+22	3,265203E+22	1,240630E+23	6,530414E+22	1,893672E+23
1722	6,203203E+22	6,203394E+22	3,265181E+22	3,265169E+22	1,240660E+23	6,530350E+22	1,893695E+23
1723	6,203429E+22	6,203304E+22	3,265077E+22	3,265153E+22	1,240673E+23	6,530230E+22	1,893696E+23
1724	6,203282E+22	6,203233E+22	3,265105E+22	3,264986E+22	1,240651E+23	6,530092E+22	1,893661E+23
1725	6,203434E+22	6,203529E+22	3,265042E+22	3,265046E+22	1,240696E+23	6,530088E+22	1,893705E+23
1726	6,203447E+22	6,203309E+22	3,265003E+22	3,265056E+22	1,240676E+23	6,530059E+22	1,893681E+23
1727	6,203208E+22	6,203390E+22	3,265117E+22	3,264998E+22	1,240660E+23	6,530115E+22	1,893671E+23
1728	6,203395E+22	6,203501E+22	3,265068E+22	3,265140E+22	1,240690E+23	6,530209E+22	1,893710E+23
1729	6,203321E+22	6,203146E+22	3,265121E+22	3,265116E+22	1,240647E+23	6,530238E+22	1,893670E+23
1730	6,203221E+22	6,203322E+22	3,265237E+22	3,265159E+22	1,240654E+23	6,530396E+22	1,893694E+23
1731	6,203365E+22	6,203281E+22	3,265213E+22	3,265321E+22	1,240665E+23	6,530534E+22	1,893718E+23
1732	6,203141E+22	6,203093E+22	3,265327E+22	3,265287E+22	1,240623E+23	6,530614E+22	1,893685E+23
1733	6,203145E+22	6,203348E+22	3,265391E+22	3,265408E+22	1,240649E+23	6,530800E+22	1,893729E+23
1734	6,203220E+22	6,203094E+22	3,265396E+22	3,265486E+22	1,240631E+23	6,530882E+22	1,893720E+23
1735	6,203008E+22	6,203048E+22	3,265542E+22	3,265391E+22	1,240606E+23	6,530933E+22	1,893699E+23
1736	6,203156E+22	6,203240E+22	3,265490E+22	3,265505E+22	1,240640E+23	6,530995E+22	1,893739E+23
1737	6,203136E+22	6,202948E+22	3,265449E+22	3,265463E+22	1,240608E+23	6,530913E+22	1,893700E+23
1738	6,202967E+22	6,203146E+22	3,265486E+22	3,265407E+22	1,240611E+23	6,530893E+22	1,893701E+23
1739	6,203154E+22	6,203222E+22	3,265364E+22	3,265486E+22	1,240638E+23	6,530850E+22	1,893723E+23
1740	6,203092E+22	6,202992E+22	3,265350E+22	3,265308E+22	1,240608E+23	6,530658E+22	1,893674E+23
1741	6,203140E+22	6,203275E+22	3,265339E+22	3,265263E+22	1,240641E+23	6,530602E+22	1,893702E+23
1742	6,203345E+22	6,203176E+22	3,265209E+22	3,265279E+22	1,240652E+23	6,530488E+22	1,893701E+23
1743	6,203173E+22	6,203134E+22	3,265257E+22	3,265130E+22	1,240631E+23	6,530387E+22	1,893669E+23
1744	6,203230E+22	6,203441E+22	3,265208E+22	3,265223E+22	1,240667E+23	6,530431E+22	1,893710E+23
1745	6,203274E+22	6,203179E+22	3,265154E+22	3,265219E+22	1,240645E+23	6,530373E+22	1,893683E+23
1746	6,203094E+22	6,203230E+22	3,265277E+22	3,265169E+22	1,240632E+23	6,530446E+22	1,893677E+23
1747	6,203249E+22	6,203324E+22	3,265253E+22	3,265325E+22	1,240657E+23	6,530577E+22	1,893715E+23
1748	6,203213E+22	6,203001E+22	3,265298E+22	3,265285E+22	1,240621E+23	6,530583E+22	1,893680E+23
1749	6,203085E+22	6,203211E+22	3,265422E+22	3,265349E+22	1,240630E+23	6,530771E+22	1,893707E+23
1750	6,203206E+22	6,203157E+22	3,265375E+22	3,265536E+22	1,240636E+23	6,530911E+22	1,893727E+23
1751	6,203019E+22	6,202940E+22	3,265518E+22	3,265468E+22	1,240596E+23	6,530987E+22	1,893695E+23
1752	6,202987E+22	6,203188E+22	3,265597E+22	3,265573E+22	1,240618E+23	6,531170E+22	1,893735E+23
1753	6,203109E+22	6,202928E+22	3,265557E+22	3,265622E+22	1,240604E+23	6,531179E+22	1,893722E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1754	6,202902E+22	6,202904E+22	3,265687E+22	3,265547E+22	1,240581E+23	6,531234E+22	1,893704E+23
1755	6,202958E+22	6,203122E+22	3,265643E+22	3,265685E+22	1,240608E+23	6,531327E+22	1,893741E+23
1756	6,202967E+22	6,202852E+22	3,265591E+22	3,265615E+22	1,240582E+23	6,531206E+22	1,893702E+23
1757	6,202832E+22	6,203032E+22	3,265644E+22	3,265545E+22	1,240586E+23	6,531189E+22	1,893705E+23
1758	6,203061E+22	6,203065E+22	3,265500E+22	3,265621E+22	1,240613E+23	6,531121E+22	1,893725E+23
1759	6,203047E+22	6,202843E+22	3,265500E+22	3,265422E+22	1,240589E+23	6,530922E+22	1,893681E+23
1760	6,203026E+22	6,203169E+22	3,265490E+22	3,265397E+22	1,240619E+23	6,530887E+22	1,893708E+23
1761	6,203213E+22	6,203089E+22	3,265324E+22	3,265422E+22	1,240630E+23	6,530746E+22	1,893705E+23
1762	6,203032E+22	6,203049E+22	3,265382E+22	3,265304E+22	1,240608E+23	6,530686E+22	1,893677E+23
1763	6,203036E+22	6,203306E+22	3,265377E+22	3,265401E+22	1,240634E+23	6,530778E+22	1,893712E+23
1764	6,203147E+22	6,203023E+22	3,265333E+22	3,265363E+22	1,240617E+23	6,530696E+22	1,893687E+23
1765	6,203002E+22	6,203071E+22	3,265464E+22	3,265321E+22	1,240607E+23	6,530785E+22	1,893686E+23
1766	6,203138E+22	6,203148E+22	3,265412E+22	3,265511E+22	1,240629E+23	6,530923E+22	1,893721E+23
1767	6,203094E+22	6,202870E+22	3,265470E+22	3,265474E+22	1,240596E+23	6,530945E+22	1,893691E+23
1768	6,202900E+22	6,203104E+22	3,265601E+22	3,265542E+22	1,240600E+23	6,531143E+22	1,893715E+23
1769	6,203053E+22	6,203014E+22	3,265542E+22	3,265699E+22	1,240607E+23	6,531241E+22	1,893731E+23
1770	6,202910E+22	6,202797E+22	3,265695E+22	3,265629E+22	1,240571E+23	6,531324E+22	1,893703E+23
1771	6,202825E+22	6,203028E+22	3,265793E+22	3,265739E+22	1,240585E+23	6,531532E+22	1,893739E+23
1772	6,202964E+22	6,202799E+22	3,265738E+22	3,265777E+22	1,240576E+23	6,531515E+22	1,893728E+23
1773	6,202743E+22	6,202798E+22	3,265852E+22	3,265726E+22	1,240554E+23	6,531578E+22	1,893712E+23
1774	6,202788E+22	6,202976E+22	3,265779E+22	3,265877E+22	1,240576E+23	6,531656E+22	1,893742E+23
1775	6,202869E+22	6,202691E+22	3,265743E+22	3,265766E+22	1,240556E+23	6,531509E+22	1,893707E+23
1776	6,202733E+22	6,202883E+22	3,265795E+22	3,265671E+22	1,240562E+23	6,531466E+22	1,893708E+23
1777	6,203001E+22	6,202929E+22	3,265616E+22	3,265725E+22	1,240593E+23	6,531341E+22	1,893727E+23
1778	6,202974E+22	6,202761E+22	3,265611E+22	3,265549E+22	1,240573E+23	6,531160E+22	1,893689E+23
1779	6,202835E+22	6,203101E+22	3,265632E+22	3,265552E+22	1,240594E+23	6,531184E+22	1,893712E+23
1780	6,203033E+22	6,203021E+22	3,265478E+22	3,265564E+22	1,240605E+23	6,531043E+22	1,893710E+23
1781	6,202881E+22	6,202927E+22	3,265564E+22	3,265459E+22	1,240581E+23	6,531022E+22	1,893683E+23
1782	6,202910E+22	6,203117E+22	3,265548E+22	3,265572E+22	1,240603E+23	6,531119E+22	1,893715E+23
1783	6,203081E+22	6,202829E+22	3,265509E+22	3,265527E+22	1,240591E+23	6,531037E+22	1,893695E+23
1784	6,202874E+22	6,202920E+22	3,265631E+22	3,265503E+22	1,240579E+23	6,531134E+22	1,893693E+23
1785	6,203010E+22	6,203027E+22	3,265541E+22	3,265694E+22	1,240604E+23	6,531235E+22	1,893727E+23
1786	6,202965E+22	6,202766E+22	3,265613E+22	3,265661E+22	1,240573E+23	6,531274E+22	1,893700E+23
1787	6,202720E+22	6,202968E+22	3,265797E+22	3,265715E+22	1,240569E+23	6,531512E+22	1,893720E+23
1788	6,202921E+22	6,202878E+22	3,265746E+22	3,265834E+22	1,240580E+23	6,531579E+22	1,893738E+23
1789	6,202783E+22	6,202660E+22	3,265902E+22	3,265786E+22	1,240544E+23	6,531687E+22	1,893713E+23
1790	6,202653E+22	6,202869E+22	3,265968E+22	3,265932E+22	1,240552E+23	6,531899E+22	1,893742E+23
1791	6,202804E+22	6,202657E+22	3,265909E+22	3,265969E+22	1,240546E+23	6,531878E+22	1,893734E+23
1792	6,202557E+22	6,202667E+22	3,266012E+22	3,265908E+22	1,240522E+23	6,531920E+22	1,893714E+23
1793	6,202680E+22	6,202815E+22	3,265906E+22	3,266021E+22	1,240549E+23	6,531927E+22	1,893742E+23
1794	6,202816E+22	6,202563E+22	3,265865E+22	3,265893E+22	1,240538E+23	6,531758E+22	1,893714E+23
1795	6,202630E+22	6,202767E+22	3,265938E+22	3,265797E+22	1,240540E+23	6,531735E+22	1,893713E+23
1796	6,202888E+22	6,202860E+22	3,265756E+22	3,265839E+22	1,240575E+23	6,531595E+22	1,893734E+23
1797	6,202831E+22	6,202712E+22	3,265756E+22	3,265701E+22	1,240554E+23	6,531457E+22	1,893700E+23
1798	6,202658E+22	6,202969E+22	3,265777E+22	3,265724E+22	1,240563E+23	6,531502E+22	1,893713E+23
1799	6,202914E+22	6,202846E+22	3,265654E+22	3,265716E+22	1,240576E+23	6,531370E+22	1,893713E+23
1800	6,202767E+22	6,202749E+22	3,265730E+22	3,265603E+22	1,240552E+23	6,531333E+22	1,893685E+23
1801	6,202833E+22	6,202927E+22	3,265677E+22	3,265717E+22	1,240576E+23	6,531394E+22	1,893715E+23
1802	6,202990E+22	6,202716E+22	3,265633E+22	3,265696E+22	1,240571E+23	6,531329E+22	1,893704E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1803	6,202691E+22	6,202830E+22	3,265785E+22	3,265688E+22	1,240552E+23	6,531473E+22	1,893699E+23
1804	6,202837E+22	6,202945E+22	3,265722E+22	3,265850E+22	1,240578E+23	6,531572E+22	1,893735E+23
1805	6,202817E+22	6,202662E+22	3,265822E+22	3,265826E+22	1,240548E+23	6,531648E+22	1,893713E+23
1806	6,202561E+22	6,202791E+22	3,266006E+22	3,265896E+22	1,240535E+23	6,531901E+22	1,893725E+23
1807	6,202798E+22	6,202696E+22	3,265962E+22	3,266016E+22	1,240549E+23	6,531978E+22	1,893747E+23
1808	6,202606E+22	6,202508E+22	3,266091E+22	3,265988E+22	1,240511E+23	6,532079E+22	1,893719E+23
1809	6,202495E+22	6,202712E+22	3,266102E+22	3,266135E+22	1,240521E+23	6,532237E+22	1,893744E+23
1810	6,202682E+22	6,202522E+22	3,266034E+22	3,266156E+22	1,240520E+23	6,532190E+22	1,893739E+23
1811	6,202428E+22	6,202516E+22	3,266162E+22	3,266060E+22	1,240494E+23	6,532223E+22	1,893717E+23
1812	6,202612E+22	6,202695E+22	3,266055E+22	3,266118E+22	1,240531E+23	6,532173E+22	1,893748E+23
1813	6,202743E+22	6,202480E+22	3,266014E+22	3,266004E+22	1,240522E+23	6,532018E+22	1,893724E+23
1814	6,202485E+22	6,202672E+22	3,266080E+22	3,265940E+22	1,240516E+23	6,532020E+22	1,893718E+23
1815	6,202736E+22	6,202766E+22	3,265911E+22	3,265984E+22	1,240550E+23	6,531894E+22	1,893740E+23
1816	6,202637E+22	6,202594E+22	3,265919E+22	3,265854E+22	1,240523E+23	6,531773E+22	1,893700E+23
1817	6,202535E+22	6,202792E+22	3,265913E+22	3,265869E+22	1,240533E+23	6,531782E+22	1,893711E+23
1818	6,202839E+22	6,202683E+22	3,265785E+22	3,265863E+22	1,240552E+23	6,531648E+22	1,893717E+23
1819	6,202652E+22	6,202600E+22	3,265878E+22	3,265764E+22	1,240525E+23	6,531642E+22	1,893689E+23
1820	6,202719E+22	6,202834E+22	3,265820E+22	3,265867E+22	1,240555E+23	6,531687E+22	1,893724E+23
1821	6,202846E+22	6,202658E+22	3,265787E+22	3,265878E+22	1,240550E+23	6,531665E+22	1,893717E+23
1822	6,202515E+22	6,202699E+22	3,265964E+22	3,265877E+22	1,240521E+23	6,531842E+22	1,893706E+23
1823	6,202709E+22	6,202775E+22	3,265940E+22	3,266013E+22	1,240548E+23	6,531954E+22	1,893744E+23
1824	6,202670E+22	6,202495E+22	3,266040E+22	3,265993E+22	1,240517E+23	6,532033E+22	1,893720E+23
1825	6,202437E+22	6,202600E+22	3,266177E+22	3,266078E+22	1,240504E+23	6,532255E+22	1,893729E+23
1826	6,202650E+22	6,202562E+22	3,266114E+22	3,266217E+22	1,240521E+23	6,532331E+22	1,893754E+23
1827	6,202406E+22	6,202380E+22	3,266249E+22	3,266193E+22	1,240479E+23	6,532442E+22	1,893723E+23
1828	6,202346E+22	6,202584E+22	3,266262E+22	3,266289E+22	1,240493E+23	6,532552E+22	1,893748E+23
1829	6,202587E+22	6,202415E+22	3,266199E+22	3,266299E+22	1,240500E+23	6,532498E+22	1,893750E+23
1830	6,202335E+22	6,202362E+22	3,266320E+22	3,266196E+22	1,240470E+23	6,532516E+22	1,893721E+23
1831	6,202531E+22	6,202562E+22	3,266227E+22	3,266243E+22	1,240509E+23	6,532470E+22	1,893756E+23
1832	6,202586E+22	6,202403E+22	3,266166E+22	3,266147E+22	1,240499E+23	6,532313E+22	1,893730E+23
1833	6,202326E+22	6,202549E+22	3,266195E+22	3,266100E+22	1,240487E+23	6,532295E+22	1,893717E+23
1834	6,202591E+22	6,202641E+22	3,266036E+22	3,266138E+22	1,240523E+23	6,532173E+22	1,893741E+23
1835	6,202498E+22	6,202430E+22	3,266066E+22	3,266000E+22	1,240493E+23	6,532067E+22	1,893699E+23
1836	6,202453E+22	6,202639E+22	3,266056E+22	3,265985E+22	1,240509E+23	6,532041E+22	1,893713E+23
1837	6,202757E+22	6,202584E+22	3,265924E+22	3,266011E+22	1,240534E+23	6,531935E+22	1,893728E+23
1838	6,202505E+22	6,202489E+22	3,266019E+22	3,265939E+22	1,240499E+23	6,531958E+22	1,893695E+23
1839	6,202575E+22	6,202729E+22	3,265996E+22	3,266036E+22	1,240530E+23	6,532032E+22	1,893734E+23
1840	6,202667E+22	6,202548E+22	3,265985E+22	3,266045E+22	1,240521E+23	6,532030E+22	1,893724E+23
1841	6,202389E+22	6,202519E+22	3,266148E+22	3,266047E+22	1,240491E+23	6,532196E+22	1,893710E+23
1842	6,202598E+22	6,202609E+22	3,266125E+22	3,266187E+22	1,240521E+23	6,532312E+22	1,893752E+23
1843	6,202509E+22	6,202330E+22	3,266233E+22	3,266194E+22	1,240484E+23	6,532427E+22	1,893727E+23
1844	6,202281E+22	6,202472E+22	3,266344E+22	3,266268E+22	1,240475E+23	6,532612E+22	1,893737E+23
1845	6,202492E+22	6,202458E+22	3,266271E+22	3,266422E+22	1,240495E+23	6,532694E+22	1,893764E+23
1846	6,202251E+22	6,202216E+22	3,266415E+22	3,266379E+22	1,240447E+23	6,532795E+22	1,893726E+23
1847	6,202270E+22	6,202411E+22	3,266445E+22	3,266423E+22	1,240468E+23	6,532869E+22	1,893755E+23
1848	6,202478E+22	6,202283E+22	3,266374E+22	3,266419E+22	1,240476E+23	6,532794E+22	1,893756E+23
1849	6,202236E+22	6,202231E+22	3,266454E+22	3,266332E+22	1,240447E+23	6,532786E+22	1,893725E+23
1850	6,202384E+22	6,202482E+22	3,266352E+22	3,266389E+22	1,240487E+23	6,532741E+22	1,893761E+23
1851	6,202379E+22	6,202309E+22	3,266310E+22	3,266309E+22	1,240469E+23	6,532620E+22	1,893731E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1852	6,202172E+22	6,202426E+22	3,266337E+22	3,266230E+22	1,240460E+23	6,532567E+22	1,893717E+23
1853	6,202482E+22	6,202518E+22	3,266180E+22	3,266278E+22	1,240500E+23	6,532458E+22	1,893746E+23
1854	6,202399E+22	6,202260E+22	3,266211E+22	3,266151E+22	1,240466E+23	6,532362E+22	1,893702E+23
1855	6,202385E+22	6,202488E+22	3,266212E+22	3,266132E+22	1,240487E+23	6,532343E+22	1,893722E+23
1856	6,202617E+22	6,202501E+22	3,266076E+22	3,266173E+22	1,240512E+23	6,532249E+22	1,893737E+23
1857	6,202379E+22	6,202365E+22	3,266150E+22	3,266117E+22	1,240474E+23	6,532266E+22	1,893701E+23
1858	6,202447E+22	6,202600E+22	3,266159E+22	3,266195E+22	1,240505E+23	6,532355E+22	1,893740E+23
1859	6,202525E+22	6,202391E+22	3,266181E+22	3,266207E+22	1,240492E+23	6,532388E+22	1,893730E+23
1860	6,202272E+22	6,202357E+22	3,266339E+22	3,266197E+22	1,240463E+23	6,532536E+22	1,893717E+23
1861	6,202454E+22	6,202500E+22	3,266305E+22	3,266379E+22	1,240495E+23	6,532684E+22	1,893764E+23
1862	6,202314E+22	6,202186E+22	3,266405E+22	3,266409E+22	1,240450E+23	6,532814E+22	1,893731E+23
1863	6,202118E+22	6,202313E+22	3,266533E+22	3,266461E+22	1,240443E+23	6,532994E+22	1,893743E+23
1864	6,202328E+22	6,202321E+22	3,266464E+22	3,266589E+22	1,240465E+23	6,533052E+22	1,893770E+23
1865	6,202161E+22	6,202034E+22	3,266571E+22	3,266534E+22	1,240419E+23	6,533105E+22	1,893730E+23
1866	6,202188E+22	6,202273E+22	3,266601E+22	3,266562E+22	1,240446E+23	6,533163E+22	1,893762E+23
1867	6,202337E+22	6,202176E+22	3,266533E+22	3,266575E+22	1,240451E+23	6,533108E+22	1,893762E+23
1868	6,202077E+22	6,202151E+22	3,266589E+22	3,266480E+22	1,240423E+23	6,533069E+22	1,893730E+23
1869	6,202213E+22	6,202411E+22	3,266485E+22	3,266554E+22	1,240462E+23	6,533038E+22	1,893766E+23
1870	6,202219E+22	6,202144E+22	3,266461E+22	3,266466E+22	1,240436E+23	6,532927E+22	1,893729E+23
1871	6,202102E+22	6,202236E+22	3,266500E+22	3,266354E+22	1,240434E+23	6,532854E+22	1,893719E+23
1872	6,202395E+22	6,202376E+22	3,266333E+22	3,266400E+22	1,240477E+23	6,532734E+22	1,893750E+23
1873	6,202325E+22	6,202123E+22	3,266322E+22	3,266300E+22	1,240445E+23	6,532622E+22	1,893707E+23
1874	6,202273E+22	6,202408E+22	3,266329E+22	3,266283E+22	1,240468E+23	6,532612E+22	1,893729E+23
1875	6,202443E+22	6,202413E+22	3,266233E+22	3,266336E+22	1,240486E+23	6,532569E+22	1,893743E+23
1876	6,202242E+22	6,202255E+22	3,266324E+22	3,266256E+22	1,240450E+23	6,532580E+22	1,893708E+23
1877	6,202320E+22	6,202483E+22	3,266344E+22	3,266353E+22	1,240480E+23	6,532697E+22	1,893750E+23
1878	6,202371E+22	6,202215E+22	3,266382E+22	3,266394E+22	1,240459E+23	6,532777E+22	1,893736E+23
1879	6,202143E+22	6,202187E+22	3,266536E+22	3,266390E+22	1,240433E+23	6,532926E+22	1,893726E+23
1880	6,202256E+22	6,202371E+22	3,266488E+22	3,266584E+22	1,240463E+23	6,533072E+22	1,893770E+23
