

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	5,688652E+22	5,688460E+22	2,588061E+22	2,588155E+22	1,137711E+23	5,176217E+22	1,655333E+23
-2999	5,688280E+22	5,688532E+22	2,588244E+22	2,588150E+22	1,137681E+23	5,176393E+22	1,655321E+23
-2998	5,688425E+22	5,688475E+22	2,588260E+22	2,588345E+22	1,137690E+23	5,176605E+22	1,655350E+23
-2997	5,688429E+22	5,688315E+22	2,588286E+22	2,588268E+22	1,137674E+23	5,176555E+22	1,655330E+23
-2996	5,688160E+22	5,688302E+22	2,588468E+22	2,588362E+22	1,137646E+23	5,176830E+22	1,655329E+23
-2995	5,688390E+22	5,688220E+22	2,588392E+22	2,588510E+22	1,137661E+23	5,176902E+22	1,655351E+23
-2994	5,688194E+22	5,688214E+22	2,588447E+22	2,588412E+22	1,137641E+23	5,176859E+22	1,655327E+23
-2993	5,688129E+22	5,688249E+22	2,588511E+22	2,588536E+22	1,137638E+23	5,177047E+22	1,655342E+23
-2992	5,688383E+22	5,688179E+22	2,588387E+22	2,588508E+22	1,137656E+23	5,176895E+22	1,655346E+23
-2991	5,688110E+22	5,688250E+22	2,588496E+22	2,588362E+22	1,137636E+23	5,176859E+22	1,655322E+23
-2990	5,688269E+22	5,688306E+22	2,588454E+22	2,588461E+22	1,137657E+23	5,176915E+22	1,655349E+23
-2989	5,688388E+22	5,688261E+22	2,588332E+22	2,588330E+22	1,137665E+23	5,176663E+22	1,655331E+23
-2988	5,688107E+22	5,688352E+22	2,588399E+22	2,588297E+22	1,137646E+23	5,176696E+22	1,655315E+23
-2987	5,688384E+22	5,688355E+22	2,588260E+22	2,588378E+22	1,137674E+23	5,176638E+22	1,655338E+23
-2986	5,688352E+22	5,688346E+22	2,588217E+22	2,588185E+22	1,137670E+23	5,176403E+22	1,655310E+23
-2985	5,688303E+22	5,688400E+22	2,588263E+22	2,588216E+22	1,137670E+23	5,176479E+22	1,655318E+23
-2984	5,688618E+22	5,688362E+22	2,588126E+22	2,588234E+22	1,137698E+23	5,176360E+22	1,655334E+23
-2983	5,688351E+22	5,688414E+22	2,588214E+22	2,588126E+22	1,137677E+23	5,176340E+22	1,655311E+23
-2982	5,688356E+22	5,688483E+22	2,588256E+22	2,588286E+22	1,137684E+23	5,176542E+22	1,655338E+23
-2981	5,688497E+22	5,688383E+22	2,588200E+22	2,588278E+22	1,137688E+23	5,176478E+22	1,655336E+23
-2980	5,688159E+22	5,688350E+22	2,588379E+22	2,588278E+22	1,137651E+23	5,176657E+22	1,655317E+23
-2979	5,688331E+22	5,688292E+22	2,588401E+22	2,588456E+22	1,137662E+23	5,176856E+22	1,655348E+23
-2978	5,688312E+22	5,688187E+22	2,588420E+22	2,588403E+22	1,137650E+23	5,176823E+22	1,655332E+23
-2977	5,688065E+22	5,688192E+22	2,588556E+22	2,588499E+22	1,137626E+23	5,177055E+22	1,655331E+23
-2976	5,688295E+22	5,688147E+22	2,588475E+22	2,588637E+22	1,137644E+23	5,177112E+22	1,655355E+23
-2975	5,688070E+22	5,688113E+22	2,588560E+22	2,588531E+22	1,137618E+23	5,177091E+22	1,655327E+23
-2974	5,688021E+22	5,688186E+22	2,588626E+22	2,588611E+22	1,137621E+23	5,177237E+22	1,655344E+23
-2973	5,688301E+22	5,688107E+22	2,588520E+22	2,588584E+22	1,137641E+23	5,177104E+22	1,655351E+23
-2972	5,688017E+22	5,688110E+22	2,588603E+22	2,588466E+22	1,137613E+23	5,177070E+22	1,655320E+23
-2971	5,688142E+22	5,688194E+22	2,588546E+22	2,588566E+22	1,137634E+23	5,177111E+22	1,655345E+23
-2970	5,688249E+22	5,688181E+22	2,588416E+22	2,588449E+22	1,137643E+23	5,176865E+22	1,655329E+23
-2969	5,688036E+22	5,688232E+22	2,588452E+22	2,588385E+22	1,137627E+23	5,176837E+22	1,655310E+23
-2968	5,688357E+22	5,688252E+22	2,588324E+22	2,588438E+22	1,137661E+23	5,176762E+22	1,655337E+23
-2967	5,688305E+22	5,688225E+22	2,588313E+22	2,588257E+22	1,137653E+23	5,176570E+22	1,655310E+23
-2966	5,688215E+22	5,688357E+22	2,588358E+22	2,588288E+22	1,137657E+23	5,176646E+22	1,655322E+23
-2965	5,688501E+22	5,688340E+22	2,588240E+22	2,588341E+22	1,137684E+23	5,176581E+22	1,655342E+23
-2964	5,688212E+22	5,688302E+22	2,588326E+22	2,588265E+22	1,137651E+23	5,176591E+22	1,655311E+23
-2963	5,688215E+22	5,688357E+22	2,588388E+22	2,588404E+22	1,137657E+23	5,176792E+22	1,655336E+23
-2962	5,688366E+22	5,688257E+22	2,588345E+22	2,588401E+22	1,137662E+23	5,176746E+22	1,655337E+23
-2961	5,688089E+22	5,688182E+22	2,588498E+22	2,588398E+22	1,137627E+23	5,176896E+22	1,655317E+23
-2960	5,688252E+22	5,688164E+22	2,588508E+22	2,588583E+22	1,137642E+23	5,177091E+22	1,655351E+23
-2959	5,688165E+22	5,688061E+22	2,588536E+22	2,588558E+22	1,137623E+23	5,177094E+22	1,655332E+23
-2958	5,687916E+22	5,688128E+22	2,588660E+22	2,588626E+22	1,137604E+23	5,177286E+22	1,655333E+23
-2957	5,688184E+22	5,688075E+22	2,588601E+22	2,588744E+22	1,137626E+23	5,177345E+22	1,655360E+23
-2956	5,687989E+22	5,687965E+22	2,588680E+22	2,588630E+22	1,137595E+23	5,177310E+22	1,655326E+23
-2955	5,687951E+22	5,688059E+22	2,588749E+22	2,588683E+22	1,137601E+23	5,177432E+22	1,655344E+23
-2954	5,688186E+22	5,688031E+22	2,588631E+22	2,588678E+22	1,137622E+23	5,177309E+22	1,655353E+23
-2953	5,687923E+22	5,688022E+22	2,588670E+22	2,588572E+22	1,137594E+23	5,177242E+22	1,655319E+23
-2952	5,688047E+22	5,688114E+22	2,588605E+22	2,588659E+22	1,137616E+23	5,177264E+22	1,655343E+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 <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2951	5,688131E+22	5,688069E+22	2,588502E+22	2,588545E+22	1,137620E+23	5,177047E+22	1,655325E+23
-2950	5,687961E+22	5,688159E+22	2,588536E+22	2,588445E+22	1,137612E+23	5,176981E+22	1,655310E+23
-2949	5,688311E+22	5,688175E+22	2,588431E+22	2,588509E+22	1,137649E+23	5,176940E+22	1,655343E+23
-2948	5,688227E+22	5,688106E+22	2,588407E+22	2,588366E+22	1,137633E+23	5,176773E+22	1,655311E+23
-2947	5,688094E+22	5,688268E+22	2,588456E+22	2,588396E+22	1,137636E+23	5,176852E+22	1,655321E+23
-2946	5,688347E+22	5,688270E+22	2,588353E+22	2,588466E+22	1,137662E+23	5,176819E+22	1,655344E+23
-2945	5,688117E+22	5,688173E+22	2,588425E+22	2,588381E+22	1,137629E+23	5,176806E+22	1,655310E+23
-2944	5,688138E+22	5,688223E+22	2,588501E+22	2,588501E+22	1,137636E+23	5,177002E+22	1,655336E+23
-2943	5,688258E+22	5,688105E+22	2,588482E+22	2,588527E+22	1,137636E+23	5,177009E+22	1,655337E+23
-2942	5,687966E+22	5,688095E+22	2,588614E+22	2,588519E+22	1,137606E+23	5,177133E+22	1,655319E+23
-2941	5,688129E+22	5,688091E+22	2,588634E+22	2,588726E+22	1,137622E+23	5,177360E+22	1,655358E+23
-2940	5,688040E+22	5,687927E+22	2,588653E+22	2,588708E+22	1,137597E+23	5,177361E+22	1,655333E+23
-2939	5,687803E+22	5,688007E+22	2,588790E+22	2,588730E+22	1,137581E+23	5,177520E+22	1,655333E+23
-2938	5,688087E+22	5,687977E+22	2,588744E+22	2,588839E+22	1,137606E+23	5,177583E+22	1,655365E+23
-2937	5,687933E+22	5,687830E+22	2,588788E+22	2,588720E+22	1,137576E+23	5,177508E+22	1,655327E+23
-2936	5,687852E+22	5,687967E+22	2,588839E+22	2,588776E+22	1,137582E+23	5,177616E+22	1,655344E+23
-2935	5,688025E+22	5,687933E+22	2,588723E+22	2,588804E+22	1,137596E+23	5,177527E+22	1,655349E+23
-2934	5,687774E+22	5,687952E+22	2,588744E+22	2,588668E+22	1,137573E+23	5,177412E+22	1,655314E+23
-2933	5,687962E+22	5,688029E+22	2,588698E+22	2,588742E+22	1,137599E+23	5,177440E+22	1,655343E+23
-2932	5,688079E+22	5,687917E+22	2,588589E+22	2,588627E+22	1,137600E+23	5,177215E+22	1,655321E+23
-2931	5,687917E+22	5,688050E+22	2,588627E+22	2,588509E+22	1,137597E+23	5,177136E+22	1,655310E+23
-2930	5,688224E+22	5,688129E+22	2,588525E+22	2,588599E+22	1,137635E+23	5,177125E+22	1,655348E+23
-2929	5,688147E+22	5,688037E+22	2,588476E+22	2,588475E+22	1,137618E+23	5,176952E+22	1,655314E+23
-2928	5,687990E+22	5,688201E+22	2,588544E+22	2,588496E+22	1,137619E+23	5,177040E+22	1,655323E+23
-2927	5,688204E+22	5,688159E+22	2,588480E+22	2,588581E+22	1,137636E+23	5,177061E+22	1,655342E+23
-2926	5,688005E+22	5,688069E+22	2,588556E+22	2,588477E+22	1,137607E+23	5,177033E+22	1,655311E+23
-2925	5,688051E+22	5,688099E+22	2,588648E+22	2,588620E+22	1,137615E+23	5,177268E+22	1,655342E+23
-2924	5,688132E+22	5,687941E+22	2,588607E+22	2,588686E+22	1,137607E+23	5,177293E+22	1,655337E+23
-2923	5,687833E+22	5,687969E+22	2,588729E+22	2,588664E+22	1,137580E+23	5,177393E+22	1,655320E+23
-2922	5,687989E+22	5,687992E+22	2,588756E+22	2,588859E+22	1,137598E+23	5,177616E+22	1,655360E+23
-2921	5,687969E+22	5,687795E+22	2,588758E+22	2,588817E+22	1,137576E+23	5,177575E+22	1,655334E+23
-2920	5,687745E+22	5,687891E+22	2,588904E+22	2,588805E+22	1,137564E+23	5,177710E+22	1,655335E+23
-2919	5,687962E+22	5,687866E+22	2,588876E+22	2,588940E+22	1,137583E+23	5,177816E+22	1,655364E+23
-2918	5,687788E+22	5,687781E+22	2,588893E+22	2,588822E+22	1,137557E+23	5,177714E+22	1,655328E+23
-2917	5,687712E+22	5,687902E+22	2,588943E+22	2,588897E+22	1,137561E+23	5,177840E+22	1,655345E+23
-2916	5,687887E+22	5,687798E+22	2,588810E+22	2,588931E+22	1,137569E+23	5,177741E+22	1,655343E+23
-2915	5,687690E+22	5,687823E+22	2,588831E+22	2,588749E+22	1,137551E+23	5,177580E+22	1,655309E+23
-2914	5,687911E+22	5,687925E+22	2,588796E+22	2,588813E+22	1,137584E+23	5,177609E+22	1,655344E+23
-2913	5,688069E+22	5,687806E+22	2,588659E+22	2,588704E+22	1,137587E+23	5,177363E+22	1,655324E+23
-2912	5,687855E+22	5,687991E+22	2,588694E+22	2,588588E+22	1,137585E+23	5,177282E+22	1,655313E+23
-2911	5,688077E+22	5,688072E+22	2,588620E+22	2,588710E+22	1,137615E+23	5,177330E+22	1,655348E+23
-2910	5,688004E+22	5,687988E+22	2,588574E+22	2,588567E+22	1,137599E+23	5,177141E+22	1,655313E+23
-2909	5,687886E+22	5,688107E+22	2,588675E+22	2,588594E+22	1,137599E+23	5,177270E+22	1,655326E+23
-2908	5,688103E+22	5,687986E+22	2,588612E+22	2,588698E+22	1,137609E+23	5,177310E+22	1,655340E+23
-2907	5,687906E+22	5,687919E+22	2,588684E+22	2,588591E+22	1,137583E+23	5,177275E+22	1,655310E+23
-2906	5,687931E+22	5,688000E+22	2,588772E+22	2,588760E+22	1,137593E+23	5,177532E+22	1,655346E+23
-2905	5,688037E+22	5,687818E+22	2,588698E+22	2,588833E+22	1,137586E+23	5,177531E+22	1,655339E+23
-2904	5,687728E+22	5,687872E+22	2,588832E+22	2,588780E+22	1,137560E+23	5,177612E+22	1,655321E+23
-2903	5,687859E+22	5,687887E+22	2,588894E+22	2,588974E+22	1,137575E+23	5,177869E+22	1,655361E+23

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	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2902	5,687859E+22	5,687710E+22	2,588895E+22	2,588906E+22	1,137557E+23	5,177801E+22	1,655337E+23
-2901	5,687639E+22	5,687799E+22	2,589049E+22	2,588918E+22	1,137544E+23	5,177967E+22	1,655341E+23
-2900	5,687798E+22	5,687728E+22	2,588992E+22	2,589084E+22	1,137553E+23	5,178076E+22	1,655360E+23
-2899	5,687632E+22	5,687657E+22	2,588989E+22	2,588949E+22	1,137529E+23	5,177938E+22	1,655323E+23
-2898	5,687591E+22	5,687790E+22	2,589037E+22	2,589006E+22	1,137538E+23	5,178043E+22	1,655342E+23
-2897	5,687854E+22	5,687653E+22	2,588877E+22	2,589014E+22	1,137551E+23	5,177891E+22	1,655340E+23
-2896	5,687686E+22	5,687722E+22	2,588899E+22	2,588797E+22	1,137541E+23	5,177696E+22	1,655310E+23
-2895	5,687843E+22	5,687860E+22	2,588883E+22	2,588885E+22	1,137570E+23	5,177768E+22	1,655347E+23
-2894	5,687967E+22	5,687805E+22	2,588738E+22	2,588777E+22	1,137577E+23	5,177515E+22	1,655329E+23
-2893	5,687744E+22	5,687966E+22	2,588797E+22	2,588688E+22	1,137571E+23	5,177484E+22	1,655319E+23
-2892	5,687920E+22	5,687962E+22	2,588732E+22	2,588826E+22	1,137588E+23	5,177558E+22	1,655344E+23
-2891	5,687890E+22	5,687859E+22	2,588699E+22	2,588667E+22	1,137575E+23	5,177366E+22	1,655312E+23
-2890	5,687794E+22	5,687960E+22	2,588810E+22	2,588702E+22	1,137575E+23	5,177511E+22	1,655326E+23
-2889	5,688035E+22	5,687823E+22	2,588711E+22	2,588831E+22	1,137586E+23	5,177542E+22	1,655340E+23
-2888	5,687815E+22	5,687802E+22	2,588769E+22	2,588721E+22	1,137562E+23	5,177490E+22	1,655311E+23
-2887	5,687775E+22	5,687900E+22	2,588877E+22	2,588907E+22	1,137567E+23	5,177785E+22	1,655346E+23
-2886	5,687905E+22	5,687750E+22	2,588812E+22	2,588943E+22	1,137566E+23	5,177755E+22	1,655341E+23
-2885	5,687640E+22	5,687777E+22	2,588978E+22	2,588885E+22	1,137542E+23	5,177863E+22	1,655328E+23
-2884	5,687737E+22	5,687738E+22	2,589044E+22	2,589089E+22	1,137548E+23	5,178132E+22	1,655361E+23
-2883	5,687733E+22	5,687590E+22	2,589033E+22	2,589020E+22	1,137532E+23	5,178053E+22	1,655338E+23
-2882	5,687491E+22	5,687700E+22	2,589173E+22	2,589053E+22	1,137519E+23	5,178226E+22	1,655342E+23
-2881	5,687685E+22	5,687595E+22	2,589074E+22	2,589221E+22	1,137528E+23	5,178294E+22	1,655357E+23
-2880	5,687548E+22	5,687539E+22	2,589066E+22	2,589043E+22	1,137509E+23	5,178108E+22	1,655320E+23
-2879	5,687510E+22	5,687681E+22	2,589133E+22	2,589091E+22	1,137519E+23	5,178224E+22	1,655341E+23
-2878	5,687807E+22	5,687588E+22	2,588969E+22	2,589067E+22	1,137539E+23	5,178036E+22	1,655343E+23
-2877	5,687635E+22	5,687677E+22	2,588999E+22	2,588878E+22	1,137531E+23	5,177877E+22	1,655319E+23
-2876	5,687706E+22	5,687786E+22	2,588973E+22	2,588995E+22	1,137549E+23	5,177968E+22	1,655346E+23
-2875	5,687818E+22	5,687730E+22	2,588829E+22	2,588877E+22	1,137555E+23	5,177706E+22	1,655325E+23
-2874	5,687617E+22	5,687867E+22	2,588908E+22	2,588791E+22	1,137548E+23	5,177698E+22	1,655318E+23
-2873	5,687851E+22	5,687800E+22	2,588824E+22	2,588923E+22	1,137565E+23	5,177747E+22	1,655340E+23
-2872	5,687835E+22	5,687714E+22	2,588793E+22	2,588754E+22	1,137555E+23	5,177547E+22	1,655310E+23
-2871	5,687691E+22	5,687852E+22	2,588912E+22	2,588825E+22	1,137554E+23	5,177737E+22	1,655328E+23
-2870	5,687919E+22	5,687764E+22	2,588804E+22	2,588949E+22	1,137568E+23	5,177753E+22	1,655344E+23
-2869	5,687711E+22	5,687742E+22	2,588883E+22	2,588853E+22	1,137545E+23	5,177736E+22	1,655319E+23
-2868	5,687630E+22	5,687780E+22	2,589008E+22	2,589035E+22	1,137541E+23	5,178043E+22	1,655345E+23
-2867	5,687791E+22	5,687628E+22	2,588963E+22	2,589047E+22	1,137542E+23	5,178010E+22	1,655343E+23
-2866	5,687538E+22	5,687646E+22	2,589144E+22	2,589002E+22	1,137518E+23	5,178146E+22	1,655333E+23
-2865	5,687624E+22	5,687586E+22	2,589166E+22	2,589228E+22	1,137521E+23	5,178394E+22	1,655360E+23
-2864	5,687601E+22	5,687468E+22	2,589131E+22	2,589155E+22	1,137507E+23	5,178287E+22	1,655336E+23
-2863	5,687333E+22	5,687581E+22	2,589271E+22	2,589192E+22	1,137491E+23	5,178463E+22	1,655338E+23
-2862	5,687580E+22	5,687503E+22	2,589164E+22	2,589310E+22	1,137508E+23	5,178474E+22	1,655356E+23
-2861	5,687514E+22	5,687449E+22	2,589168E+22	2,589120E+22	1,137496E+23	5,178287E+22	1,655325E+23
-2860	5,687433E+22	5,687569E+22	2,589233E+22	2,589170E+22	1,137500E+23	5,178403E+22	1,655341E+23
-2859	5,687719E+22	5,687532E+22	2,589065E+22	2,589146E+22	1,137525E+23	5,178211E+22	1,655346E+23
-2858	5,687520E+22	5,687627E+22	2,589096E+22	2,588977E+22	1,137515E+23	5,178073E+22	1,655322E+23
-2857	5,687587E+22	5,687688E+22	2,589046E+22	2,589100E+22	1,137528E+23	5,178147E+22	1,655342E+23
-2856	5,687725E+22	5,687620E+22	2,588910E+22	2,588961E+22	1,137535E+23	5,177870E+22	1,655322E+23
-2855	5,687518E+22	5,687734E+22	2,589012E+22	2,588885E+22	1,137525E+23	5,177898E+22	1,655315E+23
-2854	5,687780E+22	5,687694E+22	2,588926E+22	2,589007E+22	1,137547E+23	5,177933E+22	1,655341E+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							
-2853	5,687768E+22	5,687626E+22	2,588896E+22	2,588874E+22	1,137539E+23	5,177770E+22	1,655316E+23
-2852	5,687545E+22	5,687741E+22	2,589010E+22	2,588966E+22	1,137529E+23	5,177977E+22	1,655326E+23
-2851	5,687784E+22	5,687670E+22	2,588917E+22	2,589071E+22	1,137545E+23	5,177988E+22	1,655344E+23
-2850	5,687602E+22	5,687633E+22	2,589025E+22	2,588969E+22	1,137523E+23	5,177994E+22	1,655323E+23
-2849	5,687550E+22	5,687627E+22	2,589141E+22	2,589144E+22	1,137518E+23	5,178285E+22	1,655346E+23
-2848	5,687706E+22	5,687495E+22	2,589097E+22	2,589151E+22	1,137520E+23	5,178248E+22	1,655345E+23
-2847	5,687391E+22	5,687538E+22	2,589279E+22	2,589146E+22	1,137493E+23	5,178424E+22	1,655335E+23
-2846	5,687469E+22	5,687507E+22	2,589278E+22	2,589358E+22	1,137498E+23	5,178636E+22	1,655361E+23
-2845	5,687480E+22	5,687380E+22	2,589243E+22	2,589294E+22	1,137486E+23	5,178537E+22	1,655340E+23
-2844	5,687203E+22	5,687445E+22	2,589380E+22	2,589311E+22	1,137465E+23	5,178691E+22	1,655334E+23
-2843	5,687503E+22	5,687381E+22	2,589277E+22	2,589389E+22	1,137488E+23	5,178666E+22	1,655355E+23
-2842	5,687459E+22	5,687350E+22	2,589285E+22	2,589206E+22	1,137481E+23	5,178491E+22	1,655330E+23
-2841	5,687358E+22	5,687466E+22	2,589309E+22	2,589267E+22	1,137482E+23	5,178576E+22	1,655340E+23
-2840	5,687607E+22	5,687456E+22	2,589131E+22	2,589235E+22	1,137506E+23	5,178366E+22	1,655343E+23
-2839	5,687381E+22	5,687546E+22	2,589178E+22	2,589081E+22	1,137493E+23	5,178259E+22	1,655319E+23
-2838	5,687484E+22	5,687600E+22	2,589132E+22	2,589166E+22	1,137508E+23	5,178298E+22	1,655338E+23
-2837	5,687679E+22	5,687519E+22	2,589010E+22	2,589040E+22	1,137520E+23	5,178051E+22	1,655325E+23
-2836	5,687429E+22	5,687601E+22	2,589111E+22	2,588985E+22	1,137503E+23	5,178096E+22	1,655313E+23
-2835	5,687681E+22	5,687607E+22	2,589026E+22	2,589114E+22	1,137529E+23	5,178139E+22	1,655343E+23
-2834	5,687663E+22	5,687552E+22	2,589007E+22	2,589003E+22	1,137522E+23	5,178010E+22	1,655323E+23
-2833	5,687438E+22	5,687627E+22	2,589109E+22	2,589092E+22	1,137506E+23	5,178202E+22	1,655327E+23
-2832	5,687690E+22	5,687556E+22	2,589039E+22	2,589171E+22	1,137525E+23	5,178210E+22	1,655346E+23
-2831	5,687493E+22	5,687508E+22	2,589175E+22	2,589087E+22	1,137500E+23	5,178262E+22	1,655326E+23
-2830	5,687434E+22	5,687522E+22	2,589285E+22	2,589256E+22	1,137496E+23	5,178541E+22	1,655350E+23
-2829	5,687582E+22	5,687401E+22	2,589229E+22	2,589305E+22	1,137498E+23	5,178535E+22	1,655352E+23
-2828	5,687195E+22	5,687396E+22	2,589395E+22	2,589310E+22	1,137459E+23	5,178705E+22	1,655330E+23
-2827	5,687318E+22	5,687376E+22	2,589393E+22	2,589489E+22	1,137469E+23	5,178882E+22	1,655358E+23
-2826	5,687394E+22	5,687240E+22	2,589366E+22	2,589400E+22	1,137463E+23	5,178767E+22	1,655340E+23
-2825	5,687155E+22	5,687291E+22	2,589474E+22	2,589399E+22	1,137445E+23	5,178872E+22	1,655332E+23
-2824	5,687459E+22	5,687280E+22	2,589367E+22	2,589460E+22	1,137474E+23	5,178827E+22	1,655357E+23
-2823	5,687351E+22	5,687295E+22	2,589375E+22	2,589303E+22	1,137465E+23	5,178678E+22	1,655332E+23
-2822	5,687235E+22	5,687434E+22	2,589388E+22	2,589346E+22	1,137467E+23	5,178734E+22	1,655340E+23
-2821	5,687504E+22	5,687403E+22	2,589221E+22	2,589326E+22	1,137491E+23	5,178547E+22	1,655345E+23
-2820	5,687251E+22	5,687420E+22	2,589279E+22	2,589172E+22	1,137467E+23	5,178451E+22	1,655312E+23
-2819	5,687401E+22	5,687475E+22	2,589245E+22	2,589241E+22	1,137488E+23	5,178486E+22	1,655336E+23
-2818	5,687613E+22	5,687403E+22	2,589128E+22	2,589145E+22	1,137502E+23	5,178273E+22	1,655329E+23
-2817	5,687342E+22	5,687482E+22	2,589186E+22	2,589112E+22	1,137482E+23	5,178299E+22	1,655312E+23
-2816	5,687578E+22	5,687510E+22	2,589104E+22	2,589228E+22	1,137509E+23	5,178332E+22	1,655342E+23
-2815	5,687541E+22	5,687465E+22	2,589113E+22	2,589126E+22	1,137501E+23	5,178239E+22	1,655325E+23
-2814	5,687345E+22	5,687536E+22	2,589232E+22	2,589176E+22	1,137488E+23	5,178408E+22	1,655329E+23
-2813	5,687616E+22	5,687461E+22	2,589182E+22	2,589276E+22	1,137508E+23	5,178458E+22	1,655354E+23
-2812	5,687349E+22	5,687379E+22	2,589321E+22	2,589225E+22	1,137473E+23	5,178546E+22	1,655327E+23
-2811	5,687269E+22	5,687411E+22	2,589421E+22	2,589395E+22	1,137468E+23	5,178816E+22	1,655350E+23
-2810	5,687428E+22	5,687284E+22	2,589364E+22	2,589463E+22	1,137471E+23	5,178827E+22	1,655354E+23
-2809	5,687076E+22	5,687232E+22	2,589494E+22	2,589451E+22	1,137431E+23	5,178945E+22	1,655325E+23
-2808	5,687242E+22	5,687221E+22	2,589500E+22	2,589583E+22	1,137446E+23	5,179082E+22	1,655354E+23
-2807	5,687328E+22	5,687123E+22	2,589485E+22	2,589497E+22	1,137445E+23	5,178982E+22	1,655343E+23
-2806	5,687089E+22	5,687217E+22	2,589576E+22	2,589473E+22	1,137431E+23	5,179049E+22	1,655335E+23
-2805	5,687364E+22	5,687244E+22	2,589460E+22	2,589563E+22	1,137461E+23	5,179023E+22	1,655363E+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	5,687180E+22	5,687214E+22	2,589466E+22	2,589417E+22	1,137439E+23	5,178882E+22	1,655328E+23
-2803	5,687090E+22	5,687343E+22	2,589488E+22	2,589431E+22	1,137443E+23	5,178918E+22	1,655335E+23
-2802	5,687415E+22	5,687289E+22	2,589335E+22	2,589411E+22	1,137470E+23	5,178746E+22	1,655345E+23
-2801	5,687195E+22	5,687264E+22	2,589362E+22	2,589261E+22	1,137446E+23	5,178623E+22	1,655308E+23
-2800	5,687351E+22	5,687355E+22	2,589326E+22	2,589329E+22	1,137471E+23	5,178655E+22	1,655336E+23
-2799	5,687517E+22	5,687335E+22	2,589212E+22	2,589264E+22	1,137485E+23	5,178476E+22	1,655333E+23
-2798	5,687244E+22	5,687435E+22	2,589267E+22	2,589211E+22	1,137468E+23	5,178478E+22	1,655316E+23
-2797	5,687494E+22	5,687460E+22	2,589208E+22	2,589333E+22	1,137495E+23	5,178541E+22	1,655350E+23
-2796	5,687407E+22	5,687346E+22	2,589246E+22	2,589233E+22	1,137475E+23	5,178479E+22	1,655323E+23
-2795	5,687230E+22	5,687414E+22	2,589389E+22	2,589277E+22	1,137464E+23	5,178666E+22	1,655331E+23
-2794	5,687491E+22	5,687333E+22	2,589342E+22	2,589414E+22	1,137482E+23	5,178756E+22	1,655358E+23
-2793	5,687191E+22	5,687217E+22	2,589435E+22	2,589390E+22	1,137441E+23	5,178825E+22	1,655323E+23
-2792	5,687128E+22	5,687253E+22	2,589528E+22	2,589540E+22	1,137438E+23	5,179068E+22	1,655345E+23
-2791	5,687301E+22	5,687143E+22	2,589480E+22	2,589598E+22	1,137444E+23	5,179078E+22	1,655352E+23
-2790	5,687013E+22	5,687113E+22	2,589603E+22	2,589534E+22	1,137413E+23	5,179138E+22	1,655326E+23
-2789	5,687205E+22	5,687138E+22	2,589613E+22	2,589670E+22	1,137434E+23	5,179283E+22	1,655363E+23
-2788	5,687205E+22	5,687042E+22	2,589601E+22	2,589603E+22	1,137425E+23	5,179204E+22	1,655345E+23
-2787	5,686944E+22	5,687172E+22	2,589689E+22	2,589573E+22	1,137412E+23	5,179262E+22	1,655338E+23
-2786	5,687217E+22	5,687180E+22	2,589579E+22	2,589675E+22	1,137440E+23	5,179254E+22	1,655365E+23
-2785	5,687053E+22	5,687085E+22	2,589555E+22	2,589526E+22	1,137414E+23	5,179080E+22	1,655322E+23
-2784	5,687014E+22	5,687191E+22	2,589580E+22	2,589507E+22	1,137420E+23	5,179087E+22	1,655329E+23
-2783	5,687349E+22	5,687166E+22	2,589433E+22	2,589507E+22	1,137452E+23	5,178940E+22	1,655346E+23
-2782	5,687146E+22	5,687178E+22	2,589435E+22	2,589347E+22	1,137432E+23	5,178782E+22	1,655311E+23
-2781	5,687277E+22	5,687309E+22	2,589392E+22	2,589438E+22	1,137459E+23	5,178829E+22	1,655342E+23
-2780	5,687378E+22	5,687259E+22	2,589299E+22	2,589379E+22	1,137464E+23	5,178678E+22	1,655332E+23
-2779	5,687128E+22	5,687350E+22	2,589382E+22	2,589292E+22	1,137448E+23	5,178673E+22	1,655315E+23
-2778	5,687398E+22	5,687354E+22	2,589356E+22	2,589421E+22	1,137475E+23	5,178778E+22	1,655353E+23
-2777	5,687311E+22	5,687195E+22	2,589373E+22	2,589349E+22	1,137451E+23	5,178722E+22	1,655323E+23
-2776	5,687113E+22	5,687268E+22	2,589515E+22	2,589403E+22	1,137438E+23	5,178918E+22	1,655330E+23
-2775	5,687333E+22	5,687226E+22	2,589465E+22	2,589575E+22	1,137456E+23	5,179040E+22	1,655360E+23
-2774	5,687065E+22	5,687102E+22	2,589541E+22	2,589525E+22	1,137417E+23	5,179066E+22	1,655323E+23
-2773	5,687038E+22	5,687148E+22	2,589638E+22	2,589665E+22	1,137419E+23	5,179303E+22	1,655349E+23
-2772	5,687187E+22	5,687008E+22	2,589614E+22	2,589712E+22	1,137419E+23	5,179326E+22	1,655352E+23
-2771	5,686922E+22	5,687011E+22	2,589745E+22	2,589629E+22	1,137393E+23	5,179375E+22	1,655331E+23
-2770	5,687092E+22	5,687065E+22	2,589754E+22	2,589790E+22	1,137416E+23	5,179544E+22	1,655370E+23
-2769	5,687051E+22	5,686938E+22	2,589697E+22	2,589739E+22	1,137399E+23	5,179436E+22	1,655343E+23
-2768	5,686807E+22	5,687047E+22	2,589784E+22	2,589684E+22	1,137385E+23	5,179467E+22	1,655332E+23
-2767	5,687093E+22	5,687062E+22	2,589678E+22	2,589775E+22	1,137416E+23	5,179454E+22	1,655361E+23
-2766	5,687000E+22	5,686961E+22	2,589638E+22	2,589592E+22	1,137396E+23	5,179230E+22	1,655319E+23
-2765	5,686995E+22	5,687102E+22	2,589656E+22	2,589586E+22	1,137410E+23	5,179242E+22	1,655334E+23
-2764	5,687248E+22	5,687081E+22	2,589513E+22	2,589603E+22	1,137433E+23	5,179117E+22	1,655345E+23
-2763	5,687040E+22	5,687137E+22	2,589519E+22	2,589436E+22	1,137418E+23	5,178956E+22	1,655313E+23
-2762	5,687173E+22	5,687257E+22	2,589498E+22	2,589534E+22	1,137443E+23	5,179032E+22	1,655346E+23
-2761	5,687262E+22	5,687144E+22	2,589399E+22	2,589478E+22	1,137441E+23	5,178877E+22	1,655328E+23
-2760	5,687046E+22	5,687204E+22	2,589510E+22	2,589379E+22	1,137425E+23	5,178889E+22	1,655314E+23
-2759	5,687285E+22	5,687229E+22	2,589498E+22	2,589539E+22	1,137451E+23	5,179037E+22	1,655355E+23
-2758	5,687197E+22	5,687081E+22	2,589488E+22	2,589482E+22	1,137428E+23	5,178970E+22	1,655325E+23
-2757	5,686987E+22	5,687170E+22	2,589613E+22	2,589559E+22	1,137416E+23	5,179172E+22	1,655333E+23
-2756	5,687157E+22	5,687090E+22	2,589581E+22	2,589729E+22	1,137425E+23	5,179310E+22	1,655356E+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							
-2755	5,686949E+22	5,686979E+22	2,589671E+22	2,589637E+22	1,137393E+23	5,179308E+22	1,655324E+23
-2754	5,686962E+22	5,687031E+22	2,589787E+22	2,589771E+22	1,137399E+23	5,179558E+22	1,655355E+23
-2753	5,687095E+22	5,686879E+22	2,589739E+22	2,589831E+22	1,137397E+23	5,179570E+22	1,655354E+23
-2752	5,686816E+22	5,686902E+22	2,589867E+22	2,589744E+22	1,137372E+23	5,179611E+22	1,655333E+23
-2751	5,686936E+22	5,686996E+22	2,589871E+22	2,589920E+22	1,137393E+23	5,179790E+22	1,655372E+23
-2750	5,686933E+22	5,686849E+22	2,589790E+22	2,589846E+22	1,137378E+23	5,179636E+22	1,655342E+23
-2749	5,686721E+22	5,686943E+22	2,589869E+22	2,589775E+22	1,137366E+23	5,179644E+22	1,655331E+23
-2748	5,686990E+22	5,686926E+22	2,589783E+22	2,589862E+22	1,137392E+23	5,179645E+22	1,655356E+23
-2747	5,686935E+22	5,686855E+22	2,589737E+22	2,589665E+22	1,137379E+23	5,179403E+22	1,655319E+23
-2746	5,686911E+22	5,687034E+22	2,589749E+22	2,589686E+22	1,137394E+23	5,179435E+22	1,655338E+23
-2745	5,687129E+22	5,686993E+22	2,589579E+22	2,589718E+22	1,137412E+23	5,179297E+22	1,655342E+23
-2744	5,686944E+22	5,687027E+22	2,589603E+22	2,589525E+22	1,137397E+23	5,179128E+22	1,655310E+23
-2743	5,687068E+22	5,687168E+22	2,589608E+22	2,589618E+22	1,137424E+23	5,179226E+22	1,655346E+23
-2742	5,687202E+22	5,687034E+22	2,589506E+22	2,589555E+22	1,137424E+23	5,179061E+22	1,655330E+23
-2741	5,686976E+22	5,687108E+22	2,589617E+22	2,589489E+22	1,137408E+23	5,179106E+22	1,655319E+23
-2740	5,687119E+22	5,687124E+22	2,589619E+22	2,589683E+22	1,137424E+23	5,179302E+22	1,655354E+23
-2739	5,687041E+22	5,686989E+22	2,589609E+22	2,589624E+22	1,137403E+23	5,179233E+22	1,655326E+23
-2738	5,686858E+22	5,687064E+22	2,589746E+22	2,589703E+22	1,137392E+23	5,179449E+22	1,655337E+23
-2737	5,687040E+22	5,686930E+22	2,589703E+22	2,589860E+22	1,137397E+23	5,179563E+22	1,655353E+23
-2736	5,686887E+22	5,686813E+22	2,589811E+22	2,589745E+22	1,137370E+23	5,179555E+22	1,655326E+23
-2735	5,686864E+22	5,686923E+22	2,589932E+22	2,589891E+22	1,137379E+23	5,179823E+22	1,655361E+23
-2734	5,686982E+22	5,686792E+22	2,589852E+22	2,589956E+22	1,137377E+23	5,179809E+22	1,655358E+23
-2733	5,686692E+22	5,686828E+22	2,589964E+22	2,589877E+22	1,137352E+23	5,179841E+22	1,655336E+23
-2732	5,686755E+22	5,686873E+22	2,589983E+22	2,590034E+22	1,137363E+23	5,180017E+22	1,655364E+23
-2731	5,686816E+22	5,686731E+22	2,589904E+22	2,589925E+22	1,137355E+23	5,179830E+22	1,655338E+23
-2730	5,686660E+22	5,686825E+22	2,589983E+22	2,589858E+22	1,137349E+23	5,179840E+22	1,655333E+23
-2729	5,686906E+22	5,686797E+22	2,589865E+22	2,589960E+22	1,137370E+23	5,179825E+22	1,655353E+23
-2728	5,686864E+22	5,686759E+22	2,589814E+22	2,589761E+22	1,137362E+23	5,179575E+22	1,655320E+23
-2727	5,686803E+22	5,686985E+22	2,589829E+22	2,589786E+22	1,137379E+23	5,179615E+22	1,655340E+23
-2726	5,687047E+22	5,686930E+22	2,589654E+22	2,589799E+22	1,137398E+23	5,179453E+22	1,655343E+23
-2725	5,686884E+22	5,686951E+22	2,589690E+22	2,589605E+22	1,137384E+23	5,179294E+22	1,655313E+23
-2724	5,686946E+22	5,687050E+22	2,589734E+22	2,589708E+22	1,137400E+23	5,179442E+22	1,655344E+23
-2723	5,687090E+22	5,686938E+22	2,589636E+22	2,589662E+22	1,137403E+23	5,179298E+22	1,655333E+23
-2722	5,686845E+22	5,687012E+22	2,589742E+22	2,589636E+22	1,137386E+23	5,179377E+22	1,655323E+23
-2721	5,686957E+22	5,686978E+22	2,589722E+22	2,589843E+22	1,137394E+23	5,179565E+22	1,655350E+23
-2720	5,686938E+22	5,686820E+22	2,589724E+22	2,589753E+22	1,137376E+23	5,179477E+22	1,655324E+23
-2719	5,686768E+22	5,686933E+22	2,589877E+22	2,589816E+22	1,137370E+23	5,179692E+22	1,655339E+23
-2718	5,686996E+22	5,686808E+22	2,589826E+22	2,589961E+22	1,137380E+23	5,179786E+22	1,655359E+23
-2717	5,686818E+22	5,686730E+22	2,589927E+22	2,589859E+22	1,137355E+23	5,179786E+22	1,655333E+23
-2716	5,686687E+22	5,686846E+22	2,590066E+22	2,590024E+22	1,137353E+23	5,180089E+22	1,655362E+23
-2715	5,686816E+22	5,686718E+22	2,589982E+22	2,590078E+22	1,137353E+23	5,180060E+22	1,655359E+23
-2714	5,686544E+22	5,686723E+22	2,590095E+22	2,590001E+22	1,137327E+23	5,180096E+22	1,655336E+23
-2713	5,686621E+22	5,686706E+22	2,590094E+22	2,590145E+22	1,137333E+23	5,180239E+22	1,655357E+23
-2712	5,686756E+22	5,686553E+22	2,590014E+22	2,590017E+22	1,137331E+23	5,180031E+22	1,655334E+23
-2711	5,686583E+22	5,686724E+22	2,590076E+22	2,589960E+22	1,137331E+23	5,180036E+22	1,655334E+23
-2710	5,686835E+22	5,686723E+22	2,589923E+22	2,590062E+22	1,137356E+23	5,179985E+22	1,655354E+23
-2709	5,686789E+22	5,686709E+22	2,589865E+22	2,589857E+22	1,137350E+23	5,179722E+22	1,655322E+23
-2708	5,686673E+22	5,686906E+22	2,589921E+22	2,589864E+22	1,137358E+23	5,179785E+22	1,655336E+23
-2707	5,686958E+22	5,686852E+22	2,589767E+22	2,589855E+22	1,137381E+23	5,179622E+22	1,655343E+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							
-2706	5,686812E+22	5,686861E+22	2,589819E+22	2,589693E+22	1,137367E+23	5,179512E+22	1,655319E+23
-2705	5,686815E+22	5,686921E+22	2,589846E+22	2,589828E+22	1,137374E+23	5,179675E+22	1,655341E+23
-2704	5,686974E+22	5,686807E+22	2,589748E+22	2,589798E+22	1,137378E+23	5,179546E+22	1,655333E+23
-2703	5,686716E+22	5,686908E+22	2,589852E+22	2,589777E+22	1,137362E+23	5,179629E+22	1,655325E+23
-2702	5,686869E+22	5,686850E+22	2,589822E+22	2,589963E+22	1,137372E+23	5,179785E+22	1,655350E+23
-2701	5,686889E+22	5,686704E+22	2,589834E+22	2,589861E+22	1,137359E+23	5,179695E+22	1,655329E+23
-2700	5,686657E+22	5,686803E+22	2,590024E+22	2,589922E+22	1,137346E+23	5,179946E+22	1,655341E+23
-2699	5,686865E+22	5,686728E+22	2,589976E+22	2,590077E+22	1,137359E+23	5,180053E+22	1,655365E+23
-2698	5,686662E+22	5,686659E+22	2,590069E+22	2,590013E+22	1,137332E+23	5,180082E+22	1,655340E+23
-2697	5,686481E+22	5,686706E+22	2,590187E+22	2,590176E+22	1,137319E+23	5,180363E+22	1,655355E+23
-2696	5,686682E+22	5,686544E+22	2,590106E+22	2,590201E+22	1,137323E+23	5,180307E+22	1,655353E+23
-2695	5,686449E+22	5,686571E+22	2,590212E+22	2,590102E+22	1,137302E+23	5,180315E+22	1,655333E+23
-2694	5,686582E+22	5,686564E+22	2,590182E+22	2,590236E+22	1,137315E+23	5,180417E+22	1,655356E+23
-2693	5,686718E+22	5,686477E+22	2,590078E+22	2,590112E+22	1,137320E+23	5,180191E+22	1,655339E+23
-2692	5,686463E+22	5,686671E+22	2,590157E+22	2,590057E+22	1,137313E+23	5,180214E+22	1,655335E+23
-2691	5,686726E+22	5,686698E+22	2,590013E+22	2,590139E+22	1,137342E+23	5,180152E+22	1,655358E+23
-2690	5,686694E+22	5,686662E+22	2,589971E+22	2,589939E+22	1,137336E+23	5,179909E+22	1,655327E+23
-2689	5,686558E+22	5,686781E+22	2,590033E+22	2,589944E+22	1,137334E+23	5,179977E+22	1,655332E+23
-2688	5,686885E+22	5,686700E+22	2,589892E+22	2,589943E+22	1,137359E+23	5,179835E+22	1,655342E+23
-2687	5,686699E+22	5,686754E+22	2,589934E+22	2,589817E+22	1,137345E+23	5,179750E+22	1,655320E+23
-2686	5,686710E+22	5,686807E+22	2,589928E+22	2,589968E+22	1,137352E+23	5,179896E+22	1,655341E+23
-2685	5,686878E+22	5,686696E+22	2,589822E+22	2,589927E+22	1,137357E+23	5,179749E+22	1,655332E+23
-2684	5,686588E+22	5,686784E+22	2,589964E+22	2,589887E+22	1,137337E+23	5,179851E+22	1,655322E+23
-2683	5,686789E+22	5,686747E+22	2,589954E+22	2,590048E+22	1,137354E+23	5,180002E+22	1,655354E+23
-2682	5,686804E+22	5,686617E+22	2,589981E+22	2,589976E+22	1,137342E+23	5,179956E+22	1,655338E+23
-2681	5,686497E+22	5,686690E+22	2,590164E+22	2,590063E+22	1,137319E+23	5,180227E+22	1,655341E+23
-2680	5,686711E+22	5,686602E+22	2,590118E+22	2,590224E+22	1,137331E+23	5,180342E+22	1,655365E+23
-2679	5,686493E+22	5,686547E+22	2,590206E+22	2,590162E+22	1,137304E+23	5,180368E+22	1,655341E+23
-2678	5,686367E+22	5,686551E+22	2,590296E+22	2,590301E+22	1,137292E+23	5,180597E+22	1,655352E+23
-2677	5,686620E+22	5,686395E+22	2,590205E+22	2,590304E+22	1,137302E+23	5,180509E+22	1,655352E+23
-2676	5,686358E+22	5,686437E+22	2,590326E+22	2,590202E+22	1,137280E+23	5,180528E+22	1,655332E+23
-2675	5,686493E+22	5,686497E+22	2,590282E+22	2,590329E+22	1,137299E+23	5,180611E+22	1,655360E+23
-2674	5,686615E+22	5,686444E+22	2,590171E+22	2,590225E+22	1,137306E+23	5,180396E+22	1,655345E+23
-2673	5,686319E+22	5,686578E+22	2,590246E+22	2,590154E+22	1,137290E+23	5,180400E+22	1,655330E+23
-2672	5,686635E+22	5,686578E+22	2,590122E+22	2,590210E+22	1,137321E+23	5,180332E+22	1,655355E+23
-2671	5,686614E+22	5,686562E+22	2,590086E+22	2,590013E+22	1,137318E+23	5,180099E+22	1,655328E+23
-2670	5,686489E+22	5,686658E+22	2,590124E+22	2,590034E+22	1,137315E+23	5,180158E+22	1,655330E+23
-2669	5,686801E+22	5,686616E+22	2,589967E+22	2,590057E+22	1,137342E+23	5,180023E+22	1,655344E+23
-2668	5,686555E+22	5,686659E+22	2,590025E+22	2,589943E+22	1,137321E+23	5,179969E+22	1,655318E+23
-2667	5,686588E+22	5,686726E+22	2,590029E+22	2,590075E+22	1,137331E+23	5,180105E+22	1,655342E+23
-2666	5,686789E+22	5,686613E+22	2,589941E+22	2,590041E+22	1,137340E+23	5,179981E+22	1,655338E+23
-2665	5,686478E+22	5,686635E+22	2,590096E+22	2,589994E+22	1,137311E+23	5,180090E+22	1,655320E+23
-2664	5,686702E+22	5,686603E+22	2,590105E+22	2,590163E+22	1,137331E+23	5,180268E+22	1,655357E+23
-2663	5,686663E+22	5,686525E+22	2,590126E+22	2,590122E+22	1,137319E+23	5,180248E+22	1,655344E+23
-2662	5,686346E+22	5,686567E+22	2,590280E+22	2,590220E+22	1,137291E+23	5,180500E+22	1,655341E+23
-2661	5,686576E+22	5,686473E+22	2,590224E+22	2,590362E+22	1,137305E+23	5,180586E+22	1,655364E+23
-2660	5,686351E+22	5,686391E+22	2,590337E+22	2,590279E+22	1,137274E+23	5,180616E+22	1,655336E+23
-2659	5,686286E+22	5,686422E+22	2,590424E+22	2,590389E+22	1,137271E+23	5,180813E+22	1,655352E+23
-2658	5,686552E+22	5,686310E+22	2,590323E+22	2,590412E+22	1,137286E+23	5,180735E+22	1,655360E+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	5,686232E+22	5,686343E+22	2,590427E+22	2,590319E+22	1,137258E+23	5,180746E+22	1,655332E+23
-2656	5,686390E+22	5,686412E+22	2,590383E+22	2,590436E+22	1,137280E+23	5,180819E+22	1,655362E+23
-2655	5,686490E+22	5,686388E+22	2,590276E+22	2,590322E+22	1,137288E+23	5,180598E+22	1,655348E+23
-2654	5,686239E+22	5,686472E+22	2,590335E+22	2,590237E+22	1,137271E+23	5,180572E+22	1,655328E+23
-2653	5,686574E+22	5,686460E+22	2,590209E+22	2,590278E+22	1,137303E+23	5,180487E+22	1,655352E+23
-2652	5,686500E+22	5,686447E+22	2,590193E+22	2,590109E+22	1,137295E+23	5,180302E+22	1,655325E+23
-2651	5,686375E+22	5,686579E+22	2,590214E+22	2,590143E+22	1,137295E+23	5,180357E+22	1,655331E+23
-2650	5,686676E+22	5,686548E+22	2,590053E+22	2,590191E+22	1,137322E+23	5,180244E+22	1,655347E+23
-2649	5,686417E+22	5,686527E+22	2,590117E+22	2,590063E+22	1,137294E+23	5,180180E+22	1,655312E+23
-2648	5,686519E+22	5,686576E+22	2,590146E+22	2,590167E+22	1,137309E+23	5,180312E+22	1,655341E+23
-2647	5,686716E+22	5,686506E+22	2,590076E+22	2,590136E+22	1,137322E+23	5,180212E+22	1,655343E+23
-2646	5,686404E+22	5,686518E+22	2,590217E+22	2,590111E+22	1,137292E+23	5,180328E+22	1,655325E+23
-2645	5,686583E+22	5,686518E+22	2,590221E+22	2,590293E+22	1,137310E+23	5,180514E+22	1,655361E+23
-2644	5,686481E+22	5,686429E+22	2,590265E+22	2,590273E+22	1,137291E+23	5,180538E+22	1,655345E+23
-2643	5,686190E+22	5,686460E+22	2,590418E+22	2,590350E+22	1,137265E+23	5,180767E+22	1,655342E+23
-2642	5,686455E+22	5,686357E+22	2,590365E+22	2,590493E+22	1,137281E+23	5,180858E+22	1,655367E+23
-2641	5,686234E+22	5,686211E+22	2,590473E+22	2,590400E+22	1,137245E+23	5,180873E+22	1,655332E+23
-2640	5,686207E+22	5,686271E+22	2,590554E+22	2,590509E+22	1,137248E+23	5,181063E+22	1,655354E+23
-2639	5,686435E+22	5,686240E+22	2,590437E+22	2,590544E+22	1,137267E+23	5,180981E+22	1,655366E+23
-2638	5,686122E+22	5,686248E+22	2,590503E+22	2,590441E+22	1,137237E+23	5,180945E+22	1,655331E+23
-2637	5,686293E+22	5,686325E+22	2,590459E+22	2,590519E+22	1,137262E+23	5,180979E+22	1,655360E+23
-2636	5,686382E+22	5,686282E+22	2,590379E+22	2,590392E+22	1,137266E+23	5,180771E+22	1,655344E+23
-2635	5,686160E+22	5,686375E+22	2,590437E+22	2,590297E+22	1,137253E+23	5,180734E+22	1,655327E+23
-2634	5,686483E+22	5,686398E+22	2,590305E+22	2,590375E+22	1,137288E+23	5,180681E+22	1,655356E+23
-2633	5,686360E+22	5,686337E+22	2,590280E+22	2,590228E+22	1,137270E+23	5,180509E+22	1,655321E+23
-2632	5,686273E+22	5,686467E+22	2,590305E+22	2,590259E+22	1,137274E+23	5,180563E+22	1,655330E+23
-2631	5,686573E+22	5,686462E+22	2,590157E+22	2,590298E+22	1,137303E+23	5,180455E+22	1,655349E+23
-2630	5,686362E+22	5,686395E+22	2,590211E+22	2,590160E+22	1,137276E+23	5,180371E+22	1,655313E+23
-2629	5,686474E+22	5,686458E+22	2,590254E+22	2,590250E+22	1,137293E+23	5,180504E+22	1,655344E+23
-2628	5,686595E+22	5,686409E+22	2,590214E+22	2,590255E+22	1,137300E+23	5,180469E+22	1,655347E+23
-2627	5,686256E+22	5,686446E+22	2,590350E+22	2,590249E+22	1,137270E+23	5,180599E+22	1,655330E+23
-2626	5,686409E+22	5,686442E+22	2,590354E+22	2,590450E+22	1,137285E+23	5,180804E+22	1,655365E+23
-2625	5,686297E+22	5,686263E+22	2,590405E+22	2,590423E+22	1,137256E+23	5,180828E+22	1,655339E+23
-2624	5,686091E+22	5,686271E+22	2,590561E+22	2,590474E+22	1,137236E+23	5,181035E+22	1,655340E+23
-2623	5,686358E+22	5,686216E+22	2,590506E+22	2,590613E+22	1,137257E+23	5,181119E+22	1,655369E+23
-2622	5,686164E+22	5,686079E+22	2,590574E+22	2,590532E+22	1,137224E+23	5,181106E+22	1,655335E+23
-2621	5,686119E+22	5,686183E+22	2,590636E+22	2,590621E+22	1,137230E+23	5,181258E+22	1,655356E+23
-2620	5,686290E+22	5,686173E+22	2,590542E+22	2,590656E+22	1,137246E+23	5,181198E+22	1,655366E+23
-2619	5,686010E+22	5,686186E+22	2,590607E+22	2,590523E+22	1,137220E+23	5,181130E+22	1,655333E+23
-2618	5,686192E+22	5,686251E+22	2,590569E+22	2,590596E+22	1,137244E+23	5,181165E+22	1,655361E+23
-2617	5,686267E+22	5,686138E+22	2,590494E+22	2,590480E+22	1,137240E+23	5,180974E+22	1,655338E+23
-2616	5,686073E+22	5,686237E+22	2,590541E+22	2,590400E+22	1,137231E+23	5,180941E+22	1,655325E+23
-2615	5,686355E+22	5,686316E+22	2,590399E+22	2,590498E+22	1,137267E+23	5,180896E+22	1,655357E+23
-2614	5,686270E+22	5,686216E+22	2,590342E+22	2,590351E+22	1,137249E+23	5,180693E+22	1,655318E+23
-2613	5,686214E+22	5,686352E+22	2,590374E+22	2,590340E+22	1,137257E+23	5,180713E+22	1,655328E+23
-2612	5,686498E+22	5,686361E+22	2,590268E+22	2,590375E+22	1,137286E+23	5,180644E+22	1,655350E+23