1881	6,202164E+22	6,202012E+22	3,266554E+22	3,266619E+22	1,240418E+23	6,533174E+22	1,893735E+23
1882	6,202011E+22	6,202144E+22	3,266692E+22	3,266629E+22	1,240416E+23	6,533321E+22	1,893748E+23
1883	6,202215E+22	6,202161E+22	3,266643E+22	3,266740E+22	1,240438E+23	6,533383E+22	1,893776E+23
1884	6,202070E+22	6,201913E+22	3,266730E+22	3,266660E+22	1,240398E+23	6,533389E+22	1,893737E+23
1885	6,202050E+22	6,202211E+22	3,266750E+22	3,266713E+22	1,240426E+23	6,533462E+22	1,893772E+23
1886	6,202136E+22	6,202077E+22	3,266690E+22	3,266746E+22	1,240421E+23	6,533437E+22	1,893765E+23
1887	6,201918E+22	6,202013E+22	3,266758E+22	3,266633E+22	1,240393E+23	6,533391E+22	1,893732E+23
1888	6,202053E+22	6,202273E+22	3,266656E+22	3,266688E+22	1,240433E+23	6,533344E+22	1,893767E+23
1889	6,202147E+22	6,201954E+22	3,266588E+22	3,266610E+22	1,240410E+23	6,533198E+22	1,893730E+23
1890	6,202050E+22	6,202085E+22	3,266621E+22	3,266487E+22	1,240414E+23	6,533108E+22	1,893724E+23
1891	6,202289E+22	6,202273E+22	3,266462E+22	3,266554E+22	1,240456E+23	6,533016E+22	1,893758E+23
1892	6,202203E+22	6,202055E+22	3,266437E+22	3,266443E+22	1,240426E+23	6,532880E+22	1,893714E+23
1893	6,202129E+22	6,202354E+22	3,266467E+22	3,266437E+22	1,240448E+23	6,532904E+22	1,893739E+23
1894	6,202289E+22	6,202269E+22	3,266412E+22	3,266489E+22	1,240456E+23	6,532901E+22	1,893746E+23
1895	6,202134E+22	6,202074E+22	3,266528E+22	3,266401E+22	1,240421E+23	6,532929E+22	1,893714E+23
1896	6,202162E+22	6,202340E+22	3,266548E+22	3,266515E+22	1,240450E+23	6,533062E+22	1,893756E+23
1897	6,202223E+22	6,202043E+22	3,266539E+22	3,266603E+22	1,240427E+23	6,533142E+22	1,893741E+23
1898	6,201983E+22	6,202043E+22	3,266691E+22	3,266594E+22	1,240403E+23	6,533285E+22	1,893731E+23
1899	6,202080E+22	6,202219E+22	3,266665E+22	3,266782E+22	1,240430E+23	6,533447E+22	1,893775E+23
1900	6,202045E+22	6,201867E+22	3,266722E+22	3,266773E+22	1,240391E+23	6,533495E+22	1,893741E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1901	6,201919E+22	6,202033E+22	3,266859E+22	3,266781E+22	1,240395E+23	6,533640E+22	1,893759E+23
1902	6,202086E+22	6,202019E+22	3,266831E+22	3,266902E+22	1,240411E+23	6,533733E+22	1,893784E+23
1903	6,201941E+22	6,201798E+22	3,266915E+22	3,266822E+22	1,240374E+23	6,533737E+22	1,893748E+23
1904	6,201847E+22	6,202127E+22	3,266923E+22	3,266879E+22	1,240397E+23	6,533802E+22	1,893778E+23
1905	6,201979E+22	6,201914E+22	3,266830E+22	3,266925E+22	1,240389E+23	6,533755E+22	1,893765E+23
1906	6,201823E+22	6,201834E+22	3,266897E+22	3,266772E+22	1,240366E+23	6,533669E+22	1,893733E+23
1907	6,201962E+22	6,202099E+22	3,266800E+22	3,266822E+22	1,240406E+23	6,533622E+22	1,893768E+23
1908	6,202081E+22	6,201844E+22	3,266700E+22	3,266727E+22	1,240392E+23	6,533427E+22	1,893735E+23
1909	6,201953E+22	6,202040E+22	3,266719E+22	3,266626E+22	1,240399E+23	6,533345E+22	1,893734E+23
1910	6,202117E+22	6,202193E+22	3,266603E+22	3,266706E+22	1,240431E+23	6,533309E+22	1,893762E+23
1911	6,202064E+22	6,201954E+22	3,266607E+22	3,266579E+22	1,240402E+23	6,533185E+22	1,893720E+23
1912	6,201962E+22	6,202234E+22	3,266662E+22	3,266566E+22	1,240420E+23	6,533228E+22	1,893742E+23
1913	6,202173E+22	6,202081E+22	3,266584E+22	3,266656E+22	1,240425E+23	6,533241E+22	1,893750E+23
1914	6,202029E+22	6,201897E+22	3,266697E+22	3,266578E+22	1,240393E+23	6,533276E+22	1,893720E+23
1915	6,201997E+22	6,202187E+22	3,266718E+22	3,266723E+22	1,240418E+23	6,533441E+22	1,893762E+23
1916	6,202066E+22	6,201921E+22	3,266680E+22	3,266800E+22	1,240399E+23	6,533480E+22	1,893747E+23
1917	6,201848E+22	6,201928E+22	3,266837E+22	3,266782E+22	1,240378E+23	6,533619E+22	1,893740E+23
1918	6,201952E+22	6,202045E+22	3,266858E+22	3,266949E+22	1,240400E+23	6,533807E+22	1,893780E+23
1919	6,201965E+22	6,201711E+22	3,266924E+22	3,266913E+22	1,240368E+23	6,533837E+22	1,893751E+23
1920	6,201772E+22	6,201933E+22	3,267061E+22	3,266925E+22	1,240371E+23	6,533986E+22	1,893769E+23
1921	6,201926E+22	6,201893E+22	3,266991E+22	3,267089E+22	1,240382E+23	6,534080E+22	1,893790E+23
1922	6,201764E+22	6,201675E+22	3,267074E+22	3,267002E+22	1,240344E+23	6,534076E+22	1,893752E+23
1923	6,201661E+22	6,201979E+22	3,267092E+22	3,267052E+22	1,240364E+23	6,534144E+22	1,893778E+23
1924	6,201862E+22	6,201758E+22	3,266966E+22	3,267062E+22	1,240362E+23	6,534028E+22	1,893765E+23
1925	6,201750E+22	6,201713E+22	3,267014E+22	3,266909E+22	1,240346E+23	6,533924E+22	1,893739E+23
1926	6,201868E+22	6,201961E+22	3,266936E+22	3,266963E+22	1,240383E+23	6,533899E+22	1,893773E+23
1927	6,201979E+22	6,201755E+22	3,266832E+22	3,266862E+22	1,240373E+23	6,533695E+22	1,893743E+23
1928	6,201787E+22	6,201989E+22	3,266866E+22	3,266760E+22	1,240378E+23	6,533626E+22	1,893740E+23
1929	6,201984E+22	6,202051E+22	3,266744E+22	3,266857E+22	1,240403E+23	6,533601E+22	1,893764E+23
1930	6,201965E+22	6,201788E+22	3,266773E+22	3,266712E+22	1,240375E+23	6,533486E+22	1,893724E+23
1931	6,201838E+22	6,202062E+22	3,266842E+22	3,266719E+22	1,240390E+23	6,533561E+22	1,893746E+23
1932	6,202045E+22	6,201944E+22	3,266732E+22	3,266819E+22	1,240399E+23	6,533551E+22	1,893754E+23
1933	6,201882E+22	6,201808E+22	3,266829E+22	3,266772E+22	1,240369E+23	6,533601E+22	1,893729E+23
1934	6,201814E+22	6,202043E+22	3,266891E+22	3,266923E+22	1,240386E+23	6,533814E+22	1,893767E+23
1935	6,201932E+22	6,201781E+22	3,266872E+22	3,266970E+22	1,240371E+23	6,533842E+22	1,893755E+23
1936	6,201713E+22	6,201804E+22	3,267043E+22	3,266932E+22	1,240352E+23	6,533976E+22	1,893749E+23
1937	6,201849E+22	6,201871E+22	3,267046E+22	3,267125E+22	1,240372E+23	6,534172E+22	1,893789E+23
1938	6,201854E+22	6,201572E+22	3,267112E+22	3,267089E+22	1,240343E+23	6,534201E+22	1,893763E+23
1939	6,201583E+22	6,201812E+22	3,267242E+22	3,267125E+22	1,240340E+23	6,534368E+22	1,893776E+23
1940	6,201737E+22	6,201783E+22	3,267137E+22	3,267274E+22	1,240352E+23	6,534411E+22	1,893793E+23
1941	6,201624E+22	6,201547E+22	3,267205E+22	3,267170E+22	1,240317E+23	6,534375E+22	1,893755E+23
1942	6,201538E+22	6,201777E+22	3,267256E+22	3,267198E+22	1,240331E+23	6,534454E+22	1,893777E+23
1943	6,201797E+22	6,201610E+22	3,267114E+22	3,267179E+22	1,240341E+23	6,534294E+22	1,893770E+23
1944	6,201642E+22	6,201629E+22	3,267152E+22	3,267026E+22	1,240327E+23	6,534178E+22	1,893745E+23
1945	6,201747E+22	6,201856E+22	3,267052E+22	3,267115E+22	1,240360E+23	6,534167E+22	1,893777E+23
1946	6,201849E+22	6,201664E+22	3,266967E+22	3,266997E+22	1,240351E+23	6,533964E+22	1,893748E+23
1947	6,201629E+22	6,201866E+22	3,267031E+22	3,266898E+22	1,240349E+23	6,533929E+22	1,893742E+23
1948	6,201859E+22	6,201918E+22	3,266893E+22	3,266982E+22	1,240378E+23	6,533875E+22	1,893765E+23
1949	6,201865E+22	6,201663E+22	3,266916E+22	3,266867E+22	1,240353E+23	6,533783E+22	1,893731E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1950	6,201696E+22	6,201897E+22	3,267017E+22	3,266905E+22	1,240359E+23	6,533922E+22	1,893751E+23
1951	6,201899E+22	6,201828E+22	3,266895E+22	3,267010E+22	1,240373E+23	6,533905E+22	1,893763E+23
1952	6,201706E+22	6,201710E+22	3,267000E+22	3,266956E+22	1,240342E+23	6,533956E+22	1,893737E+23
1953	6,201694E+22	6,201857E+22	3,267060E+22	3,267113E+22	1,240355E+23	6,534173E+22	1,893772E+23
1954	6,201848E+22	6,201604E+22	3,267063E+22	3,267127E+22	1,240345E+23	6,534190E+22	1,893764E+23
1955	6,201594E+22	6,201654E+22	3,267245E+22	3,267102E+22	1,240325E+23	6,534347E+22	1,893760E+23
1956	6,201700E+22	6,201757E+22	3,267213E+22	3,267295E+22	1,240346E+23	6,534508E+22	1,893797E+23
1957	6,201673E+22	6,201494E+22	3,267265E+22	3,267284E+22	1,240317E+23	6,534549E+22	1,893772E+23
1958	6,201374E+22	6,201659E+22	3,267426E+22	3,267317E+22	1,240303E+23	6,534743E+22	1,893778E+23
1959	6,201580E+22	6,201622E+22	3,267315E+22	3,267428E+22	1,240320E+23	6,534743E+22	1,893794E+23
1960	6,201499E+22	6,201405E+22	3,267376E+22	3,267303E+22	1,240290E+23	6,534679E+22	1,893758E+23
1961	6,201471E+22	6,201586E+22	3,267394E+22	3,267349E+22	1,240306E+23	6,534743E+22	1,893780E+23
1962	6,201726E+22	6,201485E+22	3,267248E+22	3,267318E+22	1,240321E+23	6,534567E+22	1,893778E+23
1963	6,201505E+22	6,201551E+22	3,267281E+22	3,267179E+22	1,240306E+23	6,534460E+22	1,893752E+23
1964	6,201599E+22	6,201776E+22	3,267166E+22	3,267248E+22	1,240338E+23	6,534414E+22	1,893779E+23
1965	6,201731E+22	6,201571E+22	3,267093E+22	3,267126E+22	1,240330E+23	6,534220E+22	1,893752E+23
1966	6,201506E+22	6,201691E+22	3,267206E+22	3,267033E+22	1,240320E+23	6,534238E+22	1,893744E+23
1967	6,201746E+22	6,201784E+22	3,267062E+22	3,267118E+22	1,240353E+23	6,534180E+22	1,893771E+23
1968	6,201714E+22	6,201571E+22	3,267078E+22	3,267030E+22	1,240328E+23	6,534108E+22	1,893739E+23
1969	6,201544E+22	6,201744E+22	3,267162E+22	3,267111E+22	1,240329E+23	6,534273E+22	1,893756E+23
1970	6,201768E+22	6,201683E+22	3,267062E+22	3,267193E+22	1,240345E+23	6,534255E+22	1,893771E+23
1971	6,201570E+22	6,201553E+22	3,267185E+22	3,267130E+22	1,240312E+23	6,534316E+22	1,893744E+23
1972	6,201587E+22	6,201710E+22	3,267229E+22	3,267266E+22	1,240330E+23	6,534495E+22	1,893779E+23
1973	6,201751E+22	6,201492E+22	3,267227E+22	3,267294E+22	1,240324E+23	6,534520E+22	1,893776E+23
1974	6,201426E+22	6,201503E+22	3,267446E+22	3,267295E+22	1,240293E+23	6,534742E+22	1,893767E+23
1975	6,201504E+22	6,201657E+22	3,267398E+22	3,267483E+22	1,240316E+23	6,534881E+22	1,893804E+23
1976	6,201472E+22	6,201378E+22	3,267450E+22	3,267465E+22	1,240285E+23	6,534914E+22	1,893776E+23
1977	6,201243E+22	6,201434E+22	3,267597E+22	3,267498E+22	1,240268E+23	6,535095E+22	1,893777E+23
1978	6,201510E+22	6,201421E+22	3,267481E+22	3,267568E+22	1,240293E+23	6,535050E+22	1,893798E+23
1979	6,201407E+22	6,201258E+22	3,267525E+22	3,267446E+22	1,240267E+23	6,534971E+22	1,893764E+23
1980	6,201362E+22	6,201499E+22	3,267501E+22	3,267485E+22	1,240286E+23	6,534987E+22	1,893785E+23
1981	6,201592E+22	6,201447E+22	3,267351E+22	3,267460E+22	1,240304E+23	6,534811E+22	1,893785E+23
1982	6,201337E+22	6,201443E+22	3,267441E+22	3,267322E+22	1,240278E+23	6,534763E+22	1,893754E+23
1983	6,201454E+22	6,201670E+22	3,267333E+22	3,267362E+22	1,240312E+23	6,534695E+22	1,893782E+23
1984	6,201598E+22	6,201459E+22	3,267268E+22	3,267253E+22	1,240306E+23	6,534522E+22	1,893758E+23
1985	6,201408E+22	6,201496E+22	3,267361E+22	3,267207E+22	1,240290E+23	6,534568E+22	1,893747E+23
1986	6,201638E+22	6,201629E+22	3,267216E+22	3,267298E+22	1,240327E+23	6,534514E+22	1,893778E+23
1987	6,201560E+22	6,201455E+22	3,267224E+22	3,267228E+22	1,240302E+23	6,534452E+22	1,893747E+23
1988	6,201418E+22	6,201607E+22	3,267287E+22	3,267281E+22	1,240302E+23	6,534568E+22	1,893759E+23
1989	6,201675E+22	6,201551E+22	3,267207E+22	3,267344E+22	1,240323E+23	6,534551E+22	1,893778E+23
1990	6,201466E+22	6,201382E+22	3,267382E+22	3,267280E+22	1,240285E+23	6,534662E+22	1,893751E+23
1991	6,201453E+22	6,201594E+22	3,267425E+22	3,267411E+22	1,240305E+23	6,534835E+22	1,893788E+23
1992	6,201562E+22	6,201416E+22	3,267427E+22	3,267471E+22	1,240298E+23	6,534898E+22	1,893788E+23
1993	6,201231E+22	6,201339E+22	3,267631E+22	3,267513E+22	1,240257E+23	6,535144E+22	1,893771E+23
1994	6,201330E+22	6,201480E+22	3,267593E+22	3,267672E+22	1,240281E+23	6,535265E+22	1,893807E+23
1995	6,201319E+22	6,201199E+22	3,267636E+22	3,267643E+22	1,240252E+23	6,535278E+22	1,893780E+23
1996	6,201150E+22	6,201255E+22	3,267735E+22	3,267652E+22	1,240240E+23	6,535387E+22	1,893779E+23
1997	6,201440E+22	6,201306E+22	3,267606E+22	3,267719E+22	1,240275E+23	6,535324E+22	1,893807E+23
1998	6,201284E+22	6,201150E+22	3,267672E+22	3,267606E+22	1,240243E+23	6,535278E+22	1,893771E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1999	6,201207E+22	6,201451E+22	3,267637E+22	3,267621E+22	1,240266E+23	6,535258E+22	1,893792E+23
2000	6,201434E+22	6,201385E+22	3,267506E+22	3,267587E+22	1,240282E+23	6,535093E+22	1,893791E+23
2001	6,201224E+22	6,201256E+22	3,267600E+22	3,267465E+22	1,240248E+23	6,535065E+22	1,893754E+23
2002	6,201369E+22	6,201496E+22	3,267499E+22	3,267488E+22	1,240287E+23	6,534987E+22	1,893785E+23
2003	6,201480E+22	6,201314E+22	3,267420E+22	3,267409E+22	1,240279E+23	6,534829E+22	1,893762E+23
2004	6,201280E+22	6,201372E+22	3,267470E+22	3,267375E+22	1,240265E+23	6,534844E+22	1,893750E+23
2005	6,201513E+22	6,201539E+22	3,267324E+22	3,267464E+22	1,240305E+23	6,534788E+22	1,893784E+23
2006	6,201415E+22	6,201307E+22	3,267387E+22	3,267389E+22	1,240272E+23	6,534776E+22	1,893750E+23
2007	6,201295E+22	6,201494E+22	3,267462E+22	3,267406E+22	1,240279E+23	6,534868E+22	1,893766E+23
2008	6,201557E+22	6,201449E+22	3,267403E+22	3,267482E+22	1,240301E+23	6,534886E+22	1,893789E+23
2009	6,201341E+22	6,201206E+22	3,267581E+22	3,267474E+22	1,240255E+23	6,535055E+22	1,893760E+23
2010	6,201289E+22	6,201457E+22	3,267625E+22	3,267609E+22	1,240275E+23	6,535234E+22	1,893798E+23
2011	6,201346E+22	6,201287E+22	3,267619E+22	3,267692E+22	1,240263E+23	6,535310E+22	1,893794E+23
2012	6,201066E+22	6,201156E+22	3,267787E+22	3,267711E+22	1,240222E+23	6,535498E+22	1,893772E+23
2013	6,201228E+22	6,201302E+22	3,267744E+22	3,267838E+22	1,240253E+23	6,535582E+22	1,893811E+23
2014	6,201222E+22	6,201014E+22	3,267809E+22	3,267802E+22	1,240224E+23	6,535611E+22	1,893785E+23
2015	6,201044E+22	6,201162E+22	3,267882E+22	3,267786E+22	1,240221E+23	6,535668E+22	1,893787E+23
2016	6,201293E+22	6,201267E+22	3,267758E+22	3,267865E+22	1,240256E+23	6,535623E+22	1,893818E+23
2017	6,201132E+22	6,201034E+22	3,267823E+22	3,267774E+22	1,240217E+23	6,535596E+22	1,893776E+23
2018	6,201068E+22	6,201315E+22	3,267809E+22	3,267751E+22	1,240238E+23	6,535560E+22	1,893794E+23
2019	6,201294E+22	6,201248E+22	3,267677E+22	3,267721E+22	1,240254E+23	6,535398E+22	1,893794E+23
2020	6,201134E+22	6,201086E+22	3,267722E+22	3,267600E+22	1,240222E+23	6,535323E+22	1,893754E+23
2021	6,201279E+22	6,201364E+22	3,267613E+22	3,267636E+22	1,240264E+23	6,535249E+22	1,893789E+23
2022	6,201342E+22	6,201193E+22	3,267554E+22	3,267583E+22	1,240254E+23	6,535137E+22	1,893767E+23
2023	6,201132E+22	6,201295E+22	3,267591E+22	3,267524E+22	1,240243E+23	6,535116E+22	1,893754E+23
2024	6,201382E+22	6,201446E+22	3,267486E+22	3,267603E+22	1,240283E+23	6,535089E+22	1,893792E+23
2025	6,201323E+22	6,201123E+22	3,267563E+22	3,267542E+22	1,240245E+23	6,535105E+22	1,893755E+23
2026	6,201203E+22	6,201336E+22	3,267658E+22	3,267545E+22	1,240254E+23	6,535204E+22	1,893774E+23
2027	6,201395E+22	6,201336E+22	3,267600E+22	3,267662E+22	1,240273E+23	6,535262E+22	1,893799E+23
2028	6,201157E+22	6,201078E+22	3,267740E+22	3,267680E+22	1,240224E+23	6,535421E+22	1,893766E+23
2029	6,201104E+22	6,201331E+22	3,267788E+22	3,267813E+22	1,240243E+23	6,535601E+22	1,893804E+23
2030	6,201167E+22	6,201101E+22	3,267816E+22	3,267892E+22	1,240227E+23	6,535708E+22	1,893798E+23
2031	6,200935E+22	6,201004E+22	3,267960E+22	3,267867E+22	1,240194E+23	6,535827E+22	1,893777E+23
2032	6,201135E+22	6,201171E+22	3,267923E+22	3,267991E+22	1,240231E+23	6,535914E+22	1,893822E+23
2033	6,201126E+22	6,200851E+22	3,267974E+22	3,267982E+22	1,240198E+23	6,535956E+22	1,893793E+23
2034	6,200925E+22	6,201065E+22	3,268042E+22	3,267946E+22	1,240199E+23	6,535988E+22	1,893798E+23
2035	6,201123E+22	6,201181E+22	3,267916E+22	3,268024E+22	1,240230E+23	6,535940E+22	1,893824E+23
2036	6,200997E+22	6,200887E+22	3,267956E+22	3,267914E+22	1,240188E+23	6,535870E+22	1,893775E+23
2037	6,200973E+22	6,201168E+22	3,267940E+22	3,267864E+22	1,240214E+23	6,535804E+22	1,893795E+23
2038	6,201176E+22	6,201081E+22	3,267828E+22	3,267854E+22	1,240226E+23	6,535683E+22	1,893794E+23
2039	6,201003E+22	6,200996E+22	3,267843E+22	3,267730E+22	1,240200E+23	6,535574E+22	1,893757E+23
2040	6,201135E+22	6,201300E+22	3,267744E+22	3,267787E+22	1,240244E+23	6,535531E+22	1,893797E+23