-2611	5,686300E+22	5,686319E+22	2,590331E+22	2,590238E+22	1,137262E+23	5,180569E+22	1,655319E+23
-2610	5,686359E+22	5,686418E+22	2,590383E+22	2,590368E+22	1,137278E+23	5,180751E+22	1,655353E+23
-2609	5,686412E+22	5,686305E+22	2,590351E+22	2,590407E+22	1,137272E+23	5,180758E+22	1,655347E+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							
-2608	5,686098E+22	5,686310E+22	2,590494E+22	2,590404E+22	1,137241E+23	5,180898E+22	1,655331E+23
-2607	5,686253E+22	5,686314E+22	2,590504E+22	2,590596E+22	1,137257E+23	5,181100E+22	1,655367E+23
-2606	5,686208E+22	5,686065E+22	2,590526E+22	2,590558E+22	1,137227E+23	5,181084E+22	1,655336E+23
-2605	5,686031E+22	5,686102E+22	2,590673E+22	2,590585E+22	1,137213E+23	5,181258E+22	1,655339E+23
-2604	5,686249E+22	5,686103E+22	2,590628E+22	2,590743E+22	1,137235E+23	5,181371E+22	1,655372E+23
-2603	5,686042E+22	5,686014E+22	2,590676E+22	2,590653E+22	1,137206E+23	5,181329E+22	1,655338E+23
-2602	5,685986E+22	5,686141E+22	2,590739E+22	2,590735E+22	1,137213E+23	5,181474E+22	1,655360E+23
-2601	5,686145E+22	5,686048E+22	2,590660E+22	2,590750E+22	1,137219E+23	5,181410E+22	1,655360E+23
-2600	5,685927E+22	5,686044E+22	2,590730E+22	2,590599E+22	1,137197E+23	5,181330E+22	1,655330E+23
-2599	5,686091E+22	5,686149E+22	2,590690E+22	2,590680E+22	1,137224E+23	5,181370E+22	1,655361E+23
-2598	5,686179E+22	5,686015E+22	2,590570E+22	2,590595E+22	1,137219E+23	5,181165E+22	1,655336E+23
-2597	5,685991E+22	5,686141E+22	2,590601E+22	2,590504E+22	1,137213E+23	5,181105E+22	1,655324E+23
-2596	5,686242E+22	5,686236E+22	2,590482E+22	2,590604E+22	1,137248E+23	5,181087E+22	1,655357E+23
-2595	5,686200E+22	5,686147E+22	2,590428E+22	2,590431E+22	1,137235E+23	5,180859E+22	1,655321E+23
-2594	5,686154E+22	5,686289E+22	2,590478E+22	2,590415E+22	1,137244E+23	5,180894E+22	1,655334E+23
-2593	5,686390E+22	5,686241E+22	2,590401E+22	2,590475E+22	1,137263E+23	5,180876E+22	1,655351E+23
-2592	5,686186E+22	5,686212E+22	2,590466E+22	2,590370E+22	1,137240E+23	5,180837E+22	1,655324E+23
-2591	5,686173E+22	5,686333E+22	2,590521E+22	2,590519E+22	1,137251E+23	5,181039E+22	1,655355E+23
-2590	5,686263E+22	5,686146E+22	2,590463E+22	2,590569E+22	1,137241E+23	5,181032E+22	1,655344E+23
-2589	5,686002E+22	5,686122E+22	2,590604E+22	2,590522E+22	1,137212E+23	5,181126E+22	1,655325E+23
-2588	5,686150E+22	5,686146E+22	2,590640E+22	2,590710E+22	1,137230E+23	5,181350E+22	1,655365E+23
-2587	5,686140E+22	5,685949E+22	2,590647E+22	2,590667E+22	1,137209E+23	5,181314E+22	1,655340E+23
-2586	5,685931E+22	5,686047E+22	2,590786E+22	2,590709E+22	1,137198E+23	5,181495E+22	1,655347E+23
-2585	5,686088E+22	5,686013E+22	2,590755E+22	2,590878E+22	1,137210E+23	5,181633E+22	1,655373E+23
-2584	5,685911E+22	5,685919E+22	2,590807E+22	2,590773E+22	1,137183E+23	5,181580E+22	1,655341E+23
-2583	5,685840E+22	5,686054E+22	2,590880E+22	2,590832E+22	1,137189E+23	5,181712E+22	1,655361E+23
-2582	5,686057E+22	5,685888E+22	2,590772E+22	2,590851E+22	1,137194E+23	5,181623E+22	1,655357E+23
-2581	5,685860E+22	5,685890E+22	2,590826E+22	2,590689E+22	1,137175E+23	5,181515E+22	1,655326E+23
-2580	5,685968E+22	5,686049E+22	2,590785E+22	2,590798E+22	1,137202E+23	5,181583E+22	1,655360E+23
-2579	5,686074E+22	5,685947E+22	2,590636E+22	2,590706E+22	1,137202E+23	5,181343E+22	1,655336E+23
-2578	5,685901E+22	5,686092E+22	2,590667E+22	2,590603E+22	1,137199E+23	5,181269E+22	1,655326E+23
-2577	5,686148E+22	5,686120E+22	2,590581E+22	2,590685E+22	1,137227E+23	5,181266E+22	1,655353E+23
-2576	5,686149E+22	5,686038E+22	2,590543E+22	2,590502E+22	1,137219E+23	5,181045E+22	1,655323E+23
-2575	5,686059E+22	5,686223E+22	2,590611E+22	2,590504E+22	1,137228E+23	5,181115E+22	1,655340E+23
-2574	5,686276E+22	5,686127E+22	2,590506E+22	2,590603E+22	1,137240E+23	5,181110E+22	1,655351E+23
-2573	5,686058E+22	5,686092E+22	2,590571E+22	2,590501E+22	1,137215E+23	5,181072E+22	1,655322E+23
-2572	5,686014E+22	5,686213E+22	2,590649E+22	2,590658E+22	1,137223E+23	5,181308E+22	1,655353E+23
-2571	5,686153E+22	5,686013E+22	2,590584E+22	2,590688E+22	1,137217E+23	5,181271E+22	1,655344E+23
-2570	5,685927E+22	5,686002E+22	2,590728E+22	2,590636E+22	1,137193E+23	5,181364E+22	1,655329E+23
-2569	5,686038E+22	5,685987E+22	2,590783E+22	2,590840E+22	1,137203E+23	5,181623E+22	1,655365E+23
-2568	5,686023E+22	5,685844E+22	2,590781E+22	2,590810E+22	1,137187E+23	5,181592E+22	1,655346E+23
-2567	5,685765E+22	5,685981E+22	2,590924E+22	2,590850E+22	1,137175E+23	5,181774E+22	1,655352E+23
-2566	5,685950E+22	5,685878E+22	2,590871E+22	2,591012E+22	1,137183E+23	5,181884E+22	1,655371E+23
-2565	5,685817E+22	5,685769E+22	2,590923E+22	2,590866E+22	1,137159E+23	5,181789E+22	1,655338E+23
-2564	5,685728E+22	5,685923E+22	2,591007E+22	2,590926E+22	1,137165E+23	5,181933E+22	1,655358E+23
-2563	5,685969E+22	5,685791E+22	2,590868E+22	2,590948E+22	1,137176E+23	5,181816E+22	1,655358E+23
-2562	5,685765E+22	5,685834E+22	2,590900E+22	2,590799E+22	1,137160E+23	5,181699E+22	1,655330E+23
-2561	5,685835E+22	5,685948E+22	2,590873E+22	2,590915E+22	1,137178E+23	5,181789E+22	1,655357E+23
-2560	5,685989E+22	5,685865E+22	2,590729E+22	2,590803E+22	1,137185E+23	5,181532E+22	1,655339E+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							
-2559	5,685812E+22	5,686018E+22	2,590777E+22	2,590672E+22	1,137183E+23	5,181449E+22	1,655328E+23
-2558	5,686093E+22	5,685986E+22	2,590682E+22	2,590766E+22	1,137208E+23	5,181448E+22	1,655353E+23
-2557	5,686089E+22	5,685912E+22	2,590645E+22	2,590587E+22	1,137200E+23	5,181233E+22	1,655323E+23
-2556	5,685904E+22	5,686136E+22	2,590728E+22	2,590630E+22	1,137204E+23	5,181358E+22	1,655340E+23
-2555	5,686127E+22	5,686044E+22	2,590607E+22	2,590736E+22	1,137217E+23	5,181343E+22	1,655351E+23
-2554	5,685933E+22	5,685990E+22	2,590676E+22	2,590627E+22	1,137192E+23	5,181304E+22	1,655323E+23
-2553	5,685887E+22	5,686036E+22	2,590787E+22	2,590778E+22	1,137192E+23	5,181566E+22	1,655349E+23
-2552	5,686073E+22	5,685865E+22	2,590725E+22	2,590804E+22	1,137194E+23	5,181528E+22	1,655347E+23
-2551	5,685812E+22	5,685910E+22	2,590873E+22	2,590763E+22	1,137172E+23	5,181636E+22	1,655336E+23
-2550	5,685915E+22	5,685871E+22	2,590901E+22	2,590994E+22	1,137179E+23	5,181895E+22	1,655368E+23
-2549	5,685899E+22	5,685733E+22	2,590901E+22	2,590946E+22	1,137163E+23	5,181847E+22	1,655348E+23
-2548	5,685608E+22	5,685885E+22	2,591065E+22	2,590978E+22	1,137149E+23	5,182043E+22	1,655354E+23
-2547	5,685839E+22	5,685765E+22	2,590996E+22	2,591112E+22	1,137160E+23	5,182108E+22	1,655371E+23
-2546	5,685734E+22	5,685661E+22	2,591040E+22	2,590965E+22	1,137139E+23	5,182005E+22	1,655340E+23
-2545	5,685602E+22	5,685775E+22	2,591128E+22	2,591045E+22	1,137138E+23	5,182174E+22	1,655355E+23
-2544	5,685842E+22	5,685695E+22	2,590964E+22	2,591073E+22	1,137154E+23	5,182037E+22	1,655357E+23
-2543	5,685637E+22	5,685768E+22	2,590991E+22	2,590912E+22	1,137141E+23	5,181904E+22	1,655331E+23
-2542	5,685758E+22	5,685810E+22	2,590945E+22	2,591009E+22	1,137157E+23	5,181954E+22	1,655352E+23
-2541	5,685950E+22	5,685733E+22	2,590813E+22	2,590856E+22	1,137168E+23	5,181669E+22	1,655335E+23
-2540	5,685743E+22	5,685932E+22	2,590885E+22	2,590738E+22	1,137168E+23	5,181624E+22	1,655330E+23
-2539	5,686005E+22	5,685925E+22	2,590776E+22	2,590847E+22	1,137193E+23	5,181623E+22	1,655355E+23
-2538	5,685970E+22	5,685876E+22	2,590736E+22	2,590704E+22	1,137185E+23	5,181440E+22	1,655329E+23
-2537	5,685732E+22	5,686018E+22	2,590850E+22	2,590769E+22	1,137175E+23	5,181618E+22	1,655337E+23
-2536	5,685985E+22	5,685927E+22	2,590734E+22	2,590867E+22	1,137191E+23	5,181601E+22	1,655351E+23
-2535	5,685819E+22	5,685864E+22	2,590818E+22	2,590745E+22	1,137168E+23	5,181563E+22	1,655325E+23
-2534	5,685813E+22	5,685846E+22	2,590912E+22	2,590910E+22	1,137166E+23	5,181822E+22	1,655348E+23
-2533	5,685995E+22	5,685716E+22	2,590848E+22	2,590934E+22	1,137171E+23	5,181783E+22	1,655349E+23
-2532	5,685661E+22	5,685823E+22	2,591004E+22	2,590916E+22	1,137148E+23	5,181920E+22	1,655340E+23
-2531	5,685772E+22	5,685790E+22	2,591017E+22	2,591132E+22	1,137156E+23	5,182149E+22	1,655371E+23
-2530	5,685781E+22	5,685645E+22	2,591022E+22	2,591064E+22	1,137143E+23	5,182086E+22	1,655351E+23
-2529	5,685471E+22	5,685722E+22	2,591216E+22	2,591088E+22	1,137119E+23	5,182304E+22	1,655350E+23
-2528	5,685732E+22	5,685639E+22	2,591135E+22	2,591217E+22	1,137137E+23	5,182351E+22	1,655372E+23
-2527	5,685607E+22	5,685564E+22	2,591164E+22	2,591079E+22	1,137117E+23	5,182242E+22	1,655341E+23
-2526	5,685485E+22	5,685641E+22	2,591213E+22	2,591178E+22	1,137113E+23	5,182390E+22	1,655352E+23
-2525	5,685757E+22	5,685577E+22	2,591043E+22	2,591175E+22	1,137133E+23	5,182219E+22	1,655355E+23
-2524	5,685536E+22	5,685686E+22	2,591085E+22	2,590998E+22	1,137122E+23	5,182083E+22	1,655331E+23
-2523	5,685706E+22	5,685731E+22	2,591029E+22	2,591068E+22	1,137144E+23	5,182097E+22	1,655353E+23
-2522	5,685903E+22	5,685670E+22	2,590903E+22	2,590923E+22	1,137157E+23	5,181826E+22	1,655340E+23
-2521	5,685613E+22	5,685830E+22	2,591002E+22	2,590847E+22	1,137144E+23	5,181848E+22	1,655329E+23
-2520	5,685843E+22	5,685860E+22	2,590884E+22	2,590973E+22	1,137170E+23	5,181856E+22	1,655356E+23
-2519	5,685804E+22	5,685793E+22	2,590855E+22	2,590837E+22	1,137160E+23	5,181692E+22	1,655329E+23
-2518	5,685622E+22	5,685838E+22	2,590954E+22	2,590900E+22	1,137146E+23	5,181855E+22	1,655331E+23
-2517	5,685927E+22	5,685743E+22	2,590850E+22	2,590968E+22	1,137167E+23	5,181818E+22	1,655349E+23
-2516	5,685741E+22	5,685741E+22	2,590945E+22	2,590861E+22	1,137148E+23	5,181806E+22	1,655329E+23
-2515	5,685730E+22	5,685761E+22	2,591018E+22	2,591030E+22	1,137149E+23	5,182048E+22	1,655354E+23
-2514	5,685882E+22	5,685671E+22	2,590959E+22	2,591071E+22	1,137155E+23	5,182030E+22	1,655358E+23
-2513	5,685495E+22	5,685717E+22	2,591155E+22	2,591062E+22	1,137121E+23	5,182217E+22	1,655343E+23
-2512	5,685609E+22	5,685690E+22	2,591172E+22	2,591251E+22	1,137130E+23	5,182423E+22	1,655372E+23
-2511	5,685646E+22	5,685525E+22	2,591187E+22	2,591179E+22	1,137117E+23	5,182365E+22	1,655354E+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							
-2510	5,685368E+22	5,685518E+22	2,591345E+22	2,591218E+22	1,137089E+23	5,182563E+22	1,655345E+23
-2509	5,685620E+22	5,685473E+22	2,591243E+22	2,591343E+22	1,137109E+23	5,182586E+22	1,655368E+23
-2508	5,685468E+22	5,685469E+22	2,591257E+22	2,591216E+22	1,137094E+23	5,182473E+22	1,655341E+23
-2507	5,685391E+22	5,685549E+22	2,591278E+22	2,591282E+22	1,137094E+23	5,182559E+22	1,655350E+23
-2506	5,685699E+22	5,685510E+22	2,591116E+22	2,591248E+22	1,137121E+23	5,182364E+22	1,655357E+23
-2505	5,685459E+22	5,685574E+22	2,591194E+22	2,591066E+22	1,137103E+23	5,182261E+22	1,655329E+23
-2504	5,685613E+22	5,685671E+22	2,591139E+22	2,591135E+22	1,137128E+23	5,182274E+22	1,655356E+23
-2503	5,685776E+22	5,685630E+22	2,591017E+22	2,591023E+22	1,137141E+23	5,182040E+22	1,655345E+23
-2502	5,685478E+22	5,685703E+22	2,591095E+22	2,590982E+22	1,137118E+23	5,182077E+22	1,655326E+23
-2501	5,685723E+22	5,685723E+22	2,590985E+22	2,591092E+22	1,137145E+23	5,182078E+22	1,655352E+23
-2500	5,685692E+22	5,685669E+22	2,590970E+22	2,590953E+22	1,137136E+23	5,181923E+22	1,655328E+23
-2499	5,685573E+22	5,685699E+22	2,591055E+22	2,590998E+22	1,137127E+23	5,182053E+22	1,655333E+23
-2498	5,685884E+22	5,685641E+22	2,590956E+22	2,591075E+22	1,137152E+23	5,182031E+22	1,655356E+23
-2497	5,685610E+22	5,685629E+22	2,591079E+22	2,591001E+22	1,137124E+23	5,182080E+22	1,655332E+23
-2496	5,685564E+22	5,685705E+22	2,591152E+22	2,591170E+22	1,137127E+23	5,182322E+22	1,655359E+23
-2495	5,685713E+22	5,685588E+22	2,591112E+22	2,591207E+22	1,137130E+23	5,182318E+22	1,655362E+23
-2494	5,685356E+22	5,685529E+22	2,591300E+22	2,591198E+22	1,137088E+23	5,182499E+22	1,655338E+23
-2493	5,685504E+22	5,685501E+22	2,591318E+22	2,591361E+22	1,137101E+23	5,182679E+22	1,655369E+23
-2492	5,685519E+22	5,685386E+22	2,591323E+22	2,591309E+22	1,137090E+23	5,182632E+22	1,655354E+23
-2491	5,685264E+22	5,685406E+22	2,591433E+22	2,591350E+22	1,137067E+23	5,182783E+22	1,655345E+23
-2490	5,685523E+22	5,685400E+22	2,591320E+22	2,591467E+22	1,137092E+23	5,182786E+22	1,655371E+23
-2489	5,685345E+22	5,685366E+22	2,591360E+22	2,591332E+22	1,137071E+23	5,182692E+22	1,655340E+23
-2488	5,685294E+22	5,685487E+22	2,591382E+22	2,591354E+22	1,137078E+23	5,182736E+22	1,655352E+23
-2487	5,685622E+22	5,685441E+22	2,591240E+22	2,591315E+22	1,137106E+23	5,182554E+22	1,655362E+23
-2486	5,685379E+22	5,685436E+22	2,591300E+22	2,591164E+22	1,137082E+23	5,182465E+22	1,655328E+23
-2485	5,685494E+22	5,685559E+22	2,591238E+22	2,591238E+22	1,137105E+23	5,182476E+22	1,655353E+23
-2484	5,685621E+22	5,685548E+22	2,591114E+22	2,591153E+22	1,137117E+23	5,182267E+22	1,655344E+23
-2483	5,685383E+22	5,685581E+22	2,591168E+22	2,591094E+22	1,137096E+23	5,182262E+22	1,655323E+23
-2482	5,685667E+22	5,685608E+22	2,591071E+22	2,591182E+22	1,137127E+23	5,182253E+22	1,655353E+23
-2481	5,685624E+22	5,685526E+22	2,591090E+22	2,591054E+22	1,137115E+23	5,182144E+22	1,655329E+23
-2480	5,685480E+22	5,685624E+22	2,591172E+22	2,591094E+22	1,137110E+23	5,182266E+22	1,655337E+23
-2479	5,685753E+22	5,685597E+22	2,591091E+22	2,591202E+22	1,137135E+23	5,182293E+22	1,655364E+23
-2478	5,685464E+22	5,685500E+22	2,591207E+22	2,591158E+22	1,137096E+23	5,182365E+22	1,655333E+23
-2477	5,685407E+22	5,685564E+22	2,591297E+22	2,591302E+22	1,137097E+23	5,182599E+22	1,655357E+23
-2476	5,685562E+22	5,685457E+22	2,591268E+22	2,591342E+22	1,137102E+23	5,182610E+22	1,655363E+23
-2475	5,685269E+22	5,685353E+22	2,591428E+22	2,591323E+22	1,137062E+23	5,182751E+22	1,655337E+23
-2474	5,685413E+22	5,685365E+22	2,591433E+22	2,591489E+22	1,137078E+23	5,182922E+22	1,655370E+23
-2473	5,685371E+22	5,685252E+22	2,591442E+22	2,591463E+22	1,137062E+23	5,182905E+22	1,655353E+23
-2472	5,685114E+22	5,685335E+22	2,591532E+22	2,591477E+22	1,137045E+23	5,183010E+22	1,655346E+23
-2471	5,685409E+22	5,685328E+22	2,591435E+22	2,591572E+22	1,137074E+23	5,183007E+22	1,655374E+23
-2470	5,685271E+22	5,685215E+22	2,591467E+22	2,591422E+22	1,137049E+23	5,182889E+22	1,655337E+23
-2469	5,685235E+22	5,685359E+22	2,591497E+22	2,591414E+22	1,137059E+23	5,182911E+22	1,655350E+23
-2468	5,685519E+22	5,685370E+22	2,591351E+22	2,591401E+22	1,137089E+23	5,182752E+22	1,655364E+23
-2467	5,685281E+22	5,685356E+22	2,591376E+22	2,591272E+22	1,137064E+23	5,182648E+22	1,655328E+23
-2466	5,685385E+22	5,685491E+22	2,591313E+22	2,591347E+22	1,137088E+23	5,182660E+22	1,655354E+23
-2465	5,685485E+22	5,685430E+22	2,591220E+22	2,591270E+22	1,137091E+23	5,182490E+22	1,655340E+23
-2464	5,685287E+22	5,685491E+22	2,591272E+22	2,591181E+22	1,137078E+23	5,182453E+22	1,655323E+23
-2463	5,685603E+22	5,685502E+22	2,591197E+22	2,591273E+22	1,137110E+23	5,182469E+22	1,655357E+23
-2462	5,685536E+22	5,685372E+22	2,591204E+22	2,591181E+22	1,137091E+23	5,182385E+22	1,655329E+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							
-2461	5,685354E+22	5,685514E+22	2,591290E+22	2,591223E+22	1,137087E+23	5,182513E+22	1,655338E+23
-2460	5,685582E+22	5,685513E+22	2,591222E+22	2,591348E+22	1,137110E+23	5,182570E+22	1,655366E+23
-2459	5,685345E+22	5,685366E+22	2,591324E+22	2,591294E+22	1,137071E+23	5,182618E+22	1,655333E+23
-2458	5,685309E+22	5,685425E+22	2,591426E+22	2,591413E+22	1,137073E+23	5,182839E+22	1,655357E+23
-2457	5,685438E+22	5,685291E+22	2,591420E+22	2,591474E+22	1,137073E+23	5,182894E+22	1,655362E+23
-2456	5,685139E+22	5,685251E+22	2,591556E+22	2,591448E+22	1,137039E+23	5,183004E+22	1,655339E+23
-2455	5,685279E+22	5,685283E+22	2,591561E+22	2,591630E+22	1,137056E+23	5,183192E+22	1,655375E+23
-2454	5,685244E+22	5,685112E+22	2,591553E+22	2,591612E+22	1,137036E+23	5,183164E+22	1,655352E+23
-2453	5,685009E+22	5,685212E+22	2,591649E+22	2,591578E+22	1,137022E+23	5,183227E+22	1,655345E+23
-2452	5,685313E+22	5,685236E+22	2,591563E+22	2,591660E+22	1,137055E+23	5,183223E+22	1,655377E+23
-2451	5,685226E+22	5,685096E+22	2,591566E+22	2,591504E+22	1,137032E+23	5,183071E+22	1,655339E+23
-2450	5,685149E+22	5,685279E+22	2,591587E+22	2,591501E+22	1,137043E+23	5,183089E+22	1,655352E+23
-2449	5,685362E+22	5,685283E+22	2,591452E+22	2,591528E+22	1,137065E+23	5,182980E+22	1,655362E+23
-2448	5,685127E+22	5,685284E+22	2,591459E+22	2,591378E+22	1,137041E+23	5,182837E+22	1,655325E+23
-2447	5,685273E+22	5,685394E+22	2,591418E+22	2,591445E+22	1,137067E+23	5,182863E+22	1,655353E+23
-2446	5,685417E+22	5,685255E+22	2,591318E+22	2,591371E+22	1,137067E+23	5,182689E+22	1,655336E+23
-2445	5,685230E+22	5,685348E+22	2,591377E+22	2,591262E+22	1,137058E+23	5,182639E+22	1,655322E+23
-2444	5,685504E+22	5,685430E+22	2,591309E+22	2,591384E+22	1,137093E+23	5,182692E+22	1,655363E+23
-2443	5,685443E+22	5,685286E+22	2,591294E+22	2,591311E+22	1,137073E+23	5,182604E+22	1,655333E+23
-2442	5,685233E+22	5,685436E+22	2,591399E+22	2,591345E+22	1,137067E+23	5,182744E+22	1,655341E+23
-2441	5,685421E+22	5,685391E+22	2,591372E+22	2,591483E+22	1,137081E+23	5,182855E+22	1,655367E+23
-2440	5,685209E+22	5,685249E+22	2,591476E+22	2,591406E+22	1,137046E+23	5,182882E+22	1,655334E+23
-2439	5,685199E+22	5,685288E+22	2,591590E+22	2,591542E+22	1,137049E+23	5,183132E+22	1,655362E+23
-2438	5,685304E+22	5,685106E+22	2,591557E+22	2,591638E+22	1,137041E+23	5,183195E+22	1,655360E+23
-2437	5,684998E+22	5,685111E+22	2,591677E+22	2,591599E+22	1,137011E+23	5,183275E+22	1,655338E+23
-2436	5,685136E+22	5,685180E+22	2,591682E+22	2,591772E+22	1,137032E+23	5,183454E+22	1,655377E+23
-2435	5,685169E+22	5,684985E+22	2,591652E+22	2,591723E+22	1,137015E+23	5,183375E+22	1,655353E+23
-2434	5,684959E+22	5,685111E+22	2,591755E+22	2,591651E+22	1,137007E+23	5,183406E+22	1,655348E+23
-2433	5,685204E+22	5,685131E+22	2,591691E+22	2,591749E+22	1,137034E+23	5,183440E+22	1,655378E+23
-2432	5,685090E+22	5,685054E+22	2,591670E+22	2,591596E+22	1,137014E+23	5,183266E+22	1,655341E+23
-2431	5,685008E+22	5,685220E+22	2,591692E+22	2,591615E+22	1,137023E+23	5,183307E+22	1,655353E+23
-2430	5,685213E+22	5,685142E+22	2,591542E+22	2,591657E+22	1,137035E+23	5,183200E+22	1,655355E+23
-2429	5,685030E+22	5,685147E+22	2,591553E+22	2,591471E+22	1,137018E+23	5,183024E+22	1,655320E+23
-2428	5,685206E+22	5,685271E+22	2,591523E+22	2,591531E+22	1,137048E+23	5,183054E+22	1,655353E+23
-2427	5,685396E+22	5,685123E+22	2,591402E+22	2,591463E+22	1,137052E+23	5,182865E+22	1,655338E+23
-2426	5,685166E+22	5,685272E+22	2,591461E+22	2,591358E+22	1,137044E+23	5,182820E+22	1,655326E+23
-2425	5,685347E+22	5,685358E+22	2,591424E+22	2,591515E+22	1,137070E+23	5,182939E+22	1,655364E+23
-2424	5,685282E+22	5,685230E+22	2,591413E+22	2,591428E+22	1,137051E+23	5,182841E+22	1,655335E+23
-2423	5,685101E+22	5,685329E+22	2,591552E+22	2,591463E+22	1,137043E+23	5,183015E+22	1,655344E+23
-2422	5,685297E+22	5,685200E+22	2,591524E+22	2,591616E+22	1,137050E+23	5,183140E+22	1,655364E+23
-2421	5,685099E+22	5,685077E+22	2,591623E+22	2,591533E+22	1,137018E+23	5,183156E+22	1,655333E+23
-2420	5,685061E+22	5,685170E+22	2,591729E+22	2,591696E+22	1,137023E+23	5,183425E+22	1,655366E+23
-2419	5,685196E+22	5,684979E+22	2,591659E+22	2,591799E+22	1,137017E+23	5,183457E+22	1,655363E+23
-2418	5,684890E+22	5,685012E+22	2,591780E+22	2,591725E+22	1,136990E+23	5,183505E+22	1,655341E+23
-2417	5,685008E+22	5,685076E+22	2,591817E+22	2,591890E+22	1,137008E+23	5,183707E+22	1,655379E+23
-2416	5,685068E+22	5,684902E+22	2,591780E+22	2,591803E+22	1,136997E+23	5,183582E+22	1,655355E+23
-2415	5,684859E+22	5,685020E+22	2,591893E+22	2,591746E+22	1,136988E+23	5,183640E+22	1,655352E+23
-2414	5,685053E+22	5,684998E+22	2,591802E+22	2,591879E+22	1,137005E+23	5,183681E+22	1,655373E+23
-2413	5,684933E+22	5,684933E+22	2,591765E+22	2,591718E+22	1,136987E+23	5,183483E+22	1,655335E+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							
-2412	5,684871E+22	5,685108E+22	2,591787E+22	2,591731E+22	1,136998E+23	5,183518E+22	1,655350E+23
-2411	5,685163E+22	5,684990E+22	2,591612E+22	2,591750E+22	1,137015E+23	5,183363E+22	1,655352E+23
-2410	5,685015E+22	5,685029E+22	2,591627E+22	2,591532E+22	1,137004E+23	5,183159E+22	1,655320E+23
-2409	5,685137E+22	5,685184E+22	2,591624E+22	2,591616E+22	1,137032E+23	5,183240E+22	1,655356E+23
-2408	5,685287E+22	5,685103E+22	2,591497E+22	2,591551E+22	1,137039E+23	5,183048E+22	1,655344E+23
-2407	5,685039E+22	5,685238E+22	2,591584E+22	2,591477E+22	1,137028E+23	5,183061E+22	1,655334E+23
-2406	5,685177E+22	5,685235E+22	2,591558E+22	2,591651E+22	1,137041E+23	5,183209E+22	1,655362E+23
-2405	5,685144E+22	5,685089E+22	2,591562E+22	2,591551E+22	1,137023E+23	5,183112E+22	1,655334E+23
-2404	5,684983E+22	5,685173E+22	2,591712E+22	2,591594E+22	1,137016E+23	5,183306E+22	1,655346E+23
-2403	5,685210E+22	5,685019E+22	2,591648E+22	2,591767E+22	1,137023E+23	5,183416E+22	1,655364E+23
-2402	5,684996E+22	5,684948E+22	2,591729E+22	2,591683E+22	1,136994E+23	5,183412E+22	1,655336E+23
-2401	5,684898E+22	5,685053E+22	2,591848E+22	2,591857E+22	1,136995E+23	5,183705E+22	1,655366E+23
-2400	5,685054E+22	5,684902E+22	2,591777E+22	2,591919E+22	1,136996E+23	5,183695E+22	1,655365E+23
-2399	5,684801E+22	5,684914E+22	2,591921E+22	2,591828E+22	1,136971E+23	5,183749E+22	1,655346E+23
-2398	5,684892E+22	5,684921E+22	2,591959E+22	2,591992E+22	1,136981E+23	5,183951E+22	1,655376E+23
-2397	5,684953E+22	5,684787E+22	2,591910E+22	2,591903E+22	1,136974E+23	5,183813E+22	1,655355E+23
-2396	5,684713E+22	5,684929E+22	2,592011E+22	2,591869E+22	1,136964E+23	5,183880E+22	1,655352E+23
-2395	5,684933E+22	5,684876E+22	2,591879E+22	2,592009E+22	1,136981E+23	5,183888E+22	1,655370E+23
-2394	5,684844E+22	5,684822E+22	2,591838E+22	2,591814E+22	1,136967E+23	5,183652E+22	1,655332E+23
-2393	5,684779E+22	5,684992E+22	2,591883E+22	2,591823E+22	1,136977E+23	5,183705E+22	1,655348E+23
-2392	5,685109E+22	5,684914E+22	2,591707E+22	2,591812E+22	1,137002E+23	5,183519E+22	1,655354E+23
-2391	5,684963E+22	5,684964E+22	2,591735E+22	2,591618E+22	1,136993E+23	5,183353E+22	1,655328E+23
-2390	5,685001E+22	5,685092E+22	2,591727E+22	2,591737E+22	1,137009E+23	5,183464E+22	1,655356E+23
-2389	5,685136E+22	5,685021E+22	2,591606E+22	2,591672E+22	1,137016E+23	5,183278E+22	1,655343E+23
-2388	5,684890E+22	5,685132E+22	2,591718E+22	2,591606E+22	1,137002E+23	5,183324E+22	1,655335E+23
-2387	5,685082E+22	5,685068E+22	2,591677E+22	2,591775E+22	1,137015E+23	5,183453E+22	1,655360E+23
-2386	5,685068E+22	5,684928E+22	2,591682E+22	2,591660E+22	1,137000E+23	5,183342E+22	1,655334E+23
-2385	5,684862E+22	5,685037E+22	2,591843E+22	2,591738E+22	1,136990E+23	5,183581E+22	1,655348E+23
-2384	5,685076E+22	5,684935E+22	2,591761E+22	2,591902E+22	1,137001E+23	5,183663E+22	1,655367E+23
-2383	5,684871E+22	5,684864E+22	2,591856E+22	2,591828E+22	1,136974E+23	5,183684E+22	1,655342E+23
-2382	5,684747E+22	5,684918E+22	2,591983E+22	2,591996E+22	1,136967E+23	5,183979E+22	1,655364E+23
-2381	5,684936E+22	5,684773E+22	2,591926E+22	2,592025E+22	1,136971E+23	5,183951E+22	1,655366E+23
-2380	5,684696E+22	5,684786E+22	2,592083E+22	2,591939E+22	1,136948E+23	5,184021E+22	1,655350E+23
-2379	5,684789E+22	5,684773E+22	2,592078E+22	2,592117E+22	1,136956E+23	5,184195E+22	1,655376E+23
-2378	5,684824E+22	5,684676E+22	2,592005E+22	2,592027E+22	1,136950E+23	5,184032E+22	1,655353E+23
-2377	5,684551E+22	5,684817E+22	2,592108E+22	2,592005E+22	1,136937E+23	5,184113E+22	1,655348E+23
-2376	5,684814E+22	5,684785E+22	2,591965E+22	2,592099E+22	1,136960E+23	5,184064E+22	1,655366E+23
-2375	5,684798E+22	5,684726E+22	2,591937E+22	2,591893E+22	1,136952E+23	5,183831E+22	1,655335E+23
-2374	5,684709E+22	5,684864E+22	2,591982E+22	2,591905E+22	1,136957E+23	5,183886E+22	1,655346E+23
-2373	5,685026E+22	5,684842E+22	2,591808E+22	2,591897E+22	1,136987E+23	5,183705E+22	1,655357E+23
-2372	5,684847E+22	5,684914E+22	2,591844E+22	2,591732E+22	1,136976E+23	5,183575E+22	1,655334E+23
-2371	5,684876E+22	5,684994E+22	2,591819E+22	2,591861E+22	1,136987E+23	5,183679E+22	1,655355E+23
-2370	5,685029E+22	5,684914E+22	2,591710E+22	2,591779E+22	1,136994E+23	5,183489E+22	1,655343E+23
-2369	5,684772E+22	5,684984E+22	2,591849E+22	2,591723E+22	1,136976E+23	5,183571E+22	1,655333E+23
-2368	5,684981E+22	5,684942E+22	2,591805E+22	2,591878E+22	1,136992E+23	5,183683E+22	1,655361E+23
-2367	5,684981E+22	5,684812E+22	2,591810E+22	2,591799E+22	1,136979E+23	5,183609E+22	1,655340E+23
-2366	5,684698E+22	5,684894E+22	2,591960E+22	2,591899E+22	1,136959E+23	5,183859E+22	1,655345E+23
-2365	5,684924E+22	5,684822E+22	2,591887E+22	2,592046E+22	1,136975E+23	5,183933E+22	1,655368E+23
-2364	5,684748E+22	5,684742E+22	2,592004E+22	2,591959E+22	1,136949E+23	5,183963E+22	1,655345E+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	5,684662E+22	5,684760E+22	2,592115E+22	2,592110E+22	1,136942E+23	5,184225E+22	1,655365E+23
-2362	5,684858E+22	5,684641E+22	2,592058E+22	2,592124E+22	1,136950E+23	5,184181E+22	1,655368E+23
-2361	5,684551E+22	5,684679E+22	2,592216E+22	2,592072E+22	1,136923E+23	5,184289E+22	1,655352E+23
-2360	5,684626E+22	5,684706E+22	2,592186E+22	2,592239E+22	1,136933E+23	5,184424E+22	1,655376E+23
-2359	5,684696E+22	5,684591E+22	2,592112E+22	2,592158E+22	1,136929E+23	5,184270E+22	1,655356E+23
-2358	5,684417E+22	5,684676E+22	2,592210E+22	2,592124E+22	1,136909E+23	5,184333E+22	1,655343E+23
-2357	5,684740E+22	5,684661E+22	2,592072E+22	2,592181E+22	1,136940E+23	5,184253E+22	1,655365E+23
-2356	5,684747E+22	5,684620E+22	2,592053E+22	2,591981E+22	1,136937E+23	5,184034E+22	1,655340E+23
-2355	5,684647E+22	5,684759E+22	2,592063E+22	2,592007E+22	1,136941E+23	5,184070E+22	1,655348E+23
-2354	5,684920E+22	5,684768E+22	2,591885E+22	2,591995E+22	1,136969E+23	5,183879E+22	1,655357E+23
-2353	5,684699E+22	5,684830E+22	2,591944E+22	2,591852E+22	1,136953E+23	5,183796E+22	1,655332E+23
-2352	5,684751E+22	5,684899E+22	2,591925E+22	2,591944E+22	1,136965E+23	5,183869E+22	1,655352E+23
-2351	5,684952E+22	5,684791E+22	2,591835E+22	2,591877E+22	1,136974E+23	5,183712E+22	1,655345E+23
-2350	5,684661E+22	5,684822E+22	2,591974E+22	2,591843E+22	1,136948E+23	5,183817E+22	1,655330E+23
-2349	5,684863E+22	5,684822E+22	2,591930E+22	2,592006E+22	1,136968E+23	5,183935E+22	1,655362E+23
-2348	5,684849E+22	5,684715E+22	2,591942E+22	2,591951E+22	1,136956E+23	5,183893E+22	1,655346E+23
-2347	5,684577E+22	5,684762E+22	2,592073E+22	2,592048E+22	1,136934E+23	5,184121E+22	1,655346E+23
-2346	5,684817E+22	5,684699E+22	2,592017E+22	2,592164E+22	1,136952E+23	5,184181E+22	1,655370E+23
-2345	5,684632E+22	5,684614E+22	2,592160E+22	2,592086E+22	1,136925E+23	5,184246E+22	1,655349E+23
-2344	5,684543E+22	5,684653E+22	2,592263E+22	2,592215E+22	1,136920E+23	5,184478E+22	1,655367E+23
-2343	5,684733E+22	5,684547E+22	2,592194E+22	2,592268E+22	1,136928E+23	5,184462E+22	1,655374E+23
-2342	5,684360E+22	5,684540E+22	2,592333E+22	2,592232E+22	1,136890E+23	5,184564E+22	1,655346E+23
-2341	5,684468E+22	5,684579E+22	2,592298E+22	2,592369E+22	1,136905E+23	5,184667E+22	1,655371E+23
-2340	5,684602E+22	5,684460E+22	2,592230E+22	2,592268E+22	1,136906E+23	5,184498E+22	1,655356E+23
-2339	5,684375E+22	5,684521E+22	2,592296E+22	2,592210E+22	1,136890E+23	5,184506E+22	1,655340E+23
-2338	5,684711E+22	5,684558E+22	2,592158E+22	2,592248E+22	1,136927E+23	5,184406E+22	1,655368E+23
-2337	5,684654E+22	5,684558E+22	2,592142E+22	2,592076E+22	1,136921E+23	5,184218E+22	1,655343E+23
-2336	5,684519E+22	5,684727E+22	2,592146E+22	2,592087E+22	1,136925E+23	5,184233E+22	1,655348E+23
-2335	5,684808E+22	5,684716E+22	2,591985E+22	2,592096E+22	1,136952E+23	5,184081E+22	1,655361E+23
-2334	5,684550E+22	5,684694E+22	2,592061E+22	2,591962E+22	1,136924E+23	5,184023E+22	1,655327E+23
-2333	5,684643E+22	5,684761E+22	2,592058E+22	2,592041E+22	1,136940E+23	5,184099E+22	1,655350E+23
-2332	5,684863E+22	5,684650E+22	2,591976E+22	2,592002E+22	1,136951E+23	5,183979E+22	1,655349E+23
-2331	5,684559E+22	5,684672E+22	2,592072E+22	2,591993E+22	1,136923E+23	5,184065E+22	1,655330E+23
-2330	5,684746E+22	5,684703E+22	2,592027E+22	2,592146E+22	1,136945E+23	5,184174E+22	1,655362E+23
-2329	5,684709E+22	5,684606E+22	2,592064E+22	2,592099E+22	1,136931E+23	5,184162E+22	1,655348E+23
-2328	5,684466E+22	5,684662E+22	2,592207E+22	2,592149E+22	1,136913E+23	5,184356E+22	1,655348E+23
-2327	5,684735E+22	5,684593E+22	2,592170E+22	2,592275E+22	1,136933E+23	5,184445E+22	1,655377E+23
-2326	5,684483E+22	5,684474E+22	2,592316E+22	2,592224E+22	1,136896E+23	5,184540E+22	1,655350E+23
-2325	5,684376E+22	5,684545E+22	2,592407E+22	2,592356E+22	1,136892E+23	5,184763E+22	1,655368E+23
-2324	5,684568E+22	5,684435E+22	2,592333E+22	2,592425E+22	1,136900E+23	5,184758E+22	1,655376E+23
-2323	5,684239E+22	5,684382E+22	2,592432E+22	2,592375E+22	1,136862E+23	5,184807E+22	1,655343E+23
-2322	5,684393E+22	5,684424E+22	2,592398E+22	2,592461E+22	1,136882E+23	5,184858E+22	1,655368E+23
-2321	5,684537E+22	5,684337E+22	2,592341E+22	2,592359E+22	1,136887E+23	5,184700E+22	1,655357E+23
-2320	5,684320E+22	5,684444E+22	2,592390E+22	2,592274E+22	1,136876E+23	5,184665E+22	1,655343E+23
-2319	5,684620E+22	5,684517E+22	2,592249E+22	2,592344E+22	1,136914E+23	5,184593E+22	1,655373E+23
-2318	5,684483E+22	5,684480E+22	2,592236E+22	2,592194E+22	1,136896E+23	5,184430E+22	1,655339E+23
-2317	5,684365E+22	5,684635E+22	2,592255E+22	2,592183E+22	1,136900E+23	5,184439E+22	1,655344E+23
-2316	5,684695E+22	5,684596E+22	2,592115E+22	2,592195E+22	1,136929E+23	5,184311E+22	1,655360E+23
-2315	5,684480E+22	5,684522E+22	2,592163E+22	2,592069E+22	1,136900E+23	5,184232E+22	1,655323E+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	5,684574E+22	5,684617E+22	2,592161E+22	2,592147E+22	1,136919E+23	5,184308E+22	1,655350E+23
-2313	5,684747E+22	5,684557E+22	2,592082E+22	2,592146E+22	1,136930E+23	5,184228E+22	1,655353E+23
-2312	5,684439E+22	5,684602E+22	2,592171E+22	2,592113E+22	1,136904E+23	5,184284E+22	1,655333E+23
-2311	5,684643E+22	5,684633E+22	2,592149E+22	2,592274E+22	1,136928E+23	5,184423E+22	1,655370E+23
-2310	5,684567E+22	5,684476E+22	2,592213E+22	2,592226E+22	1,136904E+23	5,184439E+22	1,655348E+23
-2309	5,684343E+22	5,684533E+22	2,592378E+22	2,592263E+22	1,136888E+23	5,184641E+22	1,655352E+23
-2308	5,684606E+22	5,684465E+22	2,592347E+22	2,592419E+22	1,136907E+23	5,184766E+22	1,655384E+23
-2307	5,684326E+22	5,684312E+22	2,592441E+22	2,592392E+22	1,136864E+23	5,184833E+22	1,655347E+23
-2306	5,684225E+22	5,684392E+22	2,592519E+22	2,592504E+22	1,136862E+23	5,185023E+22	1,655364E+23
-2305	5,684431E+22	5,684290E+22	2,592446E+22	2,592562E+22	1,136872E+23	5,185008E+22	1,655373E+23
-2304	5,684162E+22	5,684255E+22	2,592531E+22	2,592454E+22	1,136842E+23	5,184985E+22	1,655340E+23
-2303	5,684362E+22	5,684334E+22	2,592500E+22	2,592541E+22	1,136870E+23	5,185040E+22	1,655374E+23
-2302	5,684428E+22	5,684249E+22	2,592447E+22	2,592455E+22	1,136868E+23	5,184901E+22	1,655358E+23
-2301	5,684185E+22	5,684402E+22	2,592496E+22	2,592368E+22	1,136859E+23	5,184865E+22	1,655345E+23
-2300	5,684475E+22	5,684460E+22	2,592367E+22	2,592454E+22	1,136893E+23	5,184822E+22	1,655376E+23
-2299	5,684352E+22	5,684354E+22	2,592329E+22	2,592309E+22	1,136871E+23	5,184639E+22	1,655334E+23
-2298	5,684276E+22	5,684484E+22	2,592359E+22	2,592274E+22	1,136876E+23	5,184632E+22	1,655339E+23
-2297	5,684610E+22	5,684456E+22	2,592229E+22	2,592305E+22	1,136907E+23	5,184534E+22	1,655360E+23
-2296	5,684412E+22	5,684413E+22	2,592256E+22	2,592171E+22	1,136882E+23	5,184427E+22	1,655325E+23
-2295	5,684488E+22	5,684543E+22	2,592249E+22	2,592278E+22	1,136903E+23	5,184527E+22	1,655356E+23
-2294	5,684588E+22	5,684457E+22	2,592191E+22	2,592289E+22	1,136904E+23	5,184480E+22	1,655352E+23
-2293	5,684307E+22	5,684505E+22	2,592307E+22	2,592226E+22	1,136881E+23	5,184533E+22	1,655335E+23
-2292	5,684530E+22	5,684516E+22	2,592319E+22	2,592385E+22	1,136905E+23	5,184704E+22	1,655375E+23
-2291	5,684466E+22	5,684315E+22	2,592361E+22	2,592357E+22	1,136878E+23	5,184717E+22	1,655350E+23
-2290	5,684221E+22	5,684378E+22	2,592522E+22	2,592394E+22	1,136860E+23	5,184916E+22	1,655352E+23
-2289	5,684427E+22	5,684348E+22	2,592483E+22	2,592584E+22	1,136878E+23	5,185067E+22	1,655384E+23
-2288	5,684182E+22	5,684195E+22	2,592552E+22	2,592531E+22	1,136838E+23	5,185083E+22	1,655346E+23
-2287	5,684117E+22	5,684275E+22	2,592630E+22	2,592633E+22	1,136839E+23	5,185263E+22	1,655366E+23
-2286	5,684309E+22	5,684150E+22	2,592572E+22	2,592678E+22	1,136846E+23	5,185250E+22	1,655371E+23
-2285	5,684081E+22	5,684148E+22	2,592661E+22	2,592542E+22	1,136823E+23	5,185203E+22	1,655343E+23
-2284	5,684264E+22	5,684258E+22	2,592632E+22	2,592647E+22	1,136852E+23	5,185279E+22	1,655380E+23
-2283	5,684294E+22	5,684153E+22	2,592534E+22	2,592581E+22	1,136845E+23	5,185115E+22	1,655356E+23
-2282	5,684051E+22	5,684289E+22	2,592587E+22	2,592475E+22	1,136834E+23	5,185062E+22	1,655340E+23
-2281	5,684340E+22	5,684350E+22	2,592470E+22	2,592559E+22	1,136869E+23	5,185028E+22	1,655372E+23
-2280	5,684284E+22	5,684227E+22	2,592421E+22	2,592381E+22	1,136851E+23	5,184802E+22	1,655331E+23
-2279	5,684241E+22	5,684377E+22	2,592450E+22	2,592364E+22	1,136862E+23	5,184814E+22	1,655343E+23
-2278	5,684498E+22	5,684351E+22	2,592329E+22	2,592422E+22	1,136885E+23	5,184751E+22	1,655360E+23
-2277	5,684291E+22	5,684352E+22	2,592360E+22	2,592286E+22	1,136864E+23	5,184646E+22	1,655329E+23
-2276	5,684369E+22	5,684476E+22	2,592378E+22	2,592404E+22	1,136885E+23	5,184782E+22	1,655363E+23
-2275	5,684464E+22	5,684326E+22	2,592311E+22	2,592414E+22	1,136879E+23	5,184725E+22	1,655352E+23
-2274	5,684211E+22	5,684350E+22	2,592455E+22	2,592334E+22	1,136856E+23	5,184789E+22	1,655335E+23
-2273	5,684406E+22	5,684375E+22	2,592480E+22	2,592516E+22	1,136878E+23	5,184995E+22	1,655378E+23
-2272	5,684332E+22	5,684185E+22	2,592493E+22	2,592497E+22	1,136852E+23	5,184990E+22	1,655351E+23
-2271	5,684076E+22	5,684268E+22	2,592637E+22	2,592561E+22	1,136834E+23	5,185198E+22	1,655354E+23
-2270	5,684231E+22	5,684200E+22	2,592607E+22	2,592749E+22	1,136843E+23	5,185356E+22	1,655379E+23
-2269	5,684050E+22	5,684061E+22	2,592682E+22	2,592652E+22	1,136811E+23	5,185334E+22	1,655345E+23
-2268	5,684039E+22	5,684147E+22	2,592773E+22	2,592739E+22	1,136819E+23	5,185512E+22	1,655370E+23
-2267	5,684230E+22	5,684012E+22	2,592687E+22	2,592787E+22	1,136824E+23	5,185475E+22	1,655372E+23
-2266	5,683992E+22	5,684044E+22	2,592771E+22	2,592644E+22	1,136804E+23	5,185415E+22	1,655345E+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							
-2265	5,684116E+22	5,684194E+22	2,592739E+22	2,592764E+22	1,136831E+23	5,185502E+22	1,655381E+23
-2264	5,684172E+22	5,684076E+22	2,592622E+22	2,592679E+22	1,136825E+23	5,185300E+22	1,655355E+23
-2263	5,683963E+22	5,684193E+22	2,592676E+22	2,592569E+22	1,136816E+23	5,185245E+22	1,655340E+23
-2262	5,684222E+22	5,684214E+22	2,592583E+22	2,592654E+22	1,136844E+23	5,185236E+22	1,655367E+23
-2261	5,684210E+22	5,684116E+22	2,592536E+22	2,592470E+22	1,136833E+23	5,185006E+22	1,655333E+23
-2260	5,684149E+22	5,684289E+22	2,592564E+22	2,592480E+22	1,136844E+23	5,185045E+22	1,655348E+23
-2259	5,684374E+22	5,684244E+22	2,592415E+22	2,592561E+22	1,136862E+23	5,184976E+22	1,655359E+23
-2258	5,684184E+22	5,684225E+22	2,592460E+22	2,592399E+22	1,136841E+23	5,184860E+22	1,655327E+23
-2257	5,684242E+22	5,684366E+22	2,592505E+22	2,592511E+22	1,136861E+23	5,185016E+22	1,655362E+23
-2256	5,684386E+22	5,684204E+22	2,592437E+22	2,592509E+22	1,136859E+23	5,184945E+22	1,655354E+23
-2255	5,684125E+22	5,684235E+22	2,592587E+22	2,592458E+22	1,136836E+23	5,185044E+22	1,655340E+23
-2254	5,684219E+22	5,684257E+22	2,592623E+22	2,592673E+22	1,136848E+23	5,185296E+22	1,655377E+23
-2253	5,684158E+22	5,684081E+22	2,592633E+22	2,592652E+22	1,136824E+23	5,185284E+22	1,655352E+23
-2252	5,683927E+22	5,684145E+22	2,592782E+22	2,592718E+22	1,136807E+23	5,185499E+22	1,655357E+23
-2251	5,684108E+22	5,684029E+22	2,592731E+22	2,592890E+22	1,136814E+23	5,185622E+22	1,655376E+23
-2250	5,683986E+22	5,683889E+22	2,592816E+22	2,592758E+22	1,136787E+23	5,185574E+22	1,655345E+23
-2249	5,683952E+22	5,684035E+22	2,592908E+22	2,592850E+22	1,136799E+23	5,185759E+22	1,655375E+23
-2248	5,684133E+22	5,683931E+22	2,592790E+22	2,592897E+22	1,136806E+23	5,185687E+22	1,655375E+23
-2247	5,683873E+22	5,683983E+22	2,592861E+22	2,592768E+22	1,136786E+23	5,185628E+22	1,655348E+23
-2246	5,683935E+22	5,684091E+22	2,592847E+22	2,592878E+22	1,136803E+23	5,185725E+22	1,655375E+23
-2245	5,684049E+22	5,683969E+22	2,592737E+22	2,592761E+22	1,136802E+23	5,185498E+22	1,655352E+23
-2244	5,683897E+22	5,684072E+22	2,592797E+22	2,592657E+22	1,136797E+23	5,185455E+22	1,655342E+23
-2243	5,684141E+22	5,684068E+22	2,592673E+22	2,592757E+22	1,136821E+23	5,185431E+22	1,655364E+23
-2242	5,684131E+22	5,684002E+22	2,592623E+22	2,592577E+22	1,136813E+23	5,185200E+22	1,655333E+23
-2241	5,684032E+22	5,684220E+22	2,592654E+22	2,592599E+22	1,136825E+23	5,185253E+22	1,655350E+23
-2240	5,684273E+22	5,684162E+22	2,592502E+22	2,592661E+22	1,136843E+23	5,185163E+22	1,655360E+23
-2239	5,684106E+22	5,684138E+22	2,592566E+22	2,592503E+22	1,136824E+23	5,185069E+22	1,655331E+23
-2238	5,684105E+22	5,684234E+22	2,592653E+22	2,592620E+22	1,136834E+23	5,185273E+22	1,655361E+23
-2237	5,684259E+22	5,684091E+22	2,592592E+22	2,592631E+22	1,136835E+23	5,185223E+22	1,655357E+23
-2236	5,683979E+22	5,684119E+22	2,592738E+22	2,592620E+22	1,136810E+23	5,185358E+22	1,655346E+23
-2235	5,684035E+22	5,684094E+22	2,592745E+22	2,592851E+22	1,136813E+23	5,185595E+22	1,655372E+23
-2234	5,684031E+22	5,683899E+22	2,592761E+22	2,592800E+22	1,136793E+23	5,185560E+22	1,655349E+23
-2233	5,683821E+22	5,683994E+22	2,592917E+22	2,592842E+22	1,136781E+23	5,185758E+22	1,655357E+23
-2232	5,684057E+22	5,683894E+22	2,592854E+22	2,592990E+22	1,136795E+23	5,185844E+22	1,655379E+23
-2231	5,683929E+22	5,683803E+22	2,592930E+22	2,592868E+22	1,136773E+23	5,185798E+22	1,655353E+23
-2230	5,683784E+22	5,683965E+22	2,593037E+22	2,592975E+22	1,136775E+23	5,186012E+22	1,655376E+23
-2229	5,683971E+22	5,683878E+22	2,592917E+22	2,593013E+22	1,136785E+23	5,185929E+22	1,655378E+23
-2228	5,683726E+22	5,683891E+22	2,592991E+22	2,592886E+22	1,136762E+23	5,185877E+22	1,655349E+23
-2227	5,683798E+22	5,683935E+22	2,592956E+22	2,592988E+22	1,136773E+23	5,185945E+22	1,655368E+23
-2226	5,683987E+22	5,683789E+22	2,592845E+22	2,592852E+22	1,136778E+23	5,185698E+22	1,655347E+23
-2225	5,683815E+22	5,683951E+22	2,592893E+22	2,592761E+22	1,136777E+23	5,185655E+22	1,655342E+23
-2224	5,684066E+22	5,683981E+22	2,592737E+22	2,592866E+22	1,136805E+23	5,185603E+22	1,655365E+23
-2223	5,684048E+22	5,683938E+22	2,592683E+22	2,592689E+22	1,136799E+23	5,185372E+22	1,655336E+23
-2222	5,683888E+22	5,684132E+22	2,592758E+22	2,592698E+22	1,136802E+23	5,185456E+22	1,655348E+23
-2221	5,684171E+22	5,684074E+22	2,592633E+22	2,592737E+22	1,136824E+23	5,185370E+22	1,655361E+23
-2220	5,684019E+22	5,684030E+22	2,592719E+22	2,592608E+22	1,136805E+23	5,185327E+22	1,655338E+23
-2219	5,683962E+22	5,684090E+22	2,592789E+22	2,592758E+22	1,136805E+23	5,185547E+22	1,655360E+23
-2218	5,684120E+22	5,683943E+22	2,592726E+22	2,592783E+22	1,136806E+23	5,185509E+22	1,655357E+23
-2217	5,683822E+22	5,683995E+22	2,592867E+22	2,592782E+22	1,136782E+23	5,185649E+22	1,655347E+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							
-2216	5,683926E+22	5,683948E+22	2,592859E+22	2,592989E+22	1,136787E+23	5,185847E+22	1,655372E+23
-2215	5,683963E+22	5,683769E+22	2,592879E+22	2,592924E+22	1,136773E+23	5,185803E+22	1,655354E+23
-2214	5,683709E+22	5,683862E+22	2,593067E+22	2,592960E+22	1,136757E+23	5,186027E+22	1,655360E+23
-2213	5,683936E+22	5,683812E+22	2,593006E+22	2,593106E+22	1,136775E+23	5,186111E+22	1,655386E+23
-2212	5,683784E+22	5,683739E+22	2,593073E+22	2,593016E+22	1,136752E+23	5,186089E+22	1,655361E+23
-2211	5,683588E+22	5,683833E+22	2,593152E+22	2,593118E+22	1,136742E+23	5,186270E+22	1,655369E+23
-2210	5,683832E+22	5,683713E+22	2,593034E+22	2,593127E+22	1,136754E+23	5,186161E+22	1,655371E+23
-2209	5,683626E+22	5,683740E+22	2,593102E+22	2,592983E+22	1,136737E+23	5,186086E+22	1,655345E+23
-2208	5,683751E+22	5,683783E+22	2,593041E+22	2,593072E+22	1,136753E+23	5,186113E+22	1,655365E+23
-2207	5,683945E+22	5,683704E+22	2,592912E+22	2,592949E+22	1,136765E+23	5,185861E+22	1,655351E+23
-2206	5,683692E+22	5,683887E+22	2,592976E+22	2,592866E+22	1,136758E+23	5,185843E+22	1,655342E+23
-2205	5,683951E+22	5,683944E+22	2,592833E+22	2,592956E+22	1,136789E+23	5,185789E+22	1,655368E+23
-2204	5,683948E+22	5,683880E+22	2,592802E+22	2,592787E+22	1,136783E+23	5,185589E+22	1,655342E+23
-2203	5,683762E+22	5,683996E+22	2,592885E+22	2,592795E+22	1,136776E+23	5,185680E+22	1,655344E+23
-2202	5,684084E+22	5,683913E+22	2,592780E+22	2,592841E+22	1,136800E+23	5,185621E+22	1,655362E+23
-2201	5,683891E+22	5,683902E+22	2,592860E+22	2,592749E+22	1,136779E+23	5,185609E+22	1,655340E+23
-2200	5,683827E+22	5,683958E+22	2,592898E+22	2,592917E+22	1,136779E+23	5,185814E+22	1,655360E+23
-2199	5,683996E+22	5,683820E+22	2,592824E+22	2,592943E+22	1,136782E+23	5,185767E+22	1,655358E+23
-2198	5,683669E+22	5,683852E+22	2,592998E+22	2,592921E+22	1,136752E+23	5,185918E+22	1,655344E+23
-2197	5,683834E+22	5,683831E+22	2,593006E+22	2,593095E+22	1,136767E+23	5,186101E+22	1,655377E+23
-2196	5,683881E+22	5,683666E+22	2,593036E+22	2,593045E+22	1,136755E+23	5,186081E+22	1,655363E+23
-2195	5,683557E+22	5,683743E+22	2,593209E+22	2,593098E+22	1,136730E+23	5,186307E+22	1,655361E+23
-2194	5,683789E+22	5,683689E+22	2,593145E+22	2,593244E+22	1,136748E+23	5,186388E+22	1,655387E+23
-2193	5,683609E+22	5,683630E+22	2,593204E+22	2,593155E+22	1,136724E+23	5,186359E+22	1,655360E+23
-2192	5,683466E+22	5,683691E+22	2,593254E+22	2,593235E+22	1,136716E+23	5,186489E+22	1,655365E+23
-2191	5,683762E+22	5,683572E+22	2,593125E+22	2,593225E+22	1,136733E+23	5,186349E+22	1,655368E+23
-2190	5,683534E+22	5,683603E+22	2,593210E+22	2,593079E+22	1,136714E+23	5,186289E+22	1,655343E+23
-2189	5,683670E+22	5,683708E+22	2,593139E+22	2,593163E+22	1,136738E+23	5,186302E+22	1,655368E+23
-2188	5,683843E+22	5,683660E+22	2,593005E+22	2,593065E+22	1,136750E+23	5,186070E+22	1,655357E+23
-2187	5,683549E+22	5,683791E+22	2,593065E+22	2,592975E+22	1,136734E+23	5,186040E+22	1,655338E+23
-2186	5,683854E+22	5,683817E+22	2,592949E+22	2,593038E+22	1,136767E+23	5,185986E+22	1,655366E+23
-2185	5,683856E+22	5,683768E+22	2,592931E+22	2,592875E+22	1,136762E+23	5,185806E+22	1,655343E+23
-2184	5,683685E+22	5,683862E+22	2,592997E+22	2,592899E+22	1,136755E+23	5,185896E+22	1,655344E+23
-2183	5,683979E+22	5,683815E+22	2,592882E+22	2,592974E+22	1,136779E+23	5,185856E+22	1,655365E+23
-2182	5,683722E+22	5,683797E+22	2,592980E+22	2,592904E+22	1,136752E+23	5,185884E+22	1,655340E+23
-2181	5,683680E+22	5,683856E+22	2,593025E+22	2,593053E+22	1,136754E+23	5,186078E+22	1,655361E+23
-2180	5,683884E+22	5,683714E+22	2,592966E+22	2,593083E+22	1,136760E+23	5,186050E+22	1,655365E+23
-2179	5,683551E+22	5,683680E+22	2,593140E+22	2,593046E+22	1,136723E+23	5,186187E+22	1,655342E+23
-2178	5,683743E+22	5,683665E+22	2,593165E+22	2,593217E+22	1,136741E+23	5,186381E+22	1,655379E+23
-2177	5,683743E+22	5,683563E+22	2,593186E+22	2,593192E+22	1,136731E+23	5,186378E+22	1,655368E+23
-2176	5,683404E+22	5,683621E+22	2,593325E+22	2,593250E+22	1,136702E+23	5,186575E+22	1,655360E+23
-2175	5,683644E+22	5,683571E+22	2,593250E+22	2,593380E+22	1,136721E+23	5,186629E+22	1,655384E+23
-2174	5,683458E+22	5,683481E+22	2,593330E+22	2,593270E+22	1,136694E+23	5,186600E+22	1,655354E+23
-2173	5,683377E+22	5,683560E+22	2,593378E+22	2,593317E+22	1,136694E+23	5,186695E+22	1,655363E+23
-2172	5,683696E+22	5,683479E+22	2,593240E+22	2,593327E+22	1,136718E+23	5,186567E+22	1,655374E+23
-2171	5,683415E+22	5,683501E+22	2,593302E+22	2,593190E+22	1,136692E+23	5,186493E+22	1,655341E+23
-2170	5,683570E+22	5,683619E+22	2,593236E+22	2,593269E+22	1,136719E+23	5,186505E+22	1,655369E+23
-2169	5,683721E+22	5,683599E+22	2,593109E+22	2,593166E+22	1,136732E+23	5,186275E+22	1,655360E+23
-2168	5,683461E+22	5,683685E+22	2,593161E+22	2,593066E+22	1,136715E+23	5,186227E+22	1,655337E+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	5,683784E+22	5,683706E+22	2,593051E+22	2,593122E+22	1,136749E+23	5,186173E+22	1,655366E+23
-2166	5,683733E+22	5,683648E+22	2,593060E+22	2,592989E+22	1,136738E+23	5,186049E+22	1,655343E+23
-2165	5,683557E+22	5,683773E+22	2,593118E+22	2,593029E+22	1,136733E+23	5,186147E+22	1,655348E+23
-2164	5,683834E+22	5,683727E+22	2,592996E+22	2,593132E+22	1,136756E+23	5,186128E+22	1,655369E+23
-2163	5,683557E+22	5,683640E+22	2,593093E+22	2,593051E+22	1,136720E+23	5,186145E+22	1,655334E+23
-2162	5,683592E+22	5,683678E+22	2,593159E+22	2,593169E+22	1,136727E+23	5,186328E+22	1,655360E+23
-2161	5,683794E+22	5,683576E+22	2,593115E+22	2,593196E+22	1,136737E+23	5,186310E+22	1,655368E+23
-2160	5,683471E+22	5,683549E+22	2,593271E+22	2,593172E+22	1,136702E+23	5,186443E+22	1,655346E+23
-2159	5,683622E+22	5,683576E+22	2,593287E+22	2,593351E+22	1,136720E+23	5,186638E+22	1,655384E+23
-2158	5,683553E+22	5,683470E+22	2,593328E+22	2,593344E+22	1,136702E+23	5,186672E+22	1,655369E+23
-2157	5,683240E+22	5,683521E+22	2,593465E+22	2,593379E+22	1,136676E+23	5,186843E+22	1,655360E+23
-2156	5,683511E+22	5,683457E+22	2,593389E+22	2,593506E+22	1,136697E+23	5,186895E+22	1,655386E+23
-2155	5,683337E+22	5,683303E+22	2,593459E+22	2,593387E+22	1,136664E+23	5,186845E+22	1,655348E+23
-2154	5,683306E+22	5,683397E+22	2,593501E+22	2,593427E+22	1,136670E+23	5,186928E+22	1,655363E+23
-2153	5,683586E+22	5,683399E+22	2,593346E+22	2,593451E+22	1,136698E+23	5,186797E+22	1,655378E+23
-2152	5,683314E+22	5,683410E+22	2,593372E+22	2,593311E+22	1,136672E+23	5,186683E+22	1,655341E+23
-2151	5,683475E+22	5,683539E+22	2,593309E+22	2,593360E+22	1,136701E+23	5,186668E+22	1,655368E+23
-2150	5,683612E+22	5,683502E+22	2,593218E+22	2,593248E+22	1,136711E+23	5,186466E+22	1,655358E+23
-2149	5,683379E+22	5,683585E+22	2,593279E+22	2,593136E+22	1,136696E+23	5,186415E+22	1,655338E+23
-2148	5,683682E+22	5,683632E+22	2,593172E+22	2,593231E+22	1,136731E+23	5,186403E+22	1,655372E+23
-2147	5,683578E+22	5,683520E+22	2,593169E+22	2,593125E+22	1,136710E+23	5,186295E+22	1,655339E+23
-2146	5,683428E+22	5,683630E+22	2,593233E+22	2,593166E+22	1,136706E+23	5,186399E+22	1,655346E+23
-2145	5,683703E+22	5,683612E+22	2,593121E+22	2,593266E+22	1,136732E+23	5,186387E+22	1,655370E+23
-2144	5,683479E+22	5,683483E+22	2,593204E+22	2,593172E+22	1,136696E+23	5,186376E+22	1,655334E+23
-2143	5,683531E+22	5,683542E+22	2,593283E+22	2,593274E+22	1,136707E+23	5,186557E+22	1,655363E+23
-2142	5,683669E+22	5,683465E+22	2,593269E+22	2,593328E+22	1,136713E+23	5,186597E+22	1,655373E+23
-2141	5,683316E+22	5,683470E+22	2,593420E+22	2,593317E+22	1,136679E+23	5,186737E+22	1,655352E+23
-2140	5,683436E+22	5,683501E+22	2,593431E+22	2,593514E+22	1,136694E+23	5,186946E+22	1,655388E+23
-2139	5,683356E+22	5,683303E+22	2,593470E+22	2,593496E+22	1,136666E+23	5,186966E+22	1,655362E+23
-2138	5,683129E+22	5,683326E+22	2,593609E+22	2,593501E+22	1,136645E+23	5,187110E+22	1,655356E+23
-2137	5,683413E+22	5,683307E+22	2,593525E+22	2,593620E+22	1,136672E+23	5,187146E+22	1,655387E+23
-2136	5,683270E+22	5,683167E+22	2,593552E+22	2,593509E+22	1,136644E+23	5,187062E+22	1,655350E+23
-2135	5,683228E+22	5,683320E+22	2,593575E+22	2,593538E+22	1,136655E+23	5,187113E+22	1,655366E+23
-2134	5,683450E+22	5,683340E+22	2,593444E+22	2,593561E+22	1,136679E+23	5,187005E+22	1,655380E+23
-2133	5,683210E+22	5,683358E+22	2,593474E+22	2,593393E+22	1,136657E+23	5,186868E+22	1,655344E+23
-2132	5,683378E+22	5,683469E+22	2,593421E+22	2,593436E+22	1,136685E+23	5,186857E+22	1,655370E+23
-2131	5,683491E+22	5,683356E+22	2,593339E+22	2,593338E+22	1,136685E+23	5,186678E+22	1,655352E+23
-2130	5,683289E+22	5,683436E+22	2,593400E+22	2,593248E+22	1,136672E+23	5,186647E+22	1,655337E+23
-2129	5,683533E+22	5,683530E+22	2,593284E+22	2,593369E+22	1,136706E+23	5,186653E+22	1,655372E+23
-2128	5,683460E+22	5,683384E+22	2,593251E+22	2,593273E+22	1,136684E+23	5,186523E+22	1,655337E+23
-2127	5,683344E+22	5,683494E+22	2,593319E+22	2,593278E+22	1,136684E+23	5,186597E+22	1,655343E+23
-2126	5,683607E+22	5,683484E+22	2,593250E+22	2,593371E+22	1,136709E+23	5,186620E+22	1,655371E+23
-2125	5,683407E+22	5,683385E+22	2,593342E+22	2,593270E+22	1,136679E+23	5,186612E+22	1,655340E+23
-2124	5,683410E+22	5,683484E+22	2,593429E+22	2,593405E+22	1,136689E+23	5,186834E+22	1,655373E+23
-2123	5,683476E+22	5,683355E+22	2,593418E+22	2,593490E+22	1,136683E+23	5,186908E+22	1,655374E+23
-2122	5,683148E+22	5,683326E+22	2,593576E+22	2,593479E+22	1,136647E+23	5,187055E+22	1,655353E+23
-2121	5,683259E+22	5,683366E+22	2,593589E+22	2,593665E+22	1,136663E+23	5,187254E+22	1,655388E+23
-2120	5,683254E+22	5,683110E+22	2,593595E+22	2,593636E+22	1,136636E+23	5,187231E+22	1,655359E+23
-2119	5,683067E+22	5,683154E+22	2,593720E+22	2,593615E+22	1,136622E+23	5,187335E+22	1,655356E+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	5,683312E+22	5,683193E+22	2,593645E+22	2,593748E+22	1,136651E+23	5,187393E+22	1,655390E+23
-2117	5,683162E+22	5,683102E+22	2,593648E+22	2,593623E+22	1,136626E+23	5,187271E+22	1,655353E+23
-2116	5,683102E+22	5,683280E+22	2,593670E+22	2,593646E+22	1,136638E+23	5,187316E+22	1,655370E+23
-2115	5,683311E+22	5,683221E+22	2,593553E+22	2,593650E+22	1,136653E+23	5,187203E+22	1,655374E+23
-2114	5,683126E+22	5,683212E+22	2,593597E+22	2,593467E+22	1,136634E+23	5,187064E+22	1,655340E+23
-2113	5,683269E+22	5,683364E+22	2,593548E+22	2,593521E+22	1,136663E+23	5,187069E+22	1,655370E+23
-2112	5,683395E+22	5,683226E+22	2,593428E+22	2,593459E+22	1,136662E+23	5,186887E+22	1,655351E+23
-2111	5,683188E+22	5,683329E+22	2,593475E+22	2,593369E+22	1,136652E+23	5,186844E+22	1,655336E+23
-2110	5,683400E+22	5,683432E+22	2,593386E+22	2,593499E+22	1,136683E+23	5,186885E+22	1,655372E+23
-2109	5,683366E+22	5,683293E+22	2,593356E+22	2,593378E+22	1,136666E+23	5,186734E+22	1,655339E+23
-2108	5,683266E+22	5,683411E+22	2,593442E+22	2,593379E+22	1,136668E+23	5,186822E+22	1,655350E+23
-2107	5,683490E+22	5,683343E+22	2,593398E+22	2,593489E+22	1,136683E+23	5,186887E+22	1,655372E+23
-2106	5,683289E+22	5,683258E+22	2,593499E+22	2,593415E+22	1,136655E+23	5,186914E+22	1,655346E+23
-2105	5,683217E+22	5,683392E+22	2,593585E+22	2,593568E+22	1,136661E+23	5,187153E+22	1,655376E+23
-2104	5,683310E+22	5,683196E+22	2,593546E+22	2,593664E+22	1,136651E+23	5,187211E+22	1,655372E+23
-2103	5,683034E+22	5,683143E+22	2,593700E+22	2,593613E+22	1,136618E+23	5,187314E+22	1,655349E+23
-2102	5,683142E+22	5,683193E+22	2,593733E+22	2,593787E+22	1,136634E+23	5,187520E+22	1,655386E+23
-2101	5,683182E+22	5,682986E+22	2,593720E+22	2,593745E+22	1,136617E+23	5,187465E+22	1,655363E+23
-2100	5,682975E+22	5,683089E+22	2,593827E+22	2,593733E+22	1,136606E+23	5,187560E+22	1,655362E+23
-2099	5,683156E+22	5,683098E+22	2,593758E+22	2,593874E+22	1,136625E+23	5,187633E+22	1,655389E+23
-2098	5,683042E+22	5,683010E+22	2,593766E+22	2,593734E+22	1,136605E+23	5,187500E+22	1,655355E+23
-2097	5,682961E+22	5,683197E+22	2,593799E+22	2,593735E+22	1,136616E+23	5,187534E+22	1,655369E+23
-2096	5,683222E+22	5,683074E+22	2,593659E+22	2,593745E+22	1,136630E+23	5,187403E+22	1,655370E+23
-2095	5,683060E+22	5,683063E+22	2,593695E+22	2,593556E+22	1,136612E+23	5,187251E+22	1,655337E+23
-2094	5,683139E+22	5,683257E+22	2,593654E+22	2,593644E+22	1,136640E+23	5,187298E+22	1,655369E+23
-2093	5,683274E+22	5,683150E+22	2,593510E+22	2,593585E+22	1,136642E+23	5,187095E+22	1,655352E+23
-2092	5,683078E+22	5,683259E+22	2,593555E+22	2,593489E+22	1,136634E+23	5,187044E+22	1,655338E+23
-2091	5,683286E+22	5,683291E+22	2,593499E+22	2,593604E+22	1,136658E+23	5,187103E+22	1,655368E+23
-2090	5,683306E+22	5,683154E+22	2,593488E+22	2,593471E+22	1,136646E+23	5,186960E+22	1,655342E+23
-2089	5,683159E+22	5,683320E+22	2,593595E+22	2,593486E+22	1,136648E+23	5,187082E+22	1,655356E+23
-2088	5,683367E+22	5,683223E+22	2,593527E+22	2,593636E+22	1,136659E+23	5,187164E+22	1,655375E+23
-2087	5,683147E+22	5,683135E+22	2,593628E+22	2,593566E+22	1,136628E+23	5,187193E+22	1,655347E+23
-2086	5,683037E+22	5,683268E+22	2,593737E+22	2,593727E+22	1,136631E+23	5,187464E+22	1,655377E+23
-2085	5,683179E+22	5,683053E+22	2,593684E+22	2,593796E+22	1,136623E+23	5,187480E+22	1,655371E+23
-2084	5,682938E+22	5,683007E+22	2,593834E+22	2,593737E+22	1,136594E+23	5,187570E+22	1,655352E+23
-2083	5,683027E+22	5,683018E+22	2,593877E+22	2,593918E+22	1,136605E+23	5,187796E+22	1,655384E+23
-2082	5,683068E+22	5,682864E+22	2,593852E+22	2,593884E+22	1,136593E+23	5,187736E+22	1,655367E+23
-2081	5,682812E+22	5,683025E+22	2,593954E+22	2,593868E+22	1,136584E+23	5,187823E+22	1,655366E+23
-2080	5,683025E+22	5,682973E+22	2,593861E+22	2,594001E+22	1,136600E+23	5,187862E+22	1,655386E+23
-2079	5,682952E+22	5,682873E+22	2,593871E+22	2,593820E+22	1,136582E+23	5,187690E+22	1,655351E+23
-2078	5,682854E+22	5,683075E+22	2,593922E+22	2,593820E+22	1,136593E+23	5,187742E+22	1,655367E+23
-2077	5,683132E+22	5,682979E+22	2,593757E+22	2,593834E+22	1,136611E+23	5,187591E+22	1,655370E+23
-2076	5,682958E+22	5,683006E+22	2,593777E+22	2,593670E+22	1,136596E+23	5,187447E+22	1,655341E+23
-2075	5,682995E+22	5,683144E+22	2,593750E+22	2,593771E+22	1,136614E+23	5,187521E+22	1,655366E+23
-2074	5,683175E+22	5,683045E+22	2,593615E+22	2,593699E+22	1,136622E+23	5,187314E+22	1,655353E+23
-2073	5,682977E+22	5,683171E+22	2,593678E+22	2,593582E+22	1,136615E+23	5,187260E+22	1,655341E+23
-2072	5,683222E+22	5,683145E+22	2,593615E+22	2,593707E+22	1,136637E+23	5,187322E+22	1,655369E+23
-2071	5,683244E+22	5,683022E+22	2,593613E+22	2,593580E+22	1,136627E+23	5,187193E+22	1,655346E+23
-2070	5,683000E+22	5,683222E+22	2,593738E+22	2,593630E+22	1,136622E+23	5,187368E+22	1,655359E+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	5,683198E+22	5,683133E+22	2,593654E+22	2,593787E+22	1,136633E+23	5,187441E+22	1,655377E+23
-2068	5,682999E+22	5,683020E+22	2,593753E+22	2,593712E+22	1,136602E+23	5,187466E+22	1,655348E+23
-2067	5,682880E+22	5,683070E+22	2,593889E+22	2,593862E+22	1,136595E+23	5,187751E+22	1,655370E+23
-2066	5,683083E+22	5,682882E+22	2,593835E+22	2,593922E+22	1,136596E+23	5,187758E+22	1,655372E+23
-2065	5,682818E+22	5,682893E+22	2,593981E+22	2,593867E+22	1,136571E+23	5,187847E+22	1,655356E+23
-2064	5,682906E+22	5,682893E+22	2,593991E+22	2,594071E+22	1,136580E+23	5,188062E+22	1,655386E+23
-2063	5,682952E+22	5,682757E+22	2,593962E+22	2,594015E+22	1,136571E+23	5,187977E+22	1,655369E+23
-2062	5,682660E+22	5,682935E+22	2,594085E+22	2,593988E+22	1,136560E+23	5,188073E+22	1,655367E+23
-2061	5,682915E+22	5,682875E+22	2,593978E+22	2,594090E+22	1,136579E+23	5,188068E+22	1,655386E+23
-2060	5,682869E+22	5,682771E+22	2,593981E+22	2,593909E+22	1,136564E+23	5,187890E+22	1,655353E+23
-2059	5,682728E+22	5,682927E+22	2,594042E+22	2,593932E+22	1,136566E+23	5,187975E+22	1,655363E+23
-2058	5,683009E+22	5,682876E+22	2,593859E+22	2,593960E+22	1,136589E+23	5,187819E+22	1,655370E+23
-2057	5,682818E+22	5,682930E+22	2,593875E+22	2,593794E+22	1,136575E+23	5,187669E+22	1,655342E+23
-2056	5,682908E+22	5,683001E+22	2,593833E+22	2,593886E+22	1,136591E+23	5,187719E+22	1,655363E+23
-2055	5,683127E+22	5,682902E+22	2,593713E+22	2,593775E+22	1,136603E+23	5,187488E+22	1,655352E+23
-2054	5,682902E+22	5,683069E+22	2,593805E+22	2,593669E+22	1,136597E+23	5,187474E+22	1,655345E+23
-2053	5,683128E+22	5,683068E+22	2,593731E+22	2,593803E+22	1,136620E+23	5,187534E+22	1,655373E+23
-2052	5,683105E+22	5,682972E+22	2,593728E+22	2,593714E+22	1,136608E+23	5,187442E+22	1,655352E+23
-2051	5,682805E+22	5,683094E+22	2,593882E+22	2,593789E+22	1,136590E+23	5,187671E+22	1,655357E+23
-2050	5,683030E+22	5,682995E+22	2,593804E+22	2,593937E+22	1,136602E+23	5,187742E+22	1,655377E+23
-2049	5,682854E+22	5,682878E+22	2,593913E+22	2,593850E+22	1,136573E+23	5,187763E+22	1,655349E+23
-2048	5,682791E+22	5,682860E+22	2,594025E+22	2,594008E+22	1,136565E+23	5,188033E+22	1,655368E+23
-2047	5,683001E+22	5,682715E+22	2,593966E+22	2,594061E+22	1,136572E+23	5,188027E+22	1,655374E+23
-2046	5,682673E+22	5,682800E+22	2,594112E+22	2,594021E+22	1,136547E+23	5,188133E+22	1,655361E+23
-2045	5,682765E+22	5,682815E+22	2,594102E+22	2,594204E+22	1,136558E+23	5,188306E+22	1,655389E+23
-2044	5,682834E+22	5,682680E+22	2,594074E+22	2,594127E+22	1,136551E+23	5,188201E+22	1,655371E+23
-2043	5,682528E+22	5,682781E+22	2,594225E+22	2,594086E+22	1,136531E+23	5,188312E+22	1,655362E+23
-2042	5,682811E+22	5,682751E+22	2,594112E+22	2,594182E+22	1,136556E+23	5,188294E+22	1,655386E+23
-2041	5,682744E+22	5,682684E+22	2,594104E+22	2,594017E+22	1,136543E+23	5,188121E+22	1,655355E+23
-2040	5,682611E+22	5,682796E+22	2,594128E+22	2,594067E+22	1,136541E+23	5,188195E+22	1,655360E+23
-2039	5,682920E+22	5,682760E+22	2,593943E+22	2,594074E+22	1,136568E+23	5,188016E+22	1,655370E+23
-2038	5,682715E+22	5,682836E+22	2,593973E+22	2,593893E+22	1,136555E+23	5,187866E+22	1,655342E+23
-2037	5,682846E+22	5,682909E+22	2,593926E+22	2,593958E+22	1,136575E+23	5,187884E+22	1,655364E+23
-2036	5,683076E+22	5,682824E+22	2,593815E+22	2,593856E+22	1,136590E+23	5,187671E+22	1,655357E+23
-2035	5,682763E+22	5,682948E+22	2,593941E+22	2,593790E+22	1,136571E+23	5,187731E+22	1,655344E+23
-2034	5,682953E+22	5,682989E+22	2,593864E+22	2,593947E+22	1,136594E+23	5,187811E+22	1,655375E+23
-2033	5,682915E+22	5,682875E+22	2,593869E+22	2,593869E+22	1,136579E+23	5,187738E+22	1,655353E+23
-2032	5,682666E+22	5,682895E+22	2,594010E+22	2,593945E+22	1,136556E+23	5,187955E+22	1,655352E+23
-2031	5,682947E+22	5,682790E+22	2,593939E+22	2,594061E+22	1,136574E+23	5,188000E+22	1,655374E+23
-2030	5,682758E+22	5,682725E+22	2,594055E+22	2,593981E+22	1,136548E+23	5,188036E+22	1,655352E+23
-2029	5,682699E+22	5,682756E+22	2,594142E+22	2,594139E+22	1,136546E+23	5,188281E+22	1,655374E+23
-2028	5,682884E+22	5,682659E+22	2,594080E+22	2,594201E+22	1,136554E+23	5,188281E+22	1,655382E+23
-2027	5,682505E+22	5,682691E+22	2,594260E+22	2,594165E+22	1,136520E+23	5,188425E+22	1,655362E+23
-2026	5,682610E+22	5,682720E+22	2,594253E+22	2,594318E+22	1,136533E+23	5,188572E+22	1,655390E+23
-2025	5,682697E+22	5,682572E+22	2,594232E+22	2,594234E+22	1,136527E+23	5,188466E+22	1,655373E+23
-2024	5,682430E+22	5,682592E+22	2,594353E+22	2,594211E+22	1,136502E+23	5,188564E+22	1,655359E+23
-2023	5,682706E+22	5,682593E+22	2,594220E+22	2,594302E+22	1,136530E+23	5,188522E+22	1,655382E+23
-2022	5,682605E+22	5,682590E+22	2,594198E+22	2,594155E+22	1,136519E+23	5,188353E+22	1,655355E+23
-2021	5,682514E+22	5,682699E+22	2,594192E+22	2,594175E+22	1,136521E+23	5,188367E+22	1,655358E+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	5,682851E+22	5,682679E+22	2,594015E+22	2,594155E+22	1,136553E+23	5,188170E+22	1,655370E+23
-2019	5,682634E+22	5,682712E+22	2,594085E+22	2,593970E+22	1,136535E+23	5,188056E+22	1,655340E+23
-2018	5,682754E+22	5,682831E+22	2,594047E+22	2,594034E+22	1,136558E+23	5,188081E+22	1,655367E+23
-2017	5,682940E+22	5,682776E+22	2,593946E+22	2,593968E+22	1,136572E+23	5,187914E+22	1,655363E+23
-2016	5,682616E+22	5,682814E+22	2,594056E+22	2,593944E+22	1,136543E+23	5,187999E+22	1,655343E+23
-2015	5,682809E+22	5,682840E+22	2,593990E+22	2,594087E+22	1,136565E+23	5,188077E+22	1,655373E+23
-2014	5,682775E+22	5,682735E+22	2,594007E+22	2,594010E+22	1,136551E+23	5,188017E+22	1,655353E+23
-2013	5,682589E+22	5,682733E+22	2,594129E+22	2,594064E+22	1,136532E+23	5,188193E+22	1,655351E+23
-2012	5,682885E+22	5,682663E+22	2,594061E+22	2,594186E+22	1,136555E+23	5,188247E+22	1,655380E+23
-2011	5,682625E+22	5,682591E+22	2,594200E+22	2,594133E+22	1,136522E+23	5,188333E+22	1,655355E+23
-2010	5,682532E+22	5,682687E+22	2,594283E+22	2,594288E+22	1,136522E+23	5,188571E+22	1,655379E+23
-2009	5,682711E+22	5,682584E+22	2,594235E+22	2,594344E+22	1,136530E+23	5,188580E+22	1,655387E+23
-2008	5,682367E+22	5,682513E+22	2,594404E+22	2,594303E+22	1,136488E+23	5,188707E+22	1,655359E+23
-2007	5,682508E+22	5,682543E+22	2,594398E+22	2,594423E+22	1,136505E+23	5,188821E+22	1,655387E+23
-2006	5,682576E+22	5,682435E+22	2,594364E+22	2,594352E+22	1,136501E+23	5,188716E+22	1,655373E+23
-2005	5,682322E+22	5,682479E+22	2,594438E+22	2,594332E+22	1,136480E+23	5,188770E+22	1,655357E+23
-2004	5,682605E+22	5,682520E+22	2,594290E+22	2,594422E+22	1,136513E+23	5,188712E+22	1,655384E+23
-2003	5,682477E+22	5,682476E+22	2,594296E+22	2,594270E+22	1,136495E+23	5,188566E+22	1,655352E+23
-2002	5,682414E+22	5,682628E+22	2,594293E+22	2,594254E+22	1,136504E+23	5,188547E+22	1,655359E+23
-2001	5,682771E+22	5,682604E+22	2,594139E+22	2,594227E+22	1,136538E+23	5,188366E+22	1,655374E+23
-2000	5,682558E+22	5,682565E+22	2,594200E+22	2,594076E+22	1,136512E+23	5,188276E+22	1,655340E+23
-1999	5,682636E+22	5,682713E+22	2,594162E+22	2,594148E+22	1,136535E+23	5,188310E+22	1,655366E+23
-1998	5,682770E+22	5,682685E+22	2,594064E+22	2,594115E+22	1,136546E+23	5,188178E+22	1,655363E+23
-1997	5,682492E+22	5,682680E+22	2,594155E+22	2,594078E+22	1,136517E+23	5,188233E+22	1,655341E+23
-1996	5,682721E+22	5,682703E+22	2,594099E+22	2,594202E+22	1,136542E+23	5,188300E+22	1,655372E+23
-1995	5,682678E+22	5,682562E+22	2,594151E+22	2,594133E+22	1,136524E+23	5,188284E+22	1,655352E+23
-1994	5,682485E+22	5,682631E+22	2,594268E+22	2,594182E+22	1,136512E+23	5,188451E+22	1,655357E+23
-1993	5,682743E+22	5,682602E+22	2,594213E+22	2,594331E+22	1,136535E+23	5,188544E+22	1,655389E+23
-1992	5,682477E+22	5,682462E+22	2,594340E+22	2,594305E+22	1,136494E+23	5,188646E+22	1,655358E+23
-1991	5,682377E+22	5,682548E+22	2,594435E+22	2,594426E+22	1,136492E+23	5,188860E+22	1,655379E+23
-1990	5,682555E+22	5,682457E+22	2,594394E+22	2,594479E+22	1,136501E+23	5,188873E+22	1,655389E+23
-1989	5,682276E+22	5,682343E+22	2,594531E+22	2,594419E+22	1,136462E+23	5,188950E+22	1,655357E+23
-1988	5,682410E+22	5,682405E+22	2,594509E+22	2,594540E+22	1,136482E+23	5,189049E+22	1,655386E+23
-1987	5,682427E+22	5,682302E+22	2,594479E+22	2,594497E+22	1,136473E+23	5,188976E+22	1,655371E+23
-1986	5,682176E+22	5,682402E+22	2,594529E+22	2,594455E+22	1,136458E+23	5,188984E+22	1,655356E+23
-1985	5,682488E+22	5,682446E+22	2,594396E+22	2,594526E+22	1,136493E+23	5,188923E+22	1,655386E+23
-1984	5,682410E+22	5,682323E+22	2,594394E+22	2,594362E+22	1,136473E+23	5,188755E+22	1,655349E+23
-1983	5,682362E+22	5,682494E+22	2,594405E+22	2,594314E+22	1,136486E+23	5,188719E+22	1,655358E+23
-1982	5,682673E+22	5,682530E+22	2,594256E+22	2,594316E+22	1,136520E+23	5,188572E+22	1,655377E+23
-1981	5,682453E+22	5,682482E+22	2,594288E+22	2,594190E+22	1,136493E+23	5,188478E+22	1,655341E+23
-1980	5,682507E+22	5,682640E+22	2,594255E+22	2,594271E+22	1,136515E+23	5,188527E+22	1,655367E+23
-1979	5,682613E+22	5,682554E+22	2,594192E+22	2,594254E+22	1,136517E+23	5,188445E+22	1,655361E+23
-1978	5,682370E+22	5,682566E+22	2,594283E+22	2,594192E+22	1,136494E+23	5,188475E+22	1,655341E+23
-1977	5,682633E+22	5,682578E+22	2,594248E+22	2,594321E+22	1,136521E+23	5,188569E+22	1,655378E+23
-1976	5,682582E+22	5,682385E+22	2,594286E+22	2,594285E+22	1,136497E+23	5,188571E+22	1,655354E+23
-1975	5,682357E+22	5,682504E+22	2,594405E+22	2,594332E+22	1,136486E+23	5,188737E+22	1,655360E+23
-1974	5,682568E+22	5,682506E+22	2,594355E+22	2,594492E+22	1,136507E+23	5,188846E+22	1,655392E+23
-1973	5,682342E+22	5,682321E+22	2,594467E+22	2,594447E+22	1,136466E+23	5,188914E+22	1,655358E+23
-1972	5,682268E+22	5,682410E+22	2,594566E+22	2,594539E+22	1,136468E+23	5,189105E+22	1,655378E+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							
-1971	5,682422E+22	5,682284E+22	2,594548E+22	2,594605E+22	1,136471E+23	5,189153E+22	1,655386E+23
-1970	5,682141E+22	5,682235E+22	2,594660E+22	2,594539E+22	1,136438E+23	5,189199E+22	1,655358E+23
-1969	5,682270E+22	5,682321E+22	2,594634E+22	2,594674E+22	1,136459E+23	5,189308E+22	1,655390E+23
-1968	5,682300E+22	5,682160E+22	2,594581E+22	2,594642E+22	1,136446E+23	5,189223E+22	1,655368E+23
-1967	5,682079E+22	5,682280E+22	2,594635E+22	2,594554E+22	1,136436E+23	5,189188E+22	1,655355E+23
-1966	5,682396E+22	5,682353E+22	2,594513E+22	2,594612E+22	1,136475E+23	5,189124E+22	1,655387E+23
-1965	5,682367E+22	5,682207E+22	2,594489E+22	2,594440E+22	1,136457E+23	5,188929E+22	1,655350E+23
-1964	5,682284E+22	5,682414E+22	2,594499E+22	2,594400E+22	1,136470E+23	5,188900E+22	1,655360E+23
-1963	5,682509E+22	5,682441E+22	2,594371E+22	2,594449E+22	1,136495E+23	5,188820E+22	1,655377E+23
-1962	5,682285E+22	5,682412E+22	2,594393E+22	2,594317E+22	1,136470E+23	5,188710E+22	1,655341E+23
-1961	5,682367E+22	5,682535E+22	2,594384E+22	2,594396E+22	1,136490E+23	5,188780E+22	1,655368E+23
-1960	5,682523E+22	5,682362E+22	2,594315E+22	2,594383E+22	1,136489E+23	5,188698E+22	1,655358E+23
-1959	5,682303E+22	5,682394E+22	2,594409E+22	2,594297E+22	1,136470E+23	5,188705E+22	1,655340E+23
-1958	5,682521E+22	5,682476E+22	2,594380E+22	2,594452E+22	1,136500E+23	5,188832E+22	1,655383E+23
-1957	5,682479E+22	5,682281E+22	2,594392E+22	2,594431E+22	1,136476E+23	5,188823E+22	1,655358E+23
-1956	5,682221E+22	5,682414E+22	2,594526E+22	2,594467E+22	1,136463E+23	5,188993E+22	1,655363E+23
-1955	5,682393E+22	5,682381E+22	2,594517E+22	2,594636E+22	1,136477E+23	5,189153E+22	1,655393E+23
-1954	5,682194E+22	5,682202E+22	2,594625E+22	2,594566E+22	1,136440E+23	5,189191E+22	1,655359E+23
-1953	5,682142E+22	5,682272E+22	2,594735E+22	2,594667E+22	1,136441E+23	5,189402E+22	1,655382E+23
-1952	5,682288E+22	5,682095E+22	2,594685E+22	2,594765E+22	1,136438E+23	5,189451E+22	1,655383E+23
-1951	5,682002E+22	5,682090E+22	2,594775E+22	2,594685E+22	1,136409E+23	5,189460E+22	1,655355E+23
-1950	5,682128E+22	5,682217E+22	2,594745E+22	2,594813E+22	1,136434E+23	5,189558E+22	1,655390E+23
-1949	5,682227E+22	5,682031E+22	2,594667E+22	2,594746E+22	1,136426E+23	5,189413E+22	1,655367E+23
-1948	5,682032E+22	5,682180E+22	2,594728E+22	2,594620E+22	1,136421E+23	5,189347E+22	1,655356E+23
-1947	5,682300E+22	5,682252E+22	2,594636E+22	2,594694E+22	1,136455E+23	5,189330E+22	1,655388E+23
-1946	5,682238E+22	5,682168E+22	2,594597E+22	2,594531E+22	1,136441E+23	5,189128E+22	1,655353E+23
-1945	5,682136E+22	5,682366E+22	2,594617E+22	2,594523E+22	1,136450E+23	5,189140E+22	1,655364E+23
-1944	5,682350E+22	5,682297E+22	2,594479E+22	2,594593E+22	1,136465E+23	5,189072E+22	1,655372E+23
-1943	5,682172E+22	5,682260E+22	2,594507E+22	2,594433E+22	1,136443E+23	5,188940E+22	1,655337E+23
-1942	5,682279E+22	5,682387E+22	2,594508E+22	2,594504E+22	1,136467E+23	5,189012E+22	1,655368E+23
-1941	5,682478E+22	5,682198E+22	2,594417E+22	2,594496E+22	1,136468E+23	5,188914E+22	1,655359E+23
-1940	5,682227E+22	5,682294E+22	2,594511E+22	2,594415E+22	1,136452E+23	5,188925E+22	1,655345E+23
-1939	5,682354E+22	5,682382E+22	2,594514E+22	2,594603E+22	1,136474E+23	5,189117E+22	1,655385E+23
-1938	5,682302E+22	5,682213E+22	2,594530E+22	2,594568E+22	1,136452E+23	5,189098E+22	1,655361E+23
-1937	5,682071E+22	5,682301E+22	2,594696E+22	2,594600E+22	1,136437E+23	5,189295E+22	1,655367E+23
-1936	5,682253E+22	5,682180E+22	2,594682E+22	2,594777E+22	1,136443E+23	5,189459E+22	1,655389E+23
-1935	5,682077E+22	5,682021E+22	2,594782E+22	2,594697E+22	1,136410E+23	5,189479E+22	1,655358E+23
-1934	5,681993E+22	5,682142E+22	2,594877E+22	2,594819E+22	1,136414E+23	5,189696E+22	1,655383E+23
-1933	5,682171E+22	5,681965E+22	2,594784E+22	2,594922E+22	1,136414E+23	5,189707E+22	1,655384E+23
-1932	5,681898E+22	5,681991E+22	2,594868E+22	2,594808E+22	1,136389E+23	5,189676E+22	1,655357E+23
-1931	5,682004E+22	5,682112E+22	2,594869E+22	2,594926E+22	1,136412E+23	5,189796E+22	1,655391E+23
-1930	5,682135E+22	5,681962E+22	2,594786E+22	2,594822E+22	1,136410E+23	5,189609E+22	1,655371E+23
-1929	5,681944E+22	5,682100E+22	2,594863E+22	2,594708E+22	1,136404E+23	5,189571E+22	1,655361E+23
-1928	5,682163E+22	5,682128E+22	2,594751E+22	2,594819E+22	1,136429E+23	5,189571E+22	1,655386E+23
-1927	5,682089E+22	5,682051E+22	2,594699E+22	2,594655E+22	1,136414E+23	5,189354E+22	1,655349E+23
-1926	5,681981E+22	5,682249E+22	2,594723E+22	2,594651E+22	1,136423E+23	5,189374E+22	1,655360E+23
-1925	5,682278E+22	5,682134E+22	2,594562E+22	2,594703E+22	1,136441E+23	5,189265E+22	1,655368E+23
-1924	5,682134E+22	5,682117E+22	2,594594E+22	2,594513E+22	1,136425E+23	5,189107E+22	1,655336E+23
-1923	5,682195E+22	5,682270E+22	2,594627E+22	2,594610E+22	1,136446E+23	5,189237E+22	1,655370E+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	5,682359E+22	5,682155E+22	2,594531E+22	2,594606E+22	1,136451E+23	5,189137E+22	1,655365E+23
-1921	5,682084E+22	5,682245E+22	2,594653E+22	2,594553E+22	1,136433E+23	5,189206E+22	1,655353E+23
-1920	5,682175E+22	5,682249E+22	2,594667E+22	2,594759E+22	1,136442E+23	5,189425E+22	1,655385E+23
-1919	5,682150E+22	5,682062E+22	2,594695E+22	2,594705E+22	1,136421E+23	5,189400E+22	1,655361E+23
-1918	5,681932E+22	5,682137E+22	2,594869E+22	2,594743E+22	1,136407E+23	5,189611E+22	1,655368E+23
-1917	5,682152E+22	5,681986E+22	2,594817E+22	2,594931E+22	1,136414E+23	5,189747E+22	1,655389E+23
-1916	5,681962E+22	5,681881E+22	2,594894E+22	2,594850E+22	1,136384E+23	5,189744E+22	1,655359E+23
-1915	5,681828E+22	5,682020E+22	2,594998E+22	2,594986E+22	1,136385E+23	5,189984E+22	1,655383E+23
-1914	5,682026E+22	5,681888E+22	2,594898E+22	2,595047E+22	1,136391E+23	5,189945E+22	1,655386E+23
-1913	5,681812E+22	5,681901E+22	2,595002E+22	2,594910E+22	1,136371E+23	5,189912E+22	1,655362E+23
-1912	5,681906E+22	5,681958E+22	2,595000E+22	2,595019E+22	1,136386E+23	5,190020E+22	1,655388E+23
-1911	5,682036E+22	5,681849E+22	2,594911E+22	2,594910E+22	1,136389E+23	5,189821E+22	1,655371E+23
-1910	5,681806E+22	5,682013E+22	2,594978E+22	2,594822E+22	1,136382E+23	5,189800E+22	1,655362E+23
-1909	5,682031E+22	5,682007E+22	2,594832E+22	2,594945E+22	1,136404E+23	5,189777E+22	1,655381E+23
-1908	5,681984E+22	5,681941E+22	2,594779E+22	2,594761E+22	1,136392E+23	5,189539E+22	1,655346E+23
-1907	5,681872E+22	5,682117E+22	2,594831E+22	2,594758E+22	1,136399E+23	5,189589E+22	1,655358E+23
-1906	5,682203E+22	5,682038E+22	2,594671E+22	2,594785E+22	1,136424E+23	5,189455E+22	1,655370E+23
-1905	5,682071E+22	5,682031E+22	2,594719E+22	2,594618E+22	1,136410E+23	5,189337E+22	1,655344E+23
-1904	5,682054E+22	5,682154E+22	2,594749E+22	2,594751E+22	1,136421E+23	5,189500E+22	1,655371E+23
-1903	5,682200E+22	5,682060E+22	2,594661E+22	2,594749E+22	1,136426E+23	5,189410E+22	1,655367E+23
-1902	5,681916E+22	5,682127E+22	2,594806E+22	2,594701E+22	1,136404E+23	5,189508E+22	1,655355E+23
-1901	5,682056E+22	5,682072E+22	2,594805E+22	2,594897E+22	1,136413E+23	5,189702E+22	1,655383E+23
-1900	5,682058E+22	5,681893E+22	2,594832E+22	2,594828E+22	1,136395E+23	5,189660E+22	1,655361E+23
-1899	5,681795E+22	5,681983E+22	2,595018E+22	2,594897E+22	1,136378E+23	5,189915E+22	1,655369E+23
-1898	5,682003E+22	5,681898E+22	2,594943E+22	2,595077E+22	1,136390E+23	5,190020E+22	1,655392E+23
-1897	5,681830E+22	5,681793E+22	2,595027E+22	2,595002E+22	1,136362E+23	5,190028E+22	1,655365E+23
-1896	5,681684E+22	5,681881E+22	2,595131E+22	2,595128E+22	1,136357E+23	5,190259E+22	1,655382E+23
-1895	5,681922E+22	5,681758E+22	2,595036E+22	2,595147E+22	1,136368E+23	5,190183E+22	1,655386E+23
-1894	5,681711E+22	5,681777E+22	2,595149E+22	2,595007E+22	1,136349E+23	5,190156E+22	1,655364E+23
-1893	5,681815E+22	5,681821E+22	2,595108E+22	2,595128E+22	1,136364E+23	5,190237E+22	1,655387E+23
-1892	5,681914E+22	5,681748E+22	2,594998E+22	2,595023E+22	1,136366E+23	5,190021E+22	1,655368E+23
-1891	5,681639E+22	5,681907E+22	2,595076E+22	2,594958E+22	1,136355E+23	5,190034E+22	1,655358E+23
-1890	5,681898E+22	5,681917E+22	2,594922E+22	2,595044E+22	1,136381E+23	5,189966E+22	1,655378E+23
-1889	5,681919E+22	5,681832E+22	2,594886E+22	2,594852E+22	1,136375E+23	5,189738E+22	1,655349E+23
-1888	5,681797E+22	5,681966E+22	2,594940E+22	2,594855E+22	1,136376E+23	5,189795E+22	1,655356E+23
-1887	5,682117E+22	5,681940E+22	2,594785E+22	2,594884E+22	1,136406E+23	5,189669E+22	1,655373E+23
-1886	5,681944E+22	5,681963E+22	2,594843E+22	2,594749E+22	1,136391E+23	5,189592E+22	1,655350E+23
-1885	5,681920E+22	5,682043E+22	2,594858E+22	2,594891E+22	1,136396E+23	5,189749E+22	1,655371E+23
-1884	5,682074E+22	5,681944E+22	2,594785E+22	2,594876E+22	1,136402E+23	5,189661E+22	1,655368E+23
-1883	5,681776E+22	5,681974E+22	2,594963E+22	2,594843E+22	1,136375E+23	5,189806E+22	1,655356E+23
-1882	5,681930E+22	5,681938E+22	2,594957E+22	2,595020E+22	1,136387E+23	5,189977E+22	1,655384E+23
-1881	5,681954E+22	5,681764E+22	2,594985E+22	2,594983E+22	1,136372E+23	5,189968E+22	1,655369E+23
-1880	5,681628E+22	5,681819E+22	2,595150E+22	2,595071E+22	1,136345E+23	5,190221E+22	1,655367E+23
-1879	5,681845E+22	5,681768E+22	2,595075E+22	2,595231E+22	1,136361E+23	5,190306E+22	1,655392E+23
-1878	5,681703E+22	5,681663E+22	2,595170E+22	2,595135E+22	1,136337E+23	5,190305E+22	1,655367E+23
-1877	5,681599E+22	5,681718E+22	2,595253E+22	2,595234E+22	1,136332E+23	5,190487E+22	1,655380E+23
-1876	5,681849E+22	5,681635E+22	2,595157E+22	2,595233E+22	1,136348E+23	5,190390E+22	1,655387E+23
-1875	5,681576E+22	5,681676E+22	2,595275E+22	2,595127E+22	1,136325E+23	5,190403E+22	1,655366E+23
-1874	5,681650E+22	5,681767E+22	2,595212E+22	2,595239E+22	1,136342E+23	5,190452E+22	1,655387E+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							
-1873	5,681780E+22	5,681673E+22	2,595105E+22	2,595151E+22	1,136345E+23	5,190255E+22	1,655371E+23
-1872	5,681499E+22	5,681760E+22	2,595179E+22	2,595080E+22	1,136326E+23	5,190259E+22	1,655352E+23
-1871	5,681817E+22	5,681783E+22	2,595033E+22	2,595135E+22	1,136360E+23	5,190168E+22	1,655377E+23
-1870	5,681862E+22	5,681708E+22	2,595006E+22	2,594948E+22	1,136357E+23	5,189954E+22	1,655352E+23
-1869	5,681733E+22	5,681843E+22	2,595030E+22	2,594967E+22	1,136358E+23	5,189997E+22	1,655357E+23
-1868	5,682012E+22	5,681860E+22	2,594875E+22	2,594999E+22	1,136387E+23	5,189874E+22	1,655375E+23
-1867	5,681784E+22	5,681873E+22	2,594965E+22	2,594893E+22	1,136366E+23	5,189858E+22	1,655351E+23
-1866	5,681774E+22	5,681951E+22	2,594990E+22	2,595001E+22	1,136372E+23	5,189991E+22	1,655372E+23
-1865	5,681975E+22	5,681811E+22	2,594937E+22	2,594995E+22	1,136379E+23	5,189932E+22	1,655372E+23
-1864	5,681649E+22	5,681788E+22	2,595115E+22	2,594982E+22	1,136344E+23	5,190097E+22	1,655353E+23
-1863	5,681798E+22	5,681791E+22	2,595101E+22	2,595162E+22	1,136359E+23	5,190263E+22	1,655385E+23
-1862	5,681799E+22	5,681643E+22	2,595128E+22	2,595147E+22	1,136344E+23	5,190275E+22	1,655372E+23
-1861	5,681497E+22	5,681675E+22	2,595265E+22	2,595230E+22	1,136317E+23	5,190495E+22	1,655367E+23
-1860	5,681735E+22	5,681639E+22	2,595201E+22	2,595352E+22	1,136337E+23	5,190553E+22	1,655393E+23
-1859	5,681586E+22	5,681537E+22	2,595320E+22	2,595259E+22	1,136312E+23	5,190579E+22	1,655370E+23
-1858	5,681486E+22	5,681619E+22	2,595392E+22	2,595329E+22	1,136310E+23	5,190721E+22	1,655383E+23
-1857	5,681731E+22	5,681548E+22	2,595288E+22	2,595362E+22	1,136328E+23	5,190650E+22	1,655393E+23
-1856	5,681393E+22	5,681546E+22	2,595388E+22	2,595278E+22	1,136294E+23	5,190666E+22	1,655360E+23
-1855	5,681488E+22	5,681643E+22	2,595320E+22	2,595365E+22	1,136313E+23	5,190686E+22	1,655382E+23
-1854	5,681672E+22	5,681539E+22	2,595220E+22	2,595261E+22	1,136321E+23	5,190482E+22	1,655369E+23
-1853	5,681457E+22	5,681593E+22	2,595263E+22	2,595170E+22	1,136305E+23	5,190433E+22	1,655348E+23
-1852	5,681786E+22	5,681665E+22	2,595121E+22	2,595209E+22	1,136345E+23	5,190330E+22	1,655378E+23
-1851	5,681769E+22	5,681638E+22	2,595108E+22	2,595058E+22	1,136341E+23	5,190166E+22	1,655357E+23
-1850	5,681598E+22	5,681809E+22	2,595131E+22	2,595064E+22	1,136341E+23	5,190195E+22	1,655360E+23
-1849	5,681888E+22	5,681806E+22	2,595000E+22	2,595121E+22	1,136369E+23	5,190121E+22	1,655382E+23
-1848	5,681624E+22	5,681725E+22	2,595107E+22	2,595024E+22	1,136335E+23	5,190131E+22	1,655348E+23
-1847	5,681638E+22	5,681795E+22	2,595148E+22	2,595119E+22	1,136343E+23	5,190267E+22	1,655370E+23
-1846	5,681860E+22	5,681650E+22	2,595100E+22	2,595139E+22	1,136351E+23	5,190240E+22	1,655375E+23
-1845	5,681528E+22	5,681608E+22	2,595232E+22	2,595149E+22	1,136314E+23	5,190381E+22	1,655352E+23
-1844	5,681664E+22	5,681655E+22	2,595213E+22	2,595322E+22	1,136332E+23	5,190534E+22	1,655385E+23
-1843	5,681645E+22	5,681519E+22	2,595259E+22	2,595311E+22	1,136316E+23	5,190570E+22	1,655373E+23
-1842	5,681374E+22	5,681570E+22	2,595401E+22	2,595339E+22	1,136294E+23	5,190740E+22	1,655368E+23
-1841	5,681654E+22	5,681533E+22	2,595353E+22	2,595462E+22	1,136319E+23	5,190815E+22	1,655400E+23
-1840	5,681447E+22	5,681396E+22	2,595471E+22	2,595386E+22	1,136284E+23	5,190857E+22	1,655370E+23
-1839	5,681326E+22	5,681518E+22	2,595531E+22	2,595455E+22	1,136284E+23	5,190987E+22	1,655383E+23
-1838	5,681565E+22	5,681444E+22	2,595420E+22	2,595505E+22	1,136301E+23	5,190925E+22	1,655393E+23
-1837	5,681267E+22	5,681391E+22	2,595481E+22	2,595414E+22	1,136266E+23	5,190895E+22	1,655355E+23
-1836	5,681411E+22	5,681497E+22	2,595414E+22	2,595460E+22	1,136291E+23	5,190874E+22	1,655378E+23
-1835	5,681603E+22	5,681416E+22	2,595329E+22	2,595359E+22	1,136302E+23	5,190688E+22	1,655371E+23
-1834	5,681404E+22	5,681517E+22	2,595360E+22	2,595243E+22	1,136292E+23	5,190602E+22	1,655352E+23
-1833	5,681705E+22	5,681616E+22	2,595220E+22	2,595311E+22	1,136332E+23	5,190532E+22	1,655385E+23
-1832	5,681601E+22	5,681552E+22	2,595214E+22	2,595189E+22	1,136315E+23	5,190403E+22	1,655356E+23