2041	6,201200E+22	6,201055E+22	3,267696E+22	3,267756E+22	1,240226E+23	6,535452E+22	1,893771E+23
2042	6,201023E+22	6,201160E+22	3,267758E+22	3,267660E+22	1,240218E+23	6,535418E+22	1,893760E+23
2043	6,201259E+22	6,201317E+22	3,267670E+22	3,267746E+22	1,240258E+23	6,535415E+22	1,893799E+23
2044	6,201223E+22	6,200969E+22	3,267722E+22	3,267704E+22	1,240219E+23	6,535425E+22	1,893762E+23
2045	6,201077E+22	6,201213E+22	3,267821E+22	3,267723E+22	1,240229E+23	6,535544E+22	1,893783E+23
2046	6,201197E+22	6,201209E+22	3,267787E+22	3,267878E+22	1,240241E+23	6,535665E+22	1,893807E+23
2047	6,200963E+22	6,200965E+22	3,267908E+22	3,267873E+22	1,240193E+23	6,535781E+22	1,893771E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2048	6,200957E+22	6,201175E+22	3,267981E+22	3,267992E+22	1,240213E+23	6,535973E+22	1,893811E+23
2049	6,201071E+22	6,200877E+22	3,268005E+22	3,268074E+22	1,240195E+23	6,536079E+22	1,893803E+23
2050	6,200863E+22	6,200830E+22	3,268141E+22	3,268019E+22	1,240169E+23	6,536160E+22	1,893785E+23
2051	6,200998E+22	6,201071E+22	3,268099E+22	3,268158E+22	1,240207E+23	6,536257E+22	1,893833E+23
2052	6,200979E+22	6,200756E+22	3,268103E+22	3,268150E+22	1,240174E+23	6,536254E+22	1,893799E+23
2053	6,200768E+22	6,200968E+22	3,268182E+22	3,268089E+22	1,240174E+23	6,536272E+22	1,893801E+23
2054	6,200953E+22	6,201044E+22	3,268091E+22	3,268165E+22	1,240200E+23	6,536256E+22	1,893825E+23
2055	6,200859E+22	6,200768E+22	3,268102E+22	3,268029E+22	1,240163E+23	6,536131E+22	1,893776E+23
2056	6,200863E+22	6,201044E+22	3,268094E+22	3,268000E+22	1,240191E+23	6,536094E+22	1,893800E+23
2057	6,201057E+22	6,200924E+22	3,267967E+22	3,268030E+22	1,240198E+23	6,535997E+22	1,893798E+23
2058	6,200884E+22	6,200886E+22	3,267970E+22	3,267892E+22	1,240177E+23	6,535862E+22	1,893763E+23
2059	6,200993E+22	6,201197E+22	3,267886E+22	3,267944E+22	1,240219E+23	6,535830E+22	1,893802E+23
2060	6,201110E+22	6,200902E+22	3,267821E+22	3,267895E+22	1,240201E+23	6,535716E+22	1,893773E+23
2061	6,200958E+22	6,201021E+22	3,267903E+22	3,267778E+22	1,240198E+23	6,535681E+22	1,893766E+23
2062	6,201135E+22	6,201181E+22	3,267850E+22	3,267897E+22	1,240232E+23	6,535746E+22	1,893806E+23
2063	6,201052E+22	6,200895E+22	3,267885E+22	3,267868E+22	1,240195E+23	6,535753E+22	1,893770E+23
2064	6,200889E+22	6,201125E+22	3,268004E+22	3,267918E+22	1,240201E+23	6,535922E+22	1,893794E+23
2065	6,201007E+22	6,201022E+22	3,267984E+22	3,268094E+22	1,240203E+23	6,536078E+22	1,893811E+23
2066	6,200835E+22	6,200780E+22	3,268108E+22	3,268050E+22	1,240161E+23	6,536158E+22	1,893777E+23
2067	6,200842E+22	6,200997E+22	3,268177E+22	3,268162E+22	1,240184E+23	6,536339E+22	1,893818E+23
2068	6,200981E+22	6,200702E+22	3,268158E+22	3,268251E+22	1,240168E+23	6,536409E+22	1,893809E+23
2069	6,200758E+22	6,200727E+22	3,268284E+22	3,268187E+22	1,240148E+23	6,536471E+22	1,893796E+23
2070	6,200813E+22	6,200975E+22	3,268264E+22	3,268342E+22	1,240179E+23	6,536606E+22	1,893839E+23
2071	6,200790E+22	6,200682E+22	3,268257E+22	3,268297E+22	1,240147E+23	6,536554E+22	1,893803E+23
2072	6,200630E+22	6,200841E+22	3,268356E+22	3,268223E+22	1,240147E+23	6,536580E+22	1,893805E+23
2073	6,200830E+22	6,200845E+22	3,268260E+22	3,268313E+22	1,240167E+23	6,536573E+22	1,893825E+23
2074	6,200764E+22	6,200615E+22	3,268252E+22	3,268166E+22	1,240138E+23	6,536418E+22	1,893780E+23
2075	6,200723E+22	6,200932E+22	3,268234E+22	3,268158E+22	1,240165E+23	6,536393E+22	1,893805E+23
2076	6,200931E+22	6,200806E+22	3,268067E+22	3,268196E+22	1,240174E+23	6,536264E+22	1,893800E+23
2077	6,200785E+22	6,200777E+22	3,268084E+22	3,268023E+22	1,240156E+23	6,536107E+22	1,893767E+23
2078	6,200877E+22	6,201067E+22	3,268044E+22	3,268075E+22	1,240194E+23	6,536118E+22	1,893806E+23
2079	6,201005E+22	6,200812E+22	3,267969E+22	3,268006E+22	1,240182E+23	6,535975E+22	1,893779E+23
2080	6,200852E+22	6,200918E+22	3,268081E+22	3,267925E+22	1,240177E+23	6,536007E+22	1,893778E+23
2081	6,200969E+22	6,201044E+22	3,268034E+22	3,268096E+22	1,240201E+23	6,536130E+22	1,893814E+23
2082	6,200883E+22	6,200767E+22	3,268065E+22	3,268069E+22	1,240165E+23	6,536133E+22	1,893778E+23
2083	6,200706E+22	6,200964E+22	3,268202E+22	3,268118E+22	1,240167E+23	6,536320E+22	1,893799E+23
2084	6,200895E+22	6,200808E+22	3,268143E+22	3,268278E+22	1,240170E+23	6,536422E+22	1,893812E+23
2085	6,200762E+22	6,200593E+22	3,268263E+22	3,268203E+22	1,240135E+23	6,536466E+22	1,893782E+23
2086	6,200718E+22	6,200854E+22	3,268353E+22	3,268336E+22	1,240157E+23	6,536689E+22	1,893826E+23
2087	6,200814E+22	6,200647E+22	3,268308E+22	3,268411E+22	1,240146E+23	6,536720E+22	1,893818E+23
2088	6,200584E+22	6,200662E+22	3,268460E+22	3,268359E+22	1,240125E+23	6,536820E+22	1,893807E+23
2089	6,200622E+22	6,200825E+22	3,268458E+22	3,268517E+22	1,240145E+23	6,536975E+22	1,893842E+23
2090	6,200654E+22	6,200522E+22	3,268446E+22	3,268441E+22	1,240118E+23	6,536886E+22	1,893806E+23
2091	6,200502E+22	6,200671E+22	3,268537E+22	3,268370E+22	1,240117E+23	6,536907E+22	1,893808E+23
2092	6,200734E+22	6,200665E+22	3,268383E+22	3,268476E+22	1,240140E+23	6,536859E+22	1,893826E+23
2093	6,200673E+22	6,200500E+22	3,268354E+22	3,268319E+22	1,240117E+23	6,536673E+22	1,893785E+23
2094	6,200588E+22	6,200829E+22	3,268353E+22	3,268323E+22	1,240142E+23	6,536676E+22	1,893809E+23
2095	6,200804E+22	6,200732E+22	3,268183E+22	3,268314E+22	1,240154E+23	6,536497E+22	1,893803E+23
2096	6,200714E+22	6,200673E+22	3,268235E+22	3,268133E+22	1,240139E+23	6,536368E+22	1,893775E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2097	6,200774E+22	6,200907E+22	3,268218E+22	3,268205E+22	1,240168E+23	6,536423E+22	1,893810E+23
2098	6,200889E+22	6,200703E+22	3,268145E+22	3,268150E+22	1,240159E+23	6,536295E+22	1,893789E+23
2099	6,200669E+22	6,200814E+22	3,268262E+22	3,268107E+22	1,240148E+23	6,536369E+22	1,893785E+23
2100	6,200780E+22	6,200888E+22	3,268186E+22	3,268302E+22	1,240167E+23	6,536488E+22	1,893816E+23
2101	6,200740E+22	6,200606E+22	3,268225E+22	3,268248E+22	1,240135E+23	6,536472E+22	1,893782E+23
2102	6,200568E+22	6,200771E+22	3,268383E+22	3,268301E+22	1,240134E+23	6,536685E+22	1,893802E+23
2103	6,200779E+22	6,200671E+22	3,268307E+22	3,268434E+22	1,240145E+23	6,536741E+22	1,893819E+23
2104	6,200668E+22	6,200480E+22	3,268439E+22	3,268377E+22	1,240115E+23	6,536816E+22	1,893796E+23
2105	6,200552E+22	6,200729E+22	3,268538E+22	3,268536E+22	1,240128E+23	6,537074E+22	1,893835E+23
2106	6,200647E+22	6,200551E+22	3,268494E+22	3,268592E+22	1,240120E+23	6,537086E+22	1,893828E+23
2107	6,200408E+22	6,200518E+22	3,268664E+22	3,268528E+22	1,240093E+23	6,537192E+22	1,893812E+23
2108	6,200499E+22	6,200620E+22	3,268621E+22	3,268674E+22	1,240112E+23	6,537295E+22	1,893841E+23
2109	6,200573E+22	6,200346E+22	3,268589E+22	3,268577E+22	1,240092E+23	6,537166E+22	1,893808E+23
2110	6,200377E+22	6,200525E+22	3,268677E+22	3,268534E+22	1,240090E+23	6,537211E+22	1,893811E+23
2111	6,200589E+22	6,200600E+22	3,268488E+22	3,268618E+22	1,240119E+23	6,537106E+22	1,893830E+23
2112	6,200556E+22	6,200432E+22	3,268478E+22	3,268462E+22	1,240099E+23	6,536940E+22	1,893793E+23
2113	6,200460E+22	6,200704E+22	3,268505E+22	3,268459E+22	1,240116E+23	6,536964E+22	1,893813E+23
2114	6,200719E+22	6,200618E+22	3,268343E+22	3,268420E+22	1,240134E+23	6,536763E+22	1,893810E+23
2115	6,200601E+22	6,200547E+22	3,268417E+22	3,268261E+22	1,240115E+23	6,536678E+22	1,893783E+23
2116	6,200647E+22	6,200760E+22	3,268362E+22	3,268369E+22	1,240141E+23	6,536730E+22	1,893814E+23
2117	6,200742E+22	6,200585E+22	3,268283E+22	3,268328E+22	1,240133E+23	6,536611E+22	1,893794E+23
2118	6,200482E+22	6,200669E+22	3,268422E+22	3,268314E+22	1,240115E+23	6,536736E+22	1,893789E+23
2119	6,200625E+22	6,200744E+22	3,268336E+22	3,268465E+22	1,240137E+23	6,536801E+22	1,893817E+23
2120	6,200660E+22	6,200443E+22	3,268394E+22	3,268404E+22	1,240110E+23	6,536798E+22	1,893790E+23
2121	6,200466E+22	6,200589E+22	3,268566E+22	3,268470E+22	1,240106E+23	6,537036E+22	1,893809E+23
2122	6,200664E+22	6,200560E+22	3,268491E+22	3,268599E+22	1,240122E+23	6,537091E+22	1,893831E+23
2123	6,200490E+22	6,200392E+22	3,268641E+22	3,268563E+22	1,240088E+23	6,537203E+22	1,893808E+23
2124	6,200369E+22	6,200586E+22	3,268712E+22	3,268727E+22	1,240095E+23	6,537439E+22	1,893839E+23
2125	6,200502E+22	6,200399E+22	3,268676E+22	3,268753E+22	1,240090E+23	6,537429E+22	1,893833E+23
2126	6,200261E+22	6,200336E+22	3,268848E+22	3,268699E+22	1,240060E+23	6,537547E+22	1,893814E+23
2127	6,200366E+22	6,200478E+22	3,268768E+22	3,268818E+22	1,240084E+23	6,537586E+22	1,893843E+23
2128	6,200479E+22	6,200236E+22	3,268727E+22	3,268741E+22	1,240071E+23	6,537468E+22	1,893818E+23
2129	6,200234E+22	6,200402E+22	3,268809E+22	3,268713E+22	1,240064E+23	6,537522E+22	1,893816E+23
2130	6,200466E+22	6,200513E+22	3,268626E+22	3,268763E+22	1,240098E+23	6,537389E+22	1,893837E+23
2131	6,200444E+22	6,200318E+22	3,268636E+22	3,268580E+22	1,240076E+23	6,537216E+22	1,893798E+23
2132	6,200375E+22	6,200534E+22	3,268639E+22	3,268571E+22	1,240091E+23	6,537210E+22	1,893812E+23
2133	6,200640E+22	6,200493E+22	3,268481E+22	3,268530E+22	1,240113E+23	6,537011E+22	1,893814E+23
2134	6,200448E+22	6,200431E+22	3,268565E+22	3,268428E+22	1,240088E+23	6,536993E+22	1,893787E+23
2135	6,200451E+22	6,200681E+22	3,268495E+22	3,268531E+22	1,240113E+23	6,537026E+22	1,893816E+23
2136	6,200592E+22	6,200473E+22	3,268437E+22	3,268508E+22	1,240107E+23	6,536945E+22	1,893801E+23
2137	6,200334E+22	6,200484E+22	3,268599E+22	3,268492E+22	1,240082E+23	6,537090E+22	1,893791E+23
2138	6,200537E+22	6,200581E+22	3,268519E+22	3,268615E+22	1,240112E+23	6,537134E+22	1,893825E+23
2139	6,200560E+22	6,200296E+22	3,268592E+22	3,268565E+22	1,240086E+23	6,537157E+22	1,893801E+23
2140	6,200349E+22	6,200443E+22	3,268728E+22	3,268659E+22	1,240079E+23	6,537388E+22	1,893818E+23
2141	6,200519E+22	6,200463E+22	3,268658E+22	3,268787E+22	1,240098E+23	6,537445E+22	1,893843E+23
2142	6,200293E+22	6,200265E+22	3,268832E+22	3,268771E+22	1,240056E+23	6,537603E+22	1,893816E+23
2143	6,200193E+22	6,200446E+22	3,268889E+22	3,268884E+22	1,240064E+23	6,537773E+22	1,893841E+23
2144	6,200397E+22	6,200233E+22	3,268854E+22	3,268911E+22	1,240063E+23	6,537765E+22	1,893840E+23
2145	6,200133E+22	6,200156E+22	3,269018E+22	3,268871E+22	1,240029E+23	6,537889E+22	1,893818E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2146	6,200246E+22	6,200362E+22	3,268916E+22	3,268974E+22	1,240061E+23	6,537890E+22	1,893850E+23
2147	6,200321E+22	6,200147E+22	3,268879E+22	3,268900E+22	1,240047E+23	6,537779E+22	1,893825E+23
2148	6,200106E+22	6,200272E+22	3,268929E+22	3,268861E+22	1,240038E+23	6,537790E+22	1,893817E+23
2149	6,200377E+22	6,200385E+22	3,268761E+22	3,268871E+22	1,240076E+23	6,537632E+22	1,893839E+23
2150	6,200335E+22	6,200184E+22	3,268788E+22	3,268708E+22	1,240052E+23	6,537496E+22	1,893801E+23
2151	6,200254E+22	6,200429E+22	3,268770E+22	3,268682E+22	1,240068E+23	6,537453E+22	1,893814E+23
2152	6,200521E+22	6,200405E+22	3,268618E+22	3,268685E+22	1,240093E+23	6,537303E+22	1,893823E+23
2153	6,200269E+22	6,200309E+22	3,268712E+22	3,268618E+22	1,240058E+23	6,537331E+22	1,893791E+23
2154	6,200304E+22	6,200548E+22	3,268656E+22	3,268697E+22	1,240085E+23	6,537353E+22	1,893821E+23
2155	6,200472E+22	6,200312E+22	3,268624E+22	3,268662E+22	1,240078E+23	6,537285E+22	1,893807E+23
2156	6,200260E+22	6,200282E+22	3,268749E+22	3,268649E+22	1,240054E+23	6,537398E+22	1,893794E+23
2157	6,200463E+22	6,200439E+22	3,268680E+22	3,268767E+22	1,240090E+23	6,537447E+22	1,893835E+23
2158	6,200403E+22	6,200197E+22	3,268765E+22	3,268762E+22	1,240060E+23	6,537527E+22	1,893813E+23
2159	6,200144E+22	6,200369E+22	3,268894E+22	3,268836E+22	1,240051E+23	6,537731E+22	1,893824E+23
2160	6,200351E+22	6,200361E+22	3,268850E+22	3,268974E+22	1,240071E+23	6,537824E+22	1,893854E+23
2161	6,200115E+22	6,200082E+22	3,269039E+22	3,268960E+22	1,240020E+23	6,537999E+22	1,893820E+23
2162	6,200062E+22	6,200270E+22	3,269089E+22	3,269046E+22	1,240033E+23	6,538135E+22	1,893847E+23
2163	6,200270E+22	6,200075E+22	3,269043E+22	3,269080E+22	1,240034E+23	6,538123E+22	1,893847E+23
2164	6,200011E+22	6,199987E+22	3,269144E+22	3,269057E+22	1,240000E+23	6,538200E+22	1,893820E+23
2165	6,200133E+22	6,200249E+22	3,269041E+22	3,269136E+22	1,240038E+23	6,538177E+22	1,893856E+23
2166	6,200184E+22	6,200033E+22	3,269015E+22	3,269056E+22	1,240022E+23	6,538071E+22	1,893829E+23
2167	6,199996E+22	6,200158E+22	3,269056E+22	3,268956E+22	1,240015E+23	6,538012E+22	1,893817E+23
2168	6,200313E+22	6,200277E+22	3,268901E+22	3,268972E+22	1,240059E+23	6,537873E+22	1,893846E+23
2169	6,200201E+22	6,200061E+22	3,268940E+22	3,268846E+22	1,240026E+23	6,537785E+22	1,893805E+23
2170	6,200098E+22	6,200343E+22	3,268921E+22	3,268828E+22	1,240044E+23	6,537749E+22	1,893819E+23
2171	6,200334E+22	6,200310E+22	3,268786E+22	3,268852E+22	1,240064E+23	6,537638E+22	1,893828E+23
2172	6,200127E+22	6,200138E+22	3,268851E+22	3,268794E+22	1,240027E+23	6,537645E+22	1,893791E+23
2173	6,200224E+22	6,200375E+22	3,268811E+22	3,268844E+22	1,240060E+23	6,537654E+22	1,893825E+23
2174	6,200371E+22	6,200156E+22	3,268788E+22	3,268832E+22	1,240053E+23	6,537620E+22	1,893815E+23
2175	6,200151E+22	6,200171E+22	3,268895E+22	3,268800E+22	1,240032E+23	6,537695E+22	1,893802E+23
2176	6,200342E+22	6,200357E+22	3,268841E+22	3,268952E+22	1,240070E+23	6,537793E+22	1,893849E+23
2177	6,200202E+22	6,200092E+22	3,268954E+22	3,268973E+22	1,240029E+23	6,537927E+22	1,893822E+23
2178	6,199972E+22	6,200234E+22	3,269098E+22	3,269012E+22	1,240021E+23	6,538110E+22	1,893832E+23
2179	6,200190E+22	6,200183E+22	3,269073E+22	3,269138E+22	1,240037E+23	6,538212E+22	1,893858E+23
2180	6,200002E+22	6,199861E+22	3,269209E+22	3,269135E+22	1,239986E+23	6,538344E+22	1,893821E+23
2181	6,199964E+22	6,200091E+22	3,269247E+22	3,269212E+22	1,240006E+23	6,538459E+22	1,893851E+23
2182	6,200109E+22	6,199955E+22	3,269191E+22	3,269274E+22	1,240006E+23	6,538465E+22	1,893853E+23
2183	6,199854E+22	6,199901E+22	3,269262E+22	3,269206E+22	1,239976E+23	6,538468E+22	1,893822E+23
2184	6,200026E+22	6,200155E+22	3,269181E+22	3,269270E+22	1,240018E+23	6,538451E+22	1,893863E+23
2185	6,200056E+22	6,199909E+22	3,269178E+22	3,269183E+22	1,239996E+23	6,538361E+22	1,893833E+23
2186	6,199895E+22	6,200043E+22	3,269221E+22	3,269062E+22	1,239994E+23	6,538283E+22	1,893822E+23
2187	6,200175E+22	6,200175E+22	3,269076E+22	3,269105E+22	1,240035E+23	6,538181E+22	1,893853E+23
2188	6,200054E+22	6,199927E+22	3,269064E+22	3,269027E+22	1,239998E+23	6,538090E+22	1,893807E+23
2189	6,199961E+22	6,200210E+22	3,269056E+22	3,269003E+22	1,240017E+23	6,538059E+22	1,893823E+23
2190	6,200190E+22	6,200158E+22	3,268934E+22	3,269033E+22	1,240035E+23	6,537967E+22	1,893831E+23
2191	6,200036E+22	6,199979E+22	3,268978E+22	3,268922E+22	1,240001E+23	6,537900E+22	1,893792E+23
2192	6,200181E+22	6,200246E+22	3,268952E+22	3,268981E+22	1,240043E+23	6,537933E+22	1,893836E+23
2193	6,200246E+22	6,200043E+22	3,268949E+22	3,268997E+22	1,240029E+23	6,537947E+22	1,893824E+23
2194	6,199987E+22	6,200095E+22	3,269075E+22	3,268965E+22	1,240008E+23	6,538040E+22	1,893812E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2195	6,200136E+22	6,200268E+22	3,269055E+22	3,269128E+22	1,240040E+23	6,538182E+22	1,893859E+23
2196	6,200026E+22	6,199905E+22	3,269145E+22	3,269167E+22	1,239993E+23	6,538312E+22	1,893824E+23
2197	6,199848E+22	6,200028E+22	3,269300E+22	3,269185E+22	1,239988E+23	6,538485E+22	1,893836E+23
2198	6,200048E+22	6,199991E+22	3,269262E+22	3,269335E+22	1,240004E+23	6,538597E+22	1,893863E+23
2199	6,199873E+22	6,199709E+22	3,269350E+22	3,269307E+22	1,239958E+23	6,538657E+22	1,893824E+23
2200	6,199853E+22	6,199992E+22	3,269379E+22	3,269397E+22	1,239984E+23	6,538777E+22	1,893862E+23