-1831	5,681438E+22	5,681708E+22	2,595256E+22	2,595177E+22	1,136315E+23	5,190433E+22	1,655358E+23
-1830	5,681748E+22	5,681669E+22	2,595150E+22	2,595237E+22	1,136342E+23	5,190387E+22	1,655380E+23
-1829	5,681530E+22	5,681535E+22	2,595231E+22	2,595151E+22	1,136307E+23	5,190382E+22	1,655345E+23
-1828	5,681548E+22	5,681627E+22	2,595272E+22	2,595245E+22	1,136317E+23	5,190517E+22	1,655369E+23
-1827	5,681718E+22	5,681531E+22	2,595228E+22	2,595305E+22	1,136325E+23	5,190532E+22	1,655378E+23
-1826	5,681388E+22	5,681520E+22	2,595347E+22	2,595290E+22	1,136291E+23	5,190637E+22	1,655354E+23
-1825	5,681547E+22	5,681565E+22	2,595347E+22	2,595466E+22	1,136311E+23	5,190813E+22	1,655392E+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	5,681499E+22	5,681379E+22	2,595414E+22	2,595449E+22	1,136288E+23	5,190864E+22	1,655374E+23
-1823	5,681252E+22	5,681435E+22	2,595572E+22	2,595451E+22	1,136269E+23	5,191023E+22	1,655371E+23
-1822	5,681524E+22	5,681403E+22	2,595530E+22	2,595595E+22	1,136293E+23	5,191124E+22	1,655405E+23
-1821	5,681298E+22	5,681241E+22	2,595594E+22	2,595544E+22	1,136254E+23	5,191138E+22	1,655368E+23
-1820	5,681171E+22	5,681377E+22	2,595640E+22	2,595599E+22	1,136255E+23	5,191239E+22	1,655379E+23
-1819	5,681419E+22	5,681312E+22	2,595531E+22	2,595646E+22	1,136273E+23	5,191177E+22	1,655391E+23
-1818	5,681185E+22	5,681269E+22	2,595575E+22	2,595495E+22	1,136245E+23	5,191071E+22	1,655352E+23
-1817	5,681383E+22	5,681400E+22	2,595516E+22	2,595540E+22	1,136278E+23	5,191055E+22	1,655384E+23
-1816	5,681509E+22	5,681313E+22	2,595433E+22	2,595453E+22	1,136282E+23	5,190886E+22	1,655371E+23
-1815	5,681272E+22	5,681464E+22	2,595468E+22	2,595338E+22	1,136274E+23	5,190806E+22	1,655354E+23
-1814	5,681553E+22	5,681558E+22	2,595346E+22	2,595428E+22	1,136311E+23	5,190774E+22	1,655389E+23
-1813	5,681461E+22	5,681419E+22	2,595320E+22	2,595317E+22	1,136288E+23	5,190637E+22	1,655352E+23
-1812	5,681328E+22	5,681553E+22	2,595378E+22	2,595286E+22	1,136288E+23	5,190665E+22	1,655355E+23
-1811	5,681639E+22	5,681515E+22	2,595287E+22	2,595367E+22	1,136315E+23	5,190654E+22	1,655381E+23
-1810	5,681437E+22	5,681404E+22	2,595348E+22	2,595273E+22	1,136284E+23	5,190621E+22	1,655346E+23
-1809	5,681446E+22	5,681528E+22	2,595386E+22	2,595397E+22	1,136297E+23	5,190783E+22	1,655376E+23
-1808	5,681544E+22	5,681406E+22	2,595354E+22	2,595470E+22	1,136295E+23	5,190825E+22	1,655377E+23
-1807	5,681242E+22	5,681406E+22	2,595495E+22	2,595422E+22	1,136265E+23	5,190917E+22	1,655357E+23
-1806	5,681426E+22	5,681435E+22	2,595523E+22	2,595587E+22	1,136286E+23	5,191110E+22	1,655397E+23
-1805	5,681396E+22	5,681210E+22	2,595566E+22	2,595581E+22	1,136261E+23	5,191147E+22	1,655375E+23
-1804	5,681134E+22	5,681289E+22	2,595719E+22	2,595581E+22	1,136242E+23	5,191301E+22	1,655372E+23
-1803	5,681343E+22	5,681296E+22	2,595668E+22	2,595756E+22	1,136264E+23	5,191424E+22	1,655406E+23
-1802	5,681147E+22	5,681139E+22	2,595705E+22	2,595681E+22	1,136229E+23	5,191386E+22	1,655367E+23
-1801	5,681063E+22	5,681261E+22	2,595747E+22	2,595724E+22	1,136232E+23	5,191472E+22	1,655380E+23
-1800	5,681295E+22	5,681168E+22	2,595649E+22	2,595758E+22	1,136246E+23	5,191407E+22	1,655387E+23
-1799	5,681114E+22	5,681155E+22	2,595694E+22	2,595577E+22	1,136227E+23	5,191271E+22	1,655354E+23
-1798	5,681293E+22	5,681310E+22	2,595640E+22	2,595638E+22	1,136260E+23	5,191278E+22	1,655388E+23
-1797	5,681384E+22	5,681216E+22	2,595518E+22	2,595578E+22	1,136260E+23	5,191096E+22	1,655370E+23
-1796	5,681139E+22	5,681356E+22	2,595563E+22	2,595451E+22	1,136249E+23	5,191014E+22	1,655351E+23
-1795	5,681402E+22	5,681447E+22	2,595462E+22	2,595546E+22	1,136285E+23	5,191008E+22	1,655386E+23
-1794	5,681372E+22	5,681289E+22	2,595430E+22	2,595406E+22	1,136266E+23	5,190836E+22	1,655350E+23
-1793	5,681271E+22	5,681424E+22	2,595494E+22	2,595394E+22	1,136269E+23	5,190889E+22	1,655358E+23
-1792	5,681507E+22	5,681383E+22	2,595412E+22	2,595505E+22	1,136289E+23	5,190917E+22	1,655381E+23
-1791	5,681299E+22	5,681313E+22	2,595473E+22	2,595409E+22	1,136261E+23	5,190882E+22	1,655349E+23
-1790	5,681304E+22	5,681434E+22	2,595533E+22	2,595544E+22	1,136274E+23	5,191078E+22	1,655382E+23
-1789	5,681412E+22	5,681262E+22	2,595490E+22	2,595618E+22	1,136267E+23	5,191108E+22	1,655378E+23
-1788	5,681135E+22	5,681249E+22	2,595655E+22	2,595547E+22	1,136238E+23	5,191202E+22	1,655359E+23
-1787	5,681295E+22	5,681298E+22	2,595697E+22	2,595729E+22	1,136259E+23	5,191425E+22	1,655402E+23
-1786	5,681262E+22	5,681083E+22	2,595709E+22	2,595721E+22	1,136235E+23	5,191430E+22	1,655377E+23
-1785	5,680985E+22	5,681181E+22	2,595843E+22	2,595747E+22	1,136217E+23	5,191590E+22	1,655376E+23
-1784	5,681142E+22	5,681147E+22	2,595791E+22	2,595919E+22	1,136229E+23	5,191710E+22	1,655400E+23
-1783	5,681004E+22	5,680998E+22	2,595829E+22	2,595798E+22	1,136200E+23	5,191627E+22	1,655363E+23
-1782	5,680982E+22	5,681127E+22	2,595881E+22	2,595823E+22	1,136211E+23	5,191704E+22	1,655381E+23
-1781	5,681229E+22	5,681020E+22	2,595752E+22	2,595858E+22	1,136225E+23	5,191610E+22	1,655386E+23
-1780	5,681037E+22	5,681053E+22	2,595794E+22	2,595671E+22	1,136209E+23	5,191465E+22	1,655355E+23
-1779	5,681154E+22	5,681253E+22	2,595742E+22	2,595751E+22	1,136241E+23	5,191493E+22	1,655390E+23
-1778	5,681260E+22	5,681148E+22	2,595608E+22	2,595675E+22	1,136241E+23	5,191283E+22	1,655369E+23
-1777	5,681043E+22	5,681264E+22	2,595664E+22	2,595556E+22	1,136231E+23	5,191219E+22	1,655353E+23
-1776	5,681265E+22	5,681304E+22	2,595589E+22	2,595654E+22	1,136257E+23	5,191243E+22	1,655381E+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							
-1775	5,681277E+22	5,681159E+22	2,595564E+22	2,595511E+22	1,136244E+23	5,191075E+22	1,655351E+23
-1774	5,681166E+22	5,681307E+22	2,595630E+22	2,595530E+22	1,136247E+23	5,191160E+22	1,655363E+23
-1773	5,681368E+22	5,681250E+22	2,595517E+22	2,595669E+22	1,136262E+23	5,191186E+22	1,655380E+23
-1772	5,681176E+22	5,681176E+22	2,595592E+22	2,595553E+22	1,136235E+23	5,191145E+22	1,655350E+23
-1771	5,681163E+22	5,681311E+22	2,595678E+22	2,595679E+22	1,136247E+23	5,191357E+22	1,655383E+23
-1770	5,681321E+22	5,681134E+22	2,595633E+22	2,595729E+22	1,136245E+23	5,191362E+22	1,655382E+23
-1769	5,681048E+22	5,681122E+22	2,595802E+22	2,595677E+22	1,136217E+23	5,191479E+22	1,655365E+23
-1768	5,681097E+22	5,681169E+22	2,595852E+22	2,595886E+22	1,136227E+23	5,191738E+22	1,655400E+23
-1767	5,681076E+22	5,680976E+22	2,595853E+22	2,595876E+22	1,136205E+23	5,191729E+22	1,655378E+23
-1766	5,680821E+22	5,681047E+22	2,595989E+22	2,595902E+22	1,136187E+23	5,191890E+22	1,655376E+23
-1765	5,681012E+22	5,680971E+22	2,595910E+22	2,596060E+22	1,136198E+23	5,191969E+22	1,655395E+23
-1764	5,680943E+22	5,680826E+22	2,595950E+22	2,595899E+22	1,136177E+23	5,191850E+22	1,655362E+23
-1763	5,680904E+22	5,681010E+22	2,596004E+22	2,595927E+22	1,136191E+23	5,191930E+22	1,655384E+23
-1762	5,681146E+22	5,680945E+22	2,595845E+22	2,595955E+22	1,136209E+23	5,191800E+22	1,655389E+23
-1761	5,680927E+22	5,680998E+22	2,595880E+22	2,595787E+22	1,136193E+23	5,191667E+22	1,655359E+23
-1760	5,680970E+22	5,681159E+22	2,595852E+22	2,595867E+22	1,136213E+23	5,191719E+22	1,655385E+23
-1759	5,681127E+22	5,681040E+22	2,595730E+22	2,595764E+22	1,136217E+23	5,191495E+22	1,655366E+23
-1758	5,680957E+22	5,681129E+22	2,595801E+22	2,595654E+22	1,136209E+23	5,191455E+22	1,655354E+23
-1757	5,681173E+22	5,681143E+22	2,595699E+22	2,595776E+22	1,136232E+23	5,191475E+22	1,655379E+23
-1756	5,681182E+22	5,681030E+22	2,595672E+22	2,595641E+22	1,136221E+23	5,191313E+22	1,655352E+23
-1755	5,681031E+22	5,681223E+22	2,595742E+22	2,595678E+22	1,136225E+23	5,191419E+22	1,655367E+23
-1754	5,681254E+22	5,681150E+22	2,595625E+22	2,595794E+22	1,136240E+23	5,191419E+22	1,655382E+23
-1753	5,681084E+22	5,681073E+22	2,595719E+22	2,595679E+22	1,136216E+23	5,191398E+22	1,655355E+23
-1752	5,681017E+22	5,681167E+22	2,595841E+22	2,595804E+22	1,136218E+23	5,191645E+22	1,655383E+23
-1751	5,681182E+22	5,681004E+22	2,595804E+22	2,595857E+22	1,136219E+23	5,191661E+22	1,655385E+23
-1750	5,680889E+22	5,680997E+22	2,595969E+22	2,595844E+22	1,136189E+23	5,191813E+22	1,655370E+23
-1749	5,680902E+22	5,681001E+22	2,595981E+22	2,596069E+22	1,136190E+23	5,192050E+22	1,655395E+23
-1748	5,680932E+22	5,680793E+22	2,595983E+22	2,596030E+22	1,136173E+23	5,192013E+22	1,655374E+23
-1747	5,680707E+22	5,680890E+22	2,596118E+22	2,596030E+22	1,136160E+23	5,192148E+22	1,655374E+23
-1746	5,680960E+22	5,680829E+22	2,596022E+22	2,596152E+22	1,136179E+23	5,192174E+22	1,655396E+23
-1745	5,680899E+22	5,680739E+22	2,596053E+22	2,595999E+22	1,136164E+23	5,192051E+22	1,655369E+23
-1744	5,680752E+22	5,680942E+22	2,596119E+22	2,596037E+22	1,136169E+23	5,192156E+22	1,655385E+23
-1743	5,680990E+22	5,680902E+22	2,595963E+22	2,596059E+22	1,136189E+23	5,192022E+22	1,655391E+23
-1742	5,680784E+22	5,680916E+22	2,596010E+22	2,595903E+22	1,136170E+23	5,191912E+22	1,655361E+23
-1741	5,680826E+22	5,681008E+22	2,595966E+22	2,595983E+22	1,136183E+23	5,191949E+22	1,655378E+23
-1740	5,681053E+22	5,680867E+22	2,595851E+22	2,595869E+22	1,136192E+23	5,191721E+22	1,655364E+23
-1739	5,680868E+22	5,680991E+22	2,595914E+22	2,595776E+22	1,136186E+23	5,191689E+22	1,655355E+23
-1738	5,681090E+22	5,681035E+22	2,595784E+22	2,595902E+22	1,136212E+23	5,191686E+22	1,655381E+23
-1737	5,681090E+22	5,680943E+22	2,595750E+22	2,595777E+22	1,136203E+23	5,191527E+22	1,655356E+23
-1736	5,680867E+22	5,681111E+22	2,595862E+22	2,595802E+22	1,136198E+23	5,191664E+22	1,655364E+23
-1735	5,681134E+22	5,681047E+22	2,595773E+22	2,595892E+22	1,136218E+23	5,191665E+22	1,655385E+23
-1734	5,680982E+22	5,680944E+22	2,595892E+22	2,595798E+22	1,136193E+23	5,191690E+22	1,655362E+23
-1733	5,680863E+22	5,681008E+22	2,595997E+22	2,595952E+22	1,136187E+23	5,191949E+22	1,655382E+23
-1732	5,681030E+22	5,680849E+22	2,595955E+22	2,596019E+22	1,136188E+23	5,191974E+22	1,655385E+23
-1731	5,680712E+22	5,680860E+22	2,596111E+22	2,596016E+22	1,136157E+23	5,192128E+22	1,655370E+23
-1730	5,680776E+22	5,680849E+22	2,596102E+22	2,596214E+22	1,136163E+23	5,192316E+22	1,655394E+23
-1729	5,680853E+22	5,680657E+22	2,596100E+22	2,596158E+22	1,136151E+23	5,192258E+22	1,655377E+23
-1728	5,680594E+22	5,680754E+22	2,596260E+22	2,596145E+22	1,136135E+23	5,192404E+22	1,655375E+23
-1727	5,680856E+22	5,680745E+22	2,596163E+22	2,596256E+22	1,136160E+23	5,192418E+22	1,655402E+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							
-1726	5,680766E+22	5,680678E+22	2,596188E+22	2,596132E+22	1,136144E+23	5,192320E+22	1,655376E+23
-1725	5,680570E+22	5,680830E+22	2,596227E+22	2,596175E+22	1,136140E+23	5,192402E+22	1,655380E+23
-1724	5,680852E+22	5,680756E+22	2,596079E+22	2,596173E+22	1,136161E+23	5,192252E+22	1,655386E+23
-1723	5,680678E+22	5,680774E+22	2,596127E+22	2,596007E+22	1,136145E+23	5,192134E+22	1,655359E+23
-1722	5,680774E+22	5,680851E+22	2,596059E+22	2,596070E+22	1,136163E+23	5,192129E+22	1,655375E+23
-1721	5,681001E+22	5,680764E+22	2,595931E+22	2,595976E+22	1,136176E+23	5,191906E+22	1,655367E+23
-1720	5,680735E+22	5,680908E+22	2,596007E+22	2,595896E+22	1,136164E+23	5,191903E+22	1,655355E+23
-1719	5,680958E+22	5,680974E+22	2,595893E+22	2,596010E+22	1,136193E+23	5,191903E+22	1,655384E+23
-1718	5,680973E+22	5,680867E+22	2,595886E+22	2,595896E+22	1,136184E+23	5,191782E+22	1,655362E+23
-1717	5,680731E+22	5,680964E+22	2,596005E+22	2,595920E+22	1,136170E+23	5,191925E+22	1,655362E+23
-1716	5,681032E+22	5,680877E+22	2,595939E+22	2,596013E+22	1,136191E+23	5,191952E+22	1,655386E+23
-1715	5,680842E+22	5,680803E+22	2,596055E+22	2,595954E+22	1,136165E+23	5,192009E+22	1,655365E+23
-1714	5,680710E+22	5,680865E+22	2,596125E+22	2,596122E+22	1,136157E+23	5,192246E+22	1,655382E+23
-1713	5,680883E+22	5,680718E+22	2,596068E+22	2,596194E+22	1,136160E+23	5,192262E+22	1,655386E+23
-1712	5,680542E+22	5,680702E+22	2,596247E+22	2,596168E+22	1,136124E+23	5,192415E+22	1,655366E+23
-1711	5,680671E+22	5,680715E+22	2,596249E+22	2,596325E+22	1,136139E+23	5,192574E+22	1,655396E+23
-1710	5,680776E+22	5,680545E+22	2,596255E+22	2,596276E+22	1,136132E+23	5,192531E+22	1,655385E+23
-1709	5,680458E+22	5,680637E+22	2,596393E+22	2,596275E+22	1,136109E+23	5,192668E+22	1,655376E+23
-1708	5,680722E+22	5,680640E+22	2,596295E+22	2,596386E+22	1,136136E+23	5,192681E+22	1,655404E+23
-1707	5,680602E+22	5,680582E+22	2,596312E+22	2,596263E+22	1,136118E+23	5,192575E+22	1,655376E+23
-1706	5,680446E+22	5,680700E+22	2,596328E+22	2,596285E+22	1,136115E+23	5,192612E+22	1,655376E+23
-1705	5,680777E+22	5,680621E+22	2,596169E+22	2,596269E+22	1,136140E+23	5,192438E+22	1,655384E+23
-1704	5,680574E+22	5,680626E+22	2,596236E+22	2,596104E+22	1,136120E+23	5,192340E+22	1,655354E+23
-1703	5,680686E+22	5,680760E+22	2,596166E+22	2,596167E+22	1,136145E+23	5,192333E+22	1,655378E+23
-1702	5,680891E+22	5,680699E+22	2,596037E+22	2,596104E+22	1,136159E+23	5,192140E+22	1,655373E+23
-1701	5,680581E+22	5,680799E+22	2,596107E+22	2,596026E+22	1,136138E+23	5,192133E+22	1,655351E+23
-1700	5,680849E+22	5,680837E+22	2,596023E+22	2,596116E+22	1,136169E+23	5,192139E+22	1,655382E+23
-1699	5,680865E+22	5,680740E+22	2,596034E+22	2,596005E+22	1,136160E+23	5,192039E+22	1,655364E+23
-1698	5,680641E+22	5,680817E+22	2,596141E+22	2,596038E+22	1,136146E+23	5,192179E+22	1,655364E+23
-1697	5,680911E+22	5,680764E+22	2,596065E+22	2,596159E+22	1,136167E+23	5,192224E+22	1,655390E+23
-1696	5,680647E+22	5,680684E+22	2,596196E+22	2,596125E+22	1,136133E+23	5,192322E+22	1,655365E+23
-1695	5,680541E+22	5,680748E+22	2,596269E+22	2,596276E+22	1,136129E+23	5,192545E+22	1,655383E+23
-1694	5,680749E+22	5,680594E+22	2,596223E+22	2,596350E+22	1,136134E+23	5,192573E+22	1,655392E+23
-1693	5,680418E+22	5,680527E+22	2,596394E+22	2,596307E+22	1,136095E+23	5,192700E+22	1,655365E+23
-1692	5,680589E+22	5,680546E+22	2,596407E+22	2,596448E+22	1,136114E+23	5,192855E+22	1,655399E+23
-1691	5,680655E+22	5,680444E+22	2,596401E+22	2,596416E+22	1,136110E+23	5,192817E+22	1,655392E+23
-1690	5,680322E+22	5,680525E+22	2,596501E+22	2,596413E+22	1,136085E+23	5,192914E+22	1,655376E+23
-1689	5,680575E+22	5,680536E+22	2,596391E+22	2,596511E+22	1,136111E+23	5,192903E+22	1,655401E+23
-1688	5,680444E+22	5,680447E+22	2,596430E+22	2,596372E+22	1,136089E+23	5,192802E+22	1,655369E+23
-1687	5,680348E+22	5,680567E+22	2,596447E+22	2,596363E+22	1,136092E+23	5,192810E+22	1,655373E+23
-1686	5,680704E+22	5,680518E+22	2,596286E+22	2,596369E+22	1,136122E+23	5,192656E+22	1,655388E+23
-1685	5,680458E+22	5,680510E+22	2,596330E+22	2,596221E+22	1,136097E+23	5,192550E+22	1,655352E+23
-1684	5,680582E+22	5,680658E+22	2,596268E+22	2,596284E+22	1,136124E+23	5,192551E+22	1,655379E+23
-1683	5,680764E+22	5,680625E+22	2,596149E+22	2,596222E+22	1,136139E+23	5,192371E+22	1,655376E+23
-1682	5,680483E+22	5,680683E+22	2,596215E+22	2,596133E+22	1,136117E+23	5,192347E+22	1,655351E+23
-1681	5,680764E+22	5,680720E+22	2,596143E+22	2,596218E+22	1,136148E+23	5,192361E+22	1,655384E+23
-1680	5,680730E+22	5,680604E+22	2,596184E+22	2,596134E+22	1,136133E+23	5,192319E+22	1,655365E+23
-1679	5,680494E+22	5,680708E+22	2,596289E+22	2,596184E+22	1,136120E+23	5,192473E+22	1,655367E+23
-1678	5,680742E+22	5,680663E+22	2,596207E+22	2,596339E+22	1,136141E+23	5,192545E+22	1,655395E+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							
-1677	5,680459E+22	5,680513E+22	2,596330E+22	2,596299E+22	1,136097E+23	5,192629E+22	1,655360E+23
-1676	5,680435E+22	5,680556E+22	2,596421E+22	2,596416E+22	1,136099E+23	5,192837E+22	1,655383E+23
-1675	5,680655E+22	5,680435E+22	2,596380E+22	2,596474E+22	1,136109E+23	5,192854E+22	1,655394E+23
-1674	5,680342E+22	5,680382E+22	2,596527E+22	2,596430E+22	1,136072E+23	5,192957E+22	1,655368E+23
-1673	5,680479E+22	5,680456E+22	2,596525E+22	2,596575E+22	1,136094E+23	5,193100E+22	1,655404E+23
-1672	5,680463E+22	5,680355E+22	2,596535E+22	2,596556E+22	1,136082E+23	5,193092E+22	1,655391E+23
-1671	5,680153E+22	5,680437E+22	2,596634E+22	2,596532E+22	1,136059E+23	5,193166E+22	1,655376E+23
-1670	5,680435E+22	5,680431E+22	2,596526E+22	2,596630E+22	1,136087E+23	5,193155E+22	1,655402E+23
-1669	5,680316E+22	5,680275E+22	2,596552E+22	2,596486E+22	1,136059E+23	5,193038E+22	1,655363E+23
-1668	5,680281E+22	5,680399E+22	2,596568E+22	2,596471E+22	1,136068E+23	5,193039E+22	1,655372E+23
-1667	5,680597E+22	5,680423E+22	2,596393E+22	2,596495E+22	1,136102E+23	5,192887E+22	1,655391E+23
-1666	5,680358E+22	5,680414E+22	2,596401E+22	2,596347E+22	1,136077E+23	5,192749E+22	1,655352E+23
-1665	5,680483E+22	5,680571E+22	2,596344E+22	2,596387E+22	1,136105E+23	5,192731E+22	1,655378E+23
-1664	5,680641E+22	5,680520E+22	2,596269E+22	2,596318E+22	1,136116E+23	5,192586E+22	1,655375E+23
-1663	5,680392E+22	5,680576E+22	2,596353E+22	2,596218E+22	1,136097E+23	5,192571E+22	1,655354E+23
-1662	5,680647E+22	5,680632E+22	2,596292E+22	2,596343E+22	1,136128E+23	5,192634E+22	1,655391E+23
-1661	5,680559E+22	5,680471E+22	2,596321E+22	2,596295E+22	1,136103E+23	5,192616E+22	1,655365E+23
-1660	5,680344E+22	5,680549E+22	2,596431E+22	2,596346E+22	1,136089E+23	5,192777E+22	1,655367E+23
-1659	5,680589E+22	5,680527E+22	2,596353E+22	2,596498E+22	1,136112E+23	5,192851E+22	1,655397E+23
-1658	5,680367E+22	5,680335E+22	2,596453E+22	2,596437E+22	1,136070E+23	5,192891E+22	1,655359E+23
-1657	5,680360E+22	5,680403E+22	2,596549E+22	2,596533E+22	1,136076E+23	5,193082E+22	1,655384E+23
-1656	5,680528E+22	5,680314E+22	2,596536E+22	2,596609E+22	1,136084E+23	5,193145E+22	1,655399E+23
-1655	5,680192E+22	5,680300E+22	2,596675E+22	2,596568E+22	1,136049E+23	5,193243E+22	1,655374E+23
-1654	5,680292E+22	5,680389E+22	2,596668E+22	2,596731E+22	1,136068E+23	5,193399E+22	1,655408E+23
-1653	5,680266E+22	5,680202E+22	2,596669E+22	2,596703E+22	1,136047E+23	5,193373E+22	1,655384E+23
-1652	5,680038E+22	5,680246E+22	2,596772E+22	2,596648E+22	1,136028E+23	5,193420E+22	1,655370E+23
-1651	5,680337E+22	5,680280E+22	2,596656E+22	2,596737E+22	1,136062E+23	5,193392E+22	1,655401E+23
-1650	5,680254E+22	5,680131E+22	2,596640E+22	2,596599E+22	1,136038E+23	5,193238E+22	1,655362E+23
-1649	5,680205E+22	5,680316E+22	2,596638E+22	2,596580E+22	1,136052E+23	5,193218E+22	1,655374E+23
-1648	5,680463E+22	5,680358E+22	2,596488E+22	2,596608E+22	1,136082E+23	5,193097E+22	1,655392E+23
-1647	5,680248E+22	5,680355E+22	2,596509E+22	2,596438E+22	1,136060E+23	5,192947E+22	1,655355E+23
-1646	5,680379E+22	5,680503E+22	2,596471E+22	2,596479E+22	1,136088E+23	5,192950E+22	1,655383E+23
-1645	5,680514E+22	5,680374E+22	2,596408E+22	2,596426E+22	1,136089E+23	5,192833E+22	1,655372E+23
-1644	5,680296E+22	5,680415E+22	2,596503E+22	2,596348E+22	1,136071E+23	5,192851E+22	1,655356E+23
-1643	5,680485E+22	5,680511E+22	2,596431E+22	2,596499E+22	1,136100E+23	5,192930E+22	1,655393E+23
-1642	5,680412E+22	5,680315E+22	2,596428E+22	2,596465E+22	1,136073E+23	5,192892E+22	1,655362E+23
-1641	5,680232E+22	5,680392E+22	2,596536E+22	2,596485E+22	1,136062E+23	5,193021E+22	1,655365E+23
-1640	5,680465E+22	5,680369E+22	2,596496E+22	2,596625E+22	1,136083E+23	5,193121E+22	1,655396E+23
-1639	5,680281E+22	5,680217E+22	2,596603E+22	2,596548E+22	1,136050E+23	5,193151E+22	1,655365E+23
-1638	5,680240E+22	5,680330E+22	2,596704E+22	2,596667E+22	1,136057E+23	5,193371E+22	1,655394E+23
-1637	5,680336E+22	5,680205E+22	2,596688E+22	2,596770E+22	1,136054E+23	5,193458E+22	1,655400E+23
-1636	5,680024E+22	5,680164E+22	2,596832E+22	2,596727E+22	1,136019E+23	5,193559E+22	1,655375E+23
-1635	5,680108E+22	5,680259E+22	2,596823E+22	2,596875E+22	1,136037E+23	5,193697E+22	1,655406E+23
-1634	5,680157E+22	5,680019E+22	2,596788E+22	2,596835E+22	1,136018E+23	5,193623E+22	1,655380E+23
-1633	5,679977E+22	5,680075E+22	2,596874E+22	2,596752E+22	1,136005E+23	5,193626E+22	1,655368E+23
-1632	5,680240E+22	5,680157E+22	2,596768E+22	2,596855E+22	1,136040E+23	5,193623E+22	1,655402E+23
-1631	5,680156E+22	5,680068E+22	2,596731E+22	2,596709E+22	1,136022E+23	5,193440E+22	1,655366E+23
-1630	5,680083E+22	5,680280E+22	2,596731E+22	2,596693E+22	1,136036E+23	5,193425E+22	1,655379E+23
-1629	5,680324E+22	5,680249E+22	2,596599E+22	2,596710E+22	1,136057E+23	5,193309E+22	1,655388E+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	5,680167E+22	5,680207E+22	2,596642E+22	2,596523E+22	1,136037E+23	5,193164E+22	1,655354E+23
-1627	5,680265E+22	5,680388E+22	2,596615E+22	2,596574E+22	1,136065E+23	5,193189E+22	1,655384E+23
-1626	5,680411E+22	5,680231E+22	2,596516E+22	2,596556E+22	1,136064E+23	5,193072E+22	1,655371E+23
-1625	5,680170E+22	5,680288E+22	2,596599E+22	2,596488E+22	1,136046E+23	5,193087E+22	1,655354E+23
-1624	5,680320E+22	5,680393E+22	2,596554E+22	2,596653E+22	1,136071E+23	5,193207E+22	1,655392E+23
-1623	5,680289E+22	5,680199E+22	2,596553E+22	2,596595E+22	1,136049E+23	5,193148E+22	1,655364E+23
-1622	5,680131E+22	5,680287E+22	2,596675E+22	2,596612E+22	1,136042E+23	5,193287E+22	1,655371E+23
-1621	5,680342E+22	5,680211E+22	2,596656E+22	2,596760E+22	1,136055E+23	5,193416E+22	1,655397E+23
-1620	5,680167E+22	5,680072E+22	2,596773E+22	2,596699E+22	1,136024E+23	5,193472E+22	1,655371E+23
-1619	5,680049E+22	5,680234E+22	2,596868E+22	2,596832E+22	1,136028E+23	5,193700E+22	1,655398E+23
-1618	5,680164E+22	5,680050E+22	2,596817E+22	2,596941E+22	1,136021E+23	5,193758E+22	1,655397E+23
-1617	5,679896E+22	5,679988E+22	2,596955E+22	2,596861E+22	1,135988E+23	5,193816E+22	1,655370E+23
-1616	5,679983E+22	5,680086E+22	2,596963E+22	2,596993E+22	1,136007E+23	5,193956E+22	1,655403E+23
-1615	5,680079E+22	5,679891E+22	2,596910E+22	2,596937E+22	1,135997E+23	5,193846E+22	1,655382E+23
-1614	5,679891E+22	5,680011E+22	2,596978E+22	2,596868E+22	1,135990E+23	5,193846E+22	1,655375E+23
-1613	5,680094E+22	5,680066E+22	2,596875E+22	2,596979E+22	1,136016E+23	5,193853E+22	1,655401E+23
-1612	5,680047E+22	5,679978E+22	2,596847E+22	2,596821E+22	1,136003E+23	5,193668E+22	1,655369E+23
-1611	5,679949E+22	5,680197E+22	2,596858E+22	2,596783E+22	1,136015E+23	5,193641E+22	1,655379E+23
-1610	5,680228E+22	5,680105E+22	2,596709E+22	2,596806E+22	1,136033E+23	5,193515E+22	1,655385E+23
-1609	5,680094E+22	5,680059E+22	2,596750E+22	2,596621E+22	1,136015E+23	5,193372E+22	1,655352E+23
-1608	5,680121E+22	5,680265E+22	2,596740E+22	2,596708E+22	1,136039E+23	5,193447E+22	1,655383E+23
-1607	5,680266E+22	5,680140E+22	2,596621E+22	2,596701E+22	1,136041E+23	5,193322E+22	1,655373E+23
-1606	5,680035E+22	5,680199E+22	2,596701E+22	2,596635E+22	1,136023E+23	5,193336E+22	1,655357E+23
-1605	5,680181E+22	5,680228E+22	2,596685E+22	2,596786E+22	1,136041E+23	5,193471E+22	1,655388E+23
-1604	5,680218E+22	5,680035E+22	2,596704E+22	2,596711E+22	1,136025E+23	5,193415E+22	1,655367E+23
-1603	5,680019E+22	5,680172E+22	2,596842E+22	2,596731E+22	1,136019E+23	5,193574E+22	1,655376E+23
-1602	5,680215E+22	5,680082E+22	2,596797E+22	2,596914E+22	1,136030E+23	5,193712E+22	1,655401E+23
-1601	5,680019E+22	5,679949E+22	2,596909E+22	2,596855E+22	1,135997E+23	5,193763E+22	1,655373E+23
-1600	5,679853E+22	5,680110E+22	2,597025E+22	2,596993E+22	1,135996E+23	5,194018E+22	1,655398E+23
-1599	5,680018E+22	5,679918E+22	2,596960E+22	2,597075E+22	1,135994E+23	5,194035E+22	1,655397E+23
-1598	5,679789E+22	5,679856E+22	2,597089E+22	2,596987E+22	1,135965E+23	5,194076E+22	1,655372E+23
-1597	5,679870E+22	5,679914E+22	2,597104E+22	2,597122E+22	1,135978E+23	5,194227E+22	1,655401E+23
-1596	5,679985E+22	5,679760E+22	2,597037E+22	2,597067E+22	1,135974E+23	5,194104E+22	1,655385E+23
-1595	5,679740E+22	5,679944E+22	2,597095E+22	2,596996E+22	1,135968E+23	5,194091E+22	1,655377E+23
-1594	5,679972E+22	5,679947E+22	2,596964E+22	2,597100E+22	1,135992E+23	5,194064E+22	1,655398E+23
-1593	5,679955E+22	5,679843E+22	2,596942E+22	2,596904E+22	1,135980E+23	5,193847E+22	1,655365E+23
-1592	5,679838E+22	5,680075E+22	2,596982E+22	2,596869E+22	1,135991E+23	5,193850E+22	1,655376E+23
-1591	5,680133E+22	5,680006E+22	2,596819E+22	2,596896E+22	1,136014E+23	5,193715E+22	1,655385E+23
-1590	5,679978E+22	5,679992E+22	2,596851E+22	2,596747E+22	1,135997E+23	5,193598E+22	1,655357E+23
-1589	5,679957E+22	5,680139E+22	2,596855E+22	2,596854E+22	1,136010E+23	5,193709E+22	1,655381E+23
-1588	5,680145E+22	5,680009E+22	2,596747E+22	2,596840E+22	1,136015E+23	5,193587E+22	1,655374E+23
-1587	5,679912E+22	5,680085E+22	2,596842E+22	2,596754E+22	1,136000E+23	5,193596E+22	1,655359E+23
-1586	5,680103E+22	5,680058E+22	2,596815E+22	2,596910E+22	1,136016E+23	5,193725E+22	1,655389E+23
-1585	5,680145E+22	5,679884E+22	2,596844E+22	2,596835E+22	1,136003E+23	5,193679E+22	1,655371E+23
-1584	5,679858E+22	5,680064E+22	2,597003E+22	2,596888E+22	1,135992E+23	5,193891E+22	1,655381E+23
-1583	5,680033E+22	5,679992E+22	2,596943E+22	2,597076E+22	1,136003E+23	5,194019E+22	1,655404E+23
-1582	5,679851E+22	5,679844E+22	2,597051E+22	2,597018E+22	1,135970E+23	5,194069E+22	1,655376E+23
-1581	5,679679E+22	5,679913E+22	2,597185E+22	2,597139E+22	1,135959E+23	5,194324E+22	1,655392E+23
-1580	5,679916E+22	5,679735E+22	2,597117E+22	2,597204E+22	1,135965E+23	5,194321E+22	1,655397E+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	5,679676E+22	5,679728E+22	2,597231E+22	2,597109E+22	1,135940E+23	5,194340E+22	1,655374E+23
-1578	5,679756E+22	5,679780E+22	2,597208E+22	2,597264E+22	1,135954E+23	5,194471E+22	1,655401E+23
-1577	5,679875E+22	5,679661E+22	2,597132E+22	2,597189E+22	1,135954E+23	5,194321E+22	1,655386E+23
-1576	5,679594E+22	5,679859E+22	2,597212E+22	2,597108E+22	1,135945E+23	5,194320E+22	1,655377E+23
-1575	5,679862E+22	5,679862E+22	2,597075E+22	2,597183E+22	1,135972E+23	5,194257E+22	1,655398E+23
-1574	5,679873E+22	5,679753E+22	2,597052E+22	2,596992E+22	1,135963E+23	5,194045E+22	1,655367E+23
-1573	5,679711E+22	5,679926E+22	2,597110E+22	2,596981E+22	1,135964E+23	5,194092E+22	1,655373E+23
-1572	5,680007E+22	5,679893E+22	2,596937E+22	2,597030E+22	1,135990E+23	5,193967E+22	1,655387E+23
-1571	5,679821E+22	5,679901E+22	2,596964E+22	2,596887E+22	1,135972E+23	5,193851E+22	1,655357E+23
-1570	5,679846E+22	5,679978E+22	2,596953E+22	2,596993E+22	1,135982E+23	5,193946E+22	1,655377E+23
-1569	5,680079E+22	5,679846E+22	2,596860E+22	2,596943E+22	1,135992E+23	5,193802E+22	1,655373E+23
-1568	5,679821E+22	5,679958E+22	2,596986E+22	2,596862E+22	1,135978E+23	5,193848E+22	1,655363E+23
-1567	5,680003E+22	5,679970E+22	2,596954E+22	2,597025E+22	1,135997E+23	5,193979E+22	1,655395E+23
-1566	5,679999E+22	5,679828E+22	2,596981E+22	2,596987E+22	1,135983E+23	5,193968E+22	1,655380E+23
-1565	5,679652E+22	5,679935E+22	2,597168E+22	2,597062E+22	1,135959E+23	5,194230E+22	1,655382E+23
-1564	5,679854E+22	5,679843E+22	2,597109E+22	2,597236E+22	1,135970E+23	5,194345E+22	1,655404E+23
-1563	5,679685E+22	5,679690E+22	2,597219E+22	2,597163E+22	1,135937E+23	5,194382E+22	1,655376E+23
-1562	5,679580E+22	5,679694E+22	2,597322E+22	2,597287E+22	1,135927E+23	5,194609E+22	1,655388E+23
-1561	5,679834E+22	5,679554E+22	2,597243E+22	2,597338E+22	1,135939E+23	5,194580E+22	1,655397E+23
-1560	5,679539E+22	5,679627E+22	2,597353E+22	2,597256E+22	1,135917E+23	5,194609E+22	1,655378E+23
-1559	5,679624E+22	5,679707E+22	2,597307E+22	2,597387E+22	1,135933E+23	5,194694E+22	1,655402E+23
-1558	5,679759E+22	5,679595E+22	2,597233E+22	2,597295E+22	1,135935E+23	5,194528E+22	1,655388E+23
-1557	5,679467E+22	5,679715E+22	2,597345E+22	2,597199E+22	1,135918E+23	5,194544E+22	1,655373E+23
-1556	5,679762E+22	5,679735E+22	2,597210E+22	2,597266E+22	1,135950E+23	5,194476E+22	1,655397E+23
-1555	5,679747E+22	5,679662E+22	2,597182E+22	2,597098E+22	1,135941E+23	5,194280E+22	1,655369E+23
-1554	5,679587E+22	5,679787E+22	2,597205E+22	2,597122E+22	1,135937E+23	5,194327E+22	1,655370E+23
-1553	5,679897E+22	5,679764E+22	2,597032E+22	2,597160E+22	1,135966E+23	5,194192E+22	1,655385E+23
-1552	5,679700E+22	5,679793E+22	2,597077E+22	2,597011E+22	1,135949E+23	5,194088E+22	1,655358E+23
-1551	5,679764E+22	5,679873E+22	2,597064E+22	2,597091E+22	1,135964E+23	5,194155E+22	1,655379E+23
-1550	5,680015E+22	5,679758E+22	2,596984E+22	2,597051E+22	1,135977E+23	5,194035E+22	1,655381E+23
-1549	5,679683E+22	5,679821E+22	2,597145E+22	2,597002E+22	1,135950E+23	5,19417E+22	1,655365E+23
-1548	5,679825E+22	5,679874E+22	2,597113E+22	2,597184E+22	1,135970E+23	5,194296E+22	1,655399E+23
-1547	5,679795E+22	5,679723E+22	2,597141E+22	2,597156E+22	1,135952E+23	5,194298E+22	1,655382E+23
-1546	5,679486E+22	5,679723E+22	2,597309E+22	2,597232E+22	1,135921E+23	5,194541E+22	1,655375E+23
-1545	5,679746E+22	5,679630E+22	2,597253E+22	2,597371E+22	1,135938E+23	5,194624E+22	1,655400E+23
-1544	5,679578E+22	5,679519E+22	2,597366E+22	2,597298E+22	1,135910E+23	5,194664E+22	1,655376E+23
-1543	5,679485E+22	5,679578E+22	2,597441E+22	2,597415E+22	1,135906E+23	5,194855E+22	1,655392E+23
-1542	5,679721E+22	5,679498E+22	2,597350E+22	2,597474E+22	1,135922E+23	5,194824E+22	1,655404E+23
-1541	5,679378E+22	5,679524E+22	2,597488E+22	2,597392E+22	1,135890E+23	5,194880E+22	1,655378E+23
-1540	5,679481E+22	5,679619E+22	2,597446E+22	2,597493E+22	1,135910E+23	5,194939E+22	1,655404E+23
-1539	5,679626E+22	5,679498E+22	2,597378E+22	2,597389E+22	1,135912E+23	5,194767E+22	1,655389E+23
-1538	5,679372E+22	5,679535E+22	2,597466E+22	2,597314E+22	1,135891E+23	5,194780E+22	1,655369E+23
-1537	5,679662E+22	5,679582E+22	2,597320E+22	2,597383E+22	1,135924E+23	5,194702E+22	1,655395E+23
-1536	5,679600E+22	5,679563E+22	2,597285E+22	2,597243E+22	1,135916E+23	5,194527E+22	1,655369E+23
-1535	5,679475E+22	5,679689E+22	2,597282E+22	2,597249E+22	1,135916E+23	5,194532E+22	1,655369E+23
-1534	5,679812E+22	5,679671E+22	2,597119E+22	2,597266E+22	1,135948E+23	5,194385E+22	1,655387E+23
-1533	5,679610E+22	5,679650E+22	2,597205E+22	2,597111E+22	1,135926E+23	5,194316E+22	1,655358E+23
-1532	5,679676E+22	5,679766E+22	2,597203E+22	2,597183E+22	1,135944E+23	5,194386E+22	1,655383E+23
-1531	5,679869E+22	5,679688E+22	2,597135E+22	2,597176E+22	1,135956E+23	5,194311E+22	1,655387E+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							
-1530	5,679522E+22	5,679678E+22	2,597281E+22	2,597171E+22	1,135920E+23	5,194452E+22	1,655365E+23
-1529	5,679656E+22	5,679714E+22	2,597258E+22	2,597341E+22	1,135937E+23	5,194599E+22	1,655397E+23
-1528	5,679626E+22	5,679569E+22	2,597298E+22	2,597316E+22	1,135920E+23	5,194615E+22	1,655381E+23
-1527	5,679384E+22	5,679548E+22	2,597444E+22	2,597365E+22	1,135893E+23	5,194809E+22	1,655374E+23
-1526	5,679668E+22	5,679486E+22	2,597385E+22	2,597505E+22	1,135915E+23	5,194889E+22	1,655404E+23
-1525	5,679448E+22	5,679372E+22	2,597515E+22	2,597451E+22	1,135882E+23	5,194966E+22	1,655379E+23
-1524	5,679329E+22	5,679499E+22	2,597578E+22	2,597561E+22	1,135883E+23	5,195139E+22	1,655397E+23
-1523	5,679549E+22	5,679430E+22	2,597496E+22	2,597611E+22	1,135898E+23	5,195108E+22	1,655409E+23
-1522	5,679246E+22	5,679357E+22	2,597620E+22	2,597521E+22	1,135860E+23	5,195140E+22	1,655374E+23
-1521	5,679380E+22	5,679451E+22	2,597581E+22	2,597586E+22	1,135883E+23	5,195167E+22	1,655400E+23
-1520	5,679511E+22	5,679372E+22	2,597507E+22	2,597500E+22	1,135888E+23	5,195007E+22	1,655389E+23
-1519	5,679266E+22	5,679428E+22	2,597556E+22	2,597432E+22	1,135869E+23	5,194988E+22	1,655368E+23
-1518	5,679555E+22	5,679515E+22	2,597397E+22	2,597510E+22	1,135907E+23	5,194908E+22	1,655398E+23
-1517	5,679468E+22	5,679441E+22	2,597389E+22	2,597369E+22	1,135891E+23	5,194758E+22	1,655367E+23
-1516	5,679368E+22	5,679598E+22	2,597393E+22	2,597343E+22	1,135897E+23	5,194737E+22	1,655370E+23
-1515	5,679724E+22	5,679581E+22	2,597252E+22	2,597353E+22	1,135931E+23	5,194605E+22	1,655391E+23
-1514	5,679528E+22	5,679483E+22	2,597332E+22	2,597229E+22	1,135901E+23	5,194561E+22	1,655357E+23
-1513	5,679553E+22	5,679636E+22	2,597338E+22	2,597310E+22	1,135919E+23	5,194648E+22	1,655384E+23
-1512	5,679686E+22	5,679588E+22	2,597274E+22	2,597339E+22	1,135927E+23	5,194613E+22	1,655389E+23
-1511	5,679369E+22	5,679537E+22	2,597404E+22	2,597328E+22	1,135891E+23	5,194732E+22	1,655364E+23
-1510	5,679536E+22	5,679567E+22	2,597387E+22	2,597479E+22	1,135910E+23	5,194866E+22	1,655397E+23
-1509	5,679504E+22	5,679374E+22	2,597458E+22	2,597456E+22	1,135888E+23	5,194914E+22	1,655379E+23
-1508	5,679274E+22	5,679418E+22	2,597595E+22	2,597495E+22	1,135869E+23	5,195089E+22	1,655378E+23
-1507	5,679525E+22	5,679405E+22	2,597539E+22	2,597651E+22	1,135893E+23	5,195190E+22	1,655412E+23
-1506	5,679301E+22	5,679238E+22	2,597650E+22	2,597621E+22	1,135854E+23	5,195271E+22	1,655381E+23
-1505	5,679182E+22	5,679369E+22	2,597721E+22	2,597695E+22	1,135855E+23	5,195416E+22	1,655397E+23
-1504	5,679395E+22	5,679316E+22	2,597646E+22	2,597740E+22	1,135871E+23	5,195386E+22	1,655410E+23
-1503	5,679154E+22	5,679210E+22	2,597742E+22	2,597631E+22	1,135836E+23	5,195373E+22	1,655374E+23
-1502	5,679288E+22	5,679324E+22	2,597690E+22	2,597695E+22	1,135861E+23	5,195385E+22	1,655400E+23
-1501	5,679369E+22	5,679238E+22	2,597625E+22	2,597638E+22	1,135861E+23	5,195263E+22	1,655387E+23
-1500	5,679126E+22	5,679341E+22	2,597648E+22	2,597556E+22	1,135847E+23	5,195204E+22	1,655367E+23
-1499	5,679423E+22	5,679428E+22	2,597504E+22	2,597621E+22	1,135885E+23	5,195125E+22	1,655398E+23
-1498	5,679391E+22	5,679277E+22	2,597489E+22	2,597473E+22	1,135867E+23	5,194962E+22	1,655363E+23
-1497	5,679312E+22	5,679448E+22	2,597511E+22	2,597416E+22	1,135876E+23	5,194927E+22	1,655369E+23
-1496	5,679621E+22	5,679490E+22	2,597383E+22	2,597455E+22	1,135911E+23	5,194839E+22	1,655395E+23
-1495	5,679414E+22	5,679392E+22	2,597442E+22	2,597358E+22	1,135881E+23	5,194799E+22	1,655361E+23
-1494	5,679402E+22	5,679557E+22	2,597455E+22	2,597453E+22	1,135896E+23	5,194908E+22	1,655387E+23
-1493	5,679504E+22	5,679446E+22	2,597427E+22	2,597501E+22	1,135895E+23	5,194928E+22	1,655388E+23
-1492	5,679220E+22	5,679400E+22	2,597554E+22	2,597464E+22	1,135862E+23	5,195018E+22	1,655364E+23
-1491	5,679418E+22	5,679421E+22	2,597555E+22	2,597616E+22	1,135884E+23	5,195171E+22	1,655401E+23
-1490	5,679402E+22	5,679173E+22	2,597606E+22	2,597620E+22	1,135858E+23	5,195226E+22	1,655380E+23
-1489	5,679146E+22	5,679274E+22	2,597738E+22	2,597653E+22	1,135842E+23	5,195391E+22	1,655381E+23
-1488	5,679352E+22	5,679313E+22	2,597683E+22	2,597821E+22	1,135866E+23	5,195505E+22	1,655417E+23
-1487	5,679165E+22	5,679110E+22	2,597774E+22	2,597764E+22	1,135828E+23	5,195539E+22	1,655381E+23
-1486	5,679074E+22	5,679246E+22	2,597849E+22	2,597804E+22	1,135832E+23	5,195653E+22	1,655397E+23
-1485	5,679271E+22	5,679148E+22	2,597795E+22	2,597851E+22	1,135842E+23	5,195646E+22	1,655407E+23
-1484	5,679026E+22	5,679099E+22	2,597868E+22	2,597737E+22	1,135812E+23	5,195605E+22	1,655373E+23
-1483	5,679146E+22	5,679244E+22	2,597810E+22	2,597819E+22	1,135839E+23	5,195629E+22	1,655402E+23
-1482	5,679236E+22	5,679093E+22	2,597720E+22	2,597780E+22	1,135833E+23	5,195501E+22	1,655383E+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							
-1481	5,679025E+22	5,679214E+22	2,597748E+22	2,597660E+22	1,135824E+23	5,195408E+22	1,655365E+23
-1480	5,679328E+22	5,679328E+22	2,597617E+22	2,597715E+22	1,135866E+23	5,195332E+22	1,655399E+23
-1479	5,679344E+22	5,679155E+22	2,597588E+22	2,597560E+22	1,135850E+23	5,195148E+22	1,655365E+23
-1478	5,679236E+22	5,679361E+22	2,597618E+22	2,597512E+22	1,135860E+23	5,195130E+22	1,655373E+23
-1477	5,679453E+22	5,679390E+22	2,597518E+22	2,597598E+22	1,135884E+23	5,195116E+22	1,655396E+23
-1476	5,679230E+22	5,679313E+22	2,597571E+22	2,597506E+22	1,135854E+23	5,195077E+22	1,655362E+23
-1475	5,679232E+22	5,679437E+22	2,597606E+22	2,597600E+22	1,135867E+23	5,195206E+22	1,655387E+23
-1474	5,679382E+22	5,679231E+22	2,597570E+22	2,597654E+22	1,135861E+23	5,195225E+22	1,655384E+23
-1473	5,679137E+22	5,679204E+22	2,597700E+22	2,597592E+22	1,135834E+23	5,195291E+22	1,655363E+23
-1472	5,679298E+22	5,679293E+22	2,597704E+22	2,597766E+22	1,135859E+23	5,195469E+22	1,655406E+23
-1471	5,679292E+22	5,679063E+22	2,597727E+22	2,597780E+22	1,135835E+23	5,195507E+22	1,655386E+23
-1470	5,679011E+22	5,679184E+22	2,597865E+22	2,597797E+22	1,135819E+23	5,195662E+22	1,655386E+23
-1469	5,679175E+22	5,679187E+22	2,597849E+22	2,597966E+22	1,135836E+23	5,195814E+22	1,655418E+23
-1468	5,679019E+22	5,678995E+22	2,597930E+22	2,597878E+22	1,135801E+23	5,195807E+22	1,655382E+23
-1467	5,678939E+22	5,679110E+22	2,598012E+22	2,597919E+22	1,135805E+23	5,195931E+22	1,655398E+23
-1466	5,679139E+22	5,678963E+22	2,597927E+22	2,597999E+22	1,135810E+23	5,195926E+22	1,655403E+23
-1465	5,678892E+22	5,678953E+22	2,597978E+22	2,597875E+22	1,135784E+23	5,195853E+22	1,655370E+23
-1464	5,678998E+22	5,679140E+22	2,597915E+22	2,597959E+22	1,135814E+23	5,195874E+22	1,655401E+23
-1463	5,679157E+22	5,678966E+22	2,597801E+22	2,597890E+22	1,135812E+23	5,195690E+22	1,655381E+23
-1462	5,678974E+22	5,679110E+22	2,597837E+22	2,597732E+22	1,135808E+23	5,195568E+22	1,655365E+23
-1461	5,679237E+22	5,679218E+22	2,597744E+22	2,597801E+22	1,135846E+23	5,195544E+22	1,655400E+23
-1460	5,679221E+22	5,679104E+22	2,597707E+22	2,597655E+22	1,135833E+23	5,195362E+22	1,655369E+23
-1459	5,679075E+22	5,679308E+22	2,597754E+22	2,597644E+22	1,135838E+23	5,195398E+22	1,655378E+23
-1458	5,679279E+22	5,679242E+22	2,597648E+22	2,597760E+22	1,135852E+23	5,195408E+22	1,655393E+23
-1457	5,679091E+22	5,679148E+22	2,597709E+22	2,597647E+22	1,135824E+23	5,195356E+22	1,655360E+23
-1456	5,679115E+22	5,679276E+22	2,597754E+22	2,597739E+22	1,135839E+23	5,195494E+22	1,655388E+23
-1455	5,679318E+22	5,679047E+22	2,597695E+22	2,597791E+22	1,135836E+23	5,195486E+22	1,655385E+23
-1454	5,679057E+22	5,679082E+22	2,597821E+22	2,597728E+22	1,135814E+23	5,195549E+22	1,655369E+23
-1453	5,679135E+22	5,679181E+22	2,597850E+22	2,597929E+22	1,135832E+23	5,195779E+22	1,655409E+23
-1452	5,679107E+22	5,678987E+22	2,597871E+22	2,597927E+22	1,135809E+23	5,195798E+22	1,655389E+23
-1451	5,678848E+22	5,679076E+22	2,598035E+22	2,597933E+22	1,135792E+23	5,195968E+22	1,655389E+23
-1450	5,679029E+22	5,678984E+22	2,598012E+22	2,598102E+22	1,135801E+23	5,196114E+22	1,655413E+23
-1449	5,678901E+22	5,678813E+22	2,598084E+22	2,598000E+22	1,135771E+23	5,196084E+22	1,655380E+23
-1448	5,678793E+22	5,678980E+22	2,598149E+22	2,598062E+22	1,135777E+23	5,196211E+22	1,655398E+23
-1447	5,679017E+22	5,678836E+22	2,598018E+22	2,598148E+22	1,135785E+23	5,196166E+22	1,655402E+23
-1446	5,678789E+22	5,678858E+22	2,598059E+22	2,597996E+22	1,135765E+23	5,196055E+22	1,655370E+23
-1445	5,678878E+22	5,679029E+22	2,598030E+22	2,598069E+22	1,135791E+23	5,196098E+22	1,655401E+23
-1444	5,679067E+22	5,678894E+22	2,597914E+22	2,597965E+22	1,135796E+23	5,195879E+22	1,655384E+23
-1443	5,678893E+22	5,679026E+22	2,597971E+22	2,597818E+22	1,135792E+23	5,195789E+22	1,655371E+23
-1442	5,679105E+22	5,679086E+22	2,597869E+22	2,597928E+22	1,135819E+23	5,195797E+22	1,655399E+23