2201	6,199940E+22	6,199853E+22	3,269342E+22	3,269458E+22	1,239979E+23	6,538799E+22	1,893859E+23
2202	6,199732E+22	6,199794E+22	3,269428E+22	3,269333E+22	1,239953E+23	6,538761E+22	1,893829E+23
2203	6,199914E+22	6,200031E+22	3,269369E+22	3,269377E+22	1,239995E+23	6,538746E+22	1,893869E+23
2204	6,199955E+22	6,199752E+22	3,269322E+22	3,269316E+22	1,239971E+23	6,538638E+22	1,893834E+23
2205	6,199786E+22	6,199912E+22	3,269365E+22	3,269203E+22	1,239970E+23	6,538568E+22	1,893827E+23
2206	6,199984E+22	6,200073E+22	3,269214E+22	3,269287E+22	1,240006E+23	6,538502E+22	1,893856E+23
2207	6,199893E+22	6,199816E+22	3,269176E+22	3,269181E+22	1,239971E+23	6,538357E+22	1,893807E+23
2208	6,199875E+22	6,200070E+22	3,269184E+22	3,269150E+22	1,239995E+23	6,538334E+22	1,893828E+23
2209	6,200085E+22	6,200005E+22	3,269089E+22	3,269181E+22	1,240009E+23	6,538269E+22	1,893836E+23
2210	6,199965E+22	6,199857E+22	3,269134E+22	3,269044E+22	1,239982E+23	6,538178E+22	1,893800E+23
2211	6,200056E+22	6,200148E+22	3,269135E+22	3,269125E+22	1,240020E+23	6,538260E+22	1,893846E+23
2212	6,200086E+22	6,199929E+22	3,269105E+22	3,269189E+22	1,240002E+23	6,538295E+22	1,893831E+23
2213	6,199830E+22	6,199955E+22	3,269262E+22	3,269153E+22	1,239978E+23	6,538414E+22	1,893820E+23
2214	6,199945E+22	6,200098E+22	3,269261E+22	3,269325E+22	1,240004E+23	6,538586E+22	1,893863E+23
2215	6,199893E+22	6,199714E+22	3,269317E+22	3,269330E+22	1,239961E+23	6,538647E+22	1,893825E+23
2216	6,199759E+22	6,199853E+22	3,269463E+22	3,269363E+22	1,239961E+23	6,538826E+22	1,893844E+23
2217	6,199886E+22	6,199851E+22	3,269430E+22	3,269534E+22	1,239974E+23	6,538964E+22	1,893870E+23
2218	6,199716E+22	6,199620E+22	3,269509E+22	3,269480E+22	1,239934E+23	6,538989E+22	1,893833E+23
2219	6,199688E+22	6,199902E+22	3,269566E+22	3,269556E+22	1,239959E+23	6,539122E+22	1,893871E+23
2220	6,199810E+22	6,199705E+22	3,269505E+22	3,269613E+22	1,239952E+23	6,539118E+22	1,893863E+23
2221	6,199644E+22	6,199638E+22	3,269604E+22	3,269464E+22	1,239928E+23	6,539068E+22	1,893835E+23
2222	6,199777E+22	6,199893E+22	3,269537E+22	3,269530E+22	1,239967E+23	6,539067E+22	1,893874E+23
2223	6,199820E+22	6,199628E+22	3,269443E+22	3,269463E+22	1,239945E+23	6,538906E+22	1,893835E+23
2224	6,199667E+22	6,199813E+22	3,269475E+22	3,269374E+22	1,239948E+23	6,538850E+22	1,893833E+23
2225	6,199823E+22	6,199947E+22	3,269344E+22	3,269458E+22	1,239977E+23	6,538802E+22	1,893857E+23
2226	6,199794E+22	6,199679E+22	3,269317E+22	3,269299E+22	1,239947E+23	6,538615E+22	1,893809E+23
2227	6,199803E+22	6,199937E+22	3,269347E+22	3,269256E+22	1,239974E+23	6,538603E+22	1,893834E+23
2228	6,200005E+22	6,199854E+22	3,269225E+22	3,269317E+22	1,239986E+23	6,538542E+22	1,893840E+23
2229	6,199860E+22	6,199747E+22	3,269295E+22	3,269196E+22	1,239961E+23	6,538491E+22	1,893810E+23
2230	6,199851E+22	6,200060E+22	3,269311E+22	3,269313E+22	1,239991E+23	6,538623E+22	1,893853E+23
2231	6,199897E+22	6,199807E+22	3,269270E+22	3,269363E+22	1,239970E+23	6,538633E+22	1,893834E+23
2232	6,199700E+22	6,199797E+22	3,269441E+22	3,269333E+22	1,239950E+23	6,538774E+22	1,893827E+23
2233	6,199783E+22	6,199913E+22	3,269458E+22	3,269517E+22	1,239970E+23	6,538974E+22	1,893867E+23
2234	6,199772E+22	6,199557E+22	3,269503E+22	3,269503E+22	1,239933E+23	6,539006E+22	1,893833E+23
2235	6,199622E+22	6,199726E+22	3,269649E+22	3,269551E+22	1,239935E+23	6,539199E+22	1,893855E+23
2236	6,199734E+22	6,199716E+22	3,269582E+22	3,269744E+22	1,239945E+23	6,539326E+22	1,893878E+23
2237	6,199601E+22	6,199481E+22	3,269682E+22	3,269654E+22	1,239908E+23	6,539336E+22	1,893842E+23
2238	6,199546E+22	6,199754E+22	3,269752E+22	3,269710E+22	1,239930E+23	6,539462E+22	1,893876E+23
2239	6,199715E+22	6,199559E+22	3,269653E+22	3,269731E+22	1,239927E+23	6,539383E+22	1,893866E+23
2240	6,199565E+22	6,199511E+22	3,269738E+22	3,269600E+22	1,239908E+23	6,539338E+22	1,893841E+23
2241	6,199593E+22	6,199787E+22	3,269681E+22	3,269693E+22	1,239938E+23	6,539375E+22	1,893875E+23
2242	6,199652E+22	6,199546E+22	3,269575E+22	3,269606E+22	1,239920E+23	6,539181E+22	1,893838E+23
2243	6,199518E+22	6,199695E+22	3,269628E+22	3,269511E+22	1,239921E+23	6,539139E+22	1,893835E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2244	6,199720E+22	6,199777E+22	3,269480E+22	3,269598E+22	1,239950E+23	6,539079E+22	1,893858E+23
2245	6,199747E+22	6,199521E+22	3,269465E+22	3,269420E+22	1,239927E+23	6,538885E+22	1,893815E+23
2246	6,199691E+22	6,199817E+22	3,269502E+22	3,269400E+22	1,239951E+23	6,538902E+22	1,893841E+23
2247	6,199877E+22	6,199765E+22	3,269351E+22	3,269468E+22	1,239964E+23	6,538819E+22	1,893846E+23
2248	6,199720E+22	6,199664E+22	3,269435E+22	3,269381E+22	1,239938E+23	6,538816E+22	1,893820E+23
2249	6,199642E+22	6,199930E+22	3,269497E+22	3,269506E+22	1,239957E+23	6,539002E+22	1,893857E+23
2250	6,199750E+22	6,199647E+22	3,269466E+22	3,269521E+22	1,239940E+23	6,538987E+22	1,893838E+23
2251	6,199585E+22	6,199620E+22	3,269646E+22	3,269496E+22	1,239920E+23	6,539142E+22	1,893835E+23
2252	6,199664E+22	6,199721E+22	3,269627E+22	3,269712E+22	1,239938E+23	6,539339E+22	1,893872E+23
2253	6,199651E+22	6,199412E+22	3,269676E+22	3,269698E+22	1,239906E+23	6,539374E+22	1,893844E+23
2254	6,199441E+22	6,199618E+22	3,269824E+22	3,269751E+22	1,239906E+23	6,539575E+22	1,893863E+23
2255	6,199592E+22	6,199583E+22	3,269740E+22	3,269904E+22	1,239918E+23	6,539644E+22	1,893882E+23
2256	6,199509E+22	6,199353E+22	3,269848E+22	3,269803E+22	1,239886E+23	6,539650E+22	1,893851E+23
2257	6,199402E+22	6,199613E+22	3,269930E+22	3,269854E+22	1,239902E+23	6,539785E+22	1,893880E+23
2258	6,199579E+22	6,199442E+22	3,269817E+22	3,269861E+22	1,239902E+23	6,539678E+22	1,893870E+23
2259	6,199410E+22	6,199415E+22	3,269895E+22	3,269756E+22	1,239882E+23	6,539651E+22	1,893848E+23
2260	6,199424E+22	6,199648E+22	3,269805E+22	3,269874E+22	1,239907E+23	6,539680E+22	1,893875E+23
2261	6,199544E+22	6,199391E+22	3,269719E+22	3,269756E+22	1,239894E+23	6,539476E+22	1,893841E+23
2262	6,199416E+22	6,199540E+22	3,269772E+22	3,269643E+22	1,239896E+23	6,539415E+22	1,893837E+23
2263	6,199663E+22	6,199631E+22	3,269594E+22	3,269705E+22	1,239929E+23	6,539299E+22	1,893859E+23
2264	6,199688E+22	6,199431E+22	3,269580E+22	3,269550E+22	1,239912E+23	6,539129E+22	1,893825E+23
2265	6,199512E+22	6,199746E+22	3,269649E+22	3,269559E+22	1,239926E+23	6,539208E+22	1,893847E+23
2266	6,199690E+22	6,199701E+22	3,269517E+22	3,269618E+22	1,239939E+23	6,539135E+22	1,893853E+23
2267	6,199550E+22	6,199544E+22	3,269634E+22	3,269546E+22	1,239909E+23	6,539181E+22	1,893828E+23
2268	6,199493E+22	6,199730E+22	3,269685E+22	3,269690E+22	1,239922E+23	6,539376E+22	1,893860E+23
2269	6,199662E+22	6,199445E+22	3,269662E+22	3,269701E+22	1,239911E+23	6,539363E+22	1,893847E+23
2270	6,199452E+22	6,199448E+22	3,269828E+22	3,269694E+22	1,239890E+23	6,539522E+22	1,893842E+23
2271	6,199540E+22	6,199587E+22	3,269768E+22	3,269905E+22	1,239913E+23	6,539673E+22	1,893880E+23
2272	6,199536E+22	6,199312E+22	3,269815E+22	3,269890E+22	1,239885E+23	6,539705E+22	1,893855E+23
2273	6,199267E+22	6,199490E+22	3,270007E+22	3,269924E+22	1,239876E+23	6,539931E+22	1,893869E+23
2274	6,199466E+22	6,199460E+22	3,269929E+22	3,270026E+22	1,239893E+23	6,539955E+22	1,893888E+23
2275	6,199387E+22	6,199221E+22	3,270040E+22	3,269936E+22	1,239861E+23	6,539977E+22	1,893859E+23
2276	6,199240E+22	6,199461E+22	3,270093E+22	3,270024E+22	1,239870E+23	6,540116E+22	1,893882E+23
2277	6,199424E+22	6,199314E+22	3,269974E+22	3,270034E+22	1,239874E+23	6,540008E+22	1,893875E+23
2278	6,199219E+22	6,199291E+22	3,270042E+22	3,269931E+22	1,239851E+23	6,539973E+22	1,893848E+23
2279	6,199310E+22	6,199492E+22	3,269923E+22	3,270013E+22	1,239880E+23	6,539936E+22	1,893874E+23
2280	6,199494E+22	6,199259E+22	3,269834E+22	3,269882E+22	1,239875E+23	6,539716E+22	1,893847E+23
2281	6,199320E+22	6,199419E+22	3,269909E+22	3,269770E+22	1,239874E+23	6,539679E+22	1,893842E+23
2282	6,199562E+22	6,199555E+22	3,269734E+22	3,269818E+22	1,239912E+23	6,539552E+22	1,893867E+23
2283	6,199547E+22	6,199377E+22	3,269734E+22	3,269702E+22	1,239892E+23	6,539436E+22	1,893836E+23
2284	6,199332E+22	6,199623E+22	3,269806E+22	3,269741E+22	1,239895E+23	6,539547E+22	1,893850E+23
2285	6,199556E+22	6,199532E+22	3,269709E+22	3,269786E+22	1,239909E+23	6,539495E+22	1,893858E+23
2286	6,199418E+22	6,199361E+22	3,269826E+22	3,269715E+22	1,239878E+23	6,539541E+22	1,893832E+23
2287	6,199408E+22	6,199528E+22	3,269837E+22	3,269853E+22	1,239894E+23	6,539690E+22	1,893863E+23
2288	6,199570E+22	6,199314E+22	3,269803E+22	3,269886E+22	1,239888E+23	6,539689E+22	1,893857E+23
2289	6,199271E+22	6,199348E+22	3,269983E+22	3,269891E+22	1,239862E+23	6,539874E+22	1,893849E+23
2290	6,199362E+22	6,199496E+22	3,269943E+22	3,270066E+22	1,239886E+23	6,540009E+22	1,893887E+23
2291	6,199383E+22	6,199209E+22	3,270020E+22	3,270048E+22	1,239859E+23	6,540069E+22	1,893866E+23
2292	6,199118E+22	6,199320E+22	3,270204E+22	3,270089E+22	1,239844E+23	6,540292E+22	1,893873E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2293	6,199349E+22	6,199290E+22	3,270135E+22	3,270187E+22	1,239864E+23	6,540321E+22	1,893896E+23
2294	6,199218E+22	6,199080E+22	3,270219E+22	3,270119E+22	1,239830E+23	6,540339E+22	1,893864E+23
2295	6,199085E+22	6,199314E+22	3,270215E+22	3,270207E+22	1,239840E+23	6,540423E+22	1,893882E+23
2296	6,199301E+22	6,199193E+22	3,270086E+22	3,270210E+22	1,239849E+23	6,540296E+22	1,893879E+23
2297	6,199090E+22	6,199143E+22	3,270174E+22	3,270077E+22	1,239823E+23	6,540251E+22	1,893848E+23
2298	6,199245E+22	6,199366E+22	3,270059E+22	3,270104E+22	1,239861E+23	6,540162E+22	1,893877E+23
2299	6,199433E+22	6,199172E+22	3,269974E+22	3,269985E+22	1,239860E+23	6,539959E+22	1,893856E+23
2300	6,199192E+22	6,199319E+22	3,270045E+22	3,269909E+22	1,239851E+23	6,539954E+22	1,893847E+23
2301	6,199417E+22	6,199470E+22	3,269896E+22	3,269967E+22	1,239889E+23	6,539863E+22	1,893875E+23
2302	6,199353E+22	6,199268E+22	3,269910E+22	3,269870E+22	1,239862E+23	6,539780E+22	1,893840E+23
2303	6,199195E+22	6,199449E+22	3,269964E+22	3,269902E+22	1,239864E+23	6,539866E+22	1,893851E+23
2304	6,199467E+22	6,199368E+22	3,269859E+22	3,269951E+22	1,239884E+23	6,539810E+22	1,893865E+23
2305	6,199284E+22	6,199192E+22	3,269989E+22	3,269893E+22	1,239848E+23	6,539883E+22	1,893836E+23
2306	6,199283E+22	6,199411E+22	3,269994E+22	3,270017E+22	1,239869E+23	6,540011E+22	1,893871E+23
2307	6,199420E+22	6,199236E+22	3,269965E+22	3,270078E+22	1,239866E+23	6,540043E+22	1,893870E+23
2308	6,199093E+22	6,199213E+22	3,270162E+22	3,270090E+22	1,239831E+23	6,540252E+22	1,893856E+23
2309	6,199237E+22	6,199331E+22	3,270159E+22	3,270231E+22	1,239857E+23	6,540390E+22	1,893896E+23
2310	6,199239E+22	6,199046E+22	3,270234E+22	3,270209E+22	1,239828E+23	6,540443E+22	1,893873E+23
2311	6,199001E+22	6,199139E+22	3,270370E+22	3,270253E+22	1,239814E+23	6,540622E+22	1,893876E+23
2312	6,199211E+22	6,199166E+22	3,270277E+22	3,270368E+22	1,239838E+23	6,540646E+22	1,893902E+23
2313	6,199016E+22	6,198963E+22	3,270364E+22	3,270310E+22	1,239798E+23	6,540675E+22	1,893865E+23
2314	6,198933E+22	6,199193E+22	3,270359E+22	3,270350E+22	1,239813E+23	6,540709E+22	1,893884E+23
2315	6,199201E+22	6,199081E+22	3,270237E+22	3,270343E+22	1,239828E+23	6,540580E+22	1,893886E+23
2316	6,199006E+22	6,198993E+22	3,270315E+22	3,270206E+22	1,239800E+23	6,540522E+22	1,893852E+23
2317	6,199184E+22	6,199234E+22	3,270219E+22	3,270222E+22	1,239842E+23	6,540442E+22	1,893886E+23
2318	6,199297E+22	6,199098E+22	3,270127E+22	3,270126E+22	1,239839E+23	6,540253E+22	1,893865E+23
2319	6,199051E+22	6,199212E+22	3,270163E+22	3,270068E+22	1,239826E+23	6,540231E+22	1,893849E+23
2320	6,199269E+22	6,199361E+22	3,270030E+22	3,270130E+22	1,239863E+23	6,540160E+22	1,893879E+23
2321	6,199196E+22	6,199110E+22	3,270070E+22	3,270030E+22	1,239831E+23	6,540100E+22	1,893841E+23
2322	6,199091E+22	6,199277E+22	3,270123E+22	3,270032E+22	1,239837E+23	6,540154E+22	1,893852E+23
2323	6,199368E+22	6,199242E+22	3,270019E+22	3,270111E+22	1,239861E+23	6,540130E+22	1,893874E+23
2324	6,199135E+22	6,199059E+22	3,270140E+22	3,270083E+22	1,239819E+23	6,540222E+22	1,893842E+23
2325	6,199137E+22	6,199293E+22	3,270176E+22	3,270201E+22	1,239843E+23	6,540377E+22	1,893881E+23
2326	6,199237E+22	6,199123E+22	3,270168E+22	3,270256E+22	1,239836E+23	6,540424E+22	1,893878E+23
2327	6,198967E+22	6,199036E+22	3,270347E+22	3,270259E+22	1,239800E+23	6,540606E+22	1,893861E+23
2328	6,199127E+22	6,199176E+22	3,270343E+22	3,270397E+22	1,239830E+23	6,540741E+22	1,893904E+23
2329	6,199080E+22	6,198887E+22	3,270422E+22	3,270396E+22	1,239797E+23	6,540818E+22	1,893878E+23
2330	6,198842E+22	6,199011E+22	3,270532E+22	3,270425E+22	1,239785E+23	6,540957E+22	1,893881E+23
2331	6,199048E+22	6,199072E+22	3,270425E+22	3,270560E+22	1,239812E+23	6,540985E+22	1,893910E+23
2332	6,198859E+22	6,198807E+22	3,270513E+22	3,270490E+22	1,239767E+23	6,541003E+22	1,893867E+23
2333	6,198863E+22	6,199024E+22	3,270530E+22	3,270481E+22	1,239789E+23	6,541011E+22	1,893890E+23
2334	6,199115E+22	6,198948E+22	3,270399E+22	3,270457E+22	1,239806E+23	6,540856E+22	1,893892E+23
2335	6,198935E+22	6,198866E+22	3,270436E+22	3,270331E+22	1,239780E+23	6,540767E+22	1,893857E+23
2336	6,199064E+22	6,199169E+22	3,270333E+22	3,270358E+22	1,239823E+23	6,540691E+22	1,893892E+23
2337	6,199091E+22	6,199015E+22	3,270265E+22	3,270285E+22	1,239811E+23	6,540550E+22	1,893866E+23
2338	6,198882E+22	6,199098E+22	3,270314E+22	3,270200E+22	1,239798E+23	6,540515E+22	1,893849E+23
2339	6,199139E+22	6,199232E+22	3,270190E+22	3,270277E+22	1,239837E+23	6,540467E+22	1,893884E+23
2340	6,199077E+22	6,198925E+22	3,270231E+22	3,270196E+22	1,239800E+23	6,540427E+22	1,893843E+23
2341	6,199016E+22	6,199104E+22	3,270296E+22	3,270195E+22	1,239812E+23	6,540491E+22	1,893861E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2342	6,199225E+22	6,199131E+22	3,270186E+22	3,270292E+22	1,239836E+23	6,540478E+22	1,893883E+23
2343	6,199007E+22	6,198929E+22	3,270279E+22	3,270273E+22	1,239794E+23	6,540553E+22	1,893849E+23
2344	6,199009E+22	6,199167E+22	3,270342E+22	3,270373E+22	1,239818E+23	6,540714E+22	1,893889E+23
2345	6,199086E+22	6,198970E+22	3,270367E+22	3,270424E+22	1,239806E+23	6,540791E+22	1,893885E+23
2346	6,198846E+22	6,198881E+22	3,270541E+22	3,270403E+22	1,239773E+23	6,540944E+22	1,893867E+23
2347	6,198978E+22	6,199064E+22	3,270527E+22	3,270578E+22	1,239804E+23	6,541105E+22	1,893915E+23
2348	6,198884E+22	6,198749E+22	3,270593E+22	3,270604E+22	1,239763E+23	6,541198E+22	1,893883E+23
2349	6,198683E+22	6,198858E+22	3,270713E+22	3,270615E+22	1,239754E+23	6,541328E+22	1,893887E+23
2350	6,198887E+22	6,198937E+22	3,270607E+22	3,270724E+22	1,239782E+23	6,541331E+22	1,893916E+23
2351	6,198786E+22	6,198633E+22	3,270648E+22	3,270632E+22	1,239742E+23	6,541279E+22	1,893870E+23
2352	6,198802E+22	6,198893E+22	3,270661E+22	3,270604E+22	1,239769E+23	6,541266E+22	1,893896E+23
2353	6,198992E+22	6,198851E+22	3,270537E+22	3,270593E+22	1,239784E+23	6,541129E+22	1,893897E+23
2354	6,198792E+22	6,198791E+22	3,270559E+22	3,270459E+22	1,239758E+23	6,541018E+22	1,893860E+23
2355	6,198893E+22	6,199109E+22	3,270466E+22	3,270512E+22	1,239800E+23	6,540978E+22	1,893898E+23
2356	6,198924E+22	6,198864E+22	3,270417E+22	3,270444E+22	1,239779E+23	6,540862E+22	1,893865E+23
2357	6,198799E+22	6,198902E+22	3,270489E+22	3,270335E+22	1,239770E+23	6,540824E+22	1,893852E+23
2358	6,199039E+22	6,199074E+22	3,270358E+22	3,270414E+22	1,239811E+23	6,540772E+22	1,893888E+23
2359	6,198998E+22	6,198768E+22	3,270353E+22	3,270358E+22	1,239777E+23	6,540711E+22	1,893848E+23
2360	6,198899E+22	6,199010E+22	3,270422E+22	3,270365E+22	1,239791E+23	6,540787E+22	1,893870E+23
2361	6,199044E+22	6,199034E+22	3,270348E+22	3,270473E+22	1,239808E+23	6,540821E+22	1,893890E+23
2362	6,198856E+22	6,198813E+22	3,270462E+22	3,270423E+22	1,239767E+23	6,540885E+22	1,893855E+23
2363	6,198873E+22	6,199053E+22	3,270539E+22	3,270536E+22	1,239793E+23	6,541075E+22	1,893900E+23
2364	6,198930E+22	6,198797E+22	3,270576E+22	3,270613E+22	1,239773E+23	6,541189E+22	1,893892E+23
2365	6,198717E+22	6,198710E+22	3,270751E+22	3,270598E+22	1,239743E+23	6,541349E+22	1,893878E+23
2366	6,198785E+22	6,198935E+22	3,270715E+22	3,270783E+22	1,239772E+23	6,541498E+22	1,893922E+23
2367	6,198733E+22	6,198583E+22	3,270736E+22	3,270814E+22	1,239732E+23	6,541549E+22	1,893886E+23
2368	6,198580E+22	6,198698E+22	3,270854E+22	3,270779E+22	1,239728E+23	6,541633E+22	1,893891E+23
2369	6,198780E+22	6,198771E+22	3,270764E+22	3,270863E+22	1,239755E+23	6,541627E+22	1,893918E+23
2370	6,198710E+22	6,198514E+22	3,270787E+22	3,270734E+22	1,239722E+23	6,541521E+22	1,893874E+23
2371	6,198688E+22	6,198836E+22	3,270791E+22	3,270730E+22	1,239752E+23	6,541521E+22	1,893905E+23
2372	6,198806E+22	6,198767E+22	3,270680E+22	3,270746E+22	1,239757E+23	6,541426E+22	1,893900E+23
2373	6,198637E+22	6,198673E+22	3,270725E+22	3,270604E+22	1,239731E+23	6,541329E+22	1,893864E+23
2374	6,198721E+22	6,198977E+22	3,270641E+22	3,270648E+22	1,239770E+23	6,541288E+22	1,893899E+23
2375	6,198837E+22	6,198675E+22	3,270553E+22	3,270593E+22	1,239751E+23	6,541147E+22	1,893866E+23
2376	6,198740E+22	6,198741E+22	3,270617E+22	3,270479E+22	1,239748E+23	6,541096E+22	1,893858E+23
2377	6,198924E+22	6,198947E+22	3,270498E+22	3,270580E+22	1,239787E+23	6,541078E+22	1,893895E+23
2378	6,198872E+22	6,198690E+22	3,270477E+22	3,270515E+22	1,239756E+23	6,540992E+22	1,893855E+23
2379	6,198750E+22	6,198950E+22	3,270569E+22	3,270536E+22	1,239770E+23	6,541105E+22	1,893881E+23
2380	6,198884E+22	6,198894E+22	3,270541E+22	3,270644E+22	1,239778E+23	6,541185E+22	1,893896E+23
2381	6,198753E+22	6,198630E+22	3,270684E+22	3,270581E+22	1,239738E+23	6,541265E+22	1,893865E+23
2382	6,198717E+22	6,198905E+22	3,270759E+22	3,270703E+22	1,239762E+23	6,541463E+22	1,893909E+23
2383	6,198787E+22	6,198626E+22	3,270740E+22	3,270818E+22	1,239741E+23	6,541558E+22	1,893897E+23
2384	6,198552E+22	6,198566E+22	3,270903E+22	3,270801E+22	1,239712E+23	6,541705E+22	1,893882E+23
2385	6,198596E+22	6,198784E+22	3,270883E+22	3,270977E+22	1,239738E+23	6,541860E+22	1,893924E+23
2386	6,198607E+22	6,198435E+22	3,270889E+22	3,270957E+22	1,239704E+23	6,541846E+22	1,893889E+23
2387	6,198492E+22	6,198586E+22	3,271004E+22	3,270916E+22	1,239708E+23	6,541920E+22	1,893900E+23
2388	6,198671E+22	6,198636E+22	3,270930E+22	3,271005E+22	1,239731E+23	6,541935E+22	1,893924E+23
2389	6,198604E+22	6,198405E+22	3,270955E+22	3,270873E+22	1,239701E+23	6,541828E+22	1,893884E+23
2390	6,198502E+22	6,198768E+22	3,270951E+22	3,270876E+22	1,239727E+23	6,541828E+22	1,893910E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2391	6,198654E+22	6,198628E+22	3,270808E+22	3,270911E+22	1,239728E+23	6,541719E+22	1,893900E+23
2392	6,198530E+22	6,198510E+22	3,270861E+22	3,270744E+22	1,239704E+23	6,541605E+22	1,893865E+23
2393	6,198617E+22	6,198800E+22	3,270787E+22	3,270786E+22	1,239742E+23	6,541573E+22	1,893899E+23
2394	6,198758E+22	6,198545E+22	3,270673E+22	3,270718E+22	1,239730E+23	6,541391E+22	1,893869E+23
2395	6,198638E+22	6,198680E+22	3,270726E+22	3,270633E+22	1,239732E+23	6,541359E+22	1,893868E+23
2396	6,198757E+22	6,198855E+22	3,270646E+22	3,270753E+22	1,239761E+23	6,541399E+22	1,893901E+23
2397	6,198736E+22	6,198584E+22	3,270664E+22	3,270671E+22	1,239732E+23	6,541335E+22	1,893866E+23
2398	6,198588E+22	6,198829E+22	3,270779E+22	3,270680E+22	1,239742E+23	6,541459E+22	1,893888E+23
2399	6,198765E+22	6,198708E+22	3,270727E+22	3,270820E+22	1,239747E+23	6,541547E+22	1,893902E+23
2400	6,198641E+22	6,198458E+22	3,270865E+22	3,270763E+22	1,239710E+23	6,541628E+22	1,893873E+23
2401	6,198538E+22	6,198739E+22	3,270938E+22	3,270913E+22	1,239728E+23	6,541851E+22	1,893913E+23
2402	6,198613E+22	6,198499E+22	3,270889E+22	3,271015E+22	1,239711E+23	6,541904E+22	1,893902E+23
2403	6,198408E+22	6,198450E+22	3,271046E+22	3,270992E+22	1,239686E+23	6,542038E+22	1,893890E+23
2404	6,198466E+22	6,198606E+22	3,271065E+22	3,271142E+22	1,239707E+23	6,542207E+22	1,893928E+23
2405	6,198541E+22	6,198280E+22	3,271077E+22	3,271085E+22	1,239682E+23	6,542162E+22	1,893898E+23
2406	6,198368E+22	6,198489E+22	3,271186E+22	3,271040E+22	1,239686E+23	6,542226E+22	1,893908E+23
2407	6,198533E+22	6,198525E+22	3,271071E+22	3,271166E+22	1,239706E+23	6,542237E+22	1,893930E+23
2408	6,198441E+22	6,198308E+22	3,271093E+22	3,271034E+22	1,239675E+23	6,542127E+22	1,893888E+23
2409	6,198308E+22	6,198634E+22	3,271108E+22	3,271036E+22	1,239694E+23	6,542144E+22	1,893909E+23
2410	6,198524E+22	6,198485E+22	3,270941E+22	3,271039E+22	1,239701E+23	6,541981E+22	1,893899E+23
2411	6,198451E+22	6,198386E+22	3,270979E+22	3,270882E+22	1,239684E+23	6,541862E+22	1,893870E+23
2412	6,198524E+22	6,198651E+22	3,270930E+22	3,270937E+22	1,239718E+23	6,541867E+22	1,893904E+23
2413	6,198674E+22	6,198441E+22	3,270815E+22	3,270866E+22	1,239711E+23	6,541682E+22	1,893880E+23
2414	6,198483E+22	6,198622E+22	3,270879E+22	3,270784E+22	1,239710E+23	6,541663E+22	1,893877E+23
2415	6,198629E+22	6,198720E+22	3,270792E+22	3,270917E+22	1,239735E+23	6,541709E+22	1,893906E+23
2416	6,198630E+22	6,198419E+22	3,270838E+22	3,270817E+22	1,239705E+23	6,541656E+22	1,893870E+23
2417	6,198450E+22	6,198652E+22	3,270974E+22	3,270839E+22	1,239710E+23	6,541813E+22	1,893892E+23
2418	6,198623E+22	6,198564E+22	3,270891E+22	3,270983E+22	1,239719E+23	6,541875E+22	1,893906E+23
2419	6,198479E+22	6,198358E+22	3,271014E+22	3,270964E+22	1,239684E+23	6,541977E+22	1,893881E+23
2420	6,198340E+22	6,198589E+22	3,271118E+22	3,271123E+22	1,239693E+23	6,542241E+22	1,893917E+23
2421	6,198470E+22	6,198346E+22	3,271083E+22	3,271193E+22	1,239682E+23	6,542275E+22	1,893909E+23
2422	6,198272E+22	6,198319E+22	3,271245E+22	3,271141E+22	1,239659E+23	6,542386E+22	1,893898E+23
2423	6,198378E+22	6,198433E+22	3,271235E+22	3,271306E+22	1,239681E+23	6,542541E+22	1,893935E+23
2424	6,198446E+22	6,198151E+22	3,271245E+22	3,271241E+22	1,239660E+23	6,542486E+22	1,893908E+23
2425	6,198196E+22	6,198382E+22	3,271348E+22	3,271215E+22	1,239658E+23	6,542563E+22	1,893914E+23
2426	6,198348E+22	6,198436E+22	3,271201E+22	3,271328E+22	1,239678E+23	6,542529E+22	1,893931E+23
2427	6,198296E+22	6,198203E+22	3,271218E+22	3,271194E+22	1,239650E+23	6,542412E+22	1,893891E+23
2428	6,198186E+22	6,198440E+22	3,271268E+22	3,271181E+22	1,239663E+23	6,542449E+22	1,893908E+23
2429	6,198466E+22	6,198328E+22	3,271095E+22	3,271160E+22	1,239679E+23	6,542255E+22	1,893905E+23
2430	6,198358E+22	6,198292E+22	3,271115E+22	3,271002E+22	1,239665E+23	6,542117E+22	1,893877E+23
2431	6,198415E+22	6,198536E+22	3,271044E+22	3,271094E+22	1,239695E+23	6,542138E+22	1,893909E+23
2432	6,198546E+22	6,198354E+22	3,270949E+22	3,271011E+22	1,239690E+23	6,541959E+22	1,893886E+23
2433	6,198316E+22	6,198495E+22	3,271049E+22	3,270930E+22	1,239681E+23	6,541979E+22	1,893879E+23
2434	6,198490E+22	6,198586E+22	3,270958E+22	3,271049E+22	1,239708E+23	6,542007E+22	1,893908E+23
2435	6,198517E+22	6,198295E+22	3,271000E+22	3,270982E+22	1,239681E+23	6,541981E+22	1,893879E+23
2436	6,198295E+22	6,198477E+22	3,271168E+22	3,271034E+22	1,239677E+23	6,542202E+22	1,893897E+23
2437	6,198468E+22	6,198434E+22	3,271074E+22	3,271184E+22	1,239690E+23	6,542257E+22	1,893916E+23
2438	6,198291E+22	6,198251E+22	3,271192E+22	3,271160E+22	1,239654E+23	6,542351E+22	1,893889E+23
2439	6,198212E+22	6,198398E+22	3,271287E+22	3,271322E+22	1,239661E+23	6,542609E+22	1,893922E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2440	6,198388E+22	6,198167E+22	3,271264E+22	3,271351E+22	1,239655E+23	6,542615E+22	1,893917E+23
2441	6,198161E+22	6,198163E+22	3,271431E+22	3,271299E+22	1,239632E+23	6,542730E+22	1,893905E+23
2442	6,198246E+22	6,198329E+22	3,271388E+22	3,271455E+22	1,239658E+23	6,542843E+22	1,893942E+23
2443	6,198282E+22	6,198092E+22	3,271382E+22	3,271415E+22	1,239637E+23	6,542797E+22	1,893917E+23
2444	6,197995E+22	6,198253E+22	3,271520E+22	3,271391E+22	1,239625E+23	6,542911E+22	1,893916E+23
2445	6,198201E+22	6,198291E+22	3,271372E+22	3,271470E+22	1,239649E+23	6,542842E+22	1,893933E+23
2446	6,198171E+22	6,198067E+22	3,271382E+22	3,271319E+22	1,239624E+23	6,542701E+22	1,893894E+23
2447	6,198126E+22	6,198251E+22	3,271396E+22	3,271326E+22	1,239638E+23	6,542721E+22	1,893910E+23
2448	6,198400E+22	6,198190E+22	3,271219E+22	3,271297E+22	1,239659E+23	6,542516E+22	1,893911E+23
2449	6,198225E+22	6,198202E+22	3,271240E+22	3,271155E+22	1,239643E+23	6,542395E+22	1,893882E+23
2450	6,198270E+22	6,198460E+22	3,271156E+22	3,271230E+22	1,239673E+23	6,542386E+22	1,893912E+23
2451	6,198421E+22	6,198268E+22	3,271083E+22	3,271150E+22	1,239669E+23	6,542233E+22	1,893892E+23
2452	6,198186E+22	6,198322E+22	3,271240E+22	3,271076E+22	1,239651E+23	6,542315E+22	1,893882E+23
2453	6,198370E+22	6,198439E+22	3,271149E+22	3,271194E+22	1,239681E+23	6,542344E+22	1,893915E+23
2454	6,198352E+22	6,198190E+22	3,271184E+22	3,271156E+22	1,239654E+23	6,542341E+22	1,893888E+23
2455	6,198133E+22	6,198310E+22	3,271326E+22	3,271254E+22	1,239644E+23	6,542581E+22	1,893902E+23
2456	6,198315E+22	6,198277E+22	3,271248E+22	3,271384E+22	1,239659E+23	6,542633E+22	1,893923E+23
2457	6,198140E+22	6,198083E+22	3,271379E+22	3,271345E+22	1,239622E+23	6,542724E+22	1,893895E+23
2458	6,198103E+22	6,198244E+22	3,271454E+22	3,271477E+22	1,239635E+23	6,542930E+22	1,893928E+23
2459	6,198300E+22	6,198060E+22	3,271425E+22	3,271515E+22	1,239636E+23	6,542940E+22	1,893930E+23
2460	6,198017E+22	6,198021E+22	3,271624E+22	3,271479E+22	1,239604E+23	6,543104E+22	1,893914E+23
2461	6,198074E+22	6,198241E+22	3,271567E+22	3,271626E+22	1,239632E+23	6,543193E+22	1,893951E+23
2462	6,198091E+22	6,198001E+22	3,271552E+22	3,271578E+22	1,239609E+23	6,543130E+22	1,893922E+23
2463	6,197864E+22	6,198043E+22	3,271675E+22	3,271559E+22	1,239591E+23	6,543233E+22	1,893914E+23
2464	6,198124E+22	6,198099E+22	3,271524E+22	3,271599E+22	1,239622E+23	6,543124E+22	1,893935E+23
2465	6,198080E+22	6,197912E+22	3,271516E+22	3,271451E+22	1,239599E+23	6,542968E+22	1,893896E+23
2466	6,198025E+22	6,198156E+22	3,271493E+22	3,271454E+22	1,239618E+23	6,542947E+22	1,893913E+23
2467	6,198277E+22	6,198155E+22	3,271314E+22	3,271438E+22	1,239643E+23	6,542752E+22	1,893918E+23
2468	6,198062E+22	6,198098E+22	3,271395E+22	3,271300E+22	1,239616E+23	6,542695E+22	1,893886E+23
2469	6,198129E+22	6,198356E+22	3,271331E+22	3,271347E+22	1,239648E+23	6,542679E+22	1,893916E+23
2470	6,198283E+22	6,198158E+22	3,271270E+22	3,271281E+22	1,239644E+23	6,542551E+22	1,893899E+23
2471	6,198078E+22	6,198125E+22	3,271412E+22	3,271258E+22	1,239620E+23	6,542670E+22	1,893887E+23
2472	6,198247E+22	6,198277E+22	3,271319E+22	3,271386E+22	1,239652E+23	6,542705E+22	1,893923E+23
2473	6,198178E+22	6,198055E+22	3,271344E+22	3,271370E+22	1,239623E+23	6,542715E+22	1,893895E+23
2474	6,197988E+22	6,198166E+22	3,271464E+22	3,271444E+22	1,239615E+23	6,542909E+22	1,893906E+23
2475	6,198217E+22	6,198137E+22	3,271402E+22	3,271555E+22	1,239635E+23	6,542957E+22	1,893931E+23
2476	6,198044E+22	6,197907E+22	3,271580E+22	3,271504E+22	1,239595E+23	6,543084E+22	1,893903E+23
2477	6,197996E+22	6,198126E+22	3,271647E+22	3,271616E+22	1,239612E+23	6,543263E+22	1,893939E+23
2478	6,198125E+22	6,197992E+22	3,271618E+22	3,271677E+22	1,239612E+23	6,543295E+22	1,893941E+23
2479	6,197831E+22	6,197880E+22	3,271795E+22	3,271679E+22	1,239571E+23	6,543473E+22	1,893918E+23
2480	6,197892E+22	6,198080E+22	3,271746E+22	3,271798E+22	1,239597E+23	6,543543E+22	1,893952E+23
2481	6,197925E+22	6,197828E+22	3,271726E+22	3,271742E+22	1,239575E+23	6,543468E+22	1,893922E+23
2482	6,197768E+22	6,197869E+22	3,271799E+22	3,271697E+22	1,239564E+23	6,543496E+22	1,893913E+23
2483	6,198059E+22	6,197982E+22	3,271635E+22	3,271740E+22	1,239604E+23	6,543375E+22	1,893942E+23
2484	6,197972E+22	6,197801E+22	3,271650E+22	3,271601E+22	1,239577E+23	6,543252E+22	1,893902E+23
2485	6,197889E+22	6,198106E+22	3,271619E+22	3,271585E+22	1,239599E+23	6,543204E+22	1,893920E+23
2486	6,198122E+22	6,198103E+22	3,271465E+22	3,271564E+22	1,239623E+23	6,543029E+22	1,893925E+23
2487	6,197952E+22	6,197920E+22	3,271556E+22	3,271447E+22	1,239587E+23	6,543003E+22	1,893888E+23
2488	6,198034E+22	6,198179E+22	3,271509E+22	3,271479E+22	1,239621E+23	6,542988E+22	1,893920E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2489	6,198153E+22	6,198006E+22	3,271438E+22	3,271447E+22	1,239616E+23	6,542884E+22	1,893904E+23
2490	6,197937E+22	6,197990E+22	3,271539E+22	3,271439E+22	1,239593E+23	6,542979E+22	1,893891E+23
2491	6,198106E+22	6,198179E+22	3,271448E+22	3,271577E+22	1,239628E+23	6,543025E+22	1,893931E+23
2492	6,198025E+22	6,197897E+22	3,271523E+22	3,271554E+22	1,239592E+23	6,543077E+22	1,893900E+23
2493	6,197867E+22	6,198038E+22	3,271650E+22	3,271589E+22	1,239590E+23	6,543240E+22	1,893914E+23
2494	6,198103E+22	6,198032E+22	3,271601E+22	3,271699E+22	1,239613E+23	6,543299E+22	1,893943E+23
2495	6,197926E+22	6,197729E+22	3,271774E+22	3,271692E+22	1,239566E+23	6,543465E+22	1,893912E+23
2496	6,197839E+22	6,197995E+22	3,271842E+22	3,271801E+22	1,239583E+23	6,543643E+22	1,893948E+23
2497	6,197912E+22	6,197874E+22	3,271799E+22	3,271881E+22	1,239579E+23	6,543680E+22	1,893947E+23
2498	6,197656E+22	6,197716E+22	3,271941E+22	3,271862E+22	1,239537E+23	6,543804E+22	1,893918E+23
2499	6,197783E+22	6,197915E+22	3,271887E+22	3,271952E+22	1,239570E+23	6,543839E+22	1,893954E+23
2500	6,197831E+22	6,197641E+22	3,271886E+22	3,271886E+22	1,239547E+23	6,543772E+22	1,893924E+23
2501	6,197681E+22	6,197767E+22	3,271931E+22	3,271817E+22	1,239545E+23	6,543748E+22	1,893920E+23
2502	6,197932E+22	6,197939E+22	3,271769E+22	3,271870E+22	1,239587E+23	6,543638E+22	1,893951E+23
2503	6,197834E+22	6,197694E+22	3,271783E+22	3,271758E+22	1,239553E+23	6,543541E+22	1,893907E+23
2504	6,197757E+22	6,197986E+22	3,271779E+22	3,271707E+22	1,239574E+23	6,543486E+22	1,893923E+23
2505	6,197979E+22	6,197971E+22	3,271636E+22	3,271695E+22	1,239595E+23	6,543331E+22	1,893928E+23
2506	6,197853E+22	6,197761E+22	3,271693E+22	3,271588E+22	1,239561E+23	6,543280E+22	1,893889E+23
2507	6,197938E+22	6,198046E+22	3,271642E+22	3,271640E+22	1,239598E+23	6,543283E+22	1,893927E+23
2508	6,198008E+22	6,197874E+22	3,271595E+22	3,271638E+22	1,239588E+23	6,543234E+22	1,893912E+23
2509	6,197788E+22	6,197899E+22	3,271677E+22	3,271610E+22	1,239569E+23	6,543287E+22	1,893897E+23
2510	6,197961E+22	6,198072E+22	3,271621E+22	3,271737E+22	1,239603E+23	6,543358E+22	1,893939E+23
2511	6,197926E+22	6,197705E+22	3,271705E+22	3,271722E+22	1,239563E+23	6,543427E+22	1,893906E+23
2512	6,197774E+22	6,197867E+22	3,271848E+22	3,271735E+22	1,239564E+23	6,543583E+22	1,893922E+23
2513	6,197943E+22	6,197909E+22	3,271801E+22	3,271876E+22	1,239585E+23	6,543677E+22	1,893953E+23
2514	6,197746E+22	6,197611E+22	3,271933E+22	3,271889E+22	1,239536E+23	6,543822E+22	1,893918E+23
2515	6,197647E+22	6,197883E+22	3,272002E+22	3,271997E+22	1,239553E+23	6,543999E+22	1,893953E+23
2516	6,197724E+22	6,197699E+22	3,271992E+22	3,272070E+22	1,239542E+23	6,544062E+22	1,893948E+23
2517	6,197524E+22	6,197562E+22	3,272107E+22	3,272007E+22	1,239509E+23	6,544114E+22	1,893920E+23
2518	6,197689E+22	6,197784E+22	3,272052E+22	3,272091E+22	1,239547E+23	6,544143E+22	1,893962E+23
2519	6,197751E+22	6,197478E+22	3,272030E+22	3,272051E+22	1,239523E+23	6,544080E+22	1,893931E+23
2520	6,197579E+22	6,197669E+22	3,272069E+22	3,271962E+22	1,239525E+23	6,544031E+22	1,893928E+23