-1441	5,679070E+22	5,678990E+22	2,597827E+22	2,597794E+22	1,135806E+23	5,195620E+22	1,655368E+23
-1440	5,678901E+22	5,679188E+22	2,597882E+22	2,597795E+22	1,135809E+23	5,195677E+22	1,655377E+23
-1439	5,679177E+22	5,679072E+22	2,597756E+22	2,597898E+22	1,135825E+23	5,195654E+22	1,655390E+23
-1438	5,679032E+22	5,678982E+22	2,597819E+22	2,597753E+22	1,135801E+23	5,195572E+22	1,655359E+23
-1437	5,679013E+22	5,679123E+22	2,597898E+22	2,597865E+22	1,135814E+23	5,195763E+22	1,655390E+23
-1436	5,679189E+22	5,678975E+22	2,597828E+22	2,597919E+22	1,135816E+23	5,195747E+22	1,655391E+23
-1435	5,678897E+22	5,679015E+22	2,597976E+22	2,597880E+22	1,135791E+23	5,195857E+22	1,655377E+23
-1434	5,678945E+22	5,679041E+22	2,598011E+22	2,598097E+22	1,135799E+23	5,196108E+22	1,655409E+23
-1433	5,678947E+22	5,678834E+22	2,598042E+22	2,598071E+22	1,135778E+23	5,196112E+22	1,655389E+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	5,678696E+22	5,678914E+22	2,598211E+22	2,598076E+22	1,135761E+23	5,196288E+22	1,655390E+23
-1431	5,678922E+22	5,678795E+22	2,598147E+22	2,598249E+22	1,135772E+23	5,196396E+22	1,655411E+23
-1430	5,678787E+22	5,678672E+22	2,598194E+22	2,598144E+22	1,135746E+23	5,196338E+22	1,655380E+23
-1429	5,678630E+22	5,678856E+22	2,598266E+22	2,598222E+22	1,135749E+23	5,196488E+22	1,655397E+23
-1428	5,678875E+22	5,678757E+22	2,598121E+22	2,598268E+22	1,135763E+23	5,196388E+22	1,655402E+23
-1427	5,678700E+22	5,678768E+22	2,598181E+22	2,598092E+22	1,135747E+23	5,196272E+22	1,655374E+23
-1426	5,678794E+22	5,678878E+22	2,598152E+22	2,598158E+22	1,135767E+23	5,196310E+22	1,655398E+23
-1425	5,678982E+22	5,678782E+22	2,598038E+22	2,598049E+22	1,135776E+23	5,196087E+22	1,655385E+23
-1424	5,678760E+22	5,678948E+22	2,598097E+22	2,597937E+22	1,135771E+23	5,196034E+22	1,655374E+23
-1423	5,678967E+22	5,678972E+22	2,597965E+22	2,598063E+22	1,135794E+23	5,196028E+22	1,655397E+23
-1422	5,678948E+22	5,678877E+22	2,597925E+22	2,597918E+22	1,135782E+23	5,195843E+22	1,655367E+23
-1421	5,678772E+22	5,679036E+22	2,598010E+22	2,597924E+22	1,135781E+23	5,195933E+22	1,655374E+23
-1420	5,679072E+22	5,678949E+22	2,597884E+22	2,598002E+22	1,135802E+23	5,195886E+22	1,655391E+23
-1419	5,678948E+22	5,678868E+22	2,597963E+22	2,597878E+22	1,135782E+23	5,195840E+22	1,655366E+23
-1418	5,678869E+22	5,678977E+22	2,598036E+22	2,598025E+22	1,135785E+23	5,196061E+22	1,655391E+23
-1417	5,679022E+22	5,678864E+22	2,597974E+22	2,598081E+22	1,135789E+23	5,196056E+22	1,655394E+23
-1416	5,678717E+22	5,678892E+22	2,598142E+22	2,598046E+22	1,135761E+23	5,196187E+22	1,655380E+23
-1415	5,678809E+22	5,678861E+22	2,598159E+22	2,598243E+22	1,135767E+23	5,196402E+22	1,655407E+23
-1414	5,678847E+22	5,678663E+22	2,598185E+22	2,598196E+22	1,135751E+23	5,196381E+22	1,655389E+23
-1413	5,678555E+22	5,678748E+22	2,598365E+22	2,598225E+22	1,135730E+23	5,196590E+22	1,655389E+23
-1412	5,678766E+22	5,678702E+22	2,598274E+22	2,598389E+22	1,135747E+23	5,196663E+22	1,655413E+23
-1411	5,678651E+22	5,678585E+22	2,598321E+22	2,598291E+22	1,135724E+23	5,196612E+22	1,655385E+23
-1410	5,678488E+22	5,678713E+22	2,598389E+22	2,598362E+22	1,135720E+23	5,196751E+22	1,655395E+23
-1409	5,678779E+22	5,678635E+22	2,598250E+22	2,598368E+22	1,135741E+23	5,196618E+22	1,655403E+23
-1408	5,678610E+22	5,678652E+22	2,598319E+22	2,598185E+22	1,135726E+23	5,196505E+22	1,655377E+23
-1407	5,678717E+22	5,678748E+22	2,598260E+22	2,598260E+22	1,135746E+23	5,196520E+22	1,655398E+23
-1406	5,678873E+22	5,678686E+22	2,598130E+22	2,598159E+22	1,135756E+23	5,196289E+22	1,655385E+23
-1405	5,678583E+22	5,678839E+22	2,598207E+22	2,598081E+22	1,135742E+23	5,196288E+22	1,655371E+23
-1404	5,678808E+22	5,678880E+22	2,598070E+22	2,598179E+22	1,135769E+23	5,196249E+22	1,655394E+23
-1403	5,678851E+22	5,678749E+22	2,598050E+22	2,598030E+22	1,135760E+23	5,196080E+22	1,655368E+23
-1402	5,678677E+22	5,678855E+22	2,598137E+22	2,598043E+22	1,135753E+23	5,196181E+22	1,655371E+23
-1401	5,678981E+22	5,678817E+22	2,598017E+22	2,598122E+22	1,135780E+23	5,196139E+22	1,655394E+23
-1400	5,678810E+22	5,678778E+22	2,598104E+22	2,598028E+22	1,135759E+23	5,196132E+22	1,655372E+23
-1399	5,678726E+22	5,678858E+22	2,598161E+22	2,598183E+22	1,135758E+23	5,196344E+22	1,655393E+23
-1398	5,678884E+22	5,678744E+22	2,598112E+22	2,598223E+22	1,135763E+23	5,196335E+22	1,655396E+23
-1397	5,678561E+22	5,678735E+22	2,598313E+22	2,598198E+22	1,135730E+23	5,196511E+22	1,655381E+23
-1396	5,678668E+22	5,678722E+22	2,598321E+22	2,598369E+22	1,135739E+23	5,196690E+22	1,655408E+23
-1395	5,678729E+22	5,678525E+22	2,598346E+22	2,598349E+22	1,135725E+23	5,196695E+22	1,655395E+23
-1394	5,678390E+22	5,678579E+22	2,598501E+22	2,598401E+22	1,135697E+23	5,196902E+22	1,655387E+23
-1393	5,678609E+22	5,678571E+22	2,598404E+22	2,598545E+22	1,135718E+23	5,196949E+22	1,655413E+23
-1392	5,678524E+22	5,678464E+22	2,598456E+22	2,598427E+22	1,135699E+23	5,196883E+22	1,655387E+23
-1391	5,678416E+22	5,678553E+22	2,598497E+22	2,598462E+22	1,135697E+23	5,196959E+22	1,655393E+23
-1390	5,678720E+22	5,678516E+22	2,598359E+22	2,598442E+22	1,135724E+23	5,196801E+22	1,655404E+23
-1389	5,678493E+22	5,678552E+22	2,598440E+22	2,598293E+22	1,135705E+23	5,196732E+22	1,655378E+23
-1388	5,678548E+22	5,678697E+22	2,598363E+22	2,598364E+22	1,135725E+23	5,196727E+22	1,655397E+23
-1387	5,678724E+22	5,678617E+22	2,598242E+22	2,598290E+22	1,135734E+23	5,196532E+22	1,655387E+23
-1386	5,678431E+22	5,678681E+22	2,598321E+22	2,598216E+22	1,135711E+23	5,196538E+22	1,655365E+23
-1385	5,678708E+22	5,678727E+22	2,598195E+22	2,598289E+22	1,135744E+23	5,196485E+22	1,655392E+23
-1384	5,678776E+22	5,678603E+22	2,598185E+22	2,598147E+22	1,135738E+23	5,196332E+22	1,655371E+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	5,678606E+22	5,678704E+22	2,598244E+22	2,598173E+22	1,135731E+23	5,196417E+22	1,655373E+23
-1382	5,678871E+22	5,678721E+22	2,598125E+22	2,598257E+22	1,135759E+23	5,196382E+22	1,655397E+23
-1381	5,678639E+22	5,678673E+22	2,598244E+22	2,598191E+22	1,135731E+23	5,196435E+22	1,655375E+23
-1380	5,678556E+22	5,678758E+22	2,598312E+22	2,598310E+22	1,135731E+23	5,196622E+22	1,655394E+23
-1379	5,678763E+22	5,678606E+22	2,598283E+22	2,598356E+22	1,135737E+23	5,196639E+22	1,655401E+23
-1378	5,678419E+22	5,678533E+22	2,598483E+22	2,598349E+22	1,135695E+23	5,196832E+22	1,655378E+23
-1377	5,678526E+22	5,678567E+22	2,598482E+22	2,598522E+22	1,135709E+23	5,197004E+22	1,655410E+23
-1376	5,678564E+22	5,678398E+22	2,598497E+22	2,598519E+22	1,135696E+23	5,197016E+22	1,655398E+23
-1375	5,678257E+22	5,678432E+22	2,598615E+22	2,598563E+22	1,135669E+23	5,197177E+22	1,655387E+23
-1374	5,678507E+22	5,678441E+22	2,598518E+22	2,598664E+22	1,135695E+23	5,197182E+22	1,655413E+23
-1373	5,678409E+22	5,678337E+22	2,598592E+22	2,598541E+22	1,135675E+23	5,197133E+22	1,655388E+23
-1372	5,678310E+22	5,678465E+22	2,598623E+22	2,598543E+22	1,135678E+23	5,197166E+22	1,655394E+23
-1371	5,678611E+22	5,678435E+22	2,598484E+22	2,598554E+22	1,135705E+23	5,197038E+22	1,655408E+23
-1370	5,678316E+22	5,678428E+22	2,598553E+22	2,598438E+22	1,135674E+23	5,196991E+22	1,655373E+23
-1369	5,678383E+22	5,678578E+22	2,598475E+22	2,598495E+22	1,135696E+23	5,196970E+22	1,655393E+23
-1368	5,678596E+22	5,678479E+22	2,598365E+22	2,598412E+22	1,135708E+23	5,196777E+22	1,655385E+23
-1367	5,678376E+22	5,678501E+22	2,598414E+22	2,598321E+22	1,135688E+23	5,196736E+22	1,655361E+23
-1366	5,678670E+22	5,678586E+22	2,598294E+22	2,598377E+22	1,135726E+23	5,196671E+22	1,655393E+23
-1365	5,678676E+22	5,678510E+22	2,598302E+22	2,598273E+22	1,135719E+23	5,196575E+22	1,655376E+23
-1364	5,678461E+22	5,678658E+22	2,598360E+22	2,598289E+22	1,135712E+23	5,196650E+22	1,655377E+23
-1363	5,678727E+22	5,678657E+22	2,598270E+22	2,598399E+22	1,135738E+23	5,196668E+22	1,655405E+23
-1362	5,678465E+22	5,678522E+22	2,598409E+22	2,598346E+22	1,135699E+23	5,196755E+22	1,655374E+23
-1361	5,678404E+22	5,678597E+22	2,598491E+22	2,598448E+22	1,135700E+23	5,196939E+22	1,655394E+23
-1360	5,678631E+22	5,678436E+22	2,598466E+22	2,598514E+22	1,135707E+23	5,196980E+22	1,655405E+23
-1359	5,678296E+22	5,678335E+22	2,598615E+22	2,598522E+22	1,135663E+23	5,197137E+22	1,655377E+23
-1358	5,678383E+22	5,678418E+22	2,598600E+22	2,598687E+22	1,135680E+23	5,197286E+22	1,655409E+23
-1357	5,678405E+22	5,678267E+22	2,598625E+22	2,598688E+22	1,135667E+23	5,197313E+22	1,655399E+23
-1356	5,678127E+22	5,678324E+22	2,598739E+22	2,598671E+22	1,135645E+23	5,197409E+22	1,655386E+23
-1355	5,678428E+22	5,678337E+22	2,598658E+22	2,598764E+22	1,135676E+23	5,197422E+22	1,655419E+23
-1354	5,678288E+22	5,678196E+22	2,598731E+22	2,598653E+22	1,135648E+23	5,197384E+22	1,655387E+23
-1353	5,678164E+22	5,678369E+22	2,598756E+22	2,598655E+22	1,135653E+23	5,197411E+22	1,655394E+23
-1352	5,678445E+22	5,678344E+22	2,598613E+22	2,598688E+22	1,135679E+23	5,197301E+22	1,655409E+23
-1351	5,678185E+22	5,678277E+22	2,598646E+22	2,598574E+22	1,135646E+23	5,197219E+22	1,655368E+23
-1350	5,678294E+22	5,678432E+22	2,598573E+22	2,598597E+22	1,135673E+23	5,197170E+22	1,655390E+23
-1349	5,678515E+22	5,678341E+22	2,598480E+22	2,598521E+22	1,135686E+23	5,197001E+22	1,655386E+23
-1348	5,678309E+22	5,678406E+22	2,598520E+22	2,598406E+22	1,135671E+23	5,196926E+22	1,655364E+23
-1347	5,678586E+22	5,678522E+22	2,598410E+22	2,598497E+22	1,135711E+23	5,196907E+22	1,655401E+23
-1346	5,678503E+22	5,678412E+22	2,598429E+22	2,598427E+22	1,135692E+23	5,196855E+22	1,655377E+23
-1345	5,678289E+22	5,678556E+22	2,598510E+22	2,598430E+22	1,135684E+23	5,196941E+22	1,655379E+23
-1344	5,678568E+22	5,678512E+22	2,598444E+22	2,598537E+22	1,135708E+23	5,196982E+22	1,655406E+23
-1343	5,678353E+22	5,678317E+22	2,598557E+22	2,598491E+22	1,135667E+23	5,197048E+22	1,655372E+23
-1342	5,678300E+22	5,678410E+22	2,598633E+22	2,598586E+22	1,135671E+23	5,197219E+22	1,655393E+23
-1341	5,678469E+22	5,678293E+22	2,598608E+22	2,598689E+22	1,135676E+23	5,197297E+22	1,655406E+23
-1340	5,678137E+22	5,678238E+22	2,598735E+22	2,598673E+22	1,135637E+23	5,197408E+22	1,655378E+23
-1339	5,678258E+22	5,678317E+22	2,598734E+22	2,598836E+22	1,135658E+23	5,197571E+22	1,655415E+23
-1338	5,678259E+22	5,678124E+22	2,598776E+22	2,598827E+22	1,135638E+23	5,197602E+22	1,655398E+23
-1337	5,678015E+22	5,678195E+22	2,598899E+22	2,598775E+22	1,135621E+23	5,197675E+22	1,655388E+23
-1336	5,678308E+22	5,678214E+22	2,598824E+22	2,598880E+22	1,135652E+23	5,197704E+22	1,655423E+23
-1335	5,678156E+22	5,678054E+22	2,598846E+22	2,598795E+22	1,135621E+23	5,197641E+22	1,655385E+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	5,678013E+22	5,678241E+22	2,598857E+22	2,598788E+22	1,135625E+23	5,197645E+22	1,655390E+23
-1333	5,678286E+22	5,678220E+22	2,598720E+22	2,598829E+22	1,135651E+23	5,197549E+22	1,655405E+23
-1332	5,678090E+22	5,678155E+22	2,598739E+22	2,598661E+22	1,135625E+23	5,197400E+22	1,655365E+23
-1331	5,678255E+22	5,678319E+22	2,598679E+22	2,598687E+22	1,135657E+23	5,197366E+22	1,655394E+23
-1330	5,678422E+22	5,678223E+22	2,598595E+22	2,598630E+22	1,135665E+23	5,197225E+22	1,655387E+23
-1329	5,678182E+22	5,678340E+22	2,598642E+22	2,598517E+22	1,135652E+23	5,197160E+22	1,655368E+23
-1328	5,678428E+22	5,678457E+22	2,598554E+22	2,598631E+22	1,135688E+23	5,197185E+22	1,655407E+23
-1327	5,678359E+22	5,678269E+22	2,598553E+22	2,598573E+22	1,135663E+23	5,197126E+22	1,655375E+23
-1326	5,678157E+22	5,678389E+22	2,598654E+22	2,598558E+22	1,135655E+23	5,197211E+22	1,655376E+23
-1325	5,678432E+22	5,678345E+22	2,598602E+22	2,598686E+22	1,135678E+23	5,197288E+22	1,655407E+23
-1324	5,678235E+22	5,678163E+22	2,598694E+22	2,598628E+22	1,135640E+23	5,197322E+22	1,655372E+23
-1323	5,678179E+22	5,678287E+22	2,598766E+22	2,598754E+22	1,135647E+23	5,197521E+22	1,655399E+23
-1322	5,678284E+22	5,678149E+22	2,598746E+22	2,598871E+22	1,135643E+23	5,197617E+22	1,655405E+23
-1321	5,677983E+22	5,678112E+22	2,598886E+22	2,598817E+22	1,135609E+23	5,197703E+22	1,655380E+23
-1320	5,678135E+22	5,678183E+22	2,598908E+22	2,598960E+22	1,135632E+23	5,197868E+22	1,655419E+23
-1319	5,678164E+22	5,677953E+22	2,598920E+22	2,598949E+22	1,135612E+23	5,197868E+22	1,655399E+23
-1318	5,677907E+22	5,678056E+22	2,599039E+22	2,598890E+22	1,135596E+23	5,197929E+22	1,655389E+23
-1317	5,678132E+22	5,678115E+22	2,598956E+22	2,599026E+22	1,135625E+23	5,197982E+22	1,655423E+23
-1316	5,677993E+22	5,677965E+22	2,598951E+22	2,598923E+22	1,135596E+23	5,197874E+22	1,655383E+23
-1315	5,677898E+22	5,678136E+22	2,598964E+22	2,598915E+22	1,135603E+23	5,197879E+22	1,655391E+23
-1314	5,678157E+22	5,678075E+22	2,598839E+22	2,598949E+22	1,135623E+23	5,197787E+22	1,655402E+23
-1313	5,678020E+22	5,678037E+22	2,598861E+22	2,598753E+22	1,135606E+23	5,197614E+22	1,655367E+23
-1312	5,678175E+22	5,678214E+22	2,598810E+22	2,598790E+22	1,135639E+23	5,197600E+22	1,655399E+23
-1311	5,678307E+22	5,678112E+22	2,598691E+22	2,598763E+22	1,135642E+23	5,197455E+22	1,655387E+23
-1310	5,678048E+22	5,678229E+22	2,598749E+22	2,598644E+22	1,135628E+23	5,197393E+22	1,655367E+23
-1309	5,678256E+22	5,678335E+22	2,598687E+22	2,598766E+22	1,135659E+23	5,197453E+22	1,655404E+23
-1308	5,678240E+22	5,678133E+22	2,598683E+22	2,598681E+22	1,135637E+23	5,197365E+22	1,655374E+23
-1307	5,678077E+22	5,678240E+22	2,598794E+22	2,598684E+22	1,135632E+23	5,197477E+22	1,655379E+23
-1306	5,678280E+22	5,678188E+22	2,598750E+22	2,598842E+22	1,135647E+23	5,197593E+22	1,655406E+23
-1305	5,678080E+22	5,678050E+22	2,598838E+22	2,598783E+22	1,135613E+23	5,197621E+22	1,655375E+23
-1304	5,678019E+22	5,678173E+22	2,598926E+22	2,598917E+22	1,135619E+23	5,197843E+22	1,655403E+23
-1303	5,678147E+22	5,677993E+22	2,598887E+22	2,599030E+22	1,135614E+23	5,197917E+22	1,655406E+23
-1302	5,677875E+22	5,677952E+22	2,599042E+22	2,598943E+22	1,135583E+23	5,197985E+22	1,655381E+23
-1301	5,678004E+22	5,678045E+22	2,599075E+22	2,599095E+22	1,135605E+23	5,198170E+22	1,655422E+23
-1300	5,678038E+22	5,677837E+22	2,599057E+22	2,599075E+22	1,135587E+23	5,198132E+22	1,655401E+23
-1299	5,677763E+22	5,677958E+22	2,599160E+22	2,599046E+22	1,135572E+23	5,198206E+22	1,655393E+23
-1298	5,677930E+22	5,677983E+22	2,599078E+22	2,599188E+22	1,135591E+23	5,198266E+22	1,655418E+23
-1297	5,677850E+22	5,677830E+22	2,599071E+22	2,599042E+22	1,135568E+23	5,198113E+22	1,655379E+23
-1296	5,677815E+22	5,677995E+22	2,599095E+22	2,599015E+22	1,135581E+23	5,198110E+22	1,655392E+23
-1295	5,678104E+22	5,677912E+22	2,598937E+22	2,599047E+22	1,135602E+23	5,197984E+22	1,655400E+23
-1294	5,677949E+22	5,677920E+22	2,598959E+22	2,598845E+22	1,135587E+23	5,197804E+22	1,655367E+23
-1293	5,678034E+22	5,678152E+22	2,598916E+22	2,598910E+22	1,135619E+23	5,197826E+22	1,655401E+23
-1292	5,678169E+22	5,678041E+22	2,598791E+22	2,598871E+22	1,135621E+23	5,197662E+22	1,655387E+23
-1291	5,677934E+22	5,678131E+22	2,598871E+22	2,598767E+22	1,135606E+23	5,197638E+22	1,655370E+23
-1290	5,678098E+22	5,678183E+22	2,598837E+22	2,598895E+22	1,135628E+23	5,197733E+22	1,655401E+23
-1289	5,678122E+22	5,677985E+22	2,598842E+22	2,598807E+22	1,135611E+23	5,197649E+22	1,655376E+23
-1288	5,677953E+22	5,678096E+22	2,598955E+22	2,598838E+22	1,135605E+23	5,197793E+22	1,655384E+23
-1287	5,678127E+22	5,678028E+22	2,598875E+22	2,599025E+22	1,135615E+23	5,197900E+22	1,655405E+23
-1286	5,677939E+22	5,677898E+22	2,598970E+22	2,598947E+22	1,135584E+23	5,197917E+22	1,655376E+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	5,677868E+22	5,678036E+22	2,599078E+22	2,599069E+22	1,135590E+23	5,198147E+22	1,655405E+23
-1284	5,678043E+22	5,677860E+22	2,599034E+22	2,599147E+22	1,135590E+23	5,198181E+22	1,655408E+23
-1283	5,677790E+22	5,677830E+22	2,599194E+22	2,599074E+22	1,135562E+23	5,198267E+22	1,655389E+23
-1282	5,677815E+22	5,677922E+22	2,599233E+22	2,599246E+22	1,135574E+23	5,198479E+22	1,655422E+23
-1281	5,677856E+22	5,677743E+22	2,599201E+22	2,599224E+22	1,135560E+23	5,198425E+22	1,655402E+23
-1280	5,677601E+22	5,677827E+22	2,599302E+22	2,599192E+22	1,135543E+23	5,198495E+22	1,655392E+23
-1279	5,677798E+22	5,677807E+22	2,599188E+22	2,599323E+22	1,135560E+23	5,198511E+22	1,655412E+23
-1278	5,677789E+22	5,677661E+22	2,599181E+22	2,599139E+22	1,135545E+23	5,198320E+22	1,655377E+23
-1277	5,677740E+22	5,677867E+22	2,599207E+22	2,599114E+22	1,135561E+23	5,198322E+22	1,655393E+23
-1276	5,678026E+22	5,677833E+22	2,599027E+22	2,599140E+22	1,135586E+23	5,198167E+22	1,655403E+23
-1275	5,677847E+22	5,677865E+22	2,599048E+22	2,598966E+22	1,135571E+23	5,198013E+22	1,655373E+23
-1274	5,677844E+22	5,678058E+22	2,599035E+22	2,599037E+22	1,135590E+23	5,198072E+22	1,655397E+23
-1273	5,678025E+22	5,677933E+22	2,598928E+22	2,598977E+22	1,135596E+23	5,197905E+22	1,655386E+23
-1272	5,677827E+22	5,677980E+22	2,599029E+22	2,598882E+22	1,135581E+23	5,197911E+22	1,655372E+23
-1271	5,677989E+22	5,677999E+22	2,598969E+22	2,599035E+22	1,135599E+23	5,198004E+22	1,655399E+23
-1270	5,678010E+22	5,677829E+22	2,598970E+22	2,598955E+22	1,135584E+23	5,197925E+22	1,655376E+23
-1269	5,677794E+22	5,677985E+22	2,599084E+22	2,599008E+22	1,135578E+23	5,198093E+22	1,655387E+23
-1268	5,677995E+22	5,677915E+22	2,598998E+22	2,599173E+22	1,135591E+23	5,198171E+22	1,655408E+23
-1267	5,677836E+22	5,677785E+22	2,599110E+22	2,599093E+22	1,135562E+23	5,198203E+22	1,655382E+23
-1266	5,677718E+22	5,677892E+22	2,599251E+22	2,599207E+22	1,135561E+23	5,198458E+22	1,655407E+23
-1265	5,677912E+22	5,677727E+22	2,599212E+22	2,599276E+22	1,135564E+23	5,198487E+22	1,655413E+23
-1264	5,677635E+22	5,677702E+22	2,599368E+22	2,599233E+22	1,135534E+23	5,198601E+22	1,655394E+23
-1263	5,677624E+22	5,677757E+22	2,599360E+22	2,599420E+22	1,135538E+23	5,198781E+22	1,655416E+23
-1262	5,677700E+22	5,677563E+22	2,599325E+22	2,599372E+22	1,135526E+23	5,198697E+22	1,655396E+23
-1261	5,677476E+22	5,677670E+22	2,599423E+22	2,599318E+22	1,135515E+23	5,198741E+22	1,655389E+23
-1260	5,677744E+22	5,677660E+22	2,599289E+22	2,599408E+22	1,135540E+23	5,198698E+22	1,655410E+23
-1259	5,677753E+22	5,677567E+22	2,599277E+22	2,599232E+22	1,135532E+23	5,198508E+22	1,655383E+23
-1258	5,677601E+22	5,677797E+22	2,599318E+22	2,599222E+22	1,135540E+23	5,198540E+22	1,655394E+23
-1257	5,677873E+22	5,677793E+22	2,599144E+22	2,599245E+22	1,135567E+23	5,198389E+22	1,655405E+23
-1256	5,677699E+22	5,677786E+22	2,599187E+22	2,599088E+22	1,135548E+23	5,198274E+22	1,655376E+23
-1255	5,677691E+22	5,677904E+22	2,599161E+22	2,599164E+22	1,135560E+23	5,198325E+22	1,655392E+23
-1254	5,677929E+22	5,677753E+22	2,599066E+22	2,599097E+22	1,135568E+23	5,198163E+22	1,655384E+23
-1253	5,677722E+22	5,677821E+22	2,599163E+22	2,599023E+22	1,135554E+23	5,198186E+22	1,655373E+23
-1252	5,677884E+22	5,677867E+22	2,599078E+22	2,599181E+22	1,135575E+23	5,198259E+22	1,655401E+23
-1251	5,677901E+22	5,677729E+22	2,599072E+22	2,599120E+22	1,135563E+23	5,198192E+22	1,655382E+23
-1250	5,677618E+22	5,677860E+22	2,599223E+22	2,599161E+22	1,135548E+23	5,198384E+22	1,655386E+23
-1249	5,677865E+22	5,677800E+22	2,599162E+22	2,599293E+22	1,135567E+23	5,198455E+22	1,655412E+23
-1248	5,677733E+22	5,677642E+22	2,599296E+22	2,599218E+22	1,135538E+23	5,198514E+22	1,655389E+23
-1247	5,677563E+22	5,677723E+22	2,599414E+22	2,599354E+22	1,135529E+23	5,198768E+22	1,655405E+23
-1246	5,677754E+22	5,677576E+22	2,599365E+22	2,599433E+22	1,135533E+23	5,198798E+22	1,655413E+23
-1245	5,677446E+22	5,677564E+22	2,599509E+22	2,599403E+22	1,135501E+23	5,198912E+22	1,655392E+23
-1244	5,677482E+22	5,677609E+22	2,599477E+22	2,599562E+22	1,135509E+23	5,199039E+22	1,655413E+23
-1243	5,677617E+22	5,677429E+22	2,599433E+22	2,599498E+22	1,135505E+23	5,198930E+22	1,655398E+23
-1242	5,677366E+22	5,677533E+22	2,599551E+22	2,599428E+22	1,135490E+23	5,198978E+22	1,655388E+23
-1241	5,677657E+22	5,677573E+22	2,599418E+22	2,599503E+22	1,135523E+23	5,198921E+22	1,655415E+23
-1240	5,677636E+22	5,677503E+22	2,599404E+22	2,599353E+22	1,135514E+23	5,198757E+22	1,655390E+23
-1239	5,677430E+22	5,677692E+22	2,599422E+22	2,599357E+22	1,135512E+23	5,198778E+22	1,655390E+23
-1238	5,677733E+22	5,677654E+22	2,599262E+22	2,599361E+22	1,135539E+23	5,198623E+22	1,655401E+23
-1237	5,677575E+22	5,677639E+22	2,599314E+22	2,599204E+22	1,135521E+23	5,198518E+22	1,655373E+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	5,677619E+22	5,677742E+22	2,599272E+22	2,599267E+22	1,135536E+23	5,198539E+22	1,655390E+23
-1235	5,677861E+22	5,677632E+22	2,599169E+22	2,599224E+22	1,135549E+23	5,198393E+22	1,655389E+23
-1234	5,677574E+22	5,677718E+22	2,599281E+22	2,599170E+22	1,135529E+23	5,198450E+22	1,655374E+23
-1233	5,677742E+22	5,677782E+22	2,599208E+22	2,599314E+22	1,135552E+23	5,198522E+22	1,655405E+23
-1232	5,677768E+22	5,677629E+22	2,599229E+22	2,599261E+22	1,135540E+23	5,198490E+22	1,655389E+23
-1231	5,677475E+22	5,677698E+22	2,599379E+22	2,599298E+22	1,135517E+23	5,198677E+22	1,655385E+23
-1230	5,677749E+22	5,677619E+22	2,599339E+22	2,599423E+22	1,135537E+23	5,198763E+22	1,655413E+23
-1229	5,677582E+22	5,677494E+22	2,599470E+22	2,599380E+22	1,135508E+23	5,198850E+22	1,655393E+23
-1228	5,677400E+22	5,677577E+22	2,599550E+22	2,599524E+22	1,135498E+23	5,199074E+22	1,655405E+23
-1227	5,677592E+22	5,677446E+22	2,599484E+22	2,599611E+22	1,135504E+23	5,199095E+22	1,655413E+23
-1226	5,677265E+22	5,677405E+22	2,599643E+22	2,599559E+22	1,135467E+23	5,199202E+22	1,655387E+23
-1225	5,677372E+22	5,677468E+22	2,599617E+22	2,599670E+22	1,135484E+23	5,199288E+22	1,655413E+23
-1224	5,677547E+22	5,677311E+22	2,599578E+22	2,599606E+22	1,135486E+23	5,199184E+22	1,655404E+23
-1223	5,677252E+22	5,677410E+22	2,599668E+22	2,599544E+22	1,135466E+23	5,199213E+22	1,655388E+23
-1222	5,677533E+22	5,677476E+22	2,599538E+22	2,599620E+22	1,135501E+23	5,199158E+22	1,655417E+23
-1221	5,677479E+22	5,677421E+22	2,599522E+22	2,599481E+22	1,135490E+23	5,199003E+22	1,655390E+23
-1220	5,677302E+22	5,677573E+22	2,599526E+22	2,599467E+22	1,135488E+23	5,198993E+22	1,655387E+23
-1219	5,677647E+22	5,677531E+22	2,599365E+22	2,599469E+22	1,135518E+23	5,198835E+22	1,655401E+23
-1218	5,677462E+22	5,677485E+22	2,599440E+22	2,599317E+22	1,135495E+23	5,198757E+22	1,655370E+23
-1217	5,677522E+22	5,677630E+22	2,599400E+22	2,599381E+22	1,135515E+23	5,198781E+22	1,655393E+23
-1216	5,677742E+22	5,677541E+22	2,599294E+22	2,599371E+22	1,135528E+23	5,198665E+22	1,655395E+23
-1215	5,677404E+22	5,677584E+22	2,599394E+22	2,599323E+22	1,135499E+23	5,198717E+22	1,655371E+23
-1214	5,677615E+22	5,677630E+22	2,599351E+22	2,599444E+22	1,135525E+23	5,198795E+22	1,655404E+23
-1213	5,677644E+22	5,677482E+22	2,599390E+22	2,599390E+22	1,135513E+23	5,198781E+22	1,655391E+23
-1212	5,677372E+22	5,677539E+22	2,599531E+22	2,599426E+22	1,135491E+23	5,198957E+22	1,655387E+23
-1211	5,677621E+22	5,677498E+22	2,599481E+22	2,599577E+22	1,135512E+23	5,199058E+22	1,655418E+23
-1210	5,677372E+22	5,677369E+22	2,599624E+22	2,599558E+22	1,135474E+23	5,199182E+22	1,655392E+23
-1209	5,677215E+22	5,677457E+22	2,599702E+22	2,599683E+22	1,135467E+23	5,199385E+22	1,655406E+23
-1208	5,677445E+22	5,677312E+22	2,599640E+22	2,599768E+22	1,135476E+23	5,199408E+22	1,655416E+23
-1207	5,677138E+22	5,677225E+22	2,599780E+22	2,599696E+22	1,135436E+23	5,199477E+22	1,655384E+23
-1206	5,677303E+22	5,677294E+22	2,599763E+22	2,599785E+22	1,135460E+23	5,199547E+22	1,655414E+23
-1205	5,677438E+22	5,677205E+22	2,599713E+22	2,599734E+22	1,135464E+23	5,199446E+22	1,655409E+23
-1204	5,677130E+22	5,677316E+22	2,599768E+22	2,599672E+22	1,135445E+23	5,199440E+22	1,655389E+23
-1203	5,677394E+22	5,677391E+22	2,599632E+22	2,599742E+22	1,135479E+23	5,199374E+22	1,655416E+23
-1202	5,677319E+22	5,677300E+22	2,599644E+22	2,599594E+22	1,135462E+23	5,199238E+22	1,655386E+23
-1201	5,677200E+22	5,677439E+22	2,599653E+22	2,599551E+22	1,135464E+23	5,199204E+22	1,655384E+23
-1200	5,677559E+22	5,677412E+22	2,599497E+22	2,599576E+22	1,135497E+23	5,199074E+22	1,655404E+23
-1199	5,677337E+22	5,677350E+22	2,599546E+22	2,599447E+22	1,135469E+23	5,198993E+22	1,655368E+23
-1198	5,677402E+22	5,677503E+22	2,599516E+22	2,599515E+22	1,135490E+23	5,199031E+22	1,655394E+23
-1197	5,677595E+22	5,677446E+22	2,599422E+22	2,599514E+22	1,135504E+23	5,198935E+22	1,655398E+23
-1196	5,677291E+22	5,677454E+22	2,599517E+22	2,599451E+22	1,135475E+23	5,198969E+22	1,655371E+23
-1195	5,677515E+22	5,677504E+22	2,599489E+22	2,599567E+22	1,135502E+23	5,199056E+22	1,655407E+23
-1194	5,677499E+22	5,677338E+22	2,599560E+22	2,599534E+22	1,135484E+23	5,199094E+22	1,655393E+23
-1193	5,677215E+22	5,677416E+22	2,599699E+22	2,599579E+22	1,135463E+23	5,199279E+22	1,655391E+23
-1192	5,677436E+22	5,677388E+22	2,599641E+22	2,599763E+22	1,135482E+23	5,199404E+22	1,655423E+23
-1191	5,677171E+22	5,677189E+22	2,599764E+22	2,599741E+22	1,135436E+23	5,199505E+22	1,655386E+23
-1190	5,677092E+22	5,677254E+22	2,599855E+22	2,599830E+22	1,135435E+23	5,199685E+22	1,655403E+23
-1189	5,677347E+22	5,677148E+22	2,599793E+22	2,599895E+22	1,135449E+23	5,199689E+22	1,655418E+23
-1188	5,677072E+22	5,677079E+22	2,599904E+22	2,599812E+22	1,135415E+23	5,199717E+22	1,655387E+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							
-1187	5,677210E+22	5,677216E+22	2,599872E+22	2,599904E+22	1,135443E+23	5,199776E+22	1,655420E+23
-1186	5,677264E+22	5,677131E+22	2,599836E+22	2,599863E+22	1,135439E+23	5,199699E+22	1,655409E+23
-1185	5,676969E+22	5,677240E+22	2,599896E+22	2,599781E+22	1,135421E+23	5,199678E+22	1,655389E+23
-1184	5,677254E+22	5,677293E+22	2,599764E+22	2,599854E+22	1,135455E+23	5,199618E+22	1,655417E+23
-1183	5,677182E+22	5,677126E+22	2,599765E+22	2,599708E+22	1,135431E+23	5,199473E+22	1,655378E+23
-1182	5,677123E+22	5,677261E+22	2,599780E+22	2,599664E+22	1,135438E+23	5,199445E+22	1,655383E+23
-1181	5,677445E+22	5,677294E+22	2,599613E+22	2,599713E+22	1,135474E+23	5,199326E+22	1,655406E+23
-1180	5,677227E+22	5,677237E+22	2,599629E+22	2,599590E+22	1,135446E+23	5,199219E+22	1,655368E+23
-1179	5,677292E+22	5,677404E+22	2,599605E+22	2,599642E+22	1,135470E+23	5,199247E+22	1,655394E+23
-1178	5,677457E+22	5,677325E+22	2,599557E+22	2,599632E+22	1,135478E+23	5,199189E+22	1,655397E+23
-1177	5,677188E+22	5,677334E+22	2,599677E+22	2,599554E+22	1,135452E+23	5,199231E+22	1,655375E+23
-1176	5,677386E+22	5,677397E+22	2,599660E+22	2,599702E+22	1,135478E+23	5,199362E+22	1,655414E+23
-1175	5,677311E+22	5,677191E+22	2,599716E+22	2,599706E+22	1,135450E+23	5,199423E+22	1,655393E+23
-1174	5,677048E+22	5,677246E+22	2,599859E+22	2,599756E+22	1,135429E+23	5,199615E+22	1,655391E+23
-1173	5,677258E+22	5,677236E+22	2,599801E+22	2,599938E+22	1,135449E+23	5,199738E+22	1,655423E+23
-1172	5,677064E+22	5,677008E+22	2,599896E+22	2,599893E+22	1,135407E+23	5,199789E+22	1,655386E+23
-1171	5,677017E+22	5,677098E+22	2,599985E+22	2,599954E+22	1,135411E+23	5,199939E+22	1,655405E+23
-1170	5,677231E+22	5,677024E+22	2,599946E+22	2,600027E+22	1,135426E+23	5,199973E+22	1,655423E+23
-1169	5,676942E+22	5,676999E+22	2,600044E+22	2,599937E+22	1,135394E+23	5,199981E+22	1,655392E+23
-1168	5,677030E+22	5,677155E+22	2,600006E+22	2,600045E+22	1,135419E+23	5,200051E+22	1,655424E+23
-1167	5,677068E+22	5,676995E+22	2,599959E+22	2,600001E+22	1,135406E+23	5,199960E+22	1,655402E+23
-1166	5,676850E+22	5,677054E+22	2,600029E+22	2,599893E+22	1,135390E+23	5,199922E+22	1,655383E+23
-1165	5,677146E+22	5,677140E+22	2,599894E+22	2,599960E+22	1,135429E+23	5,199854E+22	1,655414E+23
-1164	5,677117E+22	5,676974E+22	2,599856E+22	2,599822E+22	1,135409E+23	5,199677E+22	1,655377E+23
-1163	5,677042E+22	5,677166E+22	2,599856E+22	2,599782E+22	1,135421E+23	5,199639E+22	1,655385E+23
-1162	5,677305E+22	5,677216E+22	2,599717E+22	2,599841E+22	1,135452E+23	5,199559E+22	1,655408E+23
-1161	5,677108E+22	5,677164E+22	2,599748E+22	2,599696E+22	1,135427E+23	5,199444E+22	1,655372E+23
-1160	5,677176E+22	5,677325E+22	2,599749E+22	2,599751E+22	1,135450E+23	5,199500E+22	1,655400E+23
-1159	5,677322E+22	5,677169E+22	2,599712E+22	2,599757E+22	1,135449E+23	5,199469E+22	1,655396E+23
-1158	5,677078E+22	5,677158E+22	2,599850E+22	2,599699E+22	1,135424E+23	5,199549E+22	1,655378E+23
-1157	5,677207E+22	5,677267E+22	2,599824E+22	2,599877E+22	1,135447E+23	5,199701E+22	1,655417E+23
-1156	5,677143E+22	5,677029E+22	2,599844E+22	2,599896E+22	1,135417E+23	5,199740E+22	1,655391E+23
-1155	5,676916E+22	5,677082E+22	2,599981E+22	2,599920E+22	1,135400E+23	5,199900E+22	1,655390E+23
-1154	5,677125E+22	5,677062E+22	2,599952E+22	2,600079E+22	1,135419E+23	5,200031E+22	1,655422E+23
-1153	5,676975E+22	5,676873E+22	2,600049E+22	2,600005E+22	1,135385E+23	5,200054E+22	1,655390E+23
-1152	5,676909E+22	5,677015E+22	2,600134E+22	2,600082E+22	1,135392E+23	5,200216E+22	1,655414E+23
-1151	5,677046E+22	5,676915E+22	2,600086E+22	2,600175E+22	1,135396E+23	5,200262E+22	1,655422E+23
-1150	5,676778E+22	5,676875E+22	2,600191E+22	2,600083E+22	1,135365E+23	5,200274E+22	1,655393E+23
-1149	5,676847E+22	5,677035E+22	2,600151E+22	2,600178E+22	1,135388E+23	5,200329E+22	1,655421E+23
-1148	5,676954E+22	5,676824E+22	2,600070E+22	2,600124E+22	1,135378E+23	5,200194E+22	1,655397E+23
-1147	5,676788E+22	5,676887E+22	2,600127E+22	2,599995E+22	1,135368E+23	5,200123E+22	1,655380E+23
-1146	5,677048E+22	5,677007E+22	2,600007E+22	2,600076E+22	1,135405E+23	5,200084E+22	1,655414E+23
-1145	5,677019E+22	5,676901E+22	2,599952E+22	2,599936E+22	1,135392E+23	5,199888E+22	1,655381E+23
-1144	5,676917E+22	5,677117E+22	2,599955E+22	2,599906E+22	1,135403E+23	5,199861E+22	1,655390E+23
-1143	5,677154E+22	5,677098E+22	2,599836E+22	2,599960E+22	1,135425E+23	5,199796E+22	1,655405E+23
-1142	5,677019E+22	5,677008E+22	2,599897E+22	2,599801E+22	1,135403E+23	5,199697E+22	1,655372E+23
-1141	5,677049E+22	5,677196E+22	2,599915E+22	2,599864E+22	1,135425E+23	5,199779E+22	1,655402E+23
-1140	5,677206E+22	5,677022E+22	2,599847E+22	2,599906E+22	1,135423E+23	5,199754E+22	1,655398E+23
-1139	5,676936E+22	5,677021E+22	2,599973E+22	2,599861E+22	1,135396E+23	5,199833E+22	1,655379E+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	5,677016E+22	5,677133E+22	2,599971E+22	2,600052E+22	1,135415E+23	5,200024E+22	1,655417E+23
-1137	5,677000E+22	5,676894E+22	2,599987E+22	2,600044E+22	1,135389E+23	5,200031E+22	1,655393E+23
-1136	5,676795E+22	5,676954E+22	2,600130E+22	2,600060E+22	1,135375E+23	5,200190E+22	1,655394E+23
-1135	5,676995E+22	5,676892E+22	2,600113E+22	2,600221E+22	1,135389E+23	5,200334E+22	1,655422E+23
-1134	5,676870E+22	5,676717E+22	2,600216E+22	2,600152E+22	1,135359E+23	5,200368E+22	1,655395E+23
-1133	5,676726E+22	5,676920E+22	2,600292E+22	2,600237E+22	1,135365E+23	5,200530E+22	1,655418E+23
-1132	5,676882E+22	5,676777E+22	2,600206E+22	2,600334E+22	1,135366E+23	5,200541E+22	1,655420E+23
-1131	5,676648E+22	5,676716E+22	2,600305E+22	2,600209E+22	1,135336E+23	5,200514E+22	1,655388E+23
-1130	5,676717E+22	5,676874E+22	2,600284E+22	2,600289E+22	1,135359E+23	5,200573E+22	1,655416E+23
-1129	5,676875E+22	5,676695E+22	2,600187E+22	2,600216E+22	1,135357E+23	5,200403E+22	1,655397E+23
-1128	5,676702E+22	5,676814E+22	2,600229E+22	2,600107E+22	1,135352E+23	5,200336E+22	1,655385E+23
-1127	5,676907E+22	5,676908E+22	2,600109E+22	2,600203E+22	1,135382E+23	5,200313E+22	1,655413E+23
-1126	5,676908E+22	5,676800E+22	2,600069E+22	2,600057E+22	1,135371E+23	5,200126E+22	1,655383E+23
-1125	5,676780E+22	5,677032E+22	2,600090E+22	2,600013E+22	1,135381E+23	5,200103E+22	1,655392E+23
-1124	5,677054E+22	5,676955E+22	2,599959E+22	2,600071E+22	1,135401E+23	5,200030E+22	1,655404E+23
-1123	5,676940E+22	5,676859E+22	2,600027E+22	2,599918E+22	1,135380E+23	5,199945E+22	1,655374E+23
-1122	5,676898E+22	5,677058E+22	2,600063E+22	2,600013E+22	1,135396E+23	5,200077E+22	1,655403E+23
-1121	5,677037E+22	5,676914E+22	2,599978E+22	2,600068E+22	1,135395E+23	5,200046E+22	1,655400E+23
-1120	5,676775E+22	5,676912E+22	2,600097E+22	2,600031E+22	1,135369E+23	5,200128E+22	1,655381E+23
-1119	5,676851E+22	5,676941E+22	2,600116E+22	2,600208E+22	1,135379E+23	5,200325E+22	1,655412E+23
-1118	5,676911E+22	5,676704E+22	2,600150E+22	2,600179E+22	1,135362E+23	5,200329E+22	1,655394E+23
-1117	5,676680E+22	5,676819E+22	2,600302E+22	2,600188E+22	1,135350E+23	5,200490E+22	1,655399E+23
-1116	5,676873E+22	5,676756E+22	2,600255E+22	2,600374E+22	1,135363E+23	5,200629E+22	1,655426E+23
-1115	5,676726E+22	5,676604E+22	2,600349E+22	2,600303E+22	1,135333E+23	5,200652E+22	1,655398E+23
-1114	5,676529E+22	5,676804E+22	2,600444E+22	2,600389E+22	1,135333E+23	5,200833E+22	1,655417E+23
-1113	5,676730E+22	5,676657E+22	2,600345E+22	2,600458E+22	1,135339E+23	5,200803E+22	1,655419E+23
-1112	5,676537E+22	5,676589E+22	2,600433E+22	2,600327E+22	1,135313E+23	5,200760E+22	1,655389E+23
-1111	5,676600E+22	5,676699E+22	2,600418E+22	2,600411E+22	1,135330E+23	5,200829E+22	1,655413E+23
-1110	5,676788E+22	5,676561E+22	2,600312E+22	2,600345E+22	1,135335E+23	5,200657E+22	1,655401E+23
-1109	5,676556E+22	5,676744E+22	2,600343E+22	2,600238E+22	1,135330E+23	5,200581E+22	1,655388E+23
-1108	5,676790E+22	5,676796E+22	2,600200E+22	2,600335E+22	1,135359E+23	5,200535E+22	1,655412E+23
-1107	5,676821E+22	5,676667E+22	2,600170E+22	2,600153E+22	1,135349E+23	5,200322E+22	1,655381E+23
-1106	5,676665E+22	5,676903E+22	2,600227E+22	2,600108E+22	1,135357E+23	5,200335E+22	1,655390E+23
-1105	5,676953E+22	5,676846E+22	2,600088E+22	2,600170E+22	1,135380E+23	5,200258E+22	1,655406E+23
-1104	5,676803E+22	5,676774E+22	2,600150E+22	2,600058E+22	1,135358E+23	5,200208E+22	1,655379E+23
-1103	5,676705E+22	5,676919E+22	2,600201E+22	2,600180E+22	1,135362E+23	5,200380E+22	1,655400E+23
-1102	5,676891E+22	5,676758E+22	2,600126E+22	2,600230E+22	1,135365E+23	5,200356E+22	1,655400E+23
-1101	5,676628E+22	5,676773E+22	2,600254E+22	2,600174E+22	1,135340E+23	5,200427E+22	1,655383E+23
-1100	5,676762E+22	5,676755E+22	2,600257E+22	2,600351E+22	1,135352E+23	5,200608E+22	1,655412E+23
-1099	5,676836E+22	5,676541E+22	2,600297E+22	2,600312E+22	1,135338E+23	5,200609E+22	1,655399E+23
-1098	5,676524E+22	5,676706E+22	2,600467E+22	2,600346E+22	1,135323E+23	5,200813E+22	1,655404E+23
-1097	5,676691E+22	5,676670E+22	2,600402E+22	2,600530E+22	1,135336E+23	5,200931E+22	1,655429E+23
-1096	5,676549E+22	5,676508E+22	2,600489E+22	2,600462E+22	1,135306E+23	5,200951E+22	1,655401E+23
-1095	5,676349E+22	5,676617E+22	2,600599E+22	2,600531E+22	1,135297E+23	5,201129E+22	1,655410E+23
-1094	5,676624E+22	5,676474E+22	2,600497E+22	2,600581E+22	1,135310E+23	5,201078E+22	1,655417E+23
-1093	5,676429E+22	5,676461E+22	2,600570E+22	2,600445E+22	1,135289E+23	5,201015E+22	1,655391E+23
-1092	5,676499E+22	5,676564E+22	2,600514E+22	2,600547E+22	1,135306E+23	5,201062E+22	1,655413E+23
-1091	5,676688E+22	5,676465E+22	2,600401E+22	2,600466E+22	1,135315E+23	5,200867E+22	1,655402E+23
-1090	5,676421E+22	5,676657E+22	2,600454E+22	2,600350E+22	1,135308E+23	5,200804E+22	1,655388E+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							
-1089	5,676673E+22	5,676709E+22	2,600313E+22	2,600418E+22	1,135338E+23	5,200731E+22	1,655411E+23
-1088	5,676731E+22	5,676578E+22	2,600288E+22	2,600249E+22	1,135331E+23	5,200537E+22	1,655385E+23
-1087	5,676529E+22	5,676742E+22	2,600371E+22	2,600231E+22	1,135327E+23	5,200601E+22	1,655387E+23
-1086	5,676813E+22	5,676716E+22	2,600230E+22	2,600318E+22	1,135353E+23	5,200548E+22	1,655408E+23
-1085	5,676625E+22	5,676666E+22	2,600286E+22	2,600219E+22	1,135329E+23	5,200505E+22	1,655380E+23
-1084	5,676568E+22	5,676738E+22	2,600319E+22	2,600344E+22	1,135331E+23	5,200664E+22	1,655397E+23
-1083	5,676803E+22	5,676575E+22	2,600256E+22	2,600360E+22	1,135338E+23	5,200616E+22	1,655399E+23
-1082	5,676523E+22	5,676620E+22	2,600412E+22	2,600300E+22	1,135314E+23	5,200712E+22	1,655385E+23
-1081	5,676653E+22	5,676651E+22	2,600409E+22	2,600476E+22	1,135330E+23	5,200885E+22	1,655419E+23
-1080	5,676688E+22	5,676478E+22	2,600444E+22	2,600469E+22	1,135317E+23	5,200913E+22	1,655408E+23
-1079	5,676308E+22	5,676578E+22	2,600636E+22	2,600521E+22	1,135289E+23	5,201158E+22	1,655404E+23
-1078	5,676506E+22	5,676529E+22	2,600574E+22	2,600692E+22	1,135304E+23	5,201265E+22	1,655430E+23
-1077	5,676375E+22	5,676362E+22	2,600659E+22	2,600607E+22	1,135274E+23	5,201265E+22	1,655400E+23
-1076	5,676249E+22	5,676407E+22	2,600733E+22	2,600675E+22	1,135266E+23	5,201409E+22	1,655407E+23
-1075	5,676553E+22	5,676292E+22	2,600615E+22	2,600707E+22	1,135284E+23	5,201322E+22	1,655417E+23
-1074	5,676303E+22	5,676355E+22	2,600682E+22	2,600582E+22	1,135266E+23	5,201264E+22	1,655392E+23
-1073	5,676378E+22	5,676495E+22	2,600602E+22	2,600663E+22	1,135287E+23	5,201265E+22	1,655414E+23
-1072	5,676572E+22	5,676400E+22	2,600493E+22	2,600570E+22	1,135297E+23	5,201063E+22	1,655404E+23
-1071	5,676291E+22	5,676518E+22	2,600585E+22	2,600443E+22	1,135281E+23	5,201028E+22	1,655384E+23
-1070	5,676575E+22	5,676578E+22	2,600455E+22	2,600505E+22	1,135315E+23	5,200960E+22	1,655411E+23
-1069	5,676597E+22	5,676480E+22	2,600432E+22	2,600362E+22	1,135308E+23	5,200794E+22	1,655387E+23
-1068	5,676394E+22	5,676596E+22	2,600482E+22	2,600386E+22	1,135299E+23	5,200868E+22	1,655386E+23
-1067	5,676679E+22	5,676573E+22	2,600343E+22	2,600467E+22	1,135325E+23	5,200810E+22	1,655406E+23
-1066	5,676481E+22	5,676535E+22	2,600417E+22	2,600368E+22	1,135302E+23	5,200784E+22	1,655380E+23
-1065	5,676466E+22	5,676608E+22	2,600447E+22	2,600464E+22	1,135307E+23	5,200911E+22	1,655398E+23
-1064	5,676720E+22	5,676466E+22	2,600396E+22	2,600488E+22	1,135319E+23	5,200884E+22	1,655407E+23
-1063	5,676382E+22	5,676470E+22	2,600585E+22	2,600454E+22	1,135285E+23	5,201039E+22	1,655389E+23
-1062	5,676477E+22	5,676544E+22	2,600583E+22	2,600645E+22	1,135302E+23	5,201228E+22	1,655425E+23
-1061	5,676477E+22	5,676378E+22	2,600616E+22	2,600648E+22	1,135285E+23	5,201264E+22	1,655412E+23
-1060	5,676138E+22	5,676371E+22	2,600784E+22	2,600697E+22	1,135251E+23	5,201481E+22	1,655399E+23
-1059	5,676388E+22	5,676317E+22	2,600720E+22	2,600827E+22	1,135271E+23	5,201547E+22	1,655425E+23
-1058	5,676267E+22	5,676183E+22	2,600801E+22	2,600735E+22	1,135245E+23	5,201536E+22	1,655399E+23
-1057	5,676152E+22	5,676280E+22	2,600845E+22	2,600793E+22	1,135243E+23	5,201637E+22	1,655407E+23
-1056	5,676443E+22	5,676236E+22	2,600712E+22	2,600835E+22	1,135268E+23	5,201547E+22	1,655423E+23
-1055	5,676149E+22	5,676252E+22	2,600803E+22	2,600709E+22	1,135240E+23	5,201512E+22	1,655391E+23
-1054	5,676244E+22	5,676407E+22	2,600734E+22	2,600763E+22	1,135265E+23	5,201497E+22	1,655415E+23
-1053	5,676442E+22	5,676312E+22	2,600635E+22	2,600660E+22	1,135275E+23	5,201295E+22	1,655405E+23
-1052	5,676197E+22	5,676343E+22	2,600710E+22	2,600559E+22	1,135254E+23	5,201268E+22	1,655381E+23