2521	6,197775E+22	6,197867E+22	3,271909E+22	3,272019E+22	1,239564E+23	6,543928E+22	1,893957E+23
2522	6,197708E+22	6,197569E+22	3,271907E+22	3,271892E+22	1,239528E+23	6,543798E+22	1,893908E+23
2523	6,197667E+22	6,197856E+22	3,271915E+22	3,271823E+22	1,239552E+23	6,543739E+22	1,893926E+23
2524	6,197867E+22	6,197810E+22	3,271798E+22	3,271831E+22	1,239568E+23	6,543629E+22	1,893931E+23
2525	6,197722E+22	6,197662E+22	3,271830E+22	3,271727E+22	1,239538E+23	6,543558E+22	1,893894E+23
2526	6,197783E+22	6,197973E+22	3,271787E+22	3,271803E+22	1,239576E+23	6,543590E+22	1,893935E+23
2527	6,197850E+22	6,197718E+22	3,271746E+22	3,271830E+22	1,239557E+23	6,543576E+22	1,893914E+23
2528	6,197664E+22	6,197746E+22	3,271853E+22	3,271764E+22	1,239541E+23	6,543618E+22	1,893903E+23
2529	6,197832E+22	6,197925E+22	3,271811E+22	3,271893E+22	1,239576E+23	6,543704E+22	1,893946E+23
2530	6,197823E+22	6,197548E+22	3,271870E+22	3,271889E+22	1,239537E+23	6,543759E+22	1,893913E+23
2531	6,197653E+22	6,197750E+22	3,272017E+22	3,271912E+22	1,239540E+23	6,543929E+22	1,893933E+23
2532	6,197749E+22	6,197784E+22	3,271993E+22	3,272085E+22	1,239553E+23	6,544078E+22	1,893961E+23
2533	6,197547E+22	6,197507E+22	3,272105E+22	3,272077E+22	1,239505E+23	6,544182E+22	1,893924E+23
2534	6,197487E+22	6,197735E+22	3,272191E+22	3,272169E+22	1,239522E+23	6,544360E+22	1,893958E+23
2535	6,197619E+22	6,197473E+22	3,272171E+22	3,272244E+22	1,239509E+23	6,544416E+22	1,893951E+23
2536	6,197458E+22	6,197386E+22	3,272270E+22	3,272147E+22	1,239484E+23	6,544417E+22	1,893926E+23
2537	6,197569E+22	6,197675E+22	3,272206E+22	3,272243E+22	1,239524E+23	6,544449E+22	1,893969E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2538	6,197621E+22	6,197397E+22	3,272140E+22	3,272205E+22	1,239502E+23	6,544345E+22	1,893936E+23
2539	6,197444E+22	6,197593E+22	3,272192E+22	3,272096E+22	1,239504E+23	6,544287E+22	1,893932E+23
2540	6,197619E+22	6,197746E+22	3,272077E+22	3,272150E+22	1,239537E+23	6,544228E+22	1,893959E+23
2541	6,197582E+22	6,197464E+22	3,272052E+22	3,272001E+22	1,239505E+23	6,544052E+22	1,893910E+23
2542	6,197549E+22	6,197733E+22	3,272074E+22	3,271956E+22	1,239528E+23	6,544030E+22	1,893931E+23
2543	6,197739E+22	6,197647E+22	3,271947E+22	3,272011E+22	1,239539E+23	6,543958E+22	1,893934E+23
2544	6,197594E+22	6,197536E+22	3,271967E+22	3,271900E+22	1,239513E+23	6,543867E+22	1,893900E+23
2545	6,197626E+22	6,197852E+22	3,271940E+22	3,271980E+22	1,239548E+23	6,543920E+22	1,893940E+23
2546	6,197749E+22	6,197557E+22	3,271881E+22	3,271989E+22	1,239531E+23	6,543870E+22	1,893918E+23
2547	6,197595E+22	6,197597E+22	3,272007E+22	3,271899E+22	1,239519E+23	6,543906E+22	1,893910E+23
2548	6,197714E+22	6,197781E+22	3,272003E+22	3,272051E+22	1,239549E+23	6,544054E+22	1,893955E+23
2549	6,197659E+22	6,197469E+22	3,272045E+22	3,272054E+22	1,239513E+23	6,544098E+22	1,893923E+23
2550	6,197455E+22	6,197667E+22	3,272210E+22	3,272104E+22	1,239512E+23	6,544314E+22	1,893944E+23
2551	6,197546E+22	6,197608E+22	3,272192E+22	3,272300E+22	1,239515E+23	6,544491E+22	1,893965E+23
2552	6,197402E+22	6,197317E+22	3,272304E+22	3,272254E+22	1,239472E+23	6,544558E+22	1,893928E+23
2553	6,197363E+22	6,197552E+22	3,272382E+22	3,272338E+22	1,239492E+23	6,544720E+22	1,893964E+23
2554	6,197538E+22	6,197298E+22	3,272313E+22	3,272414E+22	1,239484E+23	6,544727E+22	1,893956E+23
2555	6,197377E+22	6,197287E+22	3,272397E+22	3,272304E+22	1,239466E+23	6,544701E+22	1,893937E+23
2556	6,197419E+22	6,197591E+22	3,272349E+22	3,272409E+22	1,239501E+23	6,544759E+22	1,893977E+23
2557	6,197452E+22	6,197342E+22	3,272274E+22	3,272335E+22	1,239479E+23	6,544608E+22	1,893940E+23
2558	6,197312E+22	6,197491E+22	3,272351E+22	3,272211E+22	1,239480E+23	6,544563E+22	1,893937E+23
2559	6,197498E+22	6,197556E+22	3,272239E+22	3,272283E+22	1,239505E+23	6,544522E+22	1,893958E+23
2560	6,197484E+22	6,197308E+22	3,272205E+22	3,272132E+22	1,239479E+23	6,544337E+22	1,893913E+23
2561	6,197406E+22	6,197611E+22	3,272219E+22	3,272116E+22	1,239502E+23	6,544335E+22	1,893935E+23
2562	6,197602E+22	6,197522E+22	3,272054E+22	3,272188E+22	1,239512E+23	6,544242E+22	1,893937E+23
2563	6,197483E+22	6,197423E+22	3,272087E+22	3,272049E+22	1,239491E+23	6,544136E+22	1,893904E+23
2564	6,197505E+22	6,197705E+22	3,272106E+22	3,272126E+22	1,239521E+23	6,544232E+22	1,893944E+23
2565	6,197640E+22	6,197457E+22	3,272041E+22	3,272113E+22	1,239510E+23	6,544155E+22	1,893925E+23
2566	6,197486E+22	6,197490E+22	3,272197E+22	3,272052E+22	1,239498E+23	6,544249E+22	1,893922E+23
2567	6,197545E+22	6,197635E+22	3,272201E+22	3,272253E+22	1,239518E+23	6,544454E+22	1,893963E+23
2568	6,197482E+22	6,197345E+22	3,272237E+22	3,272259E+22	1,239483E+23	6,544496E+22	1,893932E+23
2569	6,197257E+22	6,197507E+22	3,272413E+22	3,272313E+22	1,239476E+23	6,544727E+22	1,893949E+23
2570	6,197418E+22	6,197397E+22	3,272359E+22	3,272492E+22	1,239482E+23	6,544852E+22	1,893967E+23
2571	6,197332E+22	6,197131E+22	3,272456E+22	3,272411E+22	1,239446E+23	6,544868E+22	1,893933E+23
2572	6,197255E+22	6,197399E+22	3,272550E+22	3,272506E+22	1,239465E+23	6,545056E+22	1,893971E+23
2573	6,197395E+22	6,197246E+22	3,272444E+22	3,272559E+22	1,239464E+23	6,545004E+22	1,893964E+23
2574	6,197216E+22	6,197231E+22	3,272548E+22	3,272455E+22	1,239445E+23	6,545003E+22	1,893945E+23
2575	6,197240E+22	6,197456E+22	3,272523E+22	3,272563E+22	1,239470E+23	6,545086E+22	1,893978E+23
2576	6,197324E+22	6,197197E+22	3,272447E+22	3,272458E+22	1,239452E+23	6,544905E+22	1,893943E+23
2577	6,197184E+22	6,197330E+22	3,272525E+22	3,272345E+22	1,239451E+23	6,544870E+22	1,893938E+23
2578	6,197399E+22	6,197385E+22	3,272361E+22	3,272439E+22	1,239478E+23	6,544800E+22	1,893958E+23
2579	6,197390E+22	6,197191E+22	3,272309E+22	3,272288E+22	1,239458E+23	6,544597E+22	1,893918E+23
2580	6,197267E+22	6,197499E+22	3,272343E+22	3,272290E+22	1,239477E+23	6,544633E+22	1,893940E+23
2581	6,197470E+22	6,197439E+22	3,272175E+22	3,272321E+22	1,239491E+23	6,544496E+22	1,893940E+23
2582	6,197400E+22	6,197310E+22	3,272245E+22	3,272172E+22	1,239471E+23	6,544418E+22	1,893913E+23
2583	6,197404E+22	6,197539E+22	3,272288E+22	3,272267E+22	1,239494E+23	6,544556E+22	1,893950E+23
2584	6,197525E+22	6,197337E+22	3,272230E+22	3,272265E+22	1,239486E+23	6,544495E+22	1,893936E+23
2585	6,197299E+22	6,197385E+22	3,272396E+22	3,272244E+22	1,239468E+23	6,544640E+22	1,893932E+23
2586	6,197349E+22	6,197486E+22	3,272368E+22	3,272470E+22	1,239484E+23	6,544838E+22	1,893967E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2587	6,197327E+22	6,197188E+22	3,272411E+22	3,272452E+22	1,239451E+23	6,544863E+22	1,893938E+23
2588	6,197116E+22	6,197308E+22	3,272601E+22	3,272502E+22	1,239442E+23	6,545103E+22	1,893953E+23
2589	6,197298E+22	6,197250E+22	3,272520E+22	3,272647E+22	1,239455E+23	6,545168E+22	1,893972E+23
2590	6,197241E+22	6,197016E+22	3,272621E+22	3,272573E+22	1,239426E+23	6,545194E+22	1,893945E+23
2591	6,197109E+22	6,197270E+22	3,272714E+22	3,272688E+22	1,239438E+23	6,545402E+22	1,893978E+23
2592	6,197244E+22	6,197158E+22	3,272610E+22	3,272720E+22	1,239440E+23	6,545329E+22	1,893973E+23
2593	6,197051E+22	6,197110E+22	3,272730E+22	3,272603E+22	1,239416E+23	6,545333E+22	1,893949E+23
2594	6,197122E+22	6,197272E+22	3,272672E+22	3,272699E+22	1,239439E+23	6,545371E+22	1,893976E+23
2595	6,197247E+22	6,197038E+22	3,272581E+22	3,272578E+22	1,239429E+23	6,545159E+22	1,893944E+23
2596	6,197064E+22	6,197182E+22	3,272660E+22	3,272498E+22	1,239425E+23	6,545158E+22	1,893940E+23
2597	6,197249E+22	6,197318E+22	3,272466E+22	3,272581E+22	1,239457E+23	6,545047E+22	1,893961E+23
2598	6,197262E+22	6,197121E+22	3,272431E+22	3,272436E+22	1,239438E+23	6,544867E+22	1,893925E+23
2599	6,197131E+22	6,197360E+22	3,272496E+22	3,272438E+22	1,239449E+23	6,544934E+22	1,893943E+23
2600	6,197381E+22	6,197314E+22	3,272344E+22	3,272442E+22	1,239470E+23	6,544786E+22	1,893948E+23
2601	6,197290E+22	6,197178E+22	3,272437E+22	3,272314E+22	1,239447E+23	6,544752E+22	1,893922E+23
2602	6,197282E+22	6,197393E+22	3,272452E+22	3,272444E+22	1,239468E+23	6,544895E+22	1,893957E+23
2603	6,197385E+22	6,197225E+22	3,272385E+22	3,272456E+22	1,239461E+23	6,544841E+22	1,893945E+23
2604	6,197103E+22	6,197240E+22	3,272573E+22	3,272465E+22	1,239434E+23	6,545038E+22	1,893938E+23
2605	6,197172E+22	6,197346E+22	3,272530E+22	3,272645E+22	1,239452E+23	6,545176E+22	1,893969E+23
2606	6,197223E+22	6,197010E+22	3,272588E+22	3,272617E+22	1,239423E+23	6,545205E+22	1,893944E+23
2607	6,197010E+22	6,197107E+22	3,272785E+22	3,272674E+22	1,239412E+23	6,545459E+22	1,893957E+23
2608	6,197195E+22	6,197124E+22	3,272697E+22	3,272807E+22	1,239432E+23	6,545503E+22	1,893982E+23
2609	6,197075E+22	6,196929E+22	3,272806E+22	3,272745E+22	1,239400E+23	6,545551E+22	1,893956E+23
2610	6,196940E+22	6,197149E+22	3,272869E+22	3,272860E+22	1,239409E+23	6,545729E+22	1,893982E+23
2611	6,197107E+22	6,197030E+22	3,272771E+22	3,272860E+22	1,239414E+23	6,545631E+22	1,893977E+23
2612	6,196909E+22	6,196946E+22	3,272901E+22	3,272754E+22	1,239386E+23	6,545655E+22	1,893951E+23
2613	6,196989E+22	6,197145E+22	3,272807E+22	3,272826E+22	1,239413E+23	6,545632E+22	1,893977E+23
2614	6,197147E+22	6,196930E+22	3,272713E+22	3,272730E+22	1,239408E+23	6,545442E+22	1,893952E+23
2615	6,196926E+22	6,197057E+22	3,272786E+22	3,272673E+22	1,239398E+23	6,545459E+22	1,893944E+23
2616	6,197130E+22	6,197221E+22	3,272599E+22	3,272730E+22	1,239435E+23	6,545329E+22	1,893968E+23
2617	6,197150E+22	6,197006E+22	3,272591E+22	3,272566E+22	1,239416E+23	6,545157E+22	1,893931E+23
2618	6,197060E+22	6,197190E+22	3,272634E+22	3,272563E+22	1,239425E+23	6,545197E+22	1,893945E+23
2619	6,197315E+22	6,197190E+22	3,272492E+22	3,272563E+22	1,239450E+23	6,545055E+22	1,893956E+23
2620	6,197147E+22	6,197061E+22	3,272599E+22	3,272487E+22	1,239421E+23	6,545086E+22	1,893929E+23
2621	6,197074E+22	6,197311E+22	3,272599E+22	3,272614E+22	1,239439E+23	6,545213E+22	1,893960E+23
2622	6,197207E+22	6,197114E+22	3,272558E+22	3,272644E+22	1,239432E+23	6,545202E+22	1,893952E+23
2623	6,196933E+22	6,197039E+22	3,272764E+22	3,272655E+22	1,239397E+23	6,545419E+22	1,893939E+23
2624	6,197067E+22	6,197161E+22	3,272726E+22	3,272807E+22	1,239423E+23	6,545532E+22	1,893976E+23
2625	6,197116E+22	6,196852E+22	3,272787E+22	3,272784E+22	1,239397E+23	6,545571E+22	1,893954E+23
2626	6,196902E+22	6,196953E+22	3,272941E+22	3,272861E+22	1,239385E+23	6,545802E+22	1,893966E+23
2627	6,197066E+22	6,197034E+22	3,272851E+22	3,272985E+22	1,239410E+23	6,545836E+22	1,893994E+23
2628	6,196892E+22	6,196818E+22	3,272979E+22	3,272938E+22	1,239371E+23	6,545917E+22	1,893963E+23
2629	6,196765E+22	6,197031E+22	3,273030E+22	3,272998E+22	1,239380E+23	6,546029E+22	1,893982E+23
2630	6,197001E+22	6,196885E+22	3,272936E+22	3,272996E+22	1,239389E+23	6,545932E+22	1,893982E+23
2631	6,196782E+22	6,196768E+22	3,273060E+22	3,272909E+22	1,239355E+23	6,545969E+22	1,893952E+23
2632	6,196873E+22	6,197027E+22	3,272949E+22	3,272973E+22	1,239390E+23	6,545922E+22	1,893982E+23
2633	6,196995E+22	6,196841E+22	3,272857E+22	3,272887E+22	1,239384E+23	6,545744E+22	1,893958E+23
2634	6,196808E+22	6,196929E+22	3,272900E+22	3,272828E+22	1,239374E+23	6,545728E+22	1,893946E+23
2635	6,197056E+22	6,197097E+22	3,272729E+22	3,272843E+22	1,239415E+23	6,545573E+22	1,893973E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2636	6,197050E+22	6,196870E+22	3,272743E+22	3,272699E+22	1,239392E+23	6,545442E+22	1,893936E+23
2637	6,196940E+22	6,197093E+22	3,272772E+22	3,272676E+22	1,239403E+23	6,545447E+22	1,893948E+23
2638	6,197190E+22	6,197099E+22	3,272642E+22	3,272720E+22	1,239429E+23	6,545362E+22	1,893965E+23
2639	6,196956E+22	6,196933E+22	3,272767E+22	3,272687E+22	1,239389E+23	6,545454E+22	1,893934E+23
2640	6,196908E+22	6,197173E+22	3,272779E+22	3,272796E+22	1,239408E+23	6,545575E+22	1,893966E+23
2641	6,197061E+22	6,196942E+22	3,272761E+22	3,272817E+22	1,239400E+23	6,545578E+22	1,893958E+23
2642	6,196848E+22	6,196825E+22	3,272925E+22	3,272827E+22	1,239367E+23	6,545752E+22	1,893943E+23
2643	6,196996E+22	6,197002E+22	3,272889E+22	3,272966E+22	1,239400E+23	6,545855E+22	1,893985E+23
2644	6,196968E+22	6,196744E+22	3,272957E+22	3,272979E+22	1,239371E+23	6,545936E+22	1,893965E+23
2645	6,196706E+22	6,196888E+22	3,273094E+22	3,273029E+22	1,239359E+23	6,546123E+22	1,893972E+23
2646	6,196898E+22	6,196944E+22	3,273031E+22	3,273156E+22	1,239384E+23	6,546187E+22	1,894003E+23
2647	6,196717E+22	6,196653E+22	3,273175E+22	3,273109E+22	1,239337E+23	6,546284E+22	1,893965E+23
2648	6,196639E+22	6,196865E+22	3,273219E+22	3,273143E+22	1,239350E+23	6,546361E+22	1,893986E+23
2649	6,196876E+22	6,196738E+22	3,273118E+22	3,273151E+22	1,239361E+23	6,546269E+22	1,893988E+23
2650	6,196679E+22	6,196605E+22	3,273175E+22	3,273084E+22	1,239328E+23	6,546260E+22	1,893954E+23
2651	6,196774E+22	6,196919E+22	3,273060E+22	3,273129E+22	1,239369E+23	6,546189E+22	1,893988E+23
2652	6,196870E+22	6,196733E+22	3,272978E+22	3,273040E+22	1,239360E+23	6,546018E+22	1,893962E+23
2653	6,196700E+22	6,196817E+22	3,273015E+22	3,272920E+22	1,239352E+23	6,545935E+22	1,893945E+23
2654	6,196992E+22	6,196989E+22	3,272869E+22	3,272942E+22	1,239398E+23	6,545810E+22	1,893979E+23
2655	6,196924E+22	6,196743E+22	3,272900E+22	3,272836E+22	1,239367E+23	6,545735E+22	1,893940E+23
2656	6,196783E+22	6,197001E+22	3,272937E+22	3,272826E+22	1,239378E+23	6,545763E+22	1,893955E+23
2657	6,196987E+22	6,197006E+22	3,272828E+22	3,272897E+22	1,239399E+23	6,545725E+22	1,893972E+23
2658	6,196793E+22	6,196757E+22	3,272923E+22	3,272881E+22	1,239355E+23	6,545804E+22	1,893935E+23
2659	6,196807E+22	6,196987E+22	3,272951E+22	3,272961E+22	1,239379E+23	6,545912E+22	1,893971E+23
2660	6,196948E+22	6,196765E+22	3,272936E+22	3,273004E+22	1,239371E+23	6,545939E+22	1,893965E+23
2661	6,196730E+22	6,196698E+22	3,273076E+22	3,272988E+22	1,239343E+23	6,546064E+22	1,893949E+23
2662	6,196879E+22	6,196915E+22	3,273051E+22	3,273153E+22	1,239379E+23	6,546204E+22	1,894000E+23
2663	6,196776E+22	6,196640E+22	3,273141E+22	3,273186E+22	1,239342E+23	6,546327E+22	1,893974E+23
2664	6,196539E+22	6,196768E+22	3,273294E+22	3,273199E+22	1,239331E+23	6,546493E+22	1,893980E+23
2665	6,196743E+22	6,196782E+22	3,273250E+22	3,273309E+22	1,239353E+23	6,546560E+22	1,894008E+23
2666	6,196615E+22	6,196445E+22	3,273340E+22	3,273273E+22	1,239306E+23	6,546613E+22	1,893967E+23
2667	6,196556E+22	6,196697E+22	3,273363E+22	3,273293E+22	1,239325E+23	6,546656E+22	1,893991E+23
2668	6,196722E+22	6,196616E+22	3,273249E+22	3,273332E+22	1,239334E+23	6,546581E+22	1,893992E+23
2669	6,196523E+22	6,196529E+22	3,273273E+22	3,273221E+22	1,239305E+23	6,546494E+22	1,893955E+23
2670	6,196672E+22	6,196826E+22	3,273183E+22	3,273253E+22	1,239350E+23	6,546436E+22	1,893993E+23
2671	6,196748E+22	6,196607E+22	3,273130E+22	3,273160E+22	1,239336E+23	6,546290E+22	1,893965E+23
2672	6,196609E+22	6,196706E+22	3,273175E+22	3,273021E+22	1,239332E+23	6,546196E+22	1,893951E+23
2673	6,196859E+22	6,196890E+22	3,273049E+22	3,273070E+22	1,239375E+23	6,546119E+22	1,893987E+23
2674	6,196781E+22	6,196613E+22	3,273037E+22	3,273019E+22	1,239339E+23	6,546056E+22	1,893945E+23
2675	6,196638E+22	6,196870E+22	3,273085E+22	3,273010E+22	1,239351E+23	6,546095E+22	1,893960E+23
2676	6,196819E+22	6,196848E+22	3,272991E+22	3,273096E+22	1,239367E+23	6,546087E+22	1,893975E+23
2677	6,196678E+22	6,196589E+22	3,273063E+22	3,273027E+22	1,239327E+23	6,546090E+22	1,893936E+23
2678	6,196749E+22	6,196833E+22	3,273105E+22	3,273114E+22	1,239358E+23	6,546219E+22	1,893980E+23
2679	6,196823E+22	6,196634E+22	3,273107E+22	3,273182E+22	1,239346E+23	6,546289E+22	1,893975E+23
2680	6,196580E+22	6,196614E+22	3,273259E+22	3,273160E+22	1,239319E+23	6,546419E+22	1,893961E+23