-1051	5,676470E+22	5,676425E+22	2,600577E+22	2,600626E+22	1,135290E+23	5,201204E+22	1,655410E+23
-1050	5,676437E+22	5,676369E+22	2,600550E+22	2,600518E+22	1,135281E+23	5,201068E+22	1,655387E+23
-1049	5,676255E+22	5,676483E+22	2,600580E+22	2,600533E+22	1,135274E+23	5,201112E+22	1,655385E+23
-1048	5,676572E+22	5,676460E+22	2,600449E+22	2,600601E+22	1,135303E+23	5,201050E+22	1,655408E+23
-1047	5,676369E+22	5,676367E+22	2,600563E+22	2,600493E+22	1,135274E+23	5,201055E+22	1,655379E+23
-1046	5,676373E+22	5,676481E+22	2,600606E+22	2,600580E+22	1,135285E+23	5,201187E+22	1,655404E+23
-1045	5,676571E+22	5,676383E+22	2,600567E+22	2,600629E+22	1,135295E+23	5,201196E+22	1,655415E+23
-1044	5,676219E+22	5,676327E+22	2,600739E+22	2,600636E+22	1,135255E+23	5,201375E+22	1,655392E+23
-1043	5,676302E+22	5,676384E+22	2,600741E+22	2,600808E+22	1,135269E+23	5,201549E+22	1,655424E+23
-1042	5,676290E+22	5,676219E+22	2,600781E+22	2,600812E+22	1,135251E+23	5,201593E+22	1,655410E+23
-1041	5,676019E+22	5,676196E+22	2,600922E+22	2,600832E+22	1,135221E+23	5,201753E+22	1,655397E+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							
-1040	5,676299E+22	5,676165E+22	2,600848E+22	2,600957E+22	1,135246E+23	5,201806E+22	1,655427E+23
-1039	5,676140E+22	5,676029E+22	2,600942E+22	2,600881E+22	1,135217E+23	5,201823E+22	1,655399E+23
-1038	5,676013E+22	5,676195E+22	2,600971E+22	2,600930E+22	1,135221E+23	5,201901E+22	1,655411E+23
-1037	5,676278E+22	5,676173E+22	2,600844E+22	2,600963E+22	1,135245E+23	5,201807E+22	1,655426E+23
-1036	5,676029E+22	5,676098E+22	2,600921E+22	2,600831E+22	1,135213E+23	5,201752E+22	1,655388E+23
-1035	5,676150E+22	5,676247E+22	2,600861E+22	2,600848E+22	1,135240E+23	5,201709E+22	1,655411E+23
-1034	5,676329E+22	5,676188E+22	2,600764E+22	2,600766E+22	1,135252E+23	5,201529E+22	1,655405E+23
-1033	5,676088E+22	5,676231E+22	2,600807E+22	2,600677E+22	1,135232E+23	5,201484E+22	1,655380E+23
-1032	5,676342E+22	5,676351E+22	2,600668E+22	2,600766E+22	1,135269E+23	5,201434E+22	1,655413E+23
-1031	5,676285E+22	5,676237E+22	2,600671E+22	2,600666E+22	1,135252E+23	5,201337E+22	1,655386E+23
-1030	5,676134E+22	5,676369E+22	2,600710E+22	2,600654E+22	1,135250E+23	5,201364E+22	1,655387E+23
-1029	5,676469E+22	5,676353E+22	2,600602E+22	2,600716E+22	1,135282E+23	5,201317E+22	1,655414E+23
-1028	5,676288E+22	5,676181E+22	2,600708E+22	2,600631E+22	1,135247E+23	5,201338E+22	1,655381E+23
-1027	5,676250E+22	5,676334E+22	2,600761E+22	2,600721E+22	1,135258E+23	5,201482E+22	1,655407E+23
-1026	5,676383E+22	5,676274E+22	2,600722E+22	2,600804E+22	1,135266E+23	5,201526E+22	1,655418E+23
-1025	5,676041E+22	5,676179E+22	2,600878E+22	2,600803E+22	1,135222E+23	5,201681E+22	1,655390E+23
-1024	5,676152E+22	5,676235E+22	2,600882E+22	2,600959E+22	1,135239E+23	5,201841E+22	1,655423E+23
-1023	5,676149E+22	5,676013E+22	2,600948E+22	2,600957E+22	1,135216E+23	5,201905E+22	1,655407E+23
-1022	5,675904E+22	5,676047E+22	2,601076E+22	2,600962E+22	1,135195E+23	5,202038E+22	1,655399E+23
-1021	5,676160E+22	5,676075E+22	2,600998E+22	2,601099E+22	1,135223E+23	5,202097E+22	1,655433E+23
-1020	5,676002E+22	5,675896E+22	2,601064E+22	2,601042E+22	1,135190E+23	5,202106E+22	1,655400E+23
-1019	5,675879E+22	5,676075E+22	2,601098E+22	2,601055E+22	1,135195E+23	5,202153E+22	1,655411E+23
-1018	5,676134E+22	5,676069E+22	2,600979E+22	2,601079E+22	1,135220E+23	5,202058E+22	1,655426E+23
-1017	5,675936E+22	5,675965E+22	2,601036E+22	2,600930E+22	1,135190E+23	5,201966E+22	1,655387E+23
-1016	5,676059E+22	5,676132E+22	2,600970E+22	2,600953E+22	1,135219E+23	5,201923E+22	1,655411E+23
-1015	5,676184E+22	5,676055E+22	2,600889E+22	2,600905E+22	1,135224E+23	5,201794E+22	1,655403E+23
-1014	5,675944E+22	5,676141E+22	2,600915E+22	2,600816E+22	1,135209E+23	5,201730E+22	1,655382E+23
-1013	5,676198E+22	5,676253E+22	2,600790E+22	2,600895E+22	1,135245E+23	5,201685E+22	1,655414E+23
-1012	5,676196E+22	5,676058E+22	2,600786E+22	2,600794E+22	1,135225E+23	5,201580E+22	1,655383E+23
-1011	5,676073E+22	5,676199E+22	2,600840E+22	2,600746E+22	1,135227E+23	5,201587E+22	1,655386E+23
-1010	5,676355E+22	5,676237E+22	2,600748E+22	2,600834E+22	1,135259E+23	5,201582E+22	1,655417E+23
-1009	5,676161E+22	5,676081E+22	2,600836E+22	2,600773E+22	1,135224E+23	5,201609E+22	1,655385E+23
-1008	5,676080E+22	5,676247E+22	2,600895E+22	2,600878E+22	1,135233E+23	5,201774E+22	1,655410E+23
-1007	5,676178E+22	5,676124E+22	2,600893E+22	2,600978E+22	1,135230E+23	5,201871E+22	1,655417E+23
-1006	5,675877E+22	5,676029E+22	2,601044E+22	2,600953E+22	1,135191E+23	5,201997E+22	1,655390E+23
-1005	5,676013E+22	5,676076E+22	2,601059E+22	2,601103E+22	1,135209E+23	5,202162E+22	1,655425E+23
-1004	5,676044E+22	5,675801E+22	2,601098E+22	2,601125E+22	1,135185E+23	5,202223E+22	1,655407E+23
-1003	5,675784E+22	5,675892E+22	2,601213E+22	2,601116E+22	1,135168E+23	5,202330E+22	1,655401E+23
-1002	5,675994E+22	5,675981E+22	2,601132E+22	2,601262E+22	1,135198E+23	5,202394E+22	1,655437E+23
-1001	5,675874E+22	5,675778E+22	2,601174E+22	2,601175E+22	1,135165E+23	5,202350E+22	1,655400E+23
-1000	5,675772E+22	5,675963E+22	2,601214E+22	2,601154E+22	1,135174E+23	5,202368E+22	1,655410E+23
-999	5,676015E+22	5,675917E+22	2,601123E+22	2,601181E+22	1,135193E+23	5,202304E+22	1,655424E+23
-998	5,675817E+22	5,675859E+22	2,601165E+22	2,601032E+22	1,135168E+23	5,202197E+22	1,655387E+23
-997	5,675914E+22	5,676057E+22	2,601098E+22	2,601079E+22	1,135197E+23	5,202177E+22	1,655415E+23
-996	5,676049E+22	5,675903E+22	2,600992E+22	2,601056E+22	1,135195E+23	5,202048E+22	1,655400E+23
-995	5,675832E+22	5,675997E+22	2,601023E+22	2,600933E+22	1,135183E+23	5,201957E+22	1,655379E+23
-994	5,676092E+22	5,676134E+22	2,600911E+22	2,601007E+22	1,135223E+23	5,201918E+22	1,655414E+23
-993	5,676133E+22	5,675918E+22	2,600896E+22	2,600897E+22	1,135205E+23	5,201793E+22	1,655384E+23
-992	5,675986E+22	5,676099E+22	2,600964E+22	2,600860E+22	1,135208E+23	5,201824E+22	1,655391E+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	5,676181E+22	5,676125E+22	2,600904E+22	2,600992E+22	1,135231E+23	5,201896E+22	1,655420E+23
-990	5,675962E+22	5,675991E+22	2,600989E+22	2,600940E+22	1,135195E+23	5,201929E+22	1,655388E+23
-989	5,675885E+22	5,676120E+22	2,601067E+22	2,601044E+22	1,135201E+23	5,202111E+22	1,655412E+23
-988	5,676033E+22	5,675894E+22	2,601052E+22	2,601147E+22	1,135193E+23	5,202200E+22	1,655413E+23
-987	5,675780E+22	5,675814E+22	2,601201E+22	2,601092E+22	1,135159E+23	5,202292E+22	1,655389E+23
-986	5,675890E+22	5,675927E+22	2,601211E+22	2,601256E+22	1,135182E+23	5,202468E+22	1,655428E+23
-985	5,675928E+22	5,675684E+22	2,601217E+22	2,601282E+22	1,135161E+23	5,202500E+22	1,655411E+23
-984	5,675653E+22	5,675812E+22	2,601331E+22	2,601259E+22	1,135147E+23	5,202590E+22	1,655405E+23
-983	5,675825E+22	5,675866E+22	2,601287E+22	2,601400E+22	1,135169E+23	5,202688E+22	1,655438E+23
-982	5,675738E+22	5,675681E+22	2,601323E+22	2,601282E+22	1,135142E+23	5,202606E+22	1,655402E+23
-981	5,675647E+22	5,675842E+22	2,601371E+22	2,601257E+22	1,135149E+23	5,202628E+22	1,655412E+23
-980	5,675892E+22	5,675738E+22	2,601252E+22	2,601318E+22	1,135163E+23	5,202570E+22	1,655420E+23
-979	5,675692E+22	5,675712E+22	2,601273E+22	2,601166E+22	1,135140E+23	5,202438E+22	1,655384E+23
-978	5,675755E+22	5,675943E+22	2,601203E+22	2,601222E+22	1,135170E+23	5,202425E+22	1,655412E+23
-977	5,675953E+22	5,675770E+22	2,601075E+22	2,601177E+22	1,135172E+23	5,202252E+22	1,655398E+23
-976	5,675770E+22	5,675879E+22	2,601116E+22	2,601021E+22	1,135165E+23	5,202136E+22	1,655379E+23
-975	5,675995E+22	5,676005E+22	2,601049E+22	2,601107E+22	1,135200E+23	5,202155E+22	1,655416E+23
-974	5,676012E+22	5,675850E+22	2,601032E+22	2,601007E+22	1,135186E+23	5,202039E+22	1,655390E+23
-973	5,675813E+22	5,676035E+22	2,601121E+22	2,601005E+22	1,135185E+23	5,202125E+22	1,655397E+23
-972	5,675991E+22	5,675970E+22	2,601056E+22	2,601170E+22	1,135196E+23	5,202226E+22	1,655419E+23
-971	5,675802E+22	5,675811E+22	2,601148E+22	2,601099E+22	1,135161E+23	5,202247E+22	1,655386E+23
-970	5,675738E+22	5,675942E+22	2,601234E+22	2,601202E+22	1,135168E+23	5,202435E+22	1,655412E+23
-969	5,675948E+22	5,675694E+22	2,601190E+22	2,601298E+22	1,135164E+23	5,202489E+22	1,655413E+23
-968	5,675690E+22	5,675674E+22	2,601329E+22	2,601240E+22	1,135136E+23	5,202569E+22	1,655393E+23
-967	5,675730E+22	5,675809E+22	2,601363E+22	2,601427E+22	1,135154E+23	5,202790E+22	1,655433E+23
-966	5,675751E+22	5,675610E+22	2,601362E+22	2,601431E+22	1,135136E+23	5,202793E+22	1,655416E+23
-965	5,675494E+22	5,675716E+22	2,601498E+22	2,601390E+22	1,135121E+23	5,202888E+22	1,655410E+23
-964	5,675690E+22	5,675672E+22	2,601442E+22	2,601525E+22	1,135136E+23	5,202967E+22	1,655433E+23
-963	5,675623E+22	5,675504E+22	2,601470E+22	2,601390E+22	1,135113E+23	5,202860E+22	1,655399E+23
-962	5,675502E+22	5,675716E+22	2,601501E+22	2,601389E+22	1,135122E+23	5,202891E+22	1,655411E+23
-961	5,675761E+22	5,675614E+22	2,601338E+22	2,601461E+22	1,135137E+23	5,202799E+22	1,655417E+23
-960	5,675579E+22	5,675617E+22	2,601351E+22	2,601289E+22	1,135120E+23	5,202641E+22	1,655384E+23
-959	5,675633E+22	5,675823E+22	2,601318E+22	2,601340E+22	1,135146E+23	5,202658E+22	1,655411E+23
-958	5,675858E+22	5,675687E+22	2,601194E+22	2,601263E+22	1,135154E+23	5,202457E+22	1,655400E+23
-957	5,675686E+22	5,675788E+22	2,601260E+22	2,601117E+22	1,135147E+23	5,202377E+22	1,655385E+23
-956	5,675866E+22	5,675860E+22	2,601189E+22	2,601243E+22	1,135173E+23	5,202432E+22	1,655416E+23
-955	5,675856E+22	5,675728E+22	2,601172E+22	2,601159E+22	1,135158E+23	5,202331E+22	1,655391E+23
-954	5,675621E+22	5,675905E+22	2,601269E+22	2,601175E+22	1,135153E+23	5,202444E+22	1,655397E+23
-953	5,675854E+22	5,675789E+22	2,601186E+22	2,601328E+22	1,135164E+23	5,202514E+22	1,655416E+23
-952	5,675715E+22	5,675634E+22	2,601279E+22	2,601230E+22	1,135135E+23	5,202509E+22	1,655386E+23
-951	5,675622E+22	5,675765E+22	2,601396E+22	2,601348E+22	1,135139E+23	5,202744E+22	1,655413E+23
-950	5,675815E+22	5,675605E+22	2,601340E+22	2,601443E+22	1,135142E+23	5,202783E+22	1,655420E+23
-949	5,675532E+22	5,675597E+22	2,601490E+22	2,601398E+22	1,135113E+23	5,202887E+22	1,655402E+23
-948	5,675546E+22	5,675665E+22	2,601523E+22	2,601594E+22	1,135121E+23	5,203117E+22	1,655433E+23
-947	5,675601E+22	5,675462E+22	2,601524E+22	2,601568E+22	1,135106E+23	5,203092E+22	1,655416E+23
-946	5,675339E+22	5,675560E+22	2,601663E+22	2,601522E+22	1,135090E+23	5,203185E+22	1,655408E+23
-945	5,675578E+22	5,675495E+22	2,601569E+22	2,601657E+22	1,135107E+23	5,203226E+22	1,655430E+23
-944	5,675513E+22	5,675369E+22	2,601573E+22	2,601523E+22	1,135088E+23	5,203096E+22	1,655398E+23
-943	5,675340E+22	5,675591E+22	2,601614E+22	2,601544E+22	1,135093E+23	5,203158E+22	1,655409E+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							
-942	5,675618E+22	5,675533E+22	2,601437E+22	2,601583E+22	1,135115E+23	5,203020E+22	1,655417E+23
-941	5,675484E+22	5,675519E+22	2,601469E+22	2,601389E+22	1,135100E+23	5,202858E+22	1,655386E+23
-940	5,675552E+22	5,675661E+22	2,601440E+22	2,601436E+22	1,135121E+23	5,202875E+22	1,655409E+23
-939	5,675781E+22	5,675560E+22	2,601324E+22	2,601352E+22	1,135134E+23	5,202676E+22	1,655402E+23
-938	5,675547E+22	5,675700E+22	2,601399E+22	2,601245E+22	1,135125E+23	5,202645E+22	1,655389E+23
-937	5,675713E+22	5,675746E+22	2,601304E+22	2,601392E+22	1,135146E+23	5,202697E+22	1,655416E+23
-936	5,675709E+22	5,675610E+22	2,601293E+22	2,601306E+22	1,135132E+23	5,202600E+22	1,655392E+23
-935	5,675466E+22	5,675743E+22	2,601426E+22	2,601331E+22	1,135121E+23	5,202756E+22	1,655397E+23
-934	5,675726E+22	5,675648E+22	2,601338E+22	2,601459E+22	1,135137E+23	5,202796E+22	1,655417E+23
-933	5,675614E+22	5,675498E+22	2,601444E+22	2,601375E+22	1,135111E+23	5,202819E+22	1,655393E+23
-932	5,675480E+22	5,675594E+22	2,601548E+22	2,601521E+22	1,135107E+23	5,203068E+22	1,655414E+23
-931	5,675645E+22	5,675478E+22	2,601493E+22	2,601613E+22	1,135112E+23	5,203106E+22	1,655423E+23
-930	5,675346E+22	5,675476E+22	2,601655E+22	2,601567E+22	1,135082E+23	5,203222E+22	1,655404E+23
-929	5,675405E+22	5,675489E+22	2,601666E+22	2,601737E+22	1,135089E+23	5,203403E+22	1,655430E+23
-928	5,675498E+22	5,675300E+22	2,601661E+22	2,601684E+22	1,135080E+23	5,203345E+22	1,655414E+23
-927	5,675204E+22	5,675397E+22	2,601812E+22	2,601658E+22	1,135060E+23	5,203470E+22	1,655407E+23
-926	5,675422E+22	5,675406E+22	2,601691E+22	2,601785E+22	1,135083E+23	5,203476E+22	1,655430E+23
-925	5,675374E+22	5,675289E+22	2,601693E+22	2,601662E+22	1,135066E+23	5,203355E+22	1,655402E+23
-924	5,675203E+22	5,675443E+22	2,601728E+22	2,601679E+22	1,135065E+23	5,203408E+22	1,655405E+23
-923	5,675526E+22	5,675406E+22	2,601560E+22	2,601682E+22	1,135093E+23	5,203242E+22	1,655417E+23
-922	5,675399E+22	5,675401E+22	2,601602E+22	2,601484E+22	1,135080E+23	5,203086E+22	1,655389E+23
-921	5,675477E+22	5,675528E+22	2,601550E+22	2,601539E+22	1,135100E+23	5,203089E+22	1,655409E+23
-920	5,675673E+22	5,675471E+22	2,601428E+22	2,601473E+22	1,135114E+23	5,202900E+22	1,655404E+23
-919	5,675364E+22	5,675591E+22	2,601531E+22	2,601407E+22	1,135096E+23	5,202938E+22	1,655389E+23
-918	5,675534E+22	5,675651E+22	2,601436E+22	2,601533E+22	1,135118E+23	5,202969E+22	1,655415E+23
-917	5,675588E+22	5,675465E+22	2,601443E+22	2,601442E+22	1,135105E+23	5,202884E+22	1,655394E+23
-916	5,675351E+22	5,675529E+22	2,601575E+22	2,601472E+22	1,135088E+23	5,203047E+22	1,655393E+23
-915	5,675625E+22	5,675484E+22	2,601488E+22	2,601597E+22	1,135111E+23	5,203085E+22	1,655419E+23
-914	5,675463E+22	5,675381E+22	2,601596E+22	2,601538E+22	1,135084E+23	5,203135E+22	1,655398E+23
-913	5,675326E+22	5,675466E+22	2,601680E+22	2,601690E+22	1,135079E+23	5,203369E+22	1,655416E+23
-912	5,675501E+22	5,675357E+22	2,601634E+22	2,601761E+22	1,135086E+23	5,203395E+22	1,655425E+23
-911	5,675183E+22	5,675321E+22	2,601829E+22	2,601719E+22	1,135050E+23	5,203549E+22	1,655405E+23
-910	5,675258E+22	5,675358E+22	2,601829E+22	2,601857E+22	1,135062E+23	5,203685E+22	1,655430E+23
-909	5,675376E+22	5,675164E+22	2,601821E+22	2,601824E+22	1,135054E+23	5,203645E+22	1,655418E+23
-908	5,675045E+22	5,675226E+22	2,601945E+22	2,601823E+22	1,135027E+23	5,203768E+22	1,655404E+23
-907	5,675271E+22	5,675273E+22	2,601812E+22	2,601934E+22	1,135054E+23	5,203745E+22	1,655429E+23
-906	5,675241E+22	5,675167E+22	2,601817E+22	2,601795E+22	1,135041E+23	5,203611E+22	1,655402E+23
-905	5,675132E+22	5,675289E+22	2,601827E+22	2,601781E+22	1,135042E+23	5,203608E+22	1,655403E+23
-904	5,675472E+22	5,675290E+22	2,601664E+22	2,601759E+22	1,135076E+23	5,203422E+22	1,655418E+23
-903	5,675292E+22	5,675304E+22	2,601729E+22	2,601596E+22	1,135060E+23	5,203326E+22	1,655392E+23
-902	5,675313E+22	5,675479E+22	2,601667E+22	2,601650E+22	1,135079E+23	5,203316E+22	1,655411E+23
-901	5,675512E+22	5,675402E+22	2,601559E+22	2,601614E+22	1,135091E+23	5,203174E+22	1,655409E+23
-900	5,675199E+22	5,675419E+22	2,601665E+22	2,601560E+22	1,135062E+23	5,203225E+22	1,655384E+23
-899	5,675405E+22	5,675475E+22	2,601582E+22	2,601663E+22	1,135088E+23	5,203245E+22	1,655413E+23
-898	5,675484E+22	5,675298E+22	2,601596E+22	2,601581E+22	1,135078E+23	5,203176E+22	1,655396E+23
-897	5,675266E+22	5,675350E+22	2,601697E+22	2,601621E+22	1,135062E+23	5,203319E+22	1,655393E+23
-896	5,675507E+22	5,675369E+22	2,601610E+22	2,601750E+22	1,135088E+23	5,203360E+22	1,655424E+23
-895	5,675288E+22	5,675268E+22	2,601748E+22	2,601716E+22	1,135056E+23	5,203464E+22	1,655402E+23
-894	5,675145E+22	5,675366E+22	2,601838E+22	2,601826E+22	1,135051E+23	5,203664E+22	1,655417E+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							
-893	5,675370E+22	5,675223E+22	2,601811E+22	2,601896E+22	1,135059E+23	5,203707E+22	1,655430E+23
-892	5,675039E+22	5,675115E+22	2,602001E+22	2,601865E+22	1,135015E+23	5,203867E+22	1,655402E+23
-891	5,675112E+22	5,675198E+22	2,601989E+22	2,602001E+22	1,135031E+23	5,203990E+22	1,655430E+23
-890	5,675209E+22	5,675039E+22	2,601965E+22	2,601988E+22	1,135025E+23	5,203953E+22	1,655420E+23
-889	5,674911E+22	5,675080E+22	2,602047E+22	2,601979E+22	1,134999E+23	5,204027E+22	1,655402E+23
-888	5,675175E+22	5,675153E+22	2,601915E+22	2,602051E+22	1,135033E+23	5,203966E+22	1,655429E+23
-887	5,675138E+22	5,675046E+22	2,601943E+22	2,601906E+22	1,135018E+23	5,203849E+22	1,655403E+23
-886	5,675039E+22	5,675208E+22	2,601948E+22	2,601857E+22	1,135025E+23	5,203806E+22	1,655405E+23
-885	5,675378E+22	5,675211E+22	2,601790E+22	2,601863E+22	1,135059E+23	5,203653E+22	1,655424E+23
-884	5,675119E+22	5,675175E+22	2,601851E+22	2,601743E+22	1,135029E+23	5,203593E+22	1,655389E+23
-883	5,675137E+22	5,675360E+22	2,601792E+22	2,601791E+22	1,135050E+23	5,203583E+22	1,655408E+23
-882	5,675357E+22	5,675251E+22	2,601697E+22	2,601754E+22	1,135061E+23	5,203451E+22	1,655406E+23
-881	5,675118E+22	5,675218E+22	2,601776E+22	2,601686E+22	1,135034E+23	5,203463E+22	1,655380E+23
-880	5,675351E+22	5,675308E+22	2,601699E+22	2,601772E+22	1,135066E+23	5,203471E+22	1,655413E+23
-879	5,675370E+22	5,675176E+22	2,601733E+22	2,601727E+22	1,135055E+23	5,203460E+22	1,655401E+23
-878	5,675110E+22	5,675290E+22	2,601831E+22	2,601757E+22	1,135040E+23	5,203588E+22	1,655399E+23
-877	5,675350E+22	5,675294E+22	2,601770E+22	2,601906E+22	1,135064E+23	5,203676E+22	1,655432E+23
-876	5,675104E+22	5,675109E+22	2,601926E+22	2,601882E+22	1,135021E+23	5,203808E+22	1,655402E+23
-875	5,674985E+22	5,675200E+22	2,602025E+22	2,601969E+22	1,135019E+23	5,203994E+22	1,655418E+23
-874	5,675221E+22	5,675050E+22	2,601999E+22	2,602053E+22	1,135027E+23	5,204052E+22	1,655432E+23
-873	5,674912E+22	5,674919E+22	2,602137E+22	2,602038E+22	1,134983E+23	5,204175E+22	1,655401E+23
-872	5,674970E+22	5,675053E+22	2,602106E+22	2,602165E+22	1,135002E+23	5,204271E+22	1,655429E+23
-871	5,675051E+22	5,674915E+22	2,602090E+22	2,602158E+22	1,134997E+23	5,204248E+22	1,655421E+23
-870	5,674789E+22	5,674976E+22	2,602160E+22	2,602084E+22	1,134976E+23	5,204244E+22	1,655401E+23
-869	5,675103E+22	5,675049E+22	2,602043E+22	2,602142E+22	1,135015E+23	5,204186E+22	1,655434E+23
-868	5,675037E+22	5,674906E+22	2,602071E+22	2,602006E+22	1,134994E+23	5,204077E+22	1,655402E+23
-867	5,674903E+22	5,675110E+22	2,602077E+22	2,601959E+22	1,135001E+23	5,204036E+22	1,655405E+23
-866	5,675204E+22	5,675129E+22	2,601922E+22	2,601995E+22	1,135033E+23	5,203917E+22	1,655425E+23
-865	5,674977E+22	5,675026E+22	2,601952E+22	2,601886E+22	1,135000E+23	5,203839E+22	1,655384E+23
-864	5,675027E+22	5,675207E+22	2,601903E+22	2,601910E+22	1,135023E+23	5,203813E+22	1,655405E+23
-863	5,675254E+22	5,675098E+22	2,601828E+22	2,601884E+22	1,135035E+23	5,203712E+22	1,655406E+23
-862	5,675032E+22	5,675100E+22	2,601897E+22	2,601791E+22	1,135013E+23	5,203688E+22	1,655382E+23
-861	5,675259E+22	5,675219E+22	2,601833E+22	2,601910E+22	1,135048E+23	5,203743E+22	1,655422E+23
-860	5,675195E+22	5,675057E+22	2,601875E+22	2,601898E+22	1,135025E+23	5,203773E+22	1,655403E+23
-859	5,674926E+22	5,675176E+22	2,601996E+22	2,601915E+22	1,135010E+23	5,203911E+22	1,655401E+23
-858	5,675174E+22	5,675148E+22	2,601959E+22	2,602060E+22	1,135032E+23	5,204019E+22	1,655434E+23
-857	5,674978E+22	5,674899E+22	2,602087E+22	2,602038E+22	1,134988E+23	5,204125E+22	1,655400E+23
-856	5,674873E+22	5,675013E+22	2,602179E+22	2,602114E+22	1,134989E+23	5,204293E+22	1,655418E+23
-855	5,675055E+22	5,674900E+22	2,602149E+22	2,602230E+22	1,134996E+23	5,204379E+22	1,655433E+23
-854	5,674747E+22	5,674820E+22	2,602259E+22	2,602189E+22	1,134957E+23	5,204448E+22	1,655401E+23
-853	5,674847E+22	5,674947E+22	2,602234E+22	2,602310E+22	1,134979E+23	5,204544E+22	1,655434E+23
-852	5,674908E+22	5,674765E+22	2,602228E+22	2,602289E+22	1,134967E+23	5,204517E+22	1,655419E+23
-851	5,674685E+22	5,674852E+22	2,602305E+22	2,602179E+22	1,134954E+23	5,204484E+22	1,655402E+23
-850	5,674993E+22	5,674929E+22	2,602197E+22	2,602244E+22	1,134992E+23	5,204441E+22	1,655436E+23
-849	5,674916E+22	5,674770E+22	2,602181E+22	2,602137E+22	1,134969E+23	5,204318E+22	1,655400E+23
-848	5,674758E+22	5,674995E+22	2,602179E+22	2,602090E+22	1,134975E+23	5,204269E+22	1,655402E+23
-847	5,675031E+22	5,675007E+22	2,602038E+22	2,602143E+22	1,135004E+23	5,204181E+22	1,655422E+23
-846	5,674861E+22	5,674902E+22	2,602059E+22	2,601990E+22	1,134976E+23	5,204048E+22	1,655381E+23
-845	5,674968E+22	5,675073E+22	2,602025E+22	2,602015E+22	1,135004E+23	5,204040E+22	1,655408E+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							
-844	5,675150E+22	5,674951E+22	2,601960E+22	2,602012E+22	1,135010E+23	5,203972E+22	1,655407E+23
-843	5,674901E+22	5,675010E+22	2,602035E+22	2,601921E+22	1,134991E+23	5,203956E+22	1,655387E+23
-842	5,675085E+22	5,675138E+22	2,601992E+22	2,602064E+22	1,135022E+23	5,204056E+22	1,655428E+23
-841	5,675040E+22	5,674912E+22	2,602019E+22	2,602066E+22	1,134995E+23	5,204085E+22	1,655404E+23
-840	5,674783E+22	5,675011E+22	2,602159E+22	2,602060E+22	1,134979E+23	5,204219E+22	1,655401E+23
-839	5,675023E+22	5,674979E+22	2,602137E+22	2,602222E+22	1,135000E+23	5,204359E+22	1,655436E+23
-838	5,674849E+22	5,674738E+22	2,602240E+22	2,602180E+22	1,134959E+23	5,204420E+22	1,655401E+23
-837	5,674740E+22	5,674876E+22	2,602323E+22	2,602284E+22	1,134962E+23	5,204607E+22	1,655422E+23
-836	5,674867E+22	5,674748E+22	2,602287E+22	2,602413E+22	1,134962E+23	5,204701E+22	1,655432E+23
-835	5,674591E+22	5,674686E+22	2,602399E+22	2,602332E+22	1,134928E+23	5,204731E+22	1,655401E+23
-834	5,674724E+22	5,674813E+22	2,602393E+22	2,602428E+22	1,134954E+23	5,204821E+22	1,655436E+23
-833	5,674827E+22	5,674599E+22	2,602356E+22	2,602398E+22	1,134943E+23	5,204754E+22	1,655418E+23
-832	5,674594E+22	5,674722E+22	2,602432E+22	2,602278E+22	1,134932E+23	5,204710E+22	1,655403E+23
-831	5,674828E+22	5,674842E+22	2,602323E+22	2,602378E+22	1,134967E+23	5,204700E+22	1,655437E+23
-830	5,674750E+22	5,674693E+22	2,602284E+22	2,602258E+22	1,134944E+23	5,204542E+22	1,655398E+23
-829	5,674632E+22	5,674892E+22	2,602291E+22	2,602220E+22	1,134952E+23	5,204511E+22	1,655403E+23
-828	5,674892E+22	5,674851E+22	2,602162E+22	2,602272E+22	1,134974E+23	5,204435E+22	1,655418E+23
-827	5,674775E+22	5,674764E+22	2,602188E+22	2,602096E+22	1,134954E+23	5,204284E+22	1,655382E+23
-826	5,674880E+22	5,674948E+22	2,602169E+22	2,602136E+22	1,134983E+23	5,204305E+22	1,655413E+23
-825	5,675034E+22	5,674821E+22	2,602073E+22	2,602165E+22	1,134985E+23	5,204239E+22	1,655409E+23
-824	5,674763E+22	5,674896E+22	2,602162E+22	2,602072E+22	1,134966E+23	5,204234E+22	1,655389E+23
-823	5,674905E+22	5,675009E+22	2,602147E+22	2,602222E+22	1,134991E+23	5,204369E+22	1,655428E+23
-822	5,674900E+22	5,674769E+22	2,602171E+22	2,602192E+22	1,134967E+23	5,204363E+22	1,655403E+23
-821	5,674686E+22	5,674846E+22	2,602319E+22	2,602198E+22	1,134953E+23	5,204517E+22	1,655405E+23
-820	5,674852E+22	5,674798E+22	2,602301E+22	2,602386E+22	1,134965E+23	5,204687E+22	1,655434E+23
-819	5,674678E+22	5,674610E+22	2,602394E+22	2,602344E+22	1,134929E+23	5,204738E+22	1,655403E+23
-818	5,674567E+22	5,674748E+22	2,602485E+22	2,602452E+22	1,134931E+23	5,204937E+22	1,655425E+23
-817	5,674727E+22	5,674584E+22	2,602424E+22	2,602575E+22	1,134931E+23	5,204999E+22	1,655431E+23
-816	5,674491E+22	5,674533E+22	2,602543E+22	2,602453E+22	1,134902E+23	5,204996E+22	1,655402E+23
-815	5,674602E+22	5,674681E+22	2,602547E+22	2,602550E+22	1,134928E+23	5,205098E+22	1,655438E+23
-814	5,674711E+22	5,674498E+22	2,602482E+22	2,602508E+22	1,134921E+23	5,204990E+22	1,655420E+23
-813	5,674461E+22	5,674633E+22	2,602548E+22	2,602418E+22	1,134909E+23	5,204966E+22	1,655406E+23
-812	5,674623E+22	5,674721E+22	2,602443E+22	2,602533E+22	1,134934E+23	5,204976E+22	1,655432E+23
-811	5,674600E+22	5,674564E+22	2,602405E+22	2,602382E+22	1,134916E+23	5,204787E+22	1,655395E+23
-810	5,674534E+22	5,674740E+22	2,602427E+22	2,602330E+22	1,134927E+23	5,204757E+22	1,655403E+23
-809	5,674836E+22	5,674676E+22	2,602270E+22	2,602385E+22	1,134951E+23	5,204655E+22	1,655417E+23
-808	5,674709E+22	5,674634E+22	2,602298E+22	2,602202E+22	1,134934E+23	5,204500E+22	1,655384E+23
-807	5,674739E+22	5,674874E+22	2,602291E+22	2,602274E+22	1,134961E+23	5,204565E+22	1,655418E+23
-806	5,674889E+22	5,674745E+22	2,602190E+22	2,602289E+22	1,134963E+23	5,204479E+22	1,655411E+23
-805	5,674630E+22	5,674787E+22	2,602305E+22	2,602212E+22	1,134942E+23	5,204517E+22	1,655393E+23
-804	5,674725E+22	5,674849E+22	2,602317E+22	2,602368E+22	1,134957E+23	5,204686E+22	1,655426E+23
-803	5,674761E+22	5,674603E+22	2,602347E+22	2,602332E+22	1,134936E+23	5,204679E+22	1,655404E+23
-802	5,674543E+22	5,674681E+22	2,602498E+22	2,602364E+22	1,134922E+23	5,204862E+22	1,655409E+23
-801	5,674691E+22	5,674621E+22	2,602437E+22	2,602579E+22	1,134931E+23	5,205016E+22	1,655433E+23
-800	5,674528E+22	5,674450E+22	2,602529E+22	2,602517E+22	1,134898E+23	5,205046E+22	1,655402E+23
-799	5,674413E+22	5,674606E+22	2,602634E+22	2,602611E+22	1,134902E+23	5,205245E+22	1,655426E+23
-798	5,674623E+22	5,674451E+22	2,602562E+22	2,602685E+22	1,134907E+23	5,205248E+22	1,655432E+23
-797	5,674415E+22	5,674414E+22	2,602685E+22	2,602570E+22	1,134883E+23	5,205255E+22	1,655408E+23
-796	5,674430E+22	5,674563E+22	2,602694E+22	2,602684E+22	1,134899E+23	5,205378E+22	1,655437E+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							
-795	5,674534E+22	5,674414E+22	2,602618E+22	2,602642E+22	1,134895E+23	5,205260E+22	1,655421E+23
-794	5,674295E+22	5,674517E+22	2,602688E+22	2,602560E+22	1,134881E+23	5,205248E+22	1,655406E+23
-793	5,674488E+22	5,674550E+22	2,602553E+22	2,602671E+22	1,134904E+23	5,205224E+22	1,655426E+23
-792	5,674534E+22	5,674398E+22	2,602519E+22	2,602488E+22	1,134893E+23	5,205007E+22	1,655394E+23
-791	5,674462E+22	5,674598E+22	2,602544E+22	2,602438E+22	1,134906E+23	5,204983E+22	1,655404E+23
-790	5,674756E+22	5,674580E+22	2,602370E+22	2,602486E+22	1,134934E+23	5,204856E+22	1,655419E+23
-789	5,674608E+22	5,674567E+22	2,602399E+22	2,602334E+22	1,134917E+23	5,204733E+22	1,655391E+23
-788	5,674537E+22	5,674769E+22	2,602425E+22	2,602417E+22	1,134931E+23	5,204842E+22	1,655415E+23
-787	5,674723E+22	5,674630E+22	2,602346E+22	2,602416E+22	1,134935E+23	5,204762E+22	1,655412E+23
-786	5,674499E+22	5,674621E+22	2,602486E+22	2,602346E+22	1,134912E+23	5,204833E+22	1,655395E+23
-785	5,674595E+22	5,674645E+22	2,602472E+22	2,602525E+22	1,134924E+23	5,204997E+22	1,655424E+23
-784	5,674632E+22	5,674431E+22	2,602495E+22	2,602496E+22	1,134906E+23	5,204991E+22	1,655405E+23
-783	5,674367E+22	5,674548E+22	2,602641E+22	2,602550E+22	1,134891E+23	5,205191E+22	1,655411E+23
-782	5,674544E+22	5,674497E+22	2,602567E+22	2,602738E+22	1,134904E+23	5,205305E+22	1,655435E+23
-781	5,674422E+22	5,674328E+22	2,602670E+22	2,602666E+22	1,134875E+23	5,205336E+22	1,655409E+23
-780	5,674262E+22	5,674462E+22	2,602801E+22	2,602746E+22	1,134872E+23	5,205548E+22	1,655427E+23
-779	5,674501E+22	5,674329E+22	2,602732E+22	2,602805E+22	1,134883E+23	5,205537E+22	1,655437E+23
-778	5,674270E+22	5,674294E+22	2,602855E+22	2,602715E+22	1,134856E+23	5,205569E+22	1,655413E+23
-777	5,674250E+22	5,674417E+22	2,602818E+22	2,602849E+22	1,134867E+23	5,205667E+22	1,655433E+23
-776	5,674382E+22	5,674252E+22	2,602736E+22	2,602785E+22	1,134863E+23	5,205521E+22	1,655416E+23
-775	5,674167E+22	5,674363E+22	2,602805E+22	2,602688E+22	1,134853E+23	5,205493E+22	1,655402E+23
-774	5,674432E+22	5,674398E+22	2,602650E+22	2,602755E+22	1,134883E+23	5,205405E+22	1,655424E+23
-773	5,674496E+22	5,674286E+22	2,602614E+22	2,602582E+22	1,134878E+23	5,205195E+22	1,655398E+23
-772	5,674325E+22	5,674517E+22	2,602657E+22	2,602552E+22	1,134884E+23	5,205208E+22	1,655405E+23
-771	5,674601E+22	5,674530E+22	2,602493E+22	2,602600E+22	1,134913E+23	5,205093E+22	1,655422E+23
-770	5,674448E+22	5,674480E+22	2,602552E+22	2,602470E+22	1,134893E+23	5,205022E+22	1,655395E+23
-769	5,674375E+22	5,674609E+22	2,602569E+22	2,602561E+22	1,134898E+23	5,205130E+22	1,655411E+23
-768	5,674606E+22	5,674443E+22	2,602503E+22	2,602553E+22	1,134905E+23	5,205056E+22	1,655411E+23
-767	5,674373E+22	5,674443E+22	2,602643E+22	2,602506E+22	1,134882E+23	5,205149E+22	1,655397E+23
-766	5,674471E+22	5,674490E+22	2,602601E+22	2,602685E+22	1,134896E+23	5,205286E+22	1,655425E+23
-765	5,674504E+22	5,674311E+22	2,602615E+22	2,602678E+22	1,134881E+23	5,205293E+22	1,655411E+23
-764	5,674180E+22	5,674407E+22	2,602788E+22	2,602721E+22	1,134859E+23	5,205508E+22	1,655410E+23
-763	5,674404E+22	5,674370E+22	2,602735E+22	2,602869E+22	1,134877E+23	5,205604E+22	1,655438E+23
-762	5,674317E+22	5,674186E+22	2,602857E+22	2,602794E+22	1,134850E+23	5,205652E+22	1,655415E+23
-761	5,674123E+22	5,674295E+22	2,602962E+22	2,602886E+22	1,134842E+23	5,205848E+22	1,655427E+23
-760	5,674354E+22	5,674191E+22	2,602884E+22	2,602951E+22	1,134855E+23	5,205835E+22	1,655438E+23
-759	5,674085E+22	5,674167E+22	2,602990E+22	2,602876E+22	1,134825E+23	5,205866E+22	1,655412E+23
-758	5,674096E+22	5,674276E+22	2,602929E+22	2,602982E+22	1,134837E+23	5,205910E+22	1,655428E+23
-757	5,674292E+22	5,674123E+22	2,602838E+22	2,602907E+22	1,134841E+23	5,205745E+22	1,655416E+23
-756	5,674053E+22	5,674217E+22	2,602923E+22	2,602796E+22	1,134827E+23	5,205719E+22	1,655399E+23
-755	5,674348E+22	5,674301E+22	2,602774E+22	2,602849E+22	1,134865E+23	5,205623E+22	1,655427E+23
-754	5,674389E+22	5,674211E+22	2,602743E+22	2,602703E+22	1,134860E+23	5,205446E+22	1,655405E+23
-753	5,674159E+22	5,674409E+22	2,602767E+22	2,602694E+22	1,134857E+23	5,205461E+22	1,655403E+23
-752	5,674455E+22	5,674397E+22	2,602624E+22	2,602730E+22	1,134885E+23	5,205354E+22	1,655421E+23
-751	5,674307E+22	5,674326E+22	2,602697E+22	2,602604E+22	1,134863E+23	5,205302E+22	1,655394E+23
-750	5,674278E+22	5,674436E+22	2,602702E+22	2,602679E+22	1,134871E+23	5,205381E+22	1,655410E+23
-749	5,674520E+22	5,674300E+22	2,602629E+22	2,602696E+22	1,134882E+23	5,205325E+22	1,655415E+23
-748	5,674203E+22	5,674315E+22	2,602782E+22	2,602672E+22	1,134852E+23	5,205454E+22	1,655397E+23
-747	5,674310E+22	5,674388E+22	2,602749E+22	2,602841E+22	1,134870E+23	5,205590E+22	1,655429E+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	5,674355E+22	5,674196E+22	2,602787E+22	2,602839E+22	1,134855E+23	5,205626E+22	1,655418E+23
-745	5,674035E+22	5,674243E+22	2,602952E+22	2,602874E+22	1,134828E+23	5,205826E+22	1,655410E+23
-744	5,674294E+22	5,674191E+22	2,602914E+22	2,603003E+22	1,134849E+23	5,205917E+22	1,655440E+23
-743	5,674172E+22	5,674037E+22	2,603032E+22	2,602950E+22	1,134821E+23	5,205982E+22	1,655419E+23
-742	5,673966E+22	5,674157E+22	2,603095E+22	2,603041E+22	1,134812E+23	5,206135E+22	1,655426E+23
-741	5,674187E+22	5,674068E+22	2,602996E+22	2,603117E+22	1,134825E+23	5,206114E+22	1,655437E+23
-740	5,673893E+22	5,674016E+22	2,603116E+22	2,603027E+22	1,134791E+23	5,206143E+22	1,655405E+23
-739	5,673982E+22	5,674133E+22	2,603059E+22	2,603086E+22	1,134812E+23	5,206146E+22	1,655426E+23
-738	5,674222E+22	5,673995E+22	2,602975E+22	2,603009E+22	1,134822E+23	5,205984E+22	1,655420E+23
-737	5,673957E+22	5,674087E+22	2,603032E+22	2,602908E+22	1,134804E+23	5,205940E+22	1,655398E+23
-736	5,674235E+22	5,674202E+22	2,602889E+22	2,602963E+22	1,134844E+23	5,205853E+22	1,655429E+23
-735	5,674232E+22	5,674132E+22	2,602863E+22	2,602836E+22	1,134836E+23	5,205699E+22	1,655406E+23
-734	5,674023E+22	5,674289E+22	2,602880E+22	2,602811E+22	1,134831E+23	5,205691E+22	1,655400E+23
-733	5,674349E+22	5,674271E+22	2,602745E+22	2,602851E+22	1,134862E+23	5,205596E+22	1,655422E+23
-732	5,674173E+22	5,674164E+22	2,602845E+22	2,602737E+22	1,134834E+23	5,205582E+22	1,655392E+23
-731	5,674159E+22	5,674300E+22	2,602855E+22	2,602813E+22	1,134846E+23	5,205668E+22	1,655413E+23
-730	5,674383E+22	5,674189E+22	2,602782E+22	2,602867E+22	1,134857E+23	5,205649E+22	1,655422E+23
-729	5,674024E+22	5,674163E+22	2,602914E+22	2,602852E+22	1,134819E+23	5,205766E+22	1,655395E+23
-728	5,674172E+22	5,674225E+22	2,602907E+22	2,602996E+22	1,134840E+23	5,205903E+22	1,655430E+23
-727	5,674226E+22	5,674036E+22	2,602957E+22	2,602983E+22	1,134826E+23	5,205941E+22	1,655420E+23
-726	5,673924E+22	5,674075E+22	2,603110E+22	2,603003E+22	1,134800E+23	5,206113E+22	1,655411E+23
-725	5,674165E+22	5,674070E+22	2,603060E+22	2,603151E+22	1,134824E+23	5,206211E+22	1,655445E+23
-724	5,673958E+22	5,673913E+22	2,603185E+22	2,603121E+22	1,134787E+23	5,206305E+22	1,655418E+23
-723	5,673771E+22	5,674043E+22	2,603244E+22	2,603194E+22	1,134781E+23	5,206438E+22	1,655425E+23
-722	5,674034E+22	5,673937E+22	2,603147E+22	2,603267E+22	1,134797E+23	5,206414E+22	1,655439E+23
-721	5,673769E+22	5,673837E+22	2,603242E+22	2,603159E+22	1,134761E+23	5,206400E+22	1,655401E+23
-720	5,673923E+22	5,673961E+22	2,603192E+22	2,603193E+22	1,134788E+23	5,206386E+22	1,655427E+23
-719	5,674128E+22	5,673883E+22	2,603100E+22	2,603128E+22	1,134801E+23	5,206227E+22	1,655424E+23
-718	5,673846E+22	5,673996E+22	2,603127E+22	2,603027E+22	1,134784E+23	5,206154E+22	1,655400E+23
-717	5,674102E+22	5,674127E+22	2,602983E+22	2,603086E+22	1,134823E+23	5,206069E+22	1,655430E+23
-716	5,674061E+22	5,674015E+22	2,602992E+22	2,602960E+22	1,134808E+23	5,205952E+22	1,655403E+23
-715	5,673905E+22	5,674157E+22	2,603025E+22	2,602912E+22	1,134806E+23	5,205937E+22	1,655400E+23
-714	5,674243E+22	5,674138E+22	2,602900E+22	2,602975E+22	1,134838E+23	5,205876E+22	1,655426E+23
-713	5,674038E+22	5,674010E+22	2,602974E+22	2,602890E+22	1,134805E+23	5,205865E+22	1,655391E+23
-712	5,674029E+22	5,674150E+22	2,602991E+22	2,602970E+22	1,134818E+23	5,205961E+22	1,655414E+23
-711	5,674217E+22	5,674068E+22	2,602926E+22	2,603034E+22	1,134828E+23	5,205960E+22	1,655425E+23
-710	5,673899E+22	5,674017E+22	2,603049E+22	2,602997E+22	1,134792E+23	5,206046E+22	1,655396E+23
-709	5,674059E+22	5,674086E+22	2,603054E+22	2,603132E+22	1,134814E+23	5,206185E+22	1,655433E+23
-708	5,674070E+22	5,673887E+22	2,603135E+22	2,603133E+22	1,134796E+23	5,206268E+22	1,655422E+23
-707	5,673767E+22	5,673946E+22	2,603286E+22	2,603154E+22	1,134771E+23	5,206439E+22	1,655415E+23
-706	5,673973E+22	5,673958E+22	2,603227E+22	2,603332E+22	1,134793E+23	5,206560E+22	1,655449E+23
-705	5,673753E+22	5,673739E+22	2,603324E+22	2,603303E+22	1,134749E+23	5,206627E+22	1,655412E+23
-704	5,673641E+22	5,673839E+22	2,603390E+22	2,603339E+22	1,134748E+23	5,206729E+22	1,655421E+23
-703	5,673933E+22	5,673769E+22	2,603290E+22	2,603390E+22	1,134770E+23	5,206681E+22	1,655438E+23
-702	5,673714E+22	5,673685E+22	2,603351E+22	2,603261E+22	1,134740E+23	5,206612E+22	1,655401E+23
-701	5,673843E+22	5,673880E+22	2,603290E+22	2,603301E+22	1,134772E+23	5,206591E+22	1,655431E+23
-700	5,673962E+22	5,673820E+22	2,603216E+22	2,603252E+22	1,134778E+23	5,206468E+22	1,655425E+23
-699	5,673685E+22	5,673931E+22	2,603256E+22	2,603138E+22	1,134762E+23	5,206395E+22	1,655401E+23
-698	5,673954E+22	5,674039E+22	2,603129E+22	2,603207E+22	1,134799E+23	5,206336E+22	1,655433E+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	5,673919E+22	5,673843E+22	2,603127E+22	2,603088E+22	1,134776E+23	5,206215E+22	1,655398E+23
-696	5,673816E+22	5,673967E+22	2,603171E+22	2,603041E+22	1,134778E+23	5,206213E+22	1,655400E+23
-695	5,674119E+22	5,673994E+22	2,603035E+22	2,603129E+22	1,134811E+23	5,206164E+22	1,655428E+23
-694	5,673909E+22	5,673871E+22	2,603075E+22	2,603051E+22	1,134778E+23	5,206125E+22	1,655390E+23
-693	5,673900E+22	5,674035E+22	2,603096E+22	2,603122E+22	1,134794E+23	5,206219E+22	1,655415E+23
-692	5,674060E+22	5,673929E+22	2,603076E+22	2,603175E+22	1,134799E+23	5,206252E+22	1,655424E+23
-691	5,673782E+22	5,673884E+22	2,603223E+22	2,603115E+22	1,134767E+23	5,206338E+22	1,655400E+23
-690	5,673927E+22	5,673967E+22	2,603241E+22	2,603271E+22	1,134789E+23	5,206512E+22	1,655441E+23
-689	5,673880E+22	5,673734E+22	2,603301E+22	2,603306E+22	1,134761E+23	5,206607E+22	1,655422E+23
-688	5,673591E+22	5,673780E+22	2,603452E+22	2,603332E+22	1,134737E+23	5,206784E+22	1,655416E+23
-687	5,673781E+22	5,673802E+22	2,603387E+22	2,603506E+22	1,134758E+23	5,206893E+22	1,655448E+23
-686	5,673633E+22	5,673558E+22	2,603451E+22	2,603451E+22	1,134719E+23	5,206902E+22	1,655409E+23
-685	5,673568E+22	5,673684E+22	2,603508E+22	2,603459E+22	1,134725E+23	5,206967E+22	1,655422E+23
-684	5,673825E+22	5,673642E+22	2,603429E+22	2,603512E+22	1,134747E+23	5,206942E+22	1,655441E+23
-683	5,673603E+22	5,673613E+22	2,603481E+22	2,603375E+22	1,134722E+23	5,206856E+22	1,655407E+23
-682	5,673682E+22	5,673831E+22	2,603419E+22	2,603434E+22	1,134751E+23	5,206852E+22	1,655437E+23
-681	5,673777E+22	5,673702E+22	2,603336E+22	2,603390E+22	1,134748E+23	5,206726E+22	1,655420E+23
-680	5,673569E+22	5,673750E+22	2,603393E+22	2,603254E+22	1,134732E+23	5,206646E+22	1,655397E+23
-679	5,673830E+22	5,673876E+22	2,603268E+22	2,603319E+22	1,134771E+23	5,206587E+22	1,655429E+23
-678	5,673841E+22	5,673677E+22	2,603230E+22	2,603209E+22	1,134752E+23	5,206440E+22	1,655396E+23
-677	5,673721E+22	5,673847E+22	2,603262E+22	2,603174E+22	1,134757E+23	5,206436E+22	1,655400E+23
-676	5,673959E+22	5,673895E+22	2,603155E+22	2,603279E+22	1,134785E+23	5,206434E+22	1,655429E+23
-675	5,673774E+22	5,673778E+22	2,603210E+22	2,603179E+22	1,134755E+23	5,206389E+22	1,655394E+23
-674	5,673769E+22	5,673938E+22	2,603258E+22	2,603252E+22	1,134771E+23	5,206511E+22	1,655422E+23
-673	5,673916E+22	5,673766E+22	2,603247E+22	2,603317E+22	1,134768E+23	5,206564E+22	1,655425E+23
-672	5,673665E+22	5,673695E+22	2,603414E+22	2,603268E+22	1,134736E+23	5,206682E+22	1,655404E+23
-671	5,673737E+22	5,673827E+22	2,603421E+22	2,603451E+22	1,134756E+23	5,206872E+22	1,655444E+23
-670	5,673701E+22	5,673568E+22	2,603438E+22	2,603499E+22	1,134727E+23	5,206937E+22	1,655421E+23
-669	5,673439E+22	5,673612E+22	2,603578E+22	2,603503E+22	1,134705E+23	5,207081E+22	1,655413E+23
-668	5,673633E+22	5,673628E+22	2,603538E+22	2,603655E+22	1,134726E+23	5,207193E+22	1,655445E+23
-667	5,673544E+22	5,673420E+22	2,603598E+22	2,603563E+22	1,134696E+23	5,207161E+22	1,655412E+23
-666	5,673476E+22	5,673600E+22	2,603652E+22	2,603580E+22	1,134708E+23	5,207232E+22	1,655431E+23
-665	5,673667E+22	5,673538E+22	2,603558E+22	2,603648E+22	1,134720E+23	5,207206E+22	1,655441E+23
-664	5,673454E+22	5,673500E+22	2,603618E+22	2,603510E+22	1,134695E+23	5,207128E+22	1,655408E+23
-663	5,673505E+22	5,673722E+22	2,603556E+22	2,603558E+22	1,134723E+23	5,207114E+22	1,655434E+23
-662	5,673655E+22	5,673537E+22	2,603445E+22	2,603507E+22	1,134719E+23	5,206952E+22	1,655414E+23
-661	5,673494E+22	5,673588E+22	2,603496E+22	2,603361E+22	1,134708E+23	5,206857E+22	1,655394E+23
-660	5,673721E+22	5,673729E+22	2,603392E+22	2,603444E+22	1,134745E+23	5,206835E+22	1,655429E+23
-659	5,673731E+22	5,673585E+22	2,603342E+22	2,603337E+22	1,134732E+23	5,206679E+22	1,655400E+23
-658	5,673586E+22	5,673781E+22	2,603376E+22	2,603319E+22	1,134737E+23	5,206695E+22	1,655406E+23