2681	6,196681E+22	6,196834E+22	3,273268E+22	3,273331E+22	1,239351E+23	6,546600E+22	1,894011E+23
2682	6,196611E+22	6,196469E+22	3,273330E+22	3,273375E+22	1,239308E+23	6,546705E+22	1,893979E+23
2683	6,196417E+22	6,196576E+22	3,273491E+22	3,273361E+22	1,239299E+23	6,546851E+22	1,893984E+23
2684	6,196598E+22	6,196603E+22	3,273428E+22	3,273489E+22	1,239320E+23	6,546918E+22	1,894012E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2685	6,196479E+22	6,196295E+22	3,273466E+22	3,273428E+22	1,239277E+23	6,546894E+22	1,893967E+23
2686	6,196446E+22	6,196593E+22	3,273483E+22	3,273462E+22	1,239304E+23	6,546945E+22	1,893998E+23
2687	6,196565E+22	6,196515E+22	3,273380E+22	3,273503E+22	1,239308E+23	6,546883E+22	1,893996E+23
2688	6,196411E+22	6,196426E+22	3,273420E+22	3,273340E+22	1,239284E+23	6,546759E+22	1,893960E+23
2689	6,196570E+22	6,196710E+22	3,273358E+22	3,273351E+22	1,239328E+23	6,546709E+22	1,893999E+23
2690	6,196663E+22	6,196456E+22	3,273268E+22	3,273284E+22	1,239312E+23	6,546552E+22	1,893967E+23
2691	6,196509E+22	6,196583E+22	3,273321E+22	3,273157E+22	1,239309E+23	6,546478E+22	1,893957E+23
2692	6,196666E+22	6,196790E+22	3,273195E+22	3,273255E+22	1,239346E+23	6,546450E+22	1,893991E+23
2693	6,196595E+22	6,196504E+22	3,273161E+22	3,273184E+22	1,239310E+23	6,546345E+22	1,893945E+23
2694	6,196527E+22	6,196722E+22	3,273230E+22	3,273175E+22	1,239325E+23	6,546405E+22	1,893965E+23
2695	6,196698E+22	6,196673E+22	3,273162E+22	3,273265E+22	1,239337E+23	6,546427E+22	1,893980E+23
2696	6,196601E+22	6,196448E+22	3,273236E+22	3,273171E+22	1,239305E+23	6,546406E+22	1,893946E+23
2697	6,196635E+22	6,196720E+22	3,273299E+22	3,273275E+22	1,239336E+23	6,546574E+22	1,893993E+23
2698	6,196679E+22	6,196517E+22	3,273273E+22	3,273384E+22	1,239320E+23	6,546656E+22	1,893985E+23
2699	6,196433E+22	6,196490E+22	3,273445E+22	3,273349E+22	1,239292E+23	6,546793E+22	1,893972E+23
2700	6,196484E+22	6,196671E+22	3,273472E+22	3,273525E+22	1,239315E+23	6,546997E+22	1,894015E+23
2701	6,196464E+22	6,196292E+22	3,273501E+22	3,273527E+22	1,239276E+23	6,547028E+22	1,893978E+23
2702	6,196323E+22	6,196402E+22	3,273648E+22	3,273524E+22	1,239273E+23	6,547172E+22	1,893990E+23
2703	6,196438E+22	6,196457E+22	3,273587E+22	3,273675E+22	1,239289E+23	6,547262E+22	1,894016E+23
2704	6,196331E+22	6,196208E+22	3,273609E+22	3,273587E+22	1,239254E+23	6,547195E+22	1,893973E+23
2705	6,196291E+22	6,196506E+22	3,273649E+22	3,273607E+22	1,239280E+23	6,547256E+22	1,894005E+23
2706	6,196452E+22	6,196375E+22	3,273524E+22	3,273643E+22	1,239283E+23	6,547167E+22	1,893999E+23
2707	6,196343E+22	6,196281E+22	3,273575E+22	3,273453E+22	1,239262E+23	6,547028E+22	1,893965E+23
2708	6,196444E+22	6,196582E+22	3,273515E+22	3,273489E+22	1,239303E+23	6,547004E+22	1,894003E+23
2709	6,196531E+22	6,196350E+22	3,273385E+22	3,273420E+22	1,239288E+23	6,546805E+22	1,893969E+23
2710	6,196385E+22	6,196486E+22	3,273439E+22	3,273327E+22	1,239287E+23	6,546766E+22	1,893964E+23
2711	6,196489E+22	6,196666E+22	3,273339E+22	3,273438E+22	1,239316E+23	6,546777E+22	1,893993E+23
2712	6,196484E+22	6,196359E+22	3,273318E+22	3,273325E+22	1,239284E+23	6,546643E+22	1,893949E+23
2713	6,196448E+22	6,196570E+22	3,273413E+22	3,273304E+22	1,239302E+23	6,546717E+22	1,893974E+23
2714	6,196629E+22	6,196505E+22	3,273311E+22	3,273421E+22	1,239313E+23	6,546732E+22	1,893987E+23
2715	6,196502E+22	6,196325E+22	3,273403E+22	3,273335E+22	1,239283E+23	6,546737E+22	1,893956E+23
2716	6,196432E+22	6,196633E+22	3,273479E+22	3,273469E+22	1,239306E+23	6,546948E+22	1,894001E+23
2717	6,196477E+22	6,196402E+22	3,273439E+22	3,273558E+22	1,239288E+23	6,546997E+22	1,893988E+23
2718	6,196287E+22	6,196335E+22	3,273633E+22	3,273528E+22	1,239262E+23	6,547161E+22	1,893978E+23
2719	6,196311E+22	6,196489E+22	3,273673E+22	3,273711E+22	1,239280E+23	6,547384E+22	1,894018E+23
2720	6,196335E+22	6,196131E+22	3,273686E+22	3,273694E+22	1,239247E+23	6,547381E+22	1,893985E+23
2721	6,196187E+22	6,196270E+22	3,273829E+22	3,273701E+22	1,239246E+23	6,547530E+22	1,893999E+23
2722	6,196300E+22	6,196319E+22	3,273723E+22	3,273873E+22	1,239262E+23	6,547596E+22	1,894021E+23
2723	6,196226E+22	6,196081E+22	3,273757E+22	3,273747E+22	1,239231E+23	6,547504E+22	1,893981E+23
2724	6,196163E+22	6,196369E+22	3,273808E+22	3,273747E+22	1,239253E+23	6,547555E+22	1,894009E+23
2725	6,196362E+22	6,196241E+22	3,273652E+22	3,273742E+22	1,239260E+23	6,547393E+22	1,894000E+23
2726	6,196276E+22	6,196169E+22	3,273701E+22	3,273573E+22	1,239245E+23	6,547274E+22	1,893972E+23
2727	6,196271E+22	6,196483E+22	3,273657E+22	3,273644E+22	1,239275E+23	6,547301E+22	1,894006E+23
2728	6,196362E+22	6,196276E+22	3,273527E+22	3,273568E+22	1,239264E+23	6,547094E+22	1,893973E+23
2729	6,196232E+22	6,196370E+22	3,273603E+22	3,273476E+22	1,239260E+23	6,547080E+22	1,893968E+23
2730	6,196379E+22	6,196486E+22	3,273488E+22	3,273597E+22	1,239286E+23	6,547086E+22	1,893995E+23
2731	6,196430E+22	6,196192E+22	3,273473E+22	3,273461E+22	1,239262E+23	6,546935E+22	1,893956E+23
2732	6,196331E+22	6,196429E+22	3,273572E+22	3,273464E+22	1,239276E+23	6,547037E+22	1,893980E+23
2733	6,196495E+22	6,196404E+22	3,273447E+22	3,273580E+22	1,239290E+23	6,547028E+22	1,893993E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2734	6,196364E+22	6,196241E+22	3,273553E+22	3,273525E+22	1,239261E+23	6,547077E+22	1,893968E+23
2735	6,196217E+22	6,196506E+22	3,273674E+22	3,273667E+22	1,239272E+23	6,547341E+22	1,894007E+23
2736	6,196321E+22	6,196249E+22	3,273645E+22	3,273718E+22	1,239257E+23	6,547364E+22	1,893993E+23
2737	6,196161E+22	6,196155E+22	3,273846E+22	3,273690E+22	1,239232E+23	6,547536E+22	1,893985E+23
2738	6,196189E+22	6,196291E+22	3,273843E+22	3,273902E+22	1,239248E+23	6,547746E+22	1,894023E+23
2739	6,196219E+22	6,195983E+22	3,273849E+22	3,273881E+22	1,239220E+23	6,547729E+22	1,893993E+23
2740	6,196009E+22	6,196159E+22	3,273985E+22	3,273894E+22	1,239217E+23	6,547879E+22	1,894005E+23
2741	6,196161E+22	6,196198E+22	3,273858E+22	3,274018E+22	1,239236E+23	6,547876E+22	1,894024E+23
2742	6,196146E+22	6,195961E+22	3,273901E+22	3,273876E+22	1,239211E+23	6,547777E+22	1,893988E+23
2743	6,196037E+22	6,196243E+22	3,273971E+22	3,273873E+22	1,239228E+23	6,547844E+22	1,894012E+23
2744	6,196249E+22	6,196141E+22	3,273807E+22	3,273856E+22	1,239239E+23	6,547663E+22	1,894005E+23
2745	6,196134E+22	6,196085E+22	3,273860E+22	3,273720E+22	1,239222E+23	6,547580E+22	1,893980E+23
2746	6,196110E+22	6,196358E+22	3,273781E+22	3,273823E+22	1,239247E+23	6,547605E+22	1,894007E+23
2747	6,196243E+22	6,196123E+22	3,273672E+22	3,273726E+22	1,239237E+23	6,547398E+22	1,893976E+23
2748	6,196114E+22	6,196206E+22	3,273752E+22	3,273623E+22	1,239232E+23	6,547375E+22	1,893970E+23
2749	6,196310E+22	6,196321E+22	3,273608E+22	3,273716E+22	1,239263E+23	6,547324E+22	1,893995E+23
2750	6,196369E+22	6,196084E+22	3,273599E+22	3,273603E+22	1,239245E+23	6,547202E+22	1,893965E+23
2751	6,196157E+22	6,196348E+22	3,273728E+22	3,273634E+22	1,239251E+23	6,547363E+22	1,893987E+23
2752	6,196307E+22	6,196337E+22	3,273624E+22	3,273741E+22	1,239264E+23	6,547365E+22	1,894001E+23
2753	6,196184E+22	6,196125E+22	3,273768E+22	3,273698E+22	1,239231E+23	6,547466E+22	1,893978E+23
2754	6,196059E+22	6,196306E+22	3,273876E+22	3,273857E+22	1,239236E+23	6,547733E+22	1,894010E+23
2755	6,196217E+22	6,196045E+22	3,273850E+22	3,273901E+22	1,239226E+23	6,547751E+22	1,894001E+23
2756	6,196019E+22	6,195977E+22	3,274028E+22	3,273889E+22	1,239200E+23	6,547918E+22	1,893991E+23
2757	6,196057E+22	6,196146E+22	3,273979E+22	3,274090E+22	1,239220E+23	6,548069E+22	1,894027E+23
2758	6,196108E+22	6,195888E+22	3,273978E+22	3,274067E+22	1,239200E+23	6,548045E+22	1,894004E+23
2759	6,195851E+22	6,196041E+22	3,274148E+22	3,274059E+22	1,239189E+23	6,548207E+22	1,894010E+23
2760	6,196056E+22	6,196088E+22	3,274032E+22	3,274128E+22	1,239214E+23	6,548159E+22	1,894030E+23
2761	6,196051E+22	6,195848E+22	3,274078E+22	3,273989E+22	1,239190E+23	6,548067E+22	1,893997E+23
2762	6,195898E+22	6,196104E+22	3,274119E+22	3,274022E+22	1,239200E+23	6,548141E+22	1,894014E+23
2763	6,196103E+22	6,196033E+22	3,273952E+22	3,274010E+22	1,239214E+23	6,547962E+22	1,894010E+23
2764	6,195937E+22	6,195966E+22	3,273998E+22	3,273890E+22	1,239190E+23	6,547888E+22	1,893979E+23
2765	6,195978E+22	6,196200E+22	3,273900E+22	3,273962E+22	1,239218E+23	6,547862E+22	1,894004E+23
2766	6,196184E+22	6,195982E+22	3,273790E+22	3,273858E+22	1,239217E+23	6,547648E+22	1,893981E+23
2767	6,196014E+22	6,196070E+22	3,273892E+22	3,273760E+22	1,239208E+23	6,547652E+22	1,893974E+23
2768	6,196215E+22	6,196232E+22	3,273756E+22	3,273839E+22	1,239245E+23	6,547594E+22	1,894004E+23
2769	6,196234E+22	6,196021E+22	3,273765E+22	3,273762E+22	1,239225E+23	6,547527E+22	1,893978E+23
2770	6,195978E+22	6,196229E+22	3,273897E+22	3,273825E+22	1,239221E+23	6,547722E+22	1,893993E+23
2771	6,196163E+22	6,196176E+22	3,273827E+22	3,273917E+22	1,239234E+23	6,547745E+22	1,894008E+23
2772	6,196028E+22	6,195936E+22	3,273975E+22	3,273877E+22	1,239196E+23	6,547852E+22	1,893982E+23
2773	6,195952E+22	6,196100E+22	3,274039E+22	3,274026E+22	1,239205E+23	6,548065E+22	1,894012E+23
2774	6,196116E+22	6,195901E+22	3,273999E+22	3,274092E+22	1,239202E+23	6,548091E+22	1,894011E+23
2775	6,195839E+22	6,195868E+22	3,274184E+22	3,274092E+22	1,239171E+23	6,548277E+22	1,893998E+23
2776	6,195895E+22	6,196056E+22	3,274145E+22	3,274252E+22	1,239195E+23	6,548397E+22	1,894035E+23
2777	6,195969E+22	6,195792E+22	3,274170E+22	3,274217E+22	1,239176E+23	6,548387E+22	1,894015E+23
2778	6,195725E+22	6,195887E+22	3,274323E+22	3,274205E+22	1,239161E+23	6,548528E+22	1,894014E+23
2779	6,195953E+22	6,195932E+22	3,274215E+22	3,274264E+22	1,239189E+23	6,548479E+22	1,894036E+23
2780	6,195889E+22	6,195720E+22	3,274243E+22	3,274150E+22	1,239161E+23	6,548393E+22	1,894000E+23
2781	6,195745E+22	6,195970E+22	3,274231E+22	3,274185E+22	1,239171E+23	6,548416E+22	1,894013E+23
2782	6,195974E+22	6,195922E+22	3,274059E+22	3,274179E+22	1,239190E+23	6,548238E+22	1,894013E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2783	6,195801E+22	6,195821E+22	3,274126E+22	3,274038E+22	1,239162E+23	6,548165E+22	1,893979E+23
2784	6,195911E+22	6,196061E+22	3,274037E+22	3,274059E+22	1,239197E+23	6,548096E+22	1,894007E+23
2785	6,196127E+22	6,195882E+22	3,273936E+22	3,273968E+22	1,239201E+23	6,547903E+22	1,893991E+23
2786	6,195901E+22	6,195960E+22	3,274030E+22	3,273907E+22	1,239186E+23	6,547937E+22	1,893980E+23
2787	6,196072E+22	6,196146E+22	3,273925E+22	3,273996E+22	1,239222E+23	6,547921E+22	1,894014E+23
2788	6,196030E+22	6,195918E+22	3,273951E+22	3,273942E+22	1,239195E+23	6,547893E+22	1,893984E+23
2789	6,195821E+22	6,196055E+22	3,274071E+22	3,273995E+22	1,239188E+23	6,548066E+22	1,893994E+23
2790	6,196054E+22	6,196012E+22	3,273999E+22	3,274095E+22	1,239207E+23	6,548094E+22	1,894016E+23
2791	6,195885E+22	6,195758E+22	3,274154E+22	3,274071E+22	1,239164E+23	6,548225E+22	1,893987E+23
2792	6,195827E+22	6,195968E+22	3,274211E+22	3,274202E+22	1,239179E+23	6,548413E+22	1,894021E+23
2793	6,195977E+22	6,195815E+22	3,274164E+22	3,274286E+22	1,239179E+23	6,548451E+22	1,894024E+23
2794	6,195674E+22	6,195733E+22	3,274349E+22	3,274291E+22	1,239141E+23	6,548640E+22	1,894005E+23
2795	6,195781E+22	6,195903E+22	3,274343E+22	3,274405E+22	1,239168E+23	6,548748E+22	1,894043E+23
2796	6,195833E+22	6,195637E+22	3,274363E+22	3,274357E+22	1,239147E+23	6,548720E+22	1,894019E+23
2797	6,195617E+22	6,195719E+22	3,274472E+22	3,274341E+22	1,239134E+23	6,548813E+22	1,894015E+23
2798	6,195828E+22	6,195825E+22	3,274343E+22	3,274419E+22	1,239165E+23	6,548763E+22	1,894042E+23
2799	6,195690E+22	6,195616E+22	3,274375E+22	3,274325E+22	1,239131E+23	6,548700E+22	1,894001E+23
2800	6,195589E+22	6,195858E+22	3,274366E+22	3,274320E+22	1,239145E+23	6,548687E+22	1,894013E+23
2801	6,195869E+22	6,195805E+22	3,274206E+22	3,274309E+22	1,239167E+23	6,548514E+22	1,894019E+23
2802	6,195719E+22	6,195664E+22	3,274261E+22	3,274170E+22	1,239138E+23	6,548431E+22	1,893981E+23
2803	6,195858E+22	6,195924E+22	3,274191E+22	3,274181E+22	1,239178E+23	6,548371E+22	1,894015E+23
2804	6,195994E+22	6,195796E+22	3,274089E+22	3,274115E+22	1,239179E+23	6,548204E+22	1,893999E+23
2805	6,195760E+22	6,195858E+22	3,274157E+22	3,274071E+22	1,239162E+23	6,548229E+22	1,893985E+23
2806	6,195922E+22	6,196045E+22	3,274073E+22	3,274172E+22	1,239197E+23	6,548245E+22	1,894021E+23
2807	6,195860E+22	6,195764E+22	3,274133E+22	3,274122E+22	1,239162E+23	6,548256E+22	1,893988E+23
2808	6,195708E+22	6,195877E+22	3,274252E+22	3,274142E+22	1,239158E+23	6,548394E+22	1,893998E+23
2809	6,195943E+22	6,195869E+22	3,274179E+22	3,274270E+22	1,239181E+23	6,548449E+22	1,894026E+23
2810	6,195735E+22	6,195611E+22	3,274311E+22	3,274270E+22	1,239135E+23	6,548581E+22	1,893993E+23
2811	6,195678E+22	6,195833E+22	3,274390E+22	3,274392E+22	1,239151E+23	6,548781E+22	1,894029E+23
2812	6,195790E+22	6,195696E+22	3,274360E+22	3,274466E+22	1,239149E+23	6,548826E+22	1,894031E+23
2813	6,195552E+22	6,195563E+22	3,274521E+22	3,274447E+22	1,239111E+23	6,548968E+22	1,894008E+23
2814	6,195680E+22	6,195760E+22	3,274515E+22	3,274554E+22	1,239144E+23	6,549068E+22	1,894051E+23
2815	6,195684E+22	6,195496E+22	3,274536E+22	3,274522E+22	1,239118E+23	6,549058E+22	1,894024E+23
2816	6,195467E+22	6,195603E+22	3,274624E+22	3,274490E+22	1,239107E+23	6,549114E+22	1,894018E+23
2817	6,195666E+22	6,195745E+22	3,274483E+22	3,274592E+22	1,239141E+23	6,549075E+22	1,894049E+23
2818	6,195534E+22	6,195471E+22	3,274507E+22	3,274496E+22	1,239101E+23	6,549003E+22	1,894001E+23
2819	6,195516E+22	6,195687E+22	3,274524E+22	3,274448E+22	1,239120E+23	6,548973E+22	1,894018E+23
2820	6,195786E+22	6,195666E+22	3,274357E+22	3,274423E+22	1,239145E+23	6,548781E+22	1,894023E+23
2821	6,195657E+22	6,195529E+22	3,274373E+22	3,274291E+22	1,239119E+23	6,548664E+22	1,893985E+23
2822	6,195753E+22	6,195860E+22	3,274306E+22	3,274320E+22	1,239161E+23	6,548626E+22	1,894024E+23
2823	6,195801E+22	6,195722E+22	3,274234E+22	3,274282E+22	1,239152E+23	6,548516E+22	1,894004E+23
2824	6,195590E+22	6,195752E+22	3,274326E+22	3,274215E+22	1,239134E+23	6,548542E+22	1,893988E+23
2825	6,195781E+22	6,195918E+22	3,274254E+22	3,274329E+22	1,239170E+23	6,548583E+22	1,894028E+23
2826	6,195724E+22	6,195568E+22	3,274310E+22	3,274302E+22	1,239129E+23	6,548613E+22	1,893991E+23
2827	6,195616E+22	6,195687E+22	3,274441E+22	3,274319E+22	1,239130E+23	6,548760E+22	1,894006E+23
2828	6,195789E+22	6,195733E+22	3,274355E+22	3,274463E+22	1,239152E+23	6,548818E+22	1,894034E+23
2829	6,195601E+22	6,195470E+22	3,274452E+22	3,274467E+22	1,239107E+23	6,548919E+22	1,893999E+23
2830	6,195556E+22	6,195713E+22	3,274549E+22	3,274568E+22	1,239127E+23	6,549116E+22	1,894039E+23
2831	6,195642E+22	6,195548E+22	3,274551E+22	3,274629E+22	1,239119E+23	6,549180E+22	1,894037E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2832	6,195439E+22	6,195420E+22	3,274707E+22	3,274575E+22	1,239086E+23	6,549283E+22	1,894014E+23
2833	6,195542E+22	6,195655E+22	3,274690E+22	3,274711E+22	1,239120E+23	6,549402E+22	1,894060E+23
2834	6,195493E+22	6,195369E+22	3,274695E+22	3,274711E+22	1,239086E+23	6,549406E+22	1,894027E+23
2835	6,195308E+22	6,195462E+22	3,274788E+22	3,274665E+22	1,239077E+23	6,549453E+22	1,894022E+23
2836	6,195497E+22	6,195609E+22	3,274648E+22	3,274748E+22	1,239111E+23	6,549397E+22	1,894050E+23
2837	6,195459E+22	6,195299E+22	3,274630E+22	3,274631E+22	1,239076E+23	6,549260E+22	1,894002E+23
2838	6,195472E+22	6,195557E+22	3,274643E+22	3,274570E+22	1,239103E+23	6,549212E+22	1,894024E+23
2839	6,195682E+22	6,195568E+22	3,274491E+22	3,274560E+22	1,239125E+23	6,549051E+22	1,894030E+23
2840	6,195539E+22	6,195462E+22	3,274498E+22	3,274417E+22	1,239100E+23	6,548915E+22	1,893992E+23