-657	5,673795E+22	5,673760E+22	2,603287E+22	2,603422E+22	1,134756E+23	5,206708E+22	1,655426E+23
-656	5,673673E+22	5,673609E+22	2,603375E+22	2,603305E+22	1,134728E+23	5,206680E+22	1,655396E+23
-655	5,673634E+22	5,673791E+22	2,603440E+22	2,603379E+22	1,134742E+23	5,206818E+22	1,655424E+23
-654	5,673789E+22	5,673606E+22	2,603399E+22	2,603473E+22	1,134740E+23	5,206873E+22	1,655427E+23
-653	5,673511E+22	5,673556E+22	2,603553E+22	2,603442E+22	1,134707E+23	5,206995E+22	1,655406E+23
-652	5,673523E+22	5,673687E+22	2,603580E+22	2,603639E+22	1,134721E+23	5,207219E+22	1,655443E+23
-651	5,673539E+22	5,673431E+22	2,603592E+22	2,603659E+22	1,134697E+23	5,207252E+22	1,655422E+23
-650	5,673313E+22	5,673476E+22	2,603731E+22	2,603651E+22	1,134679E+23	5,207382E+22	1,655417E+23
-649	5,673511E+22	5,673453E+22	2,603693E+22	2,603796E+22	1,134696E+23	5,207490E+22	1,655445E+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	5,673461E+22	5,673259E+22	2,603754E+22	2,603697E+22	1,134672E+23	5,207451E+22	1,655417E+23
-647	5,673309E+22	5,673503E+22	2,603797E+22	2,603719E+22	1,134681E+23	5,207515E+22	1,655433E+23
-646	5,673510E+22	5,673419E+22	2,603664E+22	2,603793E+22	1,134693E+23	5,207457E+22	1,655439E+23
-645	5,673323E+22	5,673357E+22	2,603722E+22	2,603630E+22	1,134668E+23	5,207351E+22	1,655403E+23
-644	5,673364E+22	5,673568E+22	2,603688E+22	2,603667E+22	1,134693E+23	5,207354E+22	1,655429E+23
-643	5,673568E+22	5,673405E+22	2,603568E+22	2,603599E+22	1,134697E+23	5,207167E+22	1,655414E+23
-642	5,673403E+22	5,673497E+22	2,603608E+22	2,603478E+22	1,134690E+23	5,207086E+22	1,655399E+23
-641	5,673575E+22	5,673616E+22	2,603504E+22	2,603584E+22	1,134719E+23	5,207088E+22	1,655428E+23
-640	5,673611E+22	5,673466E+22	2,603471E+22	2,603475E+22	1,134708E+23	5,206946E+22	1,655402E+23
-639	5,673434E+22	5,673679E+22	2,603525E+22	2,603446E+22	1,134711E+23	5,206970E+22	1,655408E+23
-638	5,673684E+22	5,673609E+22	2,603423E+22	2,603552E+22	1,134729E+23	5,206975E+22	1,655427E+23
-637	5,673577E+22	5,673452E+22	2,603523E+22	2,603440E+22	1,134703E+23	5,206963E+22	1,655399E+23
-636	5,673470E+22	5,673646E+22	2,603612E+22	2,603543E+22	1,134712E+23	5,207156E+22	1,655427E+23
-635	5,673608E+22	5,673491E+22	2,603555E+22	2,603649E+22	1,134710E+23	5,207204E+22	1,655430E+23
-634	5,673333E+22	5,673439E+22	2,603700E+22	2,603631E+22	1,134677E+23	5,207331E+22	1,655410E+23
-633	5,673345E+22	5,673485E+22	2,603736E+22	2,603810E+22	1,134683E+23	5,207546E+22	1,655438E+23
-632	5,673440E+22	5,673226E+22	2,603760E+22	2,603800E+22	1,134667E+23	5,207560E+22	1,655423E+23
-631	5,673203E+22	5,673329E+22	2,603895E+22	2,603775E+22	1,134653E+23	5,207671E+22	1,655420E+23
-630	5,673401E+22	5,673312E+22	2,603823E+22	2,603935E+22	1,134671E+23	5,207758E+22	1,655447E+23
-629	5,673326E+22	5,673160E+22	2,603873E+22	2,603834E+22	1,134649E+23	5,207707E+22	1,655419E+23
-628	5,673118E+22	5,673403E+22	2,603936E+22	2,603856E+22	1,134652E+23	5,207792E+22	1,655431E+23
-627	5,673355E+22	5,673315E+22	2,603796E+22	2,603904E+22	1,134667E+23	5,207700E+22	1,655437E+23
-626	5,673209E+22	5,673242E+22	2,603848E+22	2,603743E+22	1,134645E+23	5,207591E+22	1,655404E+23
-625	5,673243E+22	5,673392E+22	2,603820E+22	2,603787E+22	1,134663E+23	5,207607E+22	1,655424E+23
-624	5,673482E+22	5,673259E+22	2,603697E+22	2,603730E+22	1,134674E+23	5,207427E+22	1,655417E+23
-623	5,673258E+22	5,673409E+22	2,603725E+22	2,603617E+22	1,134667E+23	5,207341E+22	1,655401E+23
-622	5,673448E+22	5,673492E+22	2,603600E+22	2,603729E+22	1,134694E+23	5,207329E+22	1,655427E+23
-621	5,673513E+22	5,673331E+22	2,603581E+22	2,603594E+22	1,134684E+23	5,207175E+22	1,655402E+23
-620	5,673307E+22	5,673540E+22	2,603678E+22	2,603562E+22	1,134685E+23	5,207240E+22	1,655409E+23
-619	5,673574E+22	5,673493E+22	2,603579E+22	2,603667E+22	1,134707E+23	5,207246E+22	1,655431E+23
-618	5,673436E+22	5,673353E+22	2,603674E+22	2,603596E+22	1,134679E+23	5,207270E+22	1,655406E+23
-617	5,673260E+22	5,673496E+22	2,603772E+22	2,603727E+22	1,134676E+23	5,207500E+22	1,655426E+23
-616	5,673442E+22	5,673318E+22	2,603720E+22	2,603827E+22	1,134676E+23	5,207547E+22	1,655431E+23
-615	5,673162E+22	5,673276E+22	2,603867E+22	2,603787E+22	1,134644E+23	5,207655E+22	1,655409E+23
-614	5,673241E+22	5,673287E+22	2,603880E+22	2,603960E+22	1,134653E+23	5,207840E+22	1,655437E+23
-613	5,673364E+22	5,673054E+22	2,603903E+22	2,603935E+22	1,134642E+23	5,207838E+22	1,655426E+23
-612	5,673057E+22	5,673212E+22	2,604054E+22	2,603925E+22	1,134627E+23	5,207979E+22	1,655425E+23
-611	5,673231E+22	5,673237E+22	2,603962E+22	2,604078E+22	1,134647E+23	5,208040E+22	1,655451E+23
-610	5,673151E+22	5,673080E+22	2,604005E+22	2,603983E+22	1,134623E+23	5,207988E+22	1,655422E+23
-609	5,672937E+22	5,673233E+22	2,604081E+22	2,603991E+22	1,134617E+23	5,208073E+22	1,655424E+23
-608	5,673247E+22	5,673133E+22	2,603943E+22	2,604019E+22	1,134638E+23	5,207961E+22	1,655434E+23
-607	5,673098E+22	5,673106E+22	2,603982E+22	2,603856E+22	1,134620E+23	5,207838E+22	1,655404E+23
-606	5,673148E+22	5,673249E+22	2,603915E+22	2,603923E+22	1,134640E+23	5,207837E+22	1,655423E+23
-605	5,673377E+22	5,673157E+22	2,603787E+22	2,603860E+22	1,134653E+23	5,207647E+22	1,655418E+23
-604	5,673117E+22	5,673320E+22	2,603843E+22	2,603745E+22	1,134644E+23	5,207588E+22	1,655403E+23
-603	5,673328E+22	5,673403E+22	2,603726E+22	2,603829E+22	1,134673E+23	5,207555E+22	1,655429E+23
-602	5,673416E+22	5,673239E+22	2,603720E+22	2,603708E+22	1,134666E+23	5,207429E+22	1,655408E+23
-601	5,673169E+22	5,673369E+22	2,603843E+22	2,603698E+22	1,134654E+23	5,207541E+22	1,655408E+23
-600	5,673422E+22	5,673342E+22	2,603746E+22	2,603827E+22	1,134676E+23	5,207573E+22	1,655434E+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	5,673237E+22	5,673232E+22	2,603831E+22	2,603775E+22	1,134647E+23	5,207606E+22	1,655407E+23
-598	5,673095E+22	5,673298E+22	2,603905E+22	2,603912E+22	1,134639E+23	5,207818E+22	1,655421E+23
-597	5,673327E+22	5,673121E+22	2,603861E+22	2,603978E+22	1,134645E+23	5,207839E+22	1,655429E+23
-596	5,673047E+22	5,673105E+22	2,604029E+22	2,603926E+22	1,134615E+23	5,207955E+22	1,655411E+23
-595	5,673135E+22	5,673168E+22	2,604033E+22	2,604086E+22	1,134630E+23	5,208119E+22	1,655442E+23
-594	5,673226E+22	5,672991E+22	2,604048E+22	2,604086E+22	1,134622E+23	5,208134E+22	1,655435E+23
-593	5,672848E+22	5,673093E+22	2,604214E+22	2,604089E+22	1,134594E+23	5,208303E+22	1,655424E+23
-592	5,673050E+22	5,673106E+22	2,604127E+22	2,604227E+22	1,134616E+23	5,208354E+22	1,655451E+23
-591	5,672977E+22	5,672943E+22	2,604164E+22	2,604116E+22	1,134592E+23	5,208280E+22	1,655420E+23
-590	5,672831E+22	5,673030E+22	2,604207E+22	2,604126E+22	1,134586E+23	5,208333E+22	1,655419E+23
-589	5,673178E+22	5,672958E+22	2,604055E+22	2,604142E+22	1,134614E+23	5,208196E+22	1,655433E+23
-588	5,672980E+22	5,672993E+22	2,604093E+22	2,603993E+22	1,134597E+23	5,208085E+22	1,655406E+23
-587	5,673032E+22	5,673180E+22	2,604007E+22	2,604046E+22	1,134621E+23	5,208052E+22	1,655426E+23
-586	5,673265E+22	5,673089E+22	2,603885E+22	2,603976E+22	1,134635E+23	5,207861E+22	1,655421E+23
-585	5,672982E+22	5,673176E+22	2,603982E+22	2,603852E+22	1,134616E+23	5,207834E+22	1,655399E+23
-584	5,673227E+22	5,673259E+22	2,603884E+22	2,603926E+22	1,134649E+23	5,207810E+22	1,655430E+23
-583	5,673269E+22	5,673121E+22	2,603883E+22	2,603832E+22	1,134639E+23	5,207714E+22	1,655410E+23
-582	5,673014E+22	5,673210E+22	2,603977E+22	2,603868E+22	1,134622E+23	5,207845E+22	1,655407E+23
-581	5,673260E+22	5,673188E+22	2,603879E+22	2,603998E+22	1,134645E+23	5,207877E+22	1,655433E+23
-580	5,673061E+22	5,673080E+22	2,603982E+22	2,603947E+22	1,134614E+23	5,207929E+22	1,655407E+23
-579	5,672971E+22	5,673149E+22	2,604050E+22	2,604053E+22	1,134612E+23	5,208103E+22	1,655422E+23
-578	5,673230E+22	5,672994E+22	2,604011E+22	2,604122E+22	1,134622E+23	5,208133E+22	1,655436E+23
-577	5,672909E+22	5,672944E+22	2,604206E+22	2,604083E+22	1,134585E+23	5,208290E+22	1,655414E+23
-576	5,672974E+22	5,673051E+22	2,604208E+22	2,604249E+22	1,134602E+23	5,208457E+22	1,655448E+23
-575	5,673015E+22	5,672898E+22	2,604216E+22	2,604256E+22	1,134591E+23	5,208472E+22	1,655439E+23
-574	5,672677E+22	5,672906E+22	2,604355E+22	2,604258E+22	1,134558E+23	5,208613E+22	1,655420E+23
-573	5,672924E+22	5,672908E+22	2,604266E+22	2,604356E+22	1,134583E+23	5,208622E+22	1,655445E+23
-572	5,672868E+22	5,672774E+22	2,604302E+22	2,604240E+22	1,134564E+23	5,208542E+22	1,655418E+23
-571	5,672745E+22	5,672901E+22	2,604315E+22	2,604236E+22	1,134565E+23	5,208551E+22	1,655420E+23
-570	5,673076E+22	5,672900E+22	2,604149E+22	2,604268E+22	1,134598E+23	5,208417E+22	1,655439E+23
-569	5,672835E+22	5,672888E+22	2,604206E+22	2,604119E+22	1,134572E+23	5,208326E+22	1,655405E+23
-568	5,672899E+22	5,673082E+22	2,604137E+22	2,604149E+22	1,134598E+23	5,208286E+22	1,655427E+23
-567	5,673129E+22	5,673000E+22	2,604029E+22	2,604074E+22	1,134613E+23	5,208103E+22	1,655423E+23
-566	5,672882E+22	5,672997E+22	2,604116E+22	2,603976E+22	1,134588E+23	5,208092E+22	1,655397E+23
-565	5,673112E+22	5,673099E+22	2,604024E+22	2,604059E+22	1,134621E+23	5,208083E+22	1,655429E+23
-564	5,673098E+22	5,672997E+22	2,604022E+22	2,604004E+22	1,134610E+23	5,208026E+22	1,655412E+23
-563	5,672850E+22	5,673082E+22	2,604097E+22	2,604036E+22	1,134593E+23	5,208133E+22	1,655407E+23
-562	5,673125E+22	5,673058E+22	2,604005E+22	2,604159E+22	1,134618E+23	5,208164E+22	1,655435E+23
-561	5,672929E+22	5,672887E+22	2,604142E+22	2,604093E+22	1,134582E+23	5,208235E+22	1,655405E+23
-560	5,672872E+22	5,672994E+22	2,604222E+22	2,604183E+22	1,134587E+23	5,208405E+22	1,655427E+23
-559	5,673085E+22	5,672893E+22	2,604190E+22	2,604266E+22	1,134598E+23	5,208456E+22	1,655443E+23
-558	5,672746E+22	5,672799E+22	2,604362E+22	2,604265E+22	1,134555E+23	5,208627E+22	1,655417E+23
-557	5,672796E+22	5,672907E+22	2,604366E+22	2,604412E+22	1,134570E+23	5,208779E+22	1,655448E+23
-556	5,672826E+22	5,672750E+22	2,604380E+22	2,604417E+22	1,134558E+23	5,208798E+22	1,655437E+23
-555	5,672553E+22	5,672742E+22	2,604493E+22	2,604389E+22	1,134530E+23	5,208882E+22	1,655418E+23
-554	5,672837E+22	5,672760E+22	2,604390E+22	2,604480E+22	1,134560E+23	5,208870E+22	1,655447E+23
-553	5,672746E+22	5,672613E+22	2,604436E+22	2,604375E+22	1,134536E+23	5,208812E+22	1,655417E+23
-552	5,672620E+22	5,672809E+22	2,604433E+22	2,604366E+22	1,134543E+23	5,208799E+22	1,655423E+23
-551	5,672913E+22	5,672833E+22	2,604271E+22	2,604393E+22	1,134575E+23	5,208664E+22	1,655441E+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	5,672714E+22	5,672739E+22	2,604318E+22	2,604245E+22	1,134545E+23	5,208563E+22	1,655402E+23
-549	5,672804E+22	5,672925E+22	2,604264E+22	2,604240E+22	1,134573E+23	5,208504E+22	1,655423E+23
-548	5,673012E+22	5,672870E+22	2,604169E+22	2,604185E+22	1,134588E+23	5,208354E+22	1,655424E+23
-547	5,672767E+22	5,672879E+22	2,604234E+22	2,604103E+22	1,134565E+23	5,208338E+22	1,655398E+23
-546	5,672963E+22	5,673013E+22	2,604136E+22	2,604214E+22	1,134598E+23	5,208350E+22	1,655433E+23
-545	5,672919E+22	5,672851E+22	2,604165E+22	2,604173E+22	1,134577E+23	5,208338E+22	1,655411E+23
-544	5,672711E+22	5,672939E+22	2,604247E+22	2,604180E+22	1,134565E+23	5,208427E+22	1,655408E+23
-543	5,672998E+22	5,672925E+22	2,604173E+22	2,604294E+22	1,134592E+23	5,208468E+22	1,655439E+23
-542	5,672841E+22	5,672690E+22	2,604299E+22	2,604248E+22	1,134553E+23	5,208547E+22	1,655408E+23
-541	5,672753E+22	5,672838E+22	2,604387E+22	2,604335E+22	1,134559E+23	5,208721E+22	1,655431E+23
-540	5,672900E+22	5,672788E+22	2,604355E+22	2,604449E+22	1,134569E+23	5,208804E+22	1,655449E+23
-539	5,672567E+22	5,672663E+22	2,604507E+22	2,604434E+22	1,134523E+23	5,208942E+22	1,655417E+23
-538	5,672634E+22	5,672768E+22	2,604510E+22	2,604564E+22	1,134540E+23	5,209074E+22	1,655448E+23
-537	5,672679E+22	5,672546E+22	2,604542E+22	2,604557E+22	1,134522E+23	5,209099E+22	1,655432E+23
-536	5,672440E+22	5,672578E+22	2,604640E+22	2,604509E+22	1,134502E+23	5,209149E+22	1,655417E+23
-535	5,672701E+22	5,672664E+22	2,604528E+22	2,604610E+22	1,134537E+23	5,209138E+22	1,655450E+23
-534	5,672618E+22	5,672480E+22	2,604542E+22	2,604526E+22	1,134510E+23	5,209069E+22	1,655417E+23
-533	5,672494E+22	5,672693E+22	2,604546E+22	2,604486E+22	1,134519E+23	5,209032E+22	1,655422E+23
-532	5,672776E+22	5,672735E+22	2,604398E+22	2,604506E+22	1,134551E+23	5,208904E+22	1,655441E+23
-531	5,672620E+22	5,672613E+22	2,604433E+22	2,604343E+22	1,134523E+23	5,208775E+22	1,655401E+23
-530	5,672711E+22	5,672814E+22	2,604382E+22	2,604347E+22	1,134552E+23	5,208729E+22	1,655425E+23
-529	5,672863E+22	5,672726E+22	2,604309E+22	2,604329E+22	1,134559E+23	5,208638E+22	1,655423E+23
-528	5,672610E+22	5,672769E+22	2,604363E+22	2,604257E+22	1,134538E+23	5,208620E+22	1,655400E+23
-527	5,672795E+22	5,672899E+22	2,604277E+22	2,604367E+22	1,134569E+23	5,208644E+22	1,655434E+23
-526	5,672804E+22	5,672651E+22	2,604297E+22	2,604329E+22	1,134545E+23	5,208626E+22	1,655408E+23
-525	5,672633E+22	5,672753E+22	2,604395E+22	2,604301E+22	1,134539E+23	5,208697E+22	1,655408E+23
-524	5,672882E+22	5,672789E+22	2,604338E+22	2,604432E+22	1,134567E+23	5,208771E+22	1,655444E+23
-523	5,672713E+22	5,672580E+22	2,604446E+22	2,604402E+22	1,134529E+23	5,208848E+22	1,655414E+23
-522	5,672580E+22	5,672751E+22	2,604533E+22	2,604499E+22	1,134533E+23	5,209032E+22	1,655436E+23
-521	5,672679E+22	5,672636E+22	2,604534E+22	2,604625E+22	1,134531E+23	5,209159E+22	1,655447E+23
-520	5,672390E+22	5,672511E+22	2,604679E+22	2,604587E+22	1,134490E+23	5,209265E+22	1,655417E+23
-519	5,672478E+22	5,672606E+22	2,604684E+22	2,604704E+22	1,134508E+23	5,209389E+22	1,655447E+23
-518	5,672570E+22	5,672332E+22	2,604686E+22	2,604717E+22	1,134490E+23	5,209403E+22	1,655431E+23
-517	5,672334E+22	5,672420E+22	2,604767E+22	2,604653E+22	1,134475E+23	5,209420E+22	1,655417E+23
-516	5,672549E+22	5,672569E+22	2,604649E+22	2,604763E+22	1,134512E+23	5,209412E+22	1,655453E+23
-515	5,672499E+22	5,672377E+22	2,604640E+22	2,604652E+22	1,134488E+23	5,209292E+22	1,655417E+23
-514	5,672393E+22	5,672592E+22	2,604652E+22	2,604580E+22	1,134498E+23	5,209232E+22	1,655422E+23
-513	5,672659E+22	5,672590E+22	2,604540E+22	2,604601E+22	1,134525E+23	5,209141E+22	1,655439E+23
-512	5,672509E+22	5,672502E+22	2,604569E+22	2,604443E+22	1,134501E+23	5,209011E+22	1,655402E+23
-511	5,672553E+22	5,672732E+22	2,604523E+22	2,604478E+22	1,134528E+23	5,209001E+22	1,655429E+23
-510	5,672711E+22	5,672574E+22	2,604428E+22	2,604498E+22	1,134528E+23	5,208926E+22	1,655421E+23
-509	5,672479E+22	5,672613E+22	2,604489E+22	2,604400E+22	1,134509E+23	5,208889E+22	1,655398E+23
-508	5,672673E+22	5,672762E+22	2,604419E+22	2,604507E+22	1,134543E+23	5,208926E+22	1,655436E+23
-507	5,672730E+22	5,672494E+22	2,604424E+22	2,604455E+22	1,134522E+23	5,208879E+22	1,655410E+23
-506	5,672540E+22	5,672634E+22	2,604535E+22	2,604432E+22	1,134517E+23	5,208967E+22	1,655414E+23
-505	5,672709E+22	5,672663E+22	2,604508E+22	2,604600E+22	1,134537E+23	5,209108E+22	1,655448E+23
-504	5,672507E+22	5,672478E+22	2,604612E+22	2,604577E+22	1,134498E+23	5,209189E+22	1,655417E+23
-503	5,672363E+22	5,672625E+22	2,604714E+22	2,604672E+22	1,134499E+23	5,209386E+22	1,655437E+23
-502	5,672518E+22	5,672403E+22	2,604698E+22	2,604769E+22	1,134492E+23	5,209467E+22	1,655439E+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							
-501	5,672283E+22	5,672287E+22	2,604837E+22	2,604726E+22	1,134457E+23	5,209562E+22	1,655413E+23
-500	5,672358E+22	5,672445E+22	2,604834E+22	2,604852E+22	1,134480E+23	5,209686E+22	1,655449E+23
-499	5,672459E+22	5,672211E+22	2,604796E+22	2,604864E+22	1,134467E+23	5,209660E+22	1,655433E+23
-498	5,672210E+22	5,672347E+22	2,604870E+22	2,604787E+22	1,134456E+23	5,209657E+22	1,655421E+23
-497	5,672391E+22	5,672459E+22	2,604789E+22	2,604890E+22	1,134485E+23	5,209679E+22	1,655453E+23
-496	5,672368E+22	5,672285E+22	2,604779E+22	2,604750E+22	1,134465E+23	5,209529E+22	1,655418E+23
-495	5,672269E+22	5,672484E+22	2,604805E+22	2,604677E+22	1,134475E+23	5,209482E+22	1,655423E+23
-494	5,672538E+22	5,672416E+22	2,604674E+22	2,604737E+22	1,134495E+23	5,209411E+22	1,655436E+23
-493	5,672383E+22	5,672359E+22	2,604691E+22	2,604587E+22	1,134474E+23	5,209278E+22	1,655402E+23
-492	5,672385E+22	5,672611E+22	2,604643E+22	2,604640E+22	1,134500E+23	5,209283E+22	1,655428E+23
-491	5,672592E+22	5,672431E+22	2,604529E+22	2,604643E+22	1,134502E+23	5,209172E+22	1,655420E+23
-490	5,672401E+22	5,672476E+22	2,604594E+22	2,604513E+22	1,134488E+23	5,209107E+22	1,655398E+23
-489	5,672562E+22	5,672603E+22	2,604571E+22	2,604625E+22	1,134516E+23	5,209196E+22	1,655436E+23
-488	5,672604E+22	5,672403E+22	2,604578E+22	2,604580E+22	1,134501E+23	5,209158E+22	1,655416E+23
-487	5,672358E+22	5,672557E+22	2,604708E+22	2,604587E+22	1,134491E+23	5,209295E+22	1,655421E+23
-486	5,672505E+22	5,672505E+22	2,604676E+22	2,604789E+22	1,134501E+23	5,209465E+22	1,655448E+23
-485	5,672332E+22	5,672296E+22	2,604785E+22	2,604748E+22	1,134463E+23	5,209533E+22	1,655416E+23
-484	5,672195E+22	5,672440E+22	2,604890E+22	2,604838E+22	1,134464E+23	5,209728E+22	1,655436E+23
-483	5,672417E+22	5,672202E+22	2,604840E+22	2,604953E+22	1,134462E+23	5,209793E+22	1,655441E+23
-482	5,672193E+22	5,672137E+22	2,604962E+22	2,604870E+22	1,134433E+23	5,209832E+22	1,655416E+23
-481	5,672207E+22	5,672318E+22	2,604978E+22	2,605014E+22	1,134453E+23	5,209992E+22	1,655452E+23
-480	5,672297E+22	5,672141E+22	2,604927E+22	2,605005E+22	1,134444E+23	5,209932E+22	1,655437E+23
-479	5,672053E+22	5,672263E+22	2,605021E+22	2,604910E+22	1,134432E+23	5,209931E+22	1,655425E+23
-478	5,672264E+22	5,672285E+22	2,604933E+22	2,605008E+22	1,134455E+23	5,209941E+22	1,655449E+23
-477	5,672267E+22	5,672119E+22	2,604921E+22	2,604851E+22	1,134439E+23	5,209772E+22	1,655416E+23
-476	5,672133E+22	5,672361E+22	2,604940E+22	2,604807E+22	1,134449E+23	5,209747E+22	1,655424E+23
-475	5,672407E+22	5,672293E+22	2,604766E+22	2,604880E+22	1,134470E+23	5,209646E+22	1,655435E+23
-474	5,672255E+22	5,672256E+22	2,604777E+22	2,604722E+22	1,134451E+23	5,209499E+22	1,655401E+23
-473	5,672248E+22	5,672473E+22	2,604769E+22	2,604774E+22	1,134472E+23	5,209542E+22	1,655426E+23
-472	5,672482E+22	5,672321E+22	2,604659E+22	2,604749E+22	1,134480E+23	5,209408E+22	1,655421E+23
-471	5,672301E+22	5,672367E+22	2,604752E+22	2,604626E+22	1,134467E+23	5,209378E+22	1,655405E+23
-470	5,672434E+22	5,672440E+22	2,604727E+22	2,604776E+22	1,134487E+23	5,209504E+22	1,655438E+23
-469	5,672445E+22	5,672269E+22	2,604737E+22	2,604746E+22	1,134471E+23	5,209483E+22	1,655420E+23
-468	5,672153E+22	5,672423E+22	2,604876E+22	2,604774E+22	1,134458E+23	5,209650E+22	1,655423E+23
-467	5,672341E+22	5,672319E+22	2,604822E+22	2,604961E+22	1,134466E+23	5,209783E+22	1,655444E+23
-466	5,672219E+22	5,672111E+22	2,604929E+22	2,604892E+22	1,134433E+23	5,209821E+22	1,655415E+23
-465	5,672068E+22	5,672242E+22	2,605059E+22	2,604989E+22	1,134431E+23	5,210049E+22	1,655436E+23
-464	5,672280E+22	5,672093E+22	2,604992E+22	2,605098E+22	1,134437E+23	5,210090E+22	1,655446E+23
-463	5,672036E+22	5,672062E+22	2,605117E+22	2,605026E+22	1,134410E+23	5,210142E+22	1,655424E+23
-462	5,672034E+22	5,672181E+22	2,605126E+22	2,605178E+22	1,134421E+23	5,210304E+22	1,655452E+23
-461	5,672159E+22	5,672009E+22	2,605080E+22	2,605136E+22	1,134417E+23	5,210216E+22	1,655438E+23
-460	5,671912E+22	5,672121E+22	2,605176E+22	2,605032E+22	1,134403E+23	5,210208E+22	1,655424E+23
-459	5,672157E+22	5,672121E+22	2,605055E+22	2,605127E+22	1,134428E+23	5,210182E+22	1,655446E+23
-458	5,672165E+22	5,671991E+22	2,605022E+22	2,604975E+22	1,134416E+23	5,209996E+22	1,655415E+23
-457	5,671968E+22	5,672228E+22	2,605056E+22	2,604959E+22	1,134420E+23	5,210014E+22	1,655421E+23
-456	5,672250E+22	5,672207E+22	2,604871E+22	2,605013E+22	1,134446E+23	5,209884E+22	1,655434E+23
-455	5,672142E+22	5,672146E+22	2,604901E+22	2,604837E+22	1,134429E+23	5,209738E+22	1,655403E+23
-454	5,672158E+22	5,672293E+22	2,604900E+22	2,604887E+22	1,134445E+23	5,209786E+22	1,655424E+23
-453	5,672406E+22	5,672177E+22	2,604802E+22	2,604853E+22	1,134458E+23	5,209656E+22	1,655424E+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	5,672159E+22	5,672262E+22	2,604908E+22	2,604767E+22	1,134442E+23	5,209676E+22	1,655410E+23
-451	5,672268E+22	5,672324E+22	2,604862E+22	2,604939E+22	1,134459E+23	5,209801E+22	1,655439E+23
-450	5,672278E+22	5,672146E+22	2,604876E+22	2,604909E+22	1,134442E+23	5,209785E+22	1,655421E+23
-449	5,671971E+22	5,672247E+22	2,605051E+22	2,604946E+22	1,134422E+23	5,209997E+22	1,655421E+23
-448	5,672191E+22	5,672166E+22	2,604988E+22	2,605107E+22	1,134436E+23	5,210095E+22	1,655445E+23
-447	5,672100E+22	5,671959E+22	2,605103E+22	2,605046E+22	1,134406E+23	5,210149E+22	1,655421E+23
-446	5,671931E+22	5,672059E+22	2,605217E+22	2,605170E+22	1,134399E+23	5,210387E+22	1,655438E+23
-445	5,672125E+22	5,671961E+22	2,605144E+22	2,605269E+22	1,134409E+23	5,210414E+22	1,655450E+23
-444	5,671861E+22	5,671948E+22	2,605273E+22	2,605193E+22	1,134381E+23	5,210466E+22	1,655427E+23
-443	5,671904E+22	5,672017E+22	2,605256E+22	2,605310E+22	1,134392E+23	5,210566E+22	1,655449E+23
-442	5,672058E+22	5,671857E+22	2,605204E+22	2,605237E+22	1,134392E+23	5,210441E+22	1,655436E+23
-441	5,671785E+22	5,671964E+22	2,605317E+22	2,605152E+22	1,134375E+23	5,210469E+22	1,655422E+23
-440	5,672002E+22	5,672032E+22	2,605173E+22	2,605244E+22	1,134403E+23	5,210417E+22	1,655445E+23
-439	5,672015E+22	5,671913E+22	2,605142E+22	2,605111E+22	1,134393E+23	5,210253E+22	1,655418E+23
-438	5,671827E+22	5,672073E+22	2,605171E+22	2,605102E+22	1,134390E+23	5,210273E+22	1,655417E+23
-437	5,672150E+22	5,672064E+22	2,604999E+22	2,605124E+22	1,134421E+23	5,210123E+22	1,655434E+23
-436	5,672051E+22	5,672016E+22	2,605040E+22	2,604946E+22	1,134407E+23	5,209986E+22	1,655405E+23
-435	5,672080E+22	5,672146E+22	2,605020E+22	2,605001E+22	1,134423E+23	5,210021E+22	1,655425E+23
-434	5,672295E+22	5,672078E+22	2,604923E+22	2,604986E+22	1,134437E+23	5,209909E+22	1,655428E+23
-433	5,671969E+22	5,672145E+22	2,605061E+22	2,604944E+22	1,134411E+23	5,210006E+22	1,655412E+23
-432	5,672059E+22	5,672221E+22	2,605017E+22	2,605100E+22	1,134428E+23	5,210117E+22	1,655440E+23
-431	5,672124E+22	5,671997E+22	2,605049E+22	2,605068E+22	1,134412E+23	5,210118E+22	1,655424E+23
-430	5,671838E+22	5,672013E+22	2,605221E+22	2,605109E+22	1,134385E+23	5,210329E+22	1,655418E+23
-429	5,672085E+22	5,671981E+22	2,605156E+22	2,605261E+22	1,134407E+23	5,210417E+22	1,655448E+23
-428	5,671955E+22	5,671825E+22	2,605263E+22	2,605216E+22	1,134378E+23	5,210479E+22	1,655426E+23
-427	5,671779E+22	5,671928E+22	2,605347E+22	2,605339E+22	1,134371E+23	5,210686E+22	1,655439E+23
-426	5,671986E+22	5,671849E+22	2,605276E+22	2,605411E+22	1,134383E+23	5,210687E+22	1,655452E+23
-425	5,671699E+22	5,671800E+22	2,605437E+22	2,605333E+22	1,134350E+23	5,210769E+22	1,655427E+23
-424	5,671755E+22	5,671900E+22	2,605409E+22	2,605415E+22	1,134366E+23	5,210824E+22	1,655448E+23
-423	5,671940E+22	5,671731E+22	2,605355E+22	2,605361E+22	1,134367E+23	5,210716E+22	1,655439E+23
-422	5,671635E+22	5,671794E+22	2,605446E+22	2,605306E+22	1,134343E+23	5,210752E+22	1,655418E+23
-421	5,671856E+22	5,671903E+22	2,605290E+22	2,605390E+22	1,134376E+23	5,210679E+22	1,655444E+23
-420	5,671875E+22	5,671789E+22	2,605261E+22	2,605249E+22	1,134366E+23	5,210510E+22	1,655417E+23
-419	5,671749E+22	5,671915E+22	2,605268E+22	2,605212E+22	1,134366E+23	5,210479E+22	1,655414E+23
-418	5,672098E+22	5,671936E+22	2,605103E+22	2,605208E+22	1,134403E+23	5,210312E+22	1,655435E+23
-417	5,671944E+22	5,671902E+22	2,605177E+22	2,605065E+22	1,134385E+23	5,210243E+22	1,655409E+23
-416	5,671913E+22	5,672093E+22	2,605153E+22	2,605123E+22	1,134401E+23	5,210277E+22	1,655428E+23
-415	5,672116E+22	5,672006E+22	2,605075E+22	2,605145E+22	1,134412E+23	5,210220E+22	1,655434E+23
-414	5,671785E+22	5,671968E+22	2,605222E+22	2,605123E+22	1,134375E+23	5,210345E+22	1,655410E+23
-413	5,671913E+22	5,672030E+22	2,605187E+22	2,605254E+22	1,134394E+23	5,210441E+22	1,655438E+23
-412	5,671997E+22	5,671810E+22	2,605223E+22	2,605228E+22	1,134381E+23	5,210451E+22	1,655426E+23
-411	5,671747E+22	5,671810E+22	2,605356E+22	2,605270E+22	1,134356E+23	5,210626E+22	1,655418E+23
-410	5,671963E+22	5,671843E+22	2,605285E+22	2,605421E+22	1,134381E+23	5,210706E+22	1,655451E+23
-409	5,671777E+22	5,671706E+22	2,605415E+22	2,605397E+22	1,134348E+23	5,210812E+22	1,655430E+23
-408	5,671596E+22	5,671830E+22	2,605500E+22	2,605474E+22	1,134343E+23	5,210974E+22	1,655440E+23
-407	5,671848E+22	5,671725E+22	2,605447E+22	2,605539E+22	1,134357E+23	5,210986E+22	1,655456E+23
-406	5,671562E+22	5,671601E+22	2,605602E+22	2,605467E+22	1,134316E+23	5,211070E+22	1,655423E+23
-405	5,671616E+22	5,671743E+22	2,605564E+22	2,605545E+22	1,134336E+23	5,211109E+22	1,655447E+23
-404	5,671773E+22	5,671614E+22	2,605493E+22	2,605514E+22	1,134339E+23	5,211007E+22	1,655439E+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							
-403	5,671499E+22	5,671650E+22	2,605540E+22	2,605457E+22	1,134315E+23	5,210997E+22	1,655415E+23
-402	5,671756E+22	5,671780E+22	2,605386E+22	2,605508E+22	1,134354E+23	5,210893E+22	1,655443E+23
-401	5,671773E+22	5,671663E+22	2,605383E+22	2,605364E+22	1,134344E+23	5,210747E+22	1,655418E+23
-400	5,671653E+22	5,671829E+22	2,605389E+22	2,605295E+22	1,134348E+23	5,210684E+22	1,655417E+23
-399	5,672004E+22	5,671858E+22	2,605242E+22	2,605322E+22	1,134386E+23	5,210564E+22	1,655443E+23
-398	5,671779E+22	5,671770E+22	2,605318E+22	2,605225E+22	1,134355E+23	5,210542E+22	1,655409E+23
-397	5,671732E+22	5,671971E+22	2,605303E+22	2,605284E+22	1,134370E+23	5,210587E+22	1,655429E+23
-396	5,671942E+22	5,671848E+22	2,605235E+22	2,605305E+22	1,134379E+23	5,210540E+22	1,655433E+23
-395	5,671675E+22	5,671746E+22	2,605354E+22	2,605270E+22	1,134342E+23	5,210624E+22	1,655405E+23
-394	5,671837E+22	5,671841E+22	2,605320E+22	2,605382E+22	1,134368E+23	5,210702E+22	1,655438E+23
-393	5,671870E+22	5,671658E+22	2,605374E+22	2,605388E+22	1,134353E+23	5,210762E+22	1,655429E+23
-392	5,671579E+22	5,671736E+22	2,605497E+22	2,605418E+22	1,134331E+23	5,210916E+22	1,655423E+23
-391	5,671799E+22	5,671765E+22	2,605449E+22	2,605583E+22	1,134356E+23	5,211032E+22	1,655460E+23
-390	5,671593E+22	5,671547E+22	2,605593E+22	2,605564E+22	1,134314E+23	5,211157E+22	1,655430E+23
-389	5,671439E+22	5,671672E+22	2,605683E+22	2,605612E+22	1,134311E+23	5,211295E+22	1,655441E+23
-388	5,671699E+22	5,671558E+22	2,605628E+22	2,605682E+22	1,134326E+23	5,211310E+22	1,655457E+23
-387	5,671440E+22	5,671411E+22	2,605731E+22	2,605625E+22	1,134285E+23	5,211357E+22	1,655421E+23
-386	5,671480E+22	5,671603E+22	2,605671E+22	2,605697E+22	1,134308E+23	5,211368E+22	1,655445E+23
-385	5,671610E+22	5,671491E+22	2,605608E+22	2,605679E+22	1,134310E+23	5,211287E+22	1,655439E+23
-384	5,671374E+22	5,671552E+22	2,605643E+22	2,605565E+22	1,134293E+23	5,211207E+22	1,655413E+23
-383	5,671686E+22	5,671675E+22	2,605509E+22	2,605602E+22	1,134336E+23	5,211111E+22	1,655447E+23
-382	5,671686E+22	5,671518E+22	2,605514E+22	2,605469E+22	1,134320E+23	5,210983E+22	1,655419E+23
-381	5,671537E+22	5,671724E+22	2,605527E+22	2,605400E+22	1,134326E+23	5,210927E+22	1,655419E+23
-380	5,671828E+22	5,671774E+22	2,605388E+22	2,605460E+22	1,134360E+23	5,210849E+22	1,655445E+23
-379	5,671625E+22	5,671619E+22	2,605436E+22	2,605382E+22	1,134324E+23	5,210818E+22	1,655406E+23
-378	5,671592E+22	5,671805E+22	2,605433E+22	2,605421E+22	1,134340E+23	5,210854E+22	1,655425E+23
-377	5,671806E+22	5,671677E+22	2,605386E+22	2,605458E+22	1,134348E+23	5,210845E+22	1,655433E+23
-376	5,671565E+22	5,671603E+22	2,605493E+22	2,605395E+22	1,134317E+23	5,210888E+22	1,655406E+23
-375	5,671732E+22	5,671724E+22	2,605473E+22	2,605537E+22	1,134346E+23	5,211010E+22	1,655447E+23
-374	5,671694E+22	5,671521E+22	2,605530E+22	2,605575E+22	1,134322E+23	5,211104E+22	1,655432E+23
-373	5,671392E+22	5,671615E+22	2,605670E+22	2,605588E+22	1,134301E+23	5,211258E+22	1,655426E+23
-372	5,671614E+22	5,671622E+22	2,605640E+22	2,605743E+22	1,134324E+23	5,211384E+22	1,655462E+23
-371	5,671463E+22	5,671339E+22	2,605753E+22	2,605716E+22	1,134280E+23	5,211469E+22	1,655427E+23
-370	5,671324E+22	5,671488E+22	2,605834E+22	2,605746E+22	1,134281E+23	5,211580E+22	1,655439E+23
-369	5,671536E+22	5,671412E+22	2,605774E+22	2,605848E+22	1,134295E+23	5,211621E+22	1,655457E+23
-368	5,671271E+22	5,671318E+22	2,605845E+22	2,605769E+22	1,134259E+23	5,211614E+22	1,655420E+23
-367	5,671357E+22	5,671507E+22	2,605793E+22	2,605840E+22	1,134286E+23	5,211633E+22	1,655450E+23
-366	5,671479E+22	5,671343E+22	2,605738E+22	2,605809E+22	1,134282E+23	5,211548E+22	1,655437E+23
-365	5,671284E+22	5,671431E+22	2,605781E+22	2,605658E+22	1,134271E+23	5,211439E+22	1,655415E+23
-364	5,671589E+22	5,671556E+22	2,605657E+22	2,605699E+22	1,134315E+23	5,211355E+22	1,655450E+23
-363	5,671574E+22	5,671378E+22	2,605626E+22	2,605596E+22	1,134295E+23	5,211221E+22	1,655417E+23
-362	5,671390E+22	5,671614E+22	2,605636E+22	2,605535E+22	1,134300E+23	5,211172E+22	1,655418E+23
-361	5,671636E+22	5,671649E+22	2,605518E+22	2,605621E+22	1,134329E+23	5,211139E+22	1,655442E+23
-360	5,671477E+22	5,671487E+22	2,605560E+22	2,605507E+22	1,134296E+23	5,211068E+22	1,655403E+23
-359	5,671509E+22	5,671650E+22	2,605575E+22	2,605549E+22	1,134316E+23	5,211124E+22	1,655428E+23
-358	5,671687E+22	5,671498E+22	2,605538E+22	2,605607E+22	1,134318E+23	5,211145E+22	1,655433E+23
-357	5,671430E+22	5,671486E+22	2,605647E+22	2,605544E+22	1,134292E+23	5,211191E+22	1,655411E+23
-356	5,671551E+22	5,671625E+22	2,605642E+22	2,605705E+22	1,134318E+23	5,211348E+22	1,655452E+23
-355	5,671531E+22	5,671370E+22	2,605682E+22	2,605753E+22	1,134290E+23	5,211434E+22	1,655433E+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	5,671245E+22	5,671451E+22	2,605836E+22	2,605738E+22	1,134270E+23	5,211574E+22	1,655427E+23
-353	5,671450E+22	5,671453E+22	2,605822E+22	2,605904E+22	1,134290E+23	5,211727E+22	1,655463E+23
-352	5,671326E+22	5,671187E+22	2,605909E+22	2,605856E+22	1,134251E+23	5,211765E+22	1,655428E+23
-351	5,671192E+22	5,671352E+22	2,605981E+22	2,605911E+22	1,134254E+23	5,211892E+22	1,655444E+23
-350	5,671354E+22	5,671264E+22	2,605910E+22	2,606029E+22	1,134262E+23	5,211939E+22	1,655456E+23
-349	5,671126E+22	5,671184E+22	2,605976E+22	2,605909E+22	1,134231E+23	5,211885E+22	1,655419E+23
-348	5,671236E+22	5,671370E+22	2,605940E+22	2,605953E+22	1,134261E+23	5,211892E+22	1,655450E+23
-347	5,671410E+22	5,671179E+22	2,605852E+22	2,605910E+22	1,134259E+23	5,211762E+22	1,655435E+23
-346	5,671203E+22	5,671299E+22	2,605898E+22	2,605748E+22	1,134250E+23	5,211646E+22	1,655415E+23
-345	5,671427E+22	5,671472E+22	2,605784E+22	2,605828E+22	1,134290E+23	5,211612E+22	1,655451E+23
-344	5,671399E+22	5,671310E+22	2,605735E+22	2,605721E+22	1,134271E+23	5,211457E+22	1,655417E+23
-343	5,671245E+22	5,671508E+22	2,605764E+22	2,605679E+22	1,134275E+23	5,211443E+22	1,655420E+23
-342	5,671478E+22	5,671482E+22	2,605661E+22	2,605770E+22	1,134296E+23	5,211431E+22	1,655439E+23
-341	5,671371E+22	5,671327E+22	2,605708E+22	2,605634E+22	1,134270E+23	5,211342E+22	1,655404E+23
-340	5,671404E+22	5,671499E+22	2,605738E+22	2,605689E+22	1,134290E+23	5,211427E+22	1,655433E+23
-339	5,671569E+22	5,671341E+22	2,605668E+22	2,605776E+22	1,134291E+23	5,211444E+22	1,655435E+23
-338	5,671284E+22	5,671361E+22	2,605786E+22	2,605711E+22	1,134264E+23	5,211497E+22	1,655414E+23
-337	5,671360E+22	5,671496E+22	2,605809E+22	2,605880E+22	1,134286E+23	5,211689E+22	1,655454E+23
-336	5,671375E+22	5,671230E+22	2,605845E+22	2,605890E+22	1,134261E+23	5,211735E+22	1,655434E+23
-335	5,671138E+22	5,671290E+22	2,606009E+22	2,605883E+22	1,134243E+23	5,211892E+22	1,655432E+23
-334	5,671281E+22	5,671267E+22	2,605996E+22	2,606067E+22	1,134255E+23	5,212063E+22	1,655461E+23
-333	5,671156E+22	5,671056E+22	2,606066E+22	2,606017E+22	1,134221E+23	5,212083E+22	1,655429E+23
-332	5,671018E+22	5,671222E+22	2,606135E+22	2,606074E+22	1,134224E+23	5,212209E+22	1,655445E+23
-331	5,671214E+22	5,671094E+22	2,606033E+22	2,606183E+22	1,134231E+23	5,212216E+22	1,655452E+23
-330	5,671031E+22	5,671038E+22	2,606101E+22	2,606020E+22	1,134207E+23	5,212121E+22	1,655419E+23
-329	5,671126E+22	5,671241E+22	2,606076E+22	2,606064E+22	1,134237E+23	5,212140E+22	1,655451E+23
-328	5,671303E+22	5,671086E+22	2,605969E+22	2,606006E+22	1,134239E+23	5,211975E+22	1,655436E+23
-327	5,671083E+22	5,671219E+22	2,606014E+22	2,605881E+22	1,134230E+23	5,211895E+22	1,655420E+23
-326	5,671220E+22	5,671356E+22	2,605910E+22	2,605985E+22	1,134258E+23	5,211895E+22	1,655447E+23
-325	5,671237E+22	5,671181E+22	2,605868E+22	2,605858E+22	1,134242E+23	5,211725E+22	1,655414E+23
-324	5,671127E+22	5,671340E+22	2,605914E+22	2,605804E+22	1,134247E+23	5,211717E+22	1,655418E+23
-323	5,671404E+22	5,671280E+22	2,605784E+22	2,605900E+22	1,134268E+23	5,211683E+22	1,655437E+23
-322	5,671298E+22	5,671173E+22	2,605832E+22	2,605758E+22	1,134247E+23	5,211590E+22	1,655406E+23
-321	5,671253E+22	5,671401E+22	2,605876E+22	2,605847E+22	1,134265E+23	5,211722E+22	1,655438E+23
-320	5,671408E+22	5,671262E+22	2,605802E+22	2,605923E+22	1,134267E+23	5,211725E+22	1,655440E+23
-319	5,671140E+22	5,671248E+22	2,605950E+22	2,605870E+22	1,134239E+23	5,211820E+22	1,655421E+23
-318	5,671171E+22	5,671332E+22	2,606000E+22	2,606042E+22	1,134250E+23	5,212041E+22	1,655454E+23
-317	5,671230E+22	5,671058E+22	2,606034E+22	2,606037E+22	1,134229E+23	5,212071E+22	1,655436E+23
-316	5,670983E+22	5,671111E+22	2,606199E+22	2,606049E+22	1,134209E+23	5,212248E+22	1,655434E+23
-315	5,671117E+22	5,671084E+22	2,606132E+22	2,606259E+22	1,134220E+23	5,212391E+22	1,655459E+23
-314	5,671000E+22	5,670894E+22	2,606193E+22	2,606188E+22	1,134189E+23	5,212381E+22	1,655428E+23
-313	5,670860E+22	5,671079E+22	2,606273E+22	2,606231E+22	1,134194E+23	5,212504E+22	1,655444E+23
-312	5,671113E+22	5,670966E+22	2,606157E+22	2,606286E+22	1,134208E+23	5,212443E+22	1,655452E+23
-311	5,670968E+22	5,670922E+22	2,606230E+22	2,606123E+22	1,134189E+23	5,212354E+22	1,655424E+23
-310	5,670976E+22	5,671129E+22	2,606214E+22	2,606182E+22	1,134210E+23	5,212396E+22	1,655450E+23
-309	5,671137E+22	5,671010E+22	2,606100E+22	2,606128E+22	1,134215E+23	5,212228E+22	1,655438E+23
-308	5,670913E+22	5,671111E+22	2,606157E+22	2,606020E+22	1,134202E+23	5,212176E+22	1,655420E+23
-307	5,671077E+22	5,671184E+22	2,606027E+22	2,606128E+22	1,134226E+23	5,212155E+22	1,655442E+23
-306	5,671150E+22	5,671008E+22	2,605990E+22	2,605977E+22	1,134216E+23	5,211968E+22	1,655413E+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	5,671038E+22	5,671184E+22	2,606044E+22	2,605933E+22	1,134222E+23	5,211977E+22	1,655420E+23
-304	5,671316E+22	5,671165E+22	2,605900E+22	2,606020E+22	1,134248E+23	5,211920E+22	1,655440E+23
-303	5,671195E+22	5,671093E+22	2,605953E+22	2,605912E+22	1,134229E+23	5,211866E+22	1,655415E+23
-302	5,671053E+22	5,671286E+22	2,606027E+22	2,606011E+22	1,134234E+23	5,212038E+22	1,655438E+23
-301	5,671231E+22	5,671140E+22	2,605976E+22	2,606068E+22	1,134237E+23	5,212044E+22	1,655442E+23
-300	5,670994E+22	5,671074E+22	2,606147E+22	2,606016E+22	1,134207E+23	5,212163E+22	1,655423E+23
-299	5,671024E+22	5,671111E+22	2,606167E+22	2,606203E+22	1,134214E+23	5,212370E+22	1,655451E+23
-298	5,671088E+22	5,670875E+22	2,606191E+22	2,606204E+22	1,134196E+23	5,212395E+22	1,655436E+23
-297	5,670797E+22	5,670965E+22	2,606344E+22	2,606238E+22	1,134176E+23	5,212582E+22	1,655434E+23
-296	5,670957E+22	5,670955E+22	2,606260E+22	2,606416E+22	1,134191E+23	5,212676E+22	1,655459E+23
-295	5,670896E+22	5,670772E+22	2,606325E+22	2,606333E+22	1,134167E+23	5,212659E+22	1,655433E+23
-294	5,670719E+22	5,670936E+22	2,606426E+22	2,606357E+22	1,134166E+23	5,212783E+22	1,655444E+23
-293	5,671006E+22	5,670852E+22	2,606312E+22	2,606390E+22	1,134186E+23	5,212702E+22	1,655456E+23
-292	5,670840E+22	5,670808E+22	2,606389E+22	2,606249E+22	1,134165E+23	5,212638E+22	1,655429E+23
-291	5,670805E+22	5,670992E+22	2,606332E+22	2,606335E+22	1,134180E+23	5,212667E+22	1,655446E+23
-290	5,670984E+22	5,670866E+22	2,606215E+22	2,606270E+22	1,134185E+23	5,212485E+22	1,655434E+23
-289	5,670770E+22	5,670955E+22	2,606279E+22	2,606158E+22	1,134173E+23	5,212437E+22	1,655416E+23
-288	5,671002E+22	5,671030E+22	2,606135E+22	2,606228E+22	1,134203E+23	5,212363E+22	1,655440E+23
-287	5,671107E+22	5,670879E+22	2,606100E+22	2,606088E+22	1,134199E+23	5,212188E+22	1,655417E+23
-286	5,670901E+22	5,671082E+22	2,606173E+22	2,606065E+22	1,134198E+23	5,212238E+22	1,655422E+23
-285	5,671160E+22	5,671099E+22	2,606038E+22	2,606153E+22	1,134226E+23	5,212191E+22	1,655445E+23
-284	5,671020E+22	5,670990E+22	2,606123E+22	2,606065E+22	1,134201E+23	5,212188E+22	1,655420E+23
-283	5,670876E+22	5,671118E+22	2,606188E+22	2,606171E+22	1,134199E+23	5,212359E+22	1,655435E+23
-282	5,671095E+22	5,670947E+22	2,606149E+22	2,606217E+22	1,134204E+23	5,212366E+22	1,655441E+23
-281	5,670847E+22	5,670883E+22	2,606322E+22	2,606188E+22	1,134173E+23	5,212511E+22	1,655424E+23
-280	5,670884E+22	5,670945E+22	2,606310E+22	2,606371E+22	1,134183E+23	5,212681E+22	1,655451E+23
-279	5,670948E+22	5,670745E+22	2,606321E+22	2,606393E+22	1,134169E+23	5,212714E+22	1,655441E+23
-278	5,670606E+22	5,670820E+22	2,606490E+22	2,606415E+22	1,134143E+23	5,212906E+22	1,655433E+23
-277	5,670821E+22	5,670822E+22	2,606419E+22	2,606547E+22	1,134164E+23	5,212966E+22	1,655461E+23
-276	5,670796E+22	5,670631E+22	2,606501E+22	2,606450E+22	1,134143E+23	5,212951E+22	1,655438E+23
-275	5,670602E+22	5,670775E+22	2,606571E+22	2,606480E+22	1,134138E+23	5,213050E+22	1,655443E+23
-274	5,670871E+22	5,670728E+22	2,606451E+22	2,606518E+22	1,134160E+23	5,212969E+22	1,655457E+23
-273	5,670657E+22	5,670702E+22	2,606518E+22	2,606404E+22	1,134136E+23	5,212922E+22	1,655428E+23
-272	5,670645E+22	5,670868E+22	2,606442E+22	2,606465E+22	1,134151E+23	5,212907E+22	1,655442E+23
-271	5,670887E+22	5,670742E+22	2,606324E+22	2,606399E+22	1,134163E+23	5,212722E+22	1,655435E+23
-270	5,670657E+22	5,670800E+22	2,606401E+22	2,606275E+22	1,134146E+23	5,212676E+22	1,655413E+23
-269	5,670917E+22	5,670911E+22	2,606266E+22	2,606331E+22	1,134183E+23	5,212597E+22	1,655442E+23
-268	5,671001E+22	5,670786E+22	2,606238E+22	2,606219E+22	1,134179E+23	5,212457E+22	1,655424E+23
-267	5,670734E+22	5,670958E+22	2,606292E+22	2,606221E+22	1,134169E+23	5,212513E+22	1,655421E+23
-266	5,671000E+22	5,670962E+22	2,606182E+22	2,606301E+22	1,134196E+23	5,212483E+22	1,655445E+23
-265	5,670861E+22	5,670828E+22	2,606287E+22	2,606219E+22	1,134169E+23	5,212506E+22	1,655419E+23
-264	5,670755E+22	5,670935E+22	2,606342E+22	2,606303E+22	1,134169E+23	5,212645E+22	1,655434E+23