2841	6,195590E+22	6,195808E+22	3,274448E+22	3,274475E+22	1,239140E+23	6,548923E+22	1,894032E+23
2842	6,195628E+22	6,195584E+22	3,274395E+22	3,274449E+22	1,239121E+23	6,548844E+22	1,894006E+23
2843	6,195487E+22	6,195549E+22	3,274516E+22	3,274362E+22	1,239104E+23	6,548878E+22	1,893991E+23
2844	6,195656E+22	6,195741E+22	3,274442E+22	3,274480E+22	1,239140E+23	6,548922E+22	1,894032E+23
2845	6,195631E+22	6,195393E+22	3,274447E+22	3,274478E+22	1,239102E+23	6,548925E+22	1,893995E+23
2846	6,195494E+22	6,195575E+22	3,274576E+22	3,274505E+22	1,239107E+23	6,549081E+22	1,894015E+23
2847	6,195604E+22	6,195628E+22	3,274521E+22	3,274657E+22	1,239123E+23	6,549179E+22	1,894041E+23
2848	6,195449E+22	6,195353E+22	3,274635E+22	3,274620E+22	1,239080E+23	6,549255E+22	1,894006E+23
2849	6,195422E+22	6,195602E+22	3,274746E+22	3,274724E+22	1,239102E+23	6,549470E+22	1,894049E+23
2850	6,195494E+22	6,195387E+22	3,274750E+22	3,274804E+22	1,239088E+23	6,549554E+22	1,894044E+23
2851	6,195312E+22	6,195256E+22	3,274909E+22	3,274752E+22	1,239057E+23	6,549661E+22	1,894023E+23
2852	6,195348E+22	6,195536E+22	3,274869E+22	3,274899E+22	1,239088E+23	6,549767E+22	1,894065E+23
2853	6,195343E+22	6,195215E+22	3,274822E+22	3,274906E+22	1,239056E+23	6,549728E+22	1,894029E+23
2854	6,195210E+22	6,195315E+22	3,274915E+22	3,274824E+22	1,239053E+23	6,549739E+22	1,894026E+23
2855	6,195406E+22	6,195446E+22	3,274789E+22	3,274882E+22	1,239085E+23	6,549671E+22	1,894052E+23
2856	6,195403E+22	6,195183E+22	3,274755E+22	3,274723E+22	1,239059E+23	6,549478E+22	1,894006E+23
2857	6,195384E+22	6,195506E+22	3,274760E+22	3,274683E+22	1,239089E+23	6,549443E+22	1,894033E+23
2858	6,195510E+22	6,195490E+22	3,274624E+22	3,274704E+22	1,239100E+23	6,549327E+22	1,894033E+23
2859	6,195383E+22	6,195354E+22	3,274666E+22	3,274561E+22	1,239074E+23	6,549227E+22	1,893996E+23
2860	6,195404E+22	6,195677E+22	3,274633E+22	3,274616E+22	1,239108E+23	6,549249E+22	1,894033E+23
2861	6,195520E+22	6,195390E+22	3,274547E+22	3,274607E+22	1,239091E+23	6,549155E+22	1,894006E+23
2862	6,195413E+22	6,195379E+22	3,274660E+22	3,274522E+22	1,239079E+23	6,549182E+22	1,893997E+23
2863	6,195528E+22	6,195591E+22	3,274596E+22	3,274665E+22	1,239112E+23	6,549262E+22	1,894038E+23
2864	6,195497E+22	6,195299E+22	3,274586E+22	3,274648E+22	1,239080E+23	6,549234E+22	1,894003E+23
2865	6,195345E+22	6,195507E+22	3,274728E+22	3,274690E+22	1,239085E+23	6,549419E+22	1,894027E+23
2866	6,195439E+22	6,195486E+22	3,274716E+22	3,274839E+22	1,239093E+23	6,549555E+22	1,894048E+23
2867	6,195346E+22	6,195176E+22	3,274857E+22	3,274777E+22	1,239052E+23	6,549634E+22	1,894016E+23
2868	6,195265E+22	6,195453E+22	3,274964E+22	3,274884E+22	1,239072E+23	6,549847E+22	1,894056E+23
2869	6,195354E+22	6,195225E+22	3,274913E+22	3,274997E+22	1,239058E+23	6,549910E+22	1,894049E+23
2870	6,195156E+22	6,195124E+22	3,275055E+22	3,274948E+22	1,239028E+23	6,550003E+22	1,894028E+23
2871	6,195161E+22	6,195396E+22	3,275027E+22	3,275088E+22	1,239056E+23	6,550115E+22	1,894067E+23
2872	6,195225E+22	6,195078E+22	3,274961E+22	3,275038E+22	1,239030E+23	6,549999E+22	1,894030E+23
2873	6,195133E+22	6,195202E+22	3,275047E+22	3,274948E+22	1,239034E+23	6,549995E+22	1,894033E+23
2874	6,195312E+22	6,195316E+22	3,274934E+22	3,275008E+22	1,239063E+23	6,549942E+22	1,894057E+23
2875	6,195316E+22	6,195074E+22	3,274906E+22	3,274845E+22	1,239039E+23	6,549752E+22	1,894014E+23
2876	6,195208E+22	6,195443E+22	3,274913E+22	3,274816E+22	1,239065E+23	6,549729E+22	1,894038E+23
2877	6,195361E+22	6,195370E+22	3,274750E+22	3,274863E+22	1,239073E+23	6,549612E+22	1,894034E+23
2878	6,195267E+22	6,195203E+22	3,274809E+22	3,274708E+22	1,239047E+23	6,549518E+22	1,893999E+23
2879	6,195282E+22	6,195497E+22	3,274794E+22	3,274766E+22	1,239078E+23	6,549560E+22	1,894034E+23
2880	6,195427E+22	6,195245E+22	3,274684E+22	3,274744E+22	1,239067E+23	6,549428E+22	1,894010E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2881	6,195303E+22	6,195296E+22	3,274785E+22	3,274691E+22	1,239060E+23	6,549476E+22	1,894007E+23
2882	6,195359E+22	6,195484E+22	3,274751E+22	3,274854E+22	1,239084E+23	6,549604E+22	1,894045E+23
2883	6,195355E+22	6,195180E+22	3,274778E+22	3,274818E+22	1,239053E+23	6,549595E+22	1,894013E+23
2884	6,195177E+22	6,195384E+22	3,274945E+22	3,274843E+22	1,239056E+23	6,549788E+22	1,894035E+23
2885	6,195325E+22	6,195304E+22	3,274907E+22	3,275014E+22	1,239063E+23	6,549921E+22	1,894055E+23
2886	6,195239E+22	6,195015E+22	3,275045E+22	3,274960E+22	1,239025E+23	6,550005E+22	1,894026E+23
2887	6,195094E+22	6,195294E+22	3,275145E+22	3,275087E+22	1,239039E+23	6,550231E+22	1,894062E+23
2888	6,195181E+22	6,195105E+22	3,275059E+22	3,275184E+22	1,239029E+23	6,550243E+22	1,894053E+23
2889	6,195012E+22	6,195020E+22	3,275185E+22	3,275127E+22	1,239003E+23	6,550313E+22	1,894034E+23
2890	6,195031E+22	6,195216E+22	3,275188E+22	3,275241E+22	1,239025E+23	6,550429E+22	1,894068E+23
2891	6,195167E+22	6,194919E+22	3,275130E+22	3,275150E+22	1,239009E+23	6,550281E+22	1,894037E+23
2892	6,195028E+22	6,195104E+22	3,275206E+22	3,275053E+22	1,239013E+23	6,550259E+22	1,894039E+23
2893	6,195196E+22	6,195213E+22	3,275057E+22	3,275150E+22	1,239041E+23	6,550207E+22	1,894062E+23
2894	6,195167E+22	6,195000E+22	3,275033E+22	3,274994E+22	1,239017E+23	6,550026E+22	1,894019E+23
2895	6,195012E+22	6,195322E+22	3,275066E+22	3,274972E+22	1,239033E+23	6,550038E+22	1,894037E+23
2896	6,195217E+22	6,195236E+22	3,274893E+22	3,274991E+22	1,239045E+23	6,549883E+22	1,894034E+23
2897	6,195173E+22	6,195075E+22	3,274940E+22	3,274855E+22	1,239025E+23	6,549794E+22	1,894004E+23
2898	6,195173E+22	6,195329E+22	3,274949E+22	3,274931E+22	1,239050E+23	6,549880E+22	1,894038E+23
2899	6,195336E+22	6,195119E+22	3,274841E+22	3,274909E+22	1,239046E+23	6,549750E+22	1,894021E+23
2900	6,195144E+22	6,195218E+22	3,274946E+22	3,274859E+22	1,239036E+23	6,549806E+22	1,894017E+23
2901	6,195232E+22	6,195347E+22	3,274907E+22	3,275037E+22	1,239058E+23	6,549944E+22	1,894052E+23
2902	6,195254E+22	6,195023E+22	3,274962E+22	3,274979E+22	1,239028E+23	6,549942E+22	1,894022E+23
2903	6,195043E+22	6,195210E+22	3,275151E+22	3,275009E+22	1,239025E+23	6,550160E+22	1,894041E+23
2904	6,195188E+22	6,195168E+22	3,275079E+22	3,275172E+22	1,239036E+23	6,550251E+22	1,894061E+23
2905	6,195072E+22	6,194915E+22	3,275197E+22	3,275155E+22	1,238999E+23	6,550352E+22	1,894034E+23
2906	6,194884E+22	6,195148E+22	3,275320E+22	3,275290E+22	1,239003E+23	6,550611E+22	1,894064E+23
2907	6,195030E+22	6,194948E+22	3,275243E+22	3,275354E+22	1,238998E+23	6,550597E+22	1,894058E+23
2908	6,194873E+22	6,194883E+22	3,275368E+22	3,275266E+22	1,238976E+23	6,550633E+22	1,894039E+23
2909	6,194960E+22	6,195047E+22	3,275335E+22	3,275388E+22	1,239001E+23	6,550722E+22	1,894073E+23
2910	6,195093E+22	6,194801E+22	3,275273E+22	3,275287E+22	1,238989E+23	6,550560E+22	1,894045E+23
2911	6,194878E+22	6,195010E+22	3,275350E+22	3,275206E+22	1,238989E+23	6,550555E+22	1,894044E+23
2912	6,195026E+22	6,195144E+22	3,275175E+22	3,275290E+22	1,239017E+23	6,550465E+22	1,894064E+23
2913	6,195020E+22	6,194914E+22	3,275154E+22	3,275147E+22	1,238993E+23	6,550301E+22	1,894024E+23
2914	6,194881E+22	6,195138E+22	3,275227E+22	3,275117E+22	1,239002E+23	6,550343E+22	1,894036E+23
2915	6,195146E+22	6,195065E+22	3,275054E+22	3,275118E+22	1,239021E+23	6,550172E+22	1,894038E+23
2916	6,195071E+22	6,194962E+22	3,275087E+22	3,274987E+22	1,239003E+23	6,550074E+22	1,894011E+23
2917	6,195072E+22	6,195197E+22	3,275072E+22	3,275104E+22	1,239027E+23	6,550175E+22	1,894044E+23
2918	6,195213E+22	6,195028E+22	3,274984E+22	3,275076E+22	1,239024E+23	6,550061E+22	1,894030E+23
2919	6,194982E+22	6,195091E+22	3,275124E+22	3,275024E+22	1,239007E+23	6,550147E+22	1,894022E+23
2920	6,195089E+22	6,195213E+22	3,275085E+22	3,275177E+22	1,239030E+23	6,550263E+22	1,894056E+23
2921	6,195135E+22	6,194905E+22	3,275135E+22	3,275146E+22	1,239004E+23	6,550281E+22	1,894032E+23
2922	6,194877E+22	6,195030E+22	3,275351E+22	3,275202E+22	1,238991E+23	6,550553E+22	1,894046E+23
2923	6,195021E+22	6,195028E+22	3,275272E+22	3,275369E+22	1,239005E+23	6,550641E+22	1,894069E+23
2924	6,194874E+22	6,194804E+22	3,275375E+22	3,275349E+22	1,238968E+23	6,550724E+22	1,894040E+23
2925	6,194752E+22	6,194956E+22	3,275480E+22	3,275488E+22	1,238971E+23	6,550968E+22	1,894068E+23
2926	6,194952E+22	6,194773E+22	3,275410E+22	3,275508E+22	1,238973E+23	6,550917E+22	1,894064E+23
2927	6,194778E+22	6,194725E+22	3,275531E+22	3,275409E+22	1,238950E+23	6,550940E+22	1,894044E+23
2928	6,194850E+22	6,194951E+22	3,275467E+22	3,275513E+22	1,238980E+23	6,550979E+22	1,894078E+23
2929	6,194950E+22	6,194759E+22	3,275389E+22	3,275437E+22	1,238971E+23	6,550826E+22	1,894053E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2930	6,194684E+22	6,194899E+22	3,275505E+22	3,275363E+22	1,238958E+23	6,550868E+22	1,894045E+23
2931	6,194875E+22	6,195014E+22	3,275343E+22	3,275422E+22	1,238989E+23	6,550764E+22	1,894065E+23
2932	6,194887E+22	6,194780E+22	3,275320E+22	3,275271E+22	1,238967E+23	6,550591E+22	1,894026E+23
2933	6,194818E+22	6,194946E+22	3,275362E+22	3,275270E+22	1,238976E+23	6,550633E+22	1,894040E+23
2934	6,195087E+22	6,194919E+22	3,275187E+22	3,275270E+22	1,239001E+23	6,550456E+22	1,894046E+23
2935	6,194945E+22	6,194859E+22	3,275219E+22	3,275155E+22	1,238980E+23	6,550374E+22	1,894018E+23
2936	6,194932E+22	6,195122E+22	3,275188E+22	3,275252E+22	1,239005E+23	6,550440E+22	1,894049E+23
2937	6,195081E+22	6,194941E+22	3,275125E+22	3,275230E+22	1,239002E+23	6,550354E+22	1,894038E+23
2938	6,194841E+22	6,194919E+22	3,275327E+22	3,275177E+22	1,238976E+23	6,550504E+22	1,894026E+23
2939	6,194965E+22	6,195057E+22	3,275292E+22	3,275326E+22	1,239002E+23	6,550618E+22	1,894064E+23
2940	6,194961E+22	6,194789E+22	3,275334E+22	3,275323E+22	1,238975E+23	6,550657E+22	1,894041E+23
2941	6,194710E+22	6,194861E+22	3,275517E+22	3,275425E+22	1,238957E+23	6,550942E+22	1,894051E+23
2942	6,194857E+22	6,194872E+22	3,275445E+22	3,275574E+22	1,238973E+23	6,551019E+22	1,894075E+23
2943	6,194715E+22	6,194634E+22	3,275555E+22	3,275535E+22	1,238935E+23	6,551089E+22	1,894044E+23
2944	6,194648E+22	6,194801E+22	3,275632E+22	3,275632E+22	1,238945E+23	6,551265E+22	1,894071E+23
2945	6,194874E+22	6,194670E+22	3,275552E+22	3,275655E+22	1,238954E+23	6,551207E+22	1,894075E+23
2946	6,194653E+22	6,194596E+22	3,275701E+22	3,275565E+22	1,238925E+23	6,551266E+22	1,894051E+23
2947	6,194699E+22	6,194870E+22	3,275628E+22	3,275658E+22	1,238957E+23	6,551286E+22	1,894085E+23
2948	6,194767E+22	6,194691E+22	3,275547E+22	3,275583E+22	1,238946E+23	6,551130E+22	1,894059E+23
2949	6,194561E+22	6,194710E+22	3,275651E+22	3,275524E+22	1,238927E+23	6,551175E+22	1,894045E+23
2950	6,194799E+22	6,194835E+22	3,275494E+22	3,275553E+22	1,238963E+23	6,551047E+22	1,894068E+23
2951	6,194801E+22	6,194623E+22	3,275453E+22	3,275407E+22	1,238942E+23	6,550860E+22	1,894028E+23
2952	6,194719E+22	6,194836E+22	3,275461E+22	3,275403E+22	1,238955E+23	6,550864E+22	1,894042E+23
2953	6,194965E+22	6,194875E+22	3,275285E+22	3,275421E+22	1,238984E+23	6,550706E+22	1,894054E+23
2954	6,194776E+22	6,194748E+22	3,275374E+22	3,275311E+22	1,238952E+23	6,550685E+22	1,894021E+23
2955	6,194786E+22	6,195007E+22	3,275375E+22	3,275380E+22	1,238979E+23	6,550756E+22	1,894055E+23
2956	6,194937E+22	6,194829E+22	3,275326E+22	3,275368E+22	1,238977E+23	6,550694E+22	1,894046E+23
2957	6,194726E+22	6,194720E+22	3,275515E+22	3,275368E+22	1,238945E+23	6,550882E+22	1,894033E+23
2958	6,194831E+22	6,194893E+22	3,275479E+22	3,275524E+22	1,238972E+23	6,551003E+22	1,894073E+23
2959	6,194776E+22	6,194643E+22	3,275506E+22	3,275545E+22	1,238942E+23	6,551051E+22	1,894047E+23
2960	6,194551E+22	6,194713E+22	3,275660E+22	3,275622E+22	1,238926E+23	6,551282E+22	1,894055E+23
2961	6,194750E+22	6,194730E+22	3,275595E+22	3,275750E+22	1,238948E+23	6,551344E+22	1,894082E+23
2962	6,194617E+22	6,194451E+22	3,275742E+22	3,275687E+22	1,238907E+23	6,551430E+22	1,894050E+23
2963	6,194560E+22	6,194681E+22	3,275812E+22	3,275758E+22	1,238924E+23	6,551569E+22	1,894081E+23
2964	6,194724E+22	6,194611E+22	3,275728E+22	3,275796E+22	1,238933E+23	6,551523E+22	1,894086E+23
2965	6,194491E+22	6,194479E+22	3,275856E+22	3,275747E+22	1,238897E+23	6,551603E+22	1,894057E+23
2966	6,194533E+22	6,194739E+22	3,275791E+22	3,275815E+22	1,238927E+23	6,551606E+22	1,894088E+23
2967	6,194602E+22	6,194532E+22	3,275711E+22	3,275735E+22	1,238913E+23	6,551446E+22	1,894058E+23
2968	6,194464E+22	6,194547E+22	3,275767E+22	3,275651E+22	1,238901E+23	6,551419E+22	1,894043E+23
2969	6,194729E+22	6,194710E+22	3,275597E+22	3,275690E+22	1,238944E+23	6,551287E+22	1,894073E+23
2970	6,194691E+22	6,194499E+22	3,275584E+22	3,275555E+22	1,238919E+23	6,551139E+22	1,894033E+23
2971	6,194595E+22	6,194774E+22	3,275586E+22	3,275537E+22	1,238937E+23	6,551123E+22	1,894049E+23
2972	6,194810E+22	6,194821E+22	3,275438E+22	3,275555E+22	1,238963E+23	6,550994E+22	1,894062E+23
2973	6,194668E+22	6,194578E+22	3,275543E+22	3,275468E+22	1,238925E+23	6,551011E+22	1,894026E+23
2974	6,194688E+22	6,194832E+22	3,275566E+22	3,275520E+22	1,238952E+23	6,551087E+22	1,894061E+23
2975	6,194797E+22	6,194672E+22	3,275511E+22	3,275540E+22	1,238947E+23	6,551051E+22	1,894052E+23
2976	6,194575E+22	6,194578E+22	3,275658E+22	3,275555E+22	1,238915E+23	6,551213E+22	1,894037E+23
2977	6,194668E+22	6,194787E+22	3,275619E+22	3,275728E+22	1,238945E+23	6,551347E+22	1,894080E+23
2978	6,194601E+22	6,194480E+22	3,275690E+22	3,275740E+22	1,238908E+23	6,551430E+22	1,894051E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude ☉	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2979	6,194424E+22	6,194567E+22	3,275847E+22	3,275775E+22	1,238899E+23	6,551622E+22	1,894061E+23
2980	6,194640E+22	6,194617E+22	3,275791E+22	3,275894E+22	1,238926E+23	6,551686E+22	1,894094E+23
2981	6,194526E+22	6,194281E+22	3,275924E+22	3,275866E+22	1,238881E+23	6,551790E+22	1,894060E+23
2982	6,194431E+22	6,194565E+22	3,275993E+22	3,275926E+22	1,238900E+23	6,551919E+22	1,894091E+23
2983	6,194532E+22	6,194517E+22	3,275889E+22	3,275978E+22	1,238905E+23	6,551867E+22	1,894092E+23
2984	6,194316E+22	6,194340E+22	3,275985E+22	3,275911E+22	1,238866E+23	6,551896E+22	1,894055E+23
2985	6,194413E+22	6,194593E+22	3,275921E+22	3,275957E+22	1,238901E+23	6,551878E+22	1,894088E+23
2986	6,194501E+22	6,194345E+22	3,275860E+22	3,275868E+22	1,238885E+23	6,551728E+22	1,894057E+23
2987	6,194383E+22	6,194429E+22	3,275893E+22	3,275765E+22	1,238881E+23	6,551658E+22	1,894047E+23
2988	6,194613E+22	6,194657E+22	3,275725E+22	3,275816E+22	1,238927E+23	6,551541E+22	1,894081E+23
2989	6,194565E+22	6,194391E+22	3,275710E+22	3,275714E+22	1,238896E+23	6,551425E+22	1,894038E+23
2990	6,194467E+22	6,194662E+22	3,275746E+22	3,275667E+22	1,238913E+23	6,551413E+22	1,894054E+23
2991	6,194665E+22	6,194689E+22	3,275616E+22	3,275693E+22	1,238935E+23	6,551309E+22	1,894066E+23
2992	6,194557E+22	6,194422E+22	3,275695E+22	3,275616E+22	1,238898E+23	6,551311E+22	1,894029E+23
2993	6,194576E+22	6,194700E+22	3,275716E+22	3,275691E+22	1,238928E+23	6,551408E+22	1,894068E+23
2994	6,194633E+22	6,194524E+22	3,275686E+22	3,275742E+22	1,238916E+23	6,551429E+22	1,894059E+23
2995	6,194412E+22	6,194473E+22	3,275814E+22	3,275742E+22	1,238889E+23	6,551556E+22	1,894044E+23
2996	6,194514E+22	6,194670E+22	3,275801E+22	3,275906E+22	1,238918E+23	6,551707E+22	1,894089E+23
2997	6,194505E+22	6,194284E+22	3,275877E+22	3,275923E+22	1,238879E+23	6,551800E+22	1,894059E+23
2998	6,194351E+22	6,194398E+22	3,276038E+22	3,275923E+22	1,238875E+23	6,551961E+22	1,894071E+23
2999	6,194500E+22	6,194493E+22	3,275980E+22	3,276061E+22	1,238899E+23	6,552041E+22	1,894103E+23