-263	5,670992E+22	5,670789E+22	2,606296E+22	2,606373E+22	1,134178E+23	5,212669E+22	1,655445E+23
-262	5,670663E+22	5,670732E+22	2,606477E+22	2,606366E+22	1,134140E+23	5,212843E+22	1,655424E+23
-261	5,670708E+22	5,670828E+22	2,606468E+22	2,606537E+22	1,134154E+23	5,213005E+22	1,655454E+23
-260	5,670790E+22	5,670616E+22	2,606495E+22	2,606559E+22	1,134141E+23	5,213054E+22	1,655446E+23
-259	5,670460E+22	5,670649E+22	2,606648E+22	2,606570E+22	1,134111E+23	5,213217E+22	1,655433E+23
-258	5,670717E+22	5,670654E+22	2,606587E+22	2,606676E+22	1,134137E+23	5,213263E+22	1,655463E+23
-257	5,670662E+22	5,670490E+22	2,606665E+22	2,606595E+22	1,134115E+23	5,213260E+22	1,655441E+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							
-256	5,670458E+22	5,670656E+22	2,606698E+22	2,606621E+22	1,134111E+23	5,213319E+22	1,655443E+23
-255	5,670715E+22	5,670624E+22	2,606560E+22	2,606674E+22	1,134134E+23	5,213234E+22	1,655457E+23
-254	5,670465E+22	5,670562E+22	2,606643E+22	2,606554E+22	1,134103E+23	5,213196E+22	1,655422E+23
-253	5,670528E+22	5,670723E+22	2,606570E+22	2,606572E+22	1,134125E+23	5,213141E+22	1,655439E+23
-252	5,670807E+22	5,670596E+22	2,606461E+22	2,606503E+22	1,134140E+23	5,212964E+22	1,655437E+23
-251	5,670562E+22	5,670654E+22	2,606510E+22	2,606392E+22	1,134122E+23	5,212902E+22	1,655412E+23
-250	5,670807E+22	5,670800E+22	2,606384E+22	2,606453E+22	1,134161E+23	5,212837E+22	1,655444E+23
-249	5,670838E+22	5,670698E+22	2,606368E+22	2,606366E+22	1,134154E+23	5,212734E+22	1,655427E+23
-248	5,670587E+22	5,670838E+22	2,606422E+22	2,606352E+22	1,134142E+23	5,212774E+22	1,655420E+23
-247	5,670876E+22	5,670832E+22	2,606325E+22	2,606438E+22	1,134171E+23	5,212763E+22	1,655447E+23
-246	5,670705E+22	5,670658E+22	2,606456E+22	2,606370E+22	1,134136E+23	5,212826E+22	1,655419E+23
-245	5,670619E+22	5,670778E+22	2,606515E+22	2,606452E+22	1,134140E+23	5,212967E+22	1,655436E+23
-244	5,670835E+22	5,670654E+22	2,606467E+22	2,606557E+22	1,134149E+23	5,213024E+22	1,655451E+23
-243	5,670477E+22	5,670566E+22	2,606617E+22	2,606561E+22	1,134104E+23	5,213178E+22	1,655422E+23
-242	5,670561E+22	5,670655E+22	2,606628E+22	2,606705E+22	1,134122E+23	5,213333E+22	1,655455E+23
-241	5,670656E+22	5,670456E+22	2,606665E+22	2,606712E+22	1,134111E+23	5,213377E+22	1,655449E+23
-240	5,670359E+22	5,670487E+22	2,606800E+22	2,606693E+22	1,134085E+23	5,213494E+22	1,655434E+23
-239	5,670605E+22	5,670541E+22	2,606730E+22	2,606812E+22	1,134115E+23	5,213542E+22	1,655469E+23
-238	5,670464E+22	5,670378E+22	2,606809E+22	2,606750E+22	1,134084E+23	5,213559E+22	1,655440E+23
-237	5,670263E+22	5,670550E+22	2,606838E+22	2,606761E+22	1,134081E+23	5,213599E+22	1,655441E+23
-236	5,670554E+22	5,670500E+22	2,606704E+22	2,606815E+22	1,134105E+23	5,213518E+22	1,655457E+23
-235	5,670337E+22	5,670379E+22	2,606759E+22	2,606682E+22	1,134072E+23	5,213441E+22	1,655416E+23
-234	5,670465E+22	5,670546E+22	2,606697E+22	2,606679E+22	1,134101E+23	5,213377E+22	1,655439E+23
-233	5,670719E+22	5,670471E+22	2,606585E+22	2,606625E+22	1,134119E+23	5,213210E+22	1,655440E+23
-232	5,670455E+22	5,670555E+22	2,606608E+22	2,606516E+22	1,134101E+23	5,213124E+22	1,655414E+23
-231	5,670674E+22	5,670725E+22	2,606488E+22	2,606587E+22	1,134140E+23	5,213076E+22	1,655447E+23
-230	5,670655E+22	5,670578E+22	2,606511E+22	2,606505E+22	1,134123E+23	5,213016E+22	1,655425E+23
-229	5,670450E+22	5,670697E+22	2,606588E+22	2,606470E+22	1,134115E+23	5,213057E+22	1,655420E+23
-228	5,670750E+22	5,670681E+22	2,606503E+22	2,606576E+22	1,134143E+23	5,213080E+22	1,655451E+23
-227	5,670550E+22	5,670480E+22	2,606607E+22	2,606541E+22	1,134103E+23	5,213148E+22	1,655418E+23
-226	5,670469E+22	5,670614E+22	2,606670E+22	2,606632E+22	1,134108E+23	5,213302E+22	1,655438E+23
-225	5,670651E+22	5,670516E+22	2,606627E+22	2,606747E+22	1,134117E+23	5,213373E+22	1,655454E+23
-224	5,670343E+22	5,670414E+22	2,606762E+22	2,606722E+22	1,134076E+23	5,213484E+22	1,655424E+23
-223	5,670455E+22	5,670513E+22	2,606778E+22	2,606847E+22	1,134097E+23	5,213625E+22	1,655459E+23
-222	5,670506E+22	5,670308E+22	2,606841E+22	2,606858E+22	1,134081E+23	5,213699E+22	1,655451E+23
-221	5,670213E+22	5,670364E+22	2,606971E+22	2,606830E+22	1,134058E+23	5,213801E+22	1,655438E+23
-220	5,670415E+22	5,670433E+22	2,606891E+22	2,606975E+22	1,134085E+23	5,213867E+22	1,655471E+23
-219	5,670258E+22	5,670218E+22	2,606939E+22	2,606923E+22	1,134048E+23	5,213862E+22	1,655434E+23
-218	5,670129E+22	5,670354E+22	2,606975E+22	2,606900E+22	1,134048E+23	5,213874E+22	1,655436E+23
-217	5,670448E+22	5,670330E+22	2,606837E+22	2,606935E+22	1,134078E+23	5,213772E+22	1,655455E+23
-216	5,670288E+22	5,670225E+22	2,606859E+22	2,606779E+22	1,134051E+23	5,213639E+22	1,655415E+23
-215	5,670396E+22	5,670457E+22	2,606790E+22	2,606785E+22	1,134085E+23	5,213575E+22	1,655443E+23
-214	5,670558E+22	5,670408E+22	2,606702E+22	2,606752E+22	1,134097E+23	5,213453E+22	1,655442E+23
-213	5,670294E+22	5,670488E+22	2,606744E+22	2,606633E+22	1,134078E+23	5,213377E+22	1,655416E+23
-212	5,670512E+22	5,670631E+22	2,606649E+22	2,606717E+22	1,134114E+23	5,213366E+22	1,655451E+23
-211	5,670501E+22	5,670404E+22	2,606663E+22	2,606650E+22	1,134090E+23	5,213312E+22	1,655422E+23
-210	5,670342E+22	5,670494E+22	2,606755E+22	2,606618E+22	1,134084E+23	5,213373E+22	1,655421E+23
-209	5,670607E+22	5,670520E+22	2,606662E+22	2,606753E+22	1,134113E+23	5,213415E+22	1,655454E+23
-208	5,670409E+22	5,670323E+22	2,606729E+22	2,606722E+22	1,134073E+23	5,213450E+22	1,655418E+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	5,670329E+22	5,670482E+22	2,606793E+22	2,606807E+22	1,134081E+23	5,213600E+22	1,655441E+23
-206	5,670488E+22	5,670363E+22	2,606786E+22	2,606905E+22	1,134085E+23	5,213691E+22	1,655454E+23
-205	5,670219E+22	5,670266E+22	2,606940E+22	2,606845E+22	1,134048E+23	5,213784E+22	1,655427E+23
-204	5,670323E+22	5,670389E+22	2,606966E+22	2,606982E+22	1,134071E+23	5,213948E+22	1,655466E+23
-203	5,670323E+22	5,670156E+22	2,607002E+22	2,607020E+22	1,134048E+23	5,214023E+22	1,655450E+23
-202	5,670036E+22	5,670207E+22	2,607132E+22	2,606998E+22	1,134024E+23	5,214131E+22	1,655437E+23
-201	5,670217E+22	5,670287E+22	2,607044E+22	2,607142E+22	1,134050E+23	5,214186E+22	1,655469E+23
-200	5,670130E+22	5,670044E+22	2,607058E+22	2,607063E+22	1,134017E+23	5,214120E+22	1,655429E+23
-199	5,670057E+22	5,670203E+22	2,607083E+22	2,607016E+22	1,134026E+23	5,214099E+22	1,655436E+23
-198	5,670347E+22	5,670196E+22	2,606966E+22	2,607051E+22	1,134054E+23	5,214016E+22	1,655456E+23
-197	5,670188E+22	5,670146E+22	2,606983E+22	2,606886E+22	1,134033E+23	5,213869E+22	1,655420E+23
-196	5,670247E+22	5,670408E+22	2,606917E+22	2,606915E+22	1,134066E+23	5,213832E+22	1,655449E+23
-195	5,670371E+22	5,670293E+22	2,606825E+22	2,606897E+22	1,134066E+23	5,213722E+22	1,655439E+23
-194	5,670168E+22	5,670316E+22	2,606895E+22	2,606765E+22	1,134048E+23	5,213660E+22	1,655414E+23
-193	5,670373E+22	5,670462E+22	2,606810E+22	2,606848E+22	1,134084E+23	5,213657E+22	1,655449E+23
-192	5,670409E+22	5,670226E+22	2,606791E+22	2,606790E+22	1,134064E+23	5,213581E+22	1,655422E+23
-191	5,670238E+22	5,670352E+22	2,606868E+22	2,606771E+22	1,134059E+23	5,213639E+22	1,655423E+23
-190	5,670426E+22	5,670396E+22	2,606801E+22	2,606924E+22	1,134082E+23	5,213725E+22	1,655455E+23
-189	5,670257E+22	5,670213E+22	2,606878E+22	2,606868E+22	1,134047E+23	5,213746E+22	1,655422E+23
-188	5,670183E+22	5,670365E+22	2,606965E+22	2,606951E+22	1,134055E+23	5,213916E+22	1,655446E+23
-187	5,670335E+22	5,670194E+22	2,606962E+22	2,607056E+22	1,134053E+23	5,214018E+22	1,655455E+23
-186	5,670103E+22	5,670077E+22	2,607133E+22	2,606998E+22	1,134018E+23	5,214132E+22	1,655431E+23
-185	5,670134E+22	5,670247E+22	2,607148E+22	2,607155E+22	1,134038E+23	5,214303E+22	1,655468E+23
-184	5,670144E+22	5,670001E+22	2,607136E+22	2,607203E+22	1,134015E+23	5,214340E+22	1,655449E+23
-183	5,669879E+22	5,670047E+22	2,607252E+22	2,607163E+22	1,133993E+23	5,214415E+22	1,655434E+23
-182	5,670063E+22	5,670117E+22	2,607185E+22	2,607284E+22	1,134018E+23	5,214470E+22	1,655465E+23
-181	5,670045E+22	5,669902E+22	2,607192E+22	2,607164E+22	1,133995E+23	5,214356E+22	1,655430E+23
-180	5,669973E+22	5,670109E+22	2,607216E+22	2,607126E+22	1,134008E+23	5,214342E+22	1,655442E+23
-179	5,670205E+22	5,670096E+22	2,607083E+22	2,607181E+22	1,134030E+23	5,214264E+22	1,655457E+23
-178	5,670051E+22	5,670041E+22	2,607115E+22	2,607019E+22	1,134009E+23	5,214134E+22	1,655423E+23
-177	5,670073E+22	5,670308E+22	2,607060E+22	2,607045E+22	1,134038E+23	5,214105E+22	1,655449E+23
-176	5,670249E+22	5,670135E+22	2,606945E+22	2,607021E+22	1,134038E+23	5,213966E+22	1,655435E+23
-175	5,670081E+22	5,670150E+22	2,607016E+22	2,606887E+22	1,134023E+23	5,213903E+22	1,655413E+23
-174	5,670249E+22	5,670299E+22	2,606951E+22	2,606987E+22	1,134055E+23	5,213938E+22	1,655449E+23
-173	5,670278E+22	5,670106E+22	2,606924E+22	2,606934E+22	1,134038E+23	5,213857E+22	1,655424E+23
-172	5,670082E+22	5,670262E+22	2,607002E+22	2,606936E+22	1,134034E+23	5,213938E+22	1,655428E+23
-171	5,670248E+22	5,670241E+22	2,606946E+22	2,607090E+22	1,134049E+23	5,214036E+22	1,655453E+23
-170	5,670142E+22	5,670029E+22	2,607056E+22	2,607013E+22	1,134017E+23	5,214070E+22	1,655424E+23
-169	5,670043E+22	5,670207E+22	2,607157E+22	2,607089E+22	1,134025E+23	5,214246E+22	1,655450E+23
-168	5,670205E+22	5,670029E+22	2,607123E+22	2,607212E+22	1,134023E+23	5,214335E+22	1,655457E+23
-167	5,669945E+22	5,669942E+22	2,607280E+22	2,607171E+22	1,133989E+23	5,214451E+22	1,655434E+23
-166	5,669908E+22	5,670110E+22	2,607309E+22	2,607339E+22	1,134002E+23	5,214648E+22	1,655467E+23
-165	5,669967E+22	5,669865E+22	2,607289E+22	2,607359E+22	1,133983E+23	5,214648E+22	1,655448E+23
-164	5,669750E+22	5,669911E+22	2,607399E+22	2,607306E+22	1,133966E+23	5,214705E+22	1,655437E+23
-163	5,669944E+22	5,669940E+22	2,607328E+22	2,607420E+22	1,133988E+23	5,214747E+22	1,655463E+23
-162	5,669977E+22	5,669746E+22	2,607337E+22	2,607291E+22	1,133972E+23	5,214628E+22	1,655435E+23
-161	5,669831E+22	5,670017E+22	2,607351E+22	2,607256E+22	1,133985E+23	5,214607E+22	1,655445E+23
-160	5,670065E+22	5,669993E+22	2,607185E+22	2,607319E+22	1,134006E+23	5,214504E+22	1,655456E+23
-159	5,669928E+22	5,669912E+22	2,607218E+22	2,607140E+22	1,133984E+23	5,214358E+22	1,655420E+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	5,669920E+22	5,670154E+22	2,607198E+22	2,607158E+22	1,134007E+23	5,214356E+22	1,655443E+23
-157	5,670147E+22	5,670000E+22	2,607079E+22	2,607120E+22	1,134015E+23	5,214199E+22	1,655434E+23
-156	5,669975E+22	5,670037E+22	2,607145E+22	2,607015E+22	1,134001E+23	5,214160E+22	1,655417E+23
-155	5,670085E+22	5,670165E+22	2,607080E+22	2,607146E+22	1,134025E+23	5,214226E+22	1,655448E+23
-154	5,670141E+22	5,669968E+22	2,607068E+22	2,607094E+22	1,134011E+23	5,214162E+22	1,655427E+23
-153	5,669915E+22	5,670139E+22	2,607164E+22	2,607086E+22	1,134005E+23	5,214250E+22	1,655430E+23
-152	5,670129E+22	5,670079E+22	2,607095E+22	2,607237E+22	1,134021E+23	5,214333E+22	1,655454E+23
-151	5,670041E+22	5,669865E+22	2,607215E+22	2,607159E+22	1,133991E+23	5,214373E+22	1,655428E+23
-150	5,669873E+22	5,670057E+22	2,607340E+22	2,607256E+22	1,133993E+23	5,214597E+22	1,655453E+23
-149	5,670019E+22	5,669911E+22	2,607287E+22	2,607386E+22	1,133993E+23	5,214673E+22	1,655460E+23
-148	5,669751E+22	5,669823E+22	2,607434E+22	2,607362E+22	1,133957E+23	5,214795E+22	1,655437E+23
-147	5,669717E+22	5,669913E+22	2,607464E+22	2,607516E+22	1,133963E+23	5,214980E+22	1,655461E+23
-146	5,669865E+22	5,669658E+22	2,607453E+22	2,607501E+22	1,133952E+23	5,214955E+22	1,655448E+23
-145	5,669651E+22	5,669760E+22	2,607554E+22	2,607427E+22	1,133941E+23	5,214981E+22	1,655439E+23
-144	5,669861E+22	5,669798E+22	2,607444E+22	2,607545E+22	1,133966E+23	5,214989E+22	1,655465E+23
-143	5,669859E+22	5,669657E+22	2,607443E+22	2,607415E+22	1,133952E+23	5,214858E+22	1,655437E+23
-142	5,669650E+22	5,669930E+22	2,607479E+22	2,607383E+22	1,133958E+23	5,214861E+22	1,655444E+23
-141	5,669905E+22	5,669896E+22	2,607314E+22	2,607422E+22	1,133980E+23	5,214737E+22	1,655454E+23
-140	5,669801E+22	5,669802E+22	2,607351E+22	2,607256E+22	1,133960E+23	5,214607E+22	1,655421E+23
-139	5,669786E+22	5,669975E+22	2,607338E+22	2,607288E+22	1,133976E+23	5,214626E+22	1,655439E+23
-138	5,670048E+22	5,669834E+22	2,607224E+22	2,607264E+22	1,133988E+23	5,214487E+22	1,655437E+23
-137	5,669821E+22	5,669929E+22	2,607276E+22	2,607172E+22	1,133975E+23	5,214448E+22	1,655420E+23
-136	5,669946E+22	5,670023E+22	2,607190E+22	2,607311E+22	1,133997E+23	5,214501E+22	1,655447E+23
-135	5,670029E+22	5,669821E+22	2,607193E+22	2,607237E+22	1,133985E+23	5,214429E+22	1,655428E+23
-134	5,669777E+22	5,669983E+22	2,607331E+22	2,607220E+22	1,133976E+23	5,214551E+22	1,655431E+23
-133	5,670005E+22	5,669950E+22	2,607268E+22	2,607362E+22	1,133995E+23	5,214630E+22	1,655458E+23
-132	5,669891E+22	5,669760E+22	2,607384E+22	2,607323E+22	1,133965E+23	5,214707E+22	1,655436E+23
-131	5,669650E+22	5,669904E+22	2,607512E+22	2,607448E+22	1,133955E+23	5,214961E+22	1,655451E+23
-130	5,669839E+22	5,669740E+22	2,607465E+22	2,607573E+22	1,133958E+23	5,215038E+22	1,655462E+23
-129	5,669574E+22	5,669654E+22	2,607605E+22	2,607524E+22	1,133923E+23	5,215129E+22	1,655436E+23
-128	5,669613E+22	5,669712E+22	2,607605E+22	2,607665E+22	1,133933E+23	5,215270E+22	1,655460E+23
-127	5,669800E+22	5,669488E+22	2,607583E+22	2,607628E+22	1,133929E+23	5,215211E+22	1,655450E+23
-126	5,669518E+22	5,669639E+22	2,607696E+22	2,607561E+22	1,133916E+23	5,215257E+22	1,655441E+23
-125	5,669704E+22	5,669736E+22	2,607567E+22	2,607671E+22	1,133944E+23	5,215238E+22	1,655468E+23
-124	5,669692E+22	5,669590E+22	2,607563E+22	2,607552E+22	1,133928E+23	5,215114E+22	1,655440E+23
-123	5,669468E+22	5,669773E+22	2,607618E+22	2,607512E+22	1,133924E+23	5,215130E+22	1,655437E+23
-122	5,669795E+22	5,669720E+22	2,607463E+22	2,607535E+22	1,133951E+23	5,214998E+22	1,655451E+23
-121	5,669683E+22	5,669656E+22	2,607492E+22	2,607373E+22	1,133934E+23	5,214865E+22	1,655420E+23
-120	5,669686E+22	5,669819E+22	2,607443E+22	2,607431E+22	1,133951E+23	5,214875E+22	1,655438E+23
-119	5,669933E+22	5,669717E+22	2,607323E+22	2,607409E+22	1,133965E+23	5,214732E+22	1,655438E+23
-118	5,669664E+22	5,669821E+22	2,607405E+22	2,607319E+22	1,133948E+23	5,214723E+22	1,655421E+23
-117	5,669815E+22	5,669919E+22	2,607329E+22	2,607430E+22	1,133973E+23	5,214759E+22	1,655449E+23
-116	5,669916E+22	5,669717E+22	2,607349E+22	2,607370E+22	1,133963E+23	5,214718E+22	1,655435E+23
-115	5,669628E+22	5,669809E+22	2,607516E+22	2,607373E+22	1,133944E+23	5,214889E+22	1,655433E+23
-114	5,669849E+22	5,669789E+22	2,607458E+22	2,607535E+22	1,133964E+23	5,214993E+22	1,655463E+23
-113	5,669682E+22	5,669632E+22	2,607561E+22	2,607515E+22	1,133931E+23	5,215077E+22	1,655439E+23
-112	5,669475E+22	5,669701E+22	2,607657E+22	2,607643E+22	1,133918E+23	5,215300E+22	1,655448E+23
-111	5,669706E+22	5,669535E+22	2,607609E+22	2,607732E+22	1,133924E+23	5,215342E+22	1,655458E+23
-110	5,669452E+22	5,669475E+22	2,607761E+22	2,607664E+22	1,133893E+23	5,215425E+22	1,655435E+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	5,669511E+22	5,669583E+22	2,607748E+22	2,607782E+22	1,133909E+23	5,215531E+22	1,655462E+23
-108	5,669671E+22	5,669426E+22	2,607717E+22	2,607767E+22	1,133910E+23	5,215484E+22	1,655458E+23
-107	5,669322E+22	5,669533E+22	2,607841E+22	2,607712E+22	1,133886E+23	5,215553E+22	1,655441E+23
-106	5,669531E+22	5,669615E+22	2,607723E+22	2,607807E+22	1,133915E+23	5,215530E+22	1,655468E+23
-105	5,669522E+22	5,669467E+22	2,607715E+22	2,607676E+22	1,133899E+23	5,215391E+22	1,655438E+23
-104	5,669361E+22	5,669577E+22	2,607740E+22	2,607642E+22	1,133894E+23	5,215382E+22	1,655432E+23
-103	5,669718E+22	5,669547E+22	2,607577E+22	2,607659E+22	1,133927E+23	5,215236E+22	1,655450E+23
-102	5,669563E+22	5,669529E+22	2,607607E+22	2,607515E+22	1,133909E+23	5,215122E+22	1,655421E+23
-101	5,669558E+22	5,669735E+22	2,607545E+22	2,607566E+22	1,133929E+23	5,215110E+22	1,655440E+23
-100	5,669809E+22	5,669641E+22	2,607434E+22	2,607547E+22	1,133945E+23	5,214982E+22	1,655443E+23
-99	5,669519E+22	5,669667E+22	2,607558E+22	2,607449E+22	1,133919E+23	5,215007E+22	1,655419E+23
-98	5,669711E+22	5,669766E+22	2,607508E+22	2,607548E+22	1,133948E+23	5,215056E+22	1,655453E+23
-97	5,669770E+22	5,669586E+22	2,607532E+22	2,607507E+22	1,133936E+23	5,215040E+22	1,655440E+23
-96	5,669466E+22	5,669642E+22	2,607671E+22	2,607555E+22	1,133911E+23	5,215226E+22	1,655433E+23
-95	5,669670E+22	5,669631E+22	2,607606E+22	2,607717E+22	1,133930E+23	5,215323E+22	1,655462E+23
-94	5,669480E+22	5,669463E+22	2,607723E+22	2,607698E+22	1,133894E+23	5,215421E+22	1,655436E+23
-93	5,669330E+22	5,669540E+22	2,607807E+22	2,607793E+22	1,133887E+23	5,215600E+22	1,655447E+23
-92	5,669602E+22	5,669397E+22	2,607758E+22	2,607879E+22	1,133900E+23	5,215637E+22	1,655464E+23
-91	5,669321E+22	5,669308E+22	2,607929E+22	2,607815E+22	1,133863E+23	5,215745E+22	1,655437E+23
-90	5,669372E+22	5,669465E+22	2,607913E+22	2,607932E+22	1,133884E+23	5,215845E+22	1,655468E+23
-89	5,669474E+22	5,669343E+22	2,607872E+22	2,607921E+22	1,133882E+23	5,215793E+22	1,655461E+23
-88	5,669160E+22	5,669366E+22	2,607970E+22	2,607868E+22	1,133853E+23	5,215837E+22	1,655436E+23
-87	5,669407E+22	5,669432E+22	2,607852E+22	2,607925E+22	1,133884E+23	5,215777E+22	1,655462E+23
-86	5,669407E+22	5,669299E+22	2,607849E+22	2,607792E+22	1,133871E+23	5,215642E+22	1,655435E+23
-85	5,669274E+22	5,669445E+22	2,607850E+22	2,607750E+22	1,133872E+23	5,215599E+22	1,655432E+23
-84	5,669610E+22	5,669477E+22	2,607677E+22	2,607792E+22	1,133909E+23	5,215468E+22	1,655456E+23
-83	5,669411E+22	5,669421E+22	2,607728E+22	2,607657E+22	1,133883E+23	5,215385E+22	1,655422E+23
-82	5,669428E+22	5,669624E+22	2,607688E+22	2,607687E+22	1,133905E+23	5,215375E+22	1,655443E+23
-81	5,669667E+22	5,669543E+22	2,607596E+22	2,607664E+22	1,133921E+23	5,215260E+22	1,655447E+23
-80	5,669417E+22	5,669482E+22	2,607708E+22	2,607588E+22	1,133890E+23	5,215296E+22	1,655420E+23
-79	5,669582E+22	5,669594E+22	2,607668E+22	2,607693E+22	1,133918E+23	5,215360E+22	1,655454E+23
-78	5,669581E+22	5,669452E+22	2,607692E+22	2,607692E+22	1,133903E+23	5,215384E+22	1,655442E+23
-77	5,669277E+22	5,669500E+22	2,607810E+22	2,607737E+22	1,133878E+23	5,215547E+22	1,655432E+23
-76	5,669505E+22	5,669489E+22	2,607748E+22	2,607897E+22	1,133899E+23	5,215645E+22	1,655464E+23
-75	5,669332E+22	5,669256E+22	2,607891E+22	2,607859E+22	1,133859E+23	5,215750E+22	1,655434E+23
-74	5,669230E+22	5,669364E+22	2,607983E+22	2,607929E+22	1,133859E+23	5,215912E+22	1,655451E+23
-73	5,669466E+22	5,669287E+22	2,607934E+22	2,608020E+22	1,133875E+23	5,215953E+22	1,655471E+23
-72	5,669173E+22	5,669168E+22	2,608074E+22	2,607984E+22	1,133834E+23	5,216057E+22	1,655440E+23
-71	5,669203E+22	5,669339E+22	2,608058E+22	2,608081E+22	1,133854E+23	5,216139E+22	1,655468E+23
-70	5,669290E+22	5,669211E+22	2,608022E+22	2,608067E+22	1,133850E+23	5,216090E+22	1,655459E+23
-69	5,669029E+22	5,669216E+22	2,608100E+22	2,607986E+22	1,133825E+23	5,216086E+22	1,655433E+23
-68	5,669312E+22	5,669300E+22	2,607972E+22	2,608046E+22	1,133861E+23	5,216018E+22	1,655463E+23
-67	5,669288E+22	5,669139E+22	2,607982E+22	2,607928E+22	1,133843E+23	5,215910E+22	1,655434E+23
-66	5,669161E+22	5,669344E+22	2,607972E+22	2,607885E+22	1,133850E+23	5,215857E+22	1,655436E+23
-65	5,669457E+22	5,669401E+22	2,607801E+22	2,607925E+22	1,133886E+23	5,215726E+22	1,655458E+23
-64	5,669290E+22	5,669265E+22	2,607843E+22	2,607794E+22	1,133856E+23	5,215637E+22	1,655419E+23
-63	5,669330E+22	5,669464E+22	2,607821E+22	2,607790E+22	1,133879E+23	5,215612E+22	1,655441E+23
-62	5,669540E+22	5,669398E+22	2,607747E+22	2,607786E+22	1,133894E+23	5,215533E+22	1,655447E+23
-61	5,669285E+22	5,669354E+22	2,607848E+22	2,607727E+22	1,133864E+23	5,215575E+22	1,655421E+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	5,669412E+22	5,669497E+22	2,607802E+22	2,607863E+22	1,133891E+23	5,215666E+22	1,655458E+23
-59	5,669375E+22	5,669291E+22	2,607855E+22	2,607880E+22	1,133867E+23	5,215734E+22	1,655440E+23
-58	5,669121E+22	5,669334E+22	2,607979E+22	2,607901E+22	1,133846E+23	5,215879E+22	1,655433E+23
-57	5,669361E+22	5,669334E+22	2,607927E+22	2,608046E+22	1,133870E+23	5,215973E+22	1,655467E+23
-56	5,669239E+22	5,669048E+22	2,608051E+22	2,608021E+22	1,133829E+23	5,216072E+22	1,655436E+23
-55	5,669121E+22	5,669200E+22	2,608145E+22	2,608078E+22	1,133832E+23	5,216223E+22	1,655454E+23
-54	5,669287E+22	5,669181E+22	2,608094E+22	2,608193E+22	1,133847E+23	5,216287E+22	1,655475E+23
-53	5,668996E+22	5,669052E+22	2,608212E+22	2,608144E+22	1,133805E+23	5,216356E+22	1,655440E+23
-52	5,669037E+22	5,669216E+22	2,608196E+22	2,608225E+22	1,133825E+23	5,216420E+22	1,655467E+23
-51	5,669141E+22	5,669024E+22	2,608181E+22	2,608201E+22	1,133817E+23	5,216381E+22	1,655455E+23
-50	5,668929E+22	5,669050E+22	2,608245E+22	2,608101E+22	1,133798E+23	5,216346E+22	1,655432E+23
-49	5,669183E+22	5,669198E+22	2,608109E+22	2,608170E+22	1,133838E+23	5,216279E+22	1,655466E+23
-48	5,669169E+22	5,669004E+22	2,608082E+22	2,608077E+22	1,133817E+23	5,216159E+22	1,655433E+23
-47	5,669033E+22	5,669221E+22	2,608080E+22	2,608008E+22	1,133825E+23	5,216088E+22	1,655434E+23
-46	5,669314E+22	5,669298E+22	2,607929E+22	2,608045E+22	1,133861E+23	5,215974E+22	1,655459E+23
-45	5,669190E+22	5,669137E+22	2,607965E+22	2,607900E+22	1,133833E+23	5,215865E+22	1,655419E+23
-44	5,669225E+22	5,669349E+22	2,607955E+22	2,607909E+22	1,133857E+23	5,215864E+22	1,655444E+23
-43	5,669383E+22	5,669247E+22	2,607908E+22	2,607941E+22	1,133863E+23	5,215850E+22	1,655448E+23
-42	5,669116E+22	5,669227E+22	2,608001E+22	2,607897E+22	1,133834E+23	5,215898E+22	1,655424E+23
-41	5,669219E+22	5,669371E+22	2,607965E+22	2,608037E+22	1,133859E+23	5,216002E+22	1,655459E+23
-40	5,669238E+22	5,669073E+22	2,608002E+22	2,608057E+22	1,133831E+23	5,216059E+22	1,655437E+23
-39	5,669027E+22	5,669128E+22	2,608137E+22	2,608039E+22	1,133815E+23	5,216176E+22	1,655433E+23
-38	5,669243E+22	5,669179E+22	2,608096E+22	2,608194E+22	1,133842E+23	5,216290E+22	1,655471E+23
-37	5,669110E+22	5,668932E+22	2,608200E+22	2,608175E+22	1,133804E+23	5,216375E+22	1,655442E+23
-36	5,668950E+22	5,669126E+22	2,608290E+22	2,608242E+22	1,133808E+23	5,216532E+22	1,655461E+23
-35	5,669071E+22	5,669044E+22	2,608270E+22	2,608363E+22	1,133811E+23	5,216633E+22	1,655475E+23
-34	5,668826E+22	5,668910E+22	2,608383E+22	2,608290E+22	1,133774E+23	5,216672E+22	1,655441E+23
-33	5,668883E+22	5,669064E+22	2,608362E+22	2,608354E+22	1,133795E+23	5,216716E+22	1,655466E+23
-32	5,669034E+22	5,668812E+22	2,608314E+22	2,608349E+22	1,133785E+23	5,216663E+22	1,655451E+23
-31	5,668832E+22	5,668891E+22	2,608360E+22	2,608235E+22	1,133772E+23	5,216595E+22	1,655432E+23
-30	5,669037E+22	5,669095E+22	2,608218E+22	2,608317E+22	1,133813E+23	5,216535E+22	1,655467E+23
-29	5,669047E+22	5,668903E+22	2,608173E+22	2,608203E+22	1,133795E+23	5,216376E+22	1,655433E+23
-28	5,668931E+22	5,669122E+22	2,608184E+22	2,608109E+22	1,133805E+23	5,216293E+22	1,655435E+23
-27	5,669194E+22	5,669149E+22	2,608077E+22	2,608146E+22	1,133834E+23	5,216224E+22	1,655457E+23
-26	5,669080E+22	5,669017E+22	2,608118E+22	2,608009E+22	1,133810E+23	5,216127E+22	1,655422E+23
-25	5,669055E+22	5,669254E+22	2,608116E+22	2,608049E+22	1,133831E+23	5,216165E+22	1,655447E+23
-24	5,669210E+22	5,669086E+22	2,608048E+22	2,608126E+22	1,133830E+23	5,216173E+22	1,655447E+23
-23	5,668963E+22	5,669053E+22	2,608146E+22	2,608062E+22	1,133802E+23	5,216207E+22	1,655422E+23
-22	5,669068E+22	5,669207E+22	2,608124E+22	2,608200E+22	1,133827E+23	5,216324E+22	1,655460E+23
-21	5,669141E+22	5,668904E+22	2,608145E+22	2,608204E+22	1,133805E+23	5,216349E+22	1,655439E+23
-20	5,668927E+22	5,668998E+22	2,608287E+22	2,608187E+22	1,133792E+23	5,216474E+22	1,655440E+23
-19	5,669076E+22	5,669049E+22	2,608277E+22	2,608369E+22	1,133813E+23	5,216647E+22	1,655477E+23
-18	5,668919E+22	5,668830E+22	2,608372E+22	2,608350E+22	1,133775E+23	5,216723E+22	1,655447E+23
-17	5,668731E+22	5,669009E+22	2,608472E+22	2,608410E+22	1,133774E+23	5,216882E+22	1,655462E+23
-16	5,668909E+22	5,668823E+22	2,608427E+22	2,608529E+22	1,133773E+23	5,216956E+22	1,655469E+23
-15	5,668713E+22	5,668686E+22	2,608532E+22	2,608419E+22	1,133740E+23	5,216950E+22	1,655435E+23
-14	5,668761E+22	5,668899E+22	2,608502E+22	2,608491E+22	1,133766E+23	5,216994E+22	1,655465E+23
-13	5,668926E+22	5,668691E+22	2,608413E+22	2,608485E+22	1,133762E+23	5,216897E+22	1,655452E+23
-12	5,668712E+22	5,668822E+22	2,608450E+22	2,608363E+22	1,133753E+23	5,216813E+22	1,655435E+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	5,668887E+22	5,668989E+22	2,608349E+22	2,608440E+22	1,133788E+23	5,216789E+22	1,655466E+23
-10	5,668924E+22	5,668810E+22	2,608310E+22	2,608299E+22	1,133773E+23	5,216610E+22	1,655434E+23
-9	5,668806E+22	5,669020E+22	2,608342E+22	2,608207E+22	1,133783E+23	5,216549E+22	1,655437E+23
-8	5,669073E+22	5,668973E+22	2,608221E+22	2,608285E+22	1,133805E+23	5,216506E+22	1,655455E+23
-7	5,668944E+22	5,668865E+22	2,608256E+22	2,608163E+22	1,133781E+23	5,216419E+22	1,655423E+23
-6	5,668870E+22	5,669124E+22	2,608254E+22	2,608230E+22	1,133799E+23	5,216484E+22	1,655448E+23
-5	5,669062E+22	5,668929E+22	2,608167E+22	2,608295E+22	1,133799E+23	5,216463E+22	1,655445E+23
-4	5,668861E+22	5,668901E+22	2,608271E+22	2,608203E+22	1,133776E+23	5,216474E+22	1,655424E+23
-3	5,668951E+22	5,669025E+22	2,608293E+22	2,608341E+22	1,133798E+23	5,216634E+22	1,655461E+23
-2	5,669020E+22	5,668792E+22	2,608316E+22	2,608344E+22	1,133781E+23	5,216659E+22	1,655447E+23
-1	5,668750E+22	5,668912E+22	2,608468E+22	2,608347E+22	1,133766E+23	5,216815E+22	1,655448E+23
1	5,668868E+22	5,668889E+22	2,608448E+22	2,608558E+22	1,133776E+23	5,217006E+22	1,655476E+23
2	5,668736E+22	5,668656E+22	2,608546E+22	2,608518E+22	1,133739E+23	5,217064E+22	1,655446E+23
3	5,668552E+22	5,668824E+22	2,608644E+22	2,608571E+22	1,133738E+23	5,217215E+22	1,655459E+23
4	5,668794E+22	5,668627E+22	2,608564E+22	2,608674E+22	1,133742E+23	5,217238E+22	1,655466E+23
5	5,668625E+22	5,668537E+22	2,608648E+22	2,608555E+22	1,133716E+23	5,217203E+22	1,655437E+23
6	5,668622E+22	5,668767E+22	2,608637E+22	2,608642E+22	1,133739E+23	5,217279E+22	1,655467E+23
7	5,668778E+22	5,668624E+22	2,608533E+22	2,608619E+22	1,133740E+23	5,217152E+22	1,655455E+23
8	5,668562E+22	5,668743E+22	2,608589E+22	2,608479E+22	1,133730E+23	5,217068E+22	1,655437E+23
9	5,668766E+22	5,668822E+22	2,608486E+22	2,608555E+22	1,133759E+23	5,217041E+22	1,655463E+23
10	5,668830E+22	5,668648E+22	2,608452E+22	2,608400E+22	1,133748E+23	5,216852E+22	1,655433E+23
11	5,668664E+22	5,668891E+22	2,608486E+22	2,608341E+22	1,133755E+23	5,216827E+22	1,655438E+23
12	5,668925E+22	5,668853E+22	2,608332E+22	2,608440E+22	1,133778E+23	5,216772E+22	1,655455E+23
13	5,668795E+22	5,668756E+22	2,608363E+22	2,608321E+22	1,133755E+23	5,216685E+22	1,655424E+23
14	5,668714E+22	5,668968E+22	2,608404E+22	2,608390E+22	1,133768E+23	5,216793E+22	1,655448E+23
15	5,668942E+22	5,668795E+22	2,608318E+22	2,608426E+22	1,133774E+23	5,216744E+22	1,655448E+23
16	5,668747E+22	5,668771E+22	2,608444E+22	2,608335E+22	1,133752E+23	5,216778E+22	1,655430E+23
17	5,668825E+22	5,668847E+22	2,608460E+22	2,608504E+22	1,133767E+23	5,216964E+22	1,655464E+23
18	5,668860E+22	5,668646E+22	2,608484E+22	2,608516E+22	1,133751E+23	5,217000E+22	1,655451E+23
19	5,668534E+22	5,668779E+22	2,608644E+22	2,608538E+22	1,133731E+23	5,217182E+22	1,655450E+23
20	5,668689E+22	5,668710E+22	2,608600E+22	2,608731E+22	1,133740E+23	5,217330E+22	1,655473E+23
21	5,668607E+22	5,668474E+22	2,608691E+22	2,608663E+22	1,133708E+23	5,217354E+22	1,655443E+23
22	5,668422E+22	5,668623E+22	2,608811E+22	2,608717E+22	1,133705E+23	5,217528E+22	1,655457E+23
23	5,668663E+22	5,668509E+22	2,608709E+22	2,608809E+22	1,133717E+23	5,217519E+22	1,655469E+23
24	5,668475E+22	5,668464E+22	2,608789E+22	2,608698E+22	1,133694E+23	5,217487E+22	1,655443E+23
25	5,668465E+22	5,668632E+22	2,608767E+22	2,608795E+22	1,133710E+23	5,217561E+22	1,655466E+23
26	5,668648E+22	5,668497E+22	2,608672E+22	2,608739E+22	1,133715E+23	5,217410E+22	1,655456E+23
27	5,668429E+22	5,668615E+22	2,608735E+22	2,608596E+22	1,133704E+23	5,217330E+22	1,655437E+23
28	5,668660E+22	5,668671E+22	2,608607E+22	2,608670E+22	1,133733E+23	5,217277E+22	1,655461E+23
29	5,668729E+22	5,668529E+22	2,608563E+22	2,608529E+22	1,133726E+23	5,217092E+22	1,655435E+23
30	5,668502E+22	5,668752E+22	2,608618E+22	2,608503E+22	1,133725E+23	5,217121E+22	1,655437E+23
31	5,668755E+22	5,668755E+22	2,608456E+22	2,608592E+22	1,133751E+23	5,217047E+22	1,655456E+23
32	5,668663E+22	5,668629E+22	2,608502E+22	2,608457E+22	1,133729E+23	5,216959E+22	1,655425E+23
33	5,668607E+22	5,668757E+22	2,608548E+22	2,608524E+22	1,133736E+23	5,217073E+22	1,655444E+23
34	5,668855E+22	5,668626E+22	2,608476E+22	2,608549E+22	1,133748E+23	5,217025E+22	1,655451E+23
35	5,668601E+22	5,668646E+22	2,608613E+22	2,608489E+22	1,133725E+23	5,217102E+22	1,655435E+23
36	5,668648E+22	5,668726E+22	2,608610E+22	2,608675E+22	1,133737E+23	5,217285E+22	1,655466E+23
37	5,668680E+22	5,668527E+22	2,608635E+22	2,608688E+22	1,133721E+23	5,217323E+22	1,655453E+23
38	5,668337E+22	5,668599E+22	2,608831E+22	2,608715E+22	1,133694E+23	5,217546E+22	1,655448E+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	5,668523E+22	5,668556E+22	2,608773E+22	2,608880E+22	1,133708E+23	5,217653E+22	1,655473E+23
40	5,668477E+22	5,668315E+22	2,608865E+22	2,608814E+22	1,133679E+23	5,217679E+22	1,655447E+23
41	5,668289E+22	5,668430E+22	2,608963E+22	2,608890E+22	1,133672E+23	5,217853E+22	1,655457E+23
42	5,668523E+22	5,668376E+22	2,608849E+22	2,608972E+22	1,133690E+23	5,217821E+22	1,655472E+23
43	5,668308E+22	5,668356E+22	2,608929E+22	2,608856E+22	1,133666E+23	5,217785E+22	1,655445E+23
44	5,668343E+22	5,668489E+22	2,608884E+22	2,608919E+22	1,133683E+23	5,217804E+22	1,655464E+23
45	5,668560E+22	5,668362E+22	2,608788E+22	2,608834E+22	1,133692E+23	5,217622E+22	1,655454E+23
46	5,668315E+22	5,668465E+22	2,608879E+22	2,608710E+22	1,133678E+23	5,217589E+22	1,655437E+23
47	5,668514E+22	5,668582E+22	2,608733E+22	2,608784E+22	1,133710E+23	5,217517E+22	1,655461E+23
48	5,668564E+22	5,668447E+22	2,608693E+22	2,608670E+22	1,133701E+23	5,217363E+22	1,655437E+23
49	5,668345E+22	5,668587E+22	2,608743E+22	2,608660E+22	1,133693E+23	5,217403E+22	1,655434E+23
50	5,668639E+22	5,668589E+22	2,608595E+22	2,608722E+22	1,133723E+23	5,217316E+22	1,655454E+23
51	5,668553E+22	5,668480E+22	2,608653E+22	2,608587E+22	1,133703E+23	5,217240E+22	1,655427E+23
52	5,668520E+22	5,668596E+22	2,608682E+22	2,608656E+22	1,133712E+23	5,217337E+22	1,655445E+23
53	5,668740E+22	5,668515E+22	2,608613E+22	2,608696E+22	1,133725E+23	5,217309E+22	1,655456E+23
54	5,668407E+22	5,668523E+22	2,608784E+22	2,608677E+22	1,133693E+23	5,217461E+22	1,655439E+23
55	5,668426E+22	5,668619E+22	2,608779E+22	2,608846E+22	1,133704E+23	5,217626E+22	1,655467E+23
56	5,668502E+22	5,668375E+22	2,608821E+22	2,608855E+22	1,133688E+23	5,217676E+22	1,655455E+23
57	5,668193E+22	5,668353E+22	2,609006E+22	2,608884E+22	1,133655E+23	5,217890E+22	1,655444E+23
58	5,668408E+22	5,668354E+22	2,608943E+22	2,609034E+22	1,133676E+23	5,217976E+22	1,655474E+23
59	5,668332E+22	5,668177E+22	2,609020E+22	2,608982E+22	1,133651E+23	5,218002E+22	1,655451E+23
60	5,668145E+22	5,668303E+22	2,609082E+22	2,609054E+22	1,133645E+23	5,218136E+22	1,655458E+23
61	5,668396E+22	5,668277E+22	2,608969E+22	2,609108E+22	1,133667E+23	5,218078E+22	1,655475E+23
62	5,668167E+22	5,668218E+22	2,609081E+22	2,608984E+22	1,133638E+23	5,218065E+22	1,655445E+23
63	5,668205E+22	5,668384E+22	2,609029E+22	2,609012E+22	1,133659E+23	5,218041E+22	1,655463E+23
64	5,668447E+22	5,668249E+22	2,608933E+22	2,608944E+22	1,133670E+23	5,217877E+22	1,655457E+23
65	5,668167E+22	5,668290E+22	2,609008E+22	2,608859E+22	1,133646E+23	5,217868E+22	1,655432E+23
66	5,668358E+22	5,668450E+22	2,608856E+22	2,608935E+22	1,133681E+23	5,217791E+22	1,655460E+23
67	5,668408E+22	5,668315E+22	2,608819E+22	2,608822E+22	1,133672E+23	5,217641E+22	1,655436E+23
68	5,668249E+22	5,668414E+22	2,608850E+22	2,608789E+22	1,133666E+23	5,217639E+22	1,655430E+23
69	5,668577E+22	5,668445E+22	2,608711E+22	2,608826E+22	1,133702E+23	5,217537E+22	1,655456E+23
70	5,668443E+22	5,668344E+22	2,608806E+22	2,608721E+22	1,133679E+23	5,217527E+22	1,655431E+23
71	5,668350E+22	5,668530E+22	2,608834E+22	2,608792E+22	1,133688E+23	5,217625E+22	1,655451E+23
72	5,668547E+22	5,668437E+22	2,608782E+22	2,608866E+22	1,133698E+23	5,217648E+22	1,655463E+23
73	5,668204E+22	5,668337E+22	2,608963E+22	2,608869E+22	1,133654E+23	5,217832E+22	1,655437E+23
74	5,668259E+22	5,668423E+22	2,608965E+22	2,609014E+22	1,133668E+23	5,217979E+22	1,655466E+23
75	5,668353E+22	5,668179E+22	2,609005E+22	2,609026E+22	1,133653E+23	5,218031E+22	1,655456E+23
76	5,668093E+22	5,668145E+22	2,609149E+22	2,609053E+22	1,133624E+23	5,218202E+22	1,655444E+23
77	5,668297E+22	5,668210E+22	2,609072E+22	2,609195E+22	1,133651E+23	5,218267E+22	1,655477E+23
78	5,668168E+22	5,668061E+22	2,609167E+22	2,609158E+22	1,133623E+23	5,218325E+22	1,655455E+23
79	5,667977E+22	5,668216E+22	2,609221E+22	2,609181E+22	1,133619E+23	5,218401E+22	1,655459E+23
80	5,668261E+22	5,668164E+22	2,609126E+22	2,609221E+22	1,133642E+23	5,218347E+22	1,655477E+23
81	5,668038E+22	5,668033E+22	2,609233E+22	2,609104E+22	1,133607E+23	5,218337E+22	1,655441E+23
82	5,668074E+22	5,668231E+22	2,609175E+22	2,609128E+22	1,133630E+23	5,218304E+22	1,655461E+23
83	5,668277E+22	5,668136E+22	2,609069E+22	2,609090E+22	1,133641E+23	5,218159E+22	1,655457E+23
84	5,668026E+22	5,668148E+22	2,609103E+22	2,609012E+22	1,133617E+23	5,218114E+22	1,655429E+23
85	5,668247E+22	5,668320E+22	2,608955E+22	2,609062E+22	1,133657E+23	5,218017E+22	1,655458E+23
86	5,668298E+22	5,668176E+22	2,608948E+22	2,608951E+22	1,133647E+23	5,217899E+22	1,655437E+23
87	5,668146E+22	5,668313E+22	2,608979E+22	2,608886E+22	1,133646E+23	5,217865E+22	1,655432E+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	5,668476E+22	5,668352E+22	2,608864E+22	2,608951E+22	1,133683E+23	5,217814E+22	1,655464E+23
89	5,668280E+22	5,668199E+22	2,608963E+22	2,608893E+22	1,133648E+23	5,217856E+22	1,655433E+23
90	5,668155E+22	5,668400E+22	2,609002E+22	2,608967E+22	1,133656E+23	5,217970E+22	1,655452E+23
91	5,668349E+22	5,668279E+22	2,608962E+22	2,609047E+22	1,133663E+23	5,218009E+22	1,655464E+23
92	5,668072E+22	5,668108E+22	2,609116E+22	2,609036E+22	1,133618E+23	5,218152E+22	1,655433E+23
93	5,668168E+22	5,668222E+22	2,609116E+22	2,609158E+22	1,133639E+23	5,218274E+22	1,655466E+23
94	5,668226E+22	5,668007E+22	2,609167E+22	2,609193E+22	1,133623E+23	5,218360E+22	1,655459E+23
95	5,667924E+22	5,668058E+22	2,609291E+22	2,609203E+22	1,133598E+23	5,218495E+22	1,655448E+23
96	5,668134E+22	5,668133E+22	2,609228E+22	2,609353E+22	1,133627E+23	5,218581E+22	1,655485E+23
97	5,667989E+22	5,667902E+22	2,609331E+22	2,609316E+22	1,133589E+23	5,218648E+22	1,655454E+23
98	5,667825E+22	5,668068E+22	2,609392E+22	2,609305E+22	1,133589E+23	5,218697E+22	1,655459E+23
99	5,668115E+22	5,668013E+22	2,609294E+22	2,609349E+22	1,133613E+23	5,218642E+22	1,655477E+23
100	5,667921E+22	5,667852E+22	2,609355E+22	2,609248E+22	1,133577E+23	5,218604E+22	1,655438E+23
101	5,667944E+22	5,668100E+22	2,609279E+22	2,609272E+22	1,133604E+23	5,218552E+22	1,655460E+23
102	5,668111E+22	5,668013E+22	2,609183E+22	2,609254E+22	1,133612E+23	5,218437E+22	1,655456E+23
103	5,667891E+22	5,668048E+22	2,609206E+22	2,609128E+22	1,133594E+23	5,218334E+22	1,655427E+23
104	5,668170E+22	5,668202E+22	2,609082E+22	2,609165E+22	1,133637E+23	5,218247E+22	1,655462E+23
105	5,668208E+22	5,668012E+22	2,609087E+22	2,609066E+22	1,133622E+23	5,218153E+22	1,655437E+23
106	5,668033E+22	5,668198E+22	2,609130E+22	2,609004E+22	1,133623E+23	5,218134E+22	1,655436E+23
107	5,668292E+22	5,668263E+22	2,609027E+22	2,609104E+22	1,133656E+23	5,218131E+22	1,655469E+23
108	5,668111E+22	5,668052E+22	2,609104E+22	2,609070E+22	1,133616E+23	5,218175E+22	1,655434E+23
109	5,668001E+22	5,668230E+22	2,609155E+22	2,609125E+22	1,133623E+23	5,218279E+22	1,655451E+23
110	5,668190E+22	5,668095E+22	2,609136E+22	2,609218E+22	1,133629E+23	5,218354E+22	1,655464E+23
111	5,667945E+22	5,667949E+22	2,609268E+22	2,609176E+22	1,133589E+23	5,218444E+22	1,655434E+23
112	5,668049E+22	5,668079E+22	2,609277E+22	2,609320E+22	1,133613E+23	5,218597E+22	1,655472E+23
113	5,668051E+22	5,667857E+22	2,609324E+22	2,609383E+22	1,133591E+23	5,218707E+22	1,655462E+23
114	5,667744E+22	5,667934E+22	2,609456E+22	2,609372E+22	1,133568E+23	5,218828E+22	1,655451E+23
115	5,667950E+22	5,667997E+22	2,609409E+22	2,609507E+22	1,133595E+23	5,218916E+22	1,655486E+23
116	5,667867E+22	5,667709E+22	2,609479E+22	2,609455E+22	1,133558E+23	5,218934E+22	1,655451E+23
117	5,667719E+22	5,667895E+22	2,609532E+22	2,609422E+22	1,133561E+23	5,218954E+22	1,655457E+23
118	5,667960E+22	5,667875E+22	2,609433E+22	2,609498E+22	1,133583E+23	5,218930E+22	1,655477E+23
119	5,667753E+22	5,667765E+22	2,609462E+22	2,609381E+22	1,133552E+23	5,218844E+22	1,655436E+23
120	5,667811E+22	5,668003E+22	2,609397E+22	2,609412E+22	1,133581E+23	5,218809E+22	1,655462E+23
121	5,667979E+22	5,667859E+22	2,609310E+22	2,609390E+22	1,133584E+23	5,218700E+22	1,655454E+23
122	5,667799E+22	5,667916E+22	2,609343E+22	2,609230E+22	1,133571E+23	5,218573E+22	1,655429E+23
123	5,668072E+22	5,668080E+22	2,609236E+22	2,609274E+22	1,133615E+23	5,218509E+22	1,655466E+23
124	5,668105E+22	5,667867E+22	2,609212E+22	2,609205E+22	1,133597E+23	5,218416E+22	1,655439E+23
125	5,667889E+22	5,668087E+22	2,609260E+22	2,609154E+22	1,133598E+23	5,218414E+22	1,655439E+23
126	5,668091E+22	5,668135E+22	2,609178E+22	2,609281E+22	1,133623E+23	5,218459E+22	1,655469E+23
127	5,667932E+22	5,667910E+22	2,609251E+22	2,609216E+22	1,133584E+23	5,218467E+22	1,655431E+23
128	5,667886E+22	5,668059E+22	2,609318E+22	2,609272E+22	1,133594E+23	5,218590E+22	1,655453E+23
129	5,668052E+22	5,667885E+22	2,609303E+22	2,609383E+22	1,133594E+23	5,218687E+22	1,655462E+23
130	5,667801E+22	5,667805E+22	2,609433E+22	2,609337E+22	1,133561E+23	5,218771E+22	1,655438E+23
131	5,667865E+22	5,667968E+22	2,609450E+22	2,609496E+22	1,133583E+23	5,218947E+22	1,655478E+23
132	5,667887E+22	5,667704E+22	2,609475E+22	2,609562E+22	1,133559E+23	5,219037E+22	1,655463E+23
133	5,667602E+22	5,667782E+22	2,609616E+22	2,609516E+22	1,133538E+23	5,219132E+22	1,655452E+23
134	5,667790E+22	5,667838E+22	2,609583E+22	2,609655E+22	1,133563E+23	5,219238E+22	1,655487E+23
135	5,667729E+22	5,667572E+22	2,609627E+22	2,609580E+22	1,133530E+23	5,219207E+22	1,655451E+23
136	5,667593E+22	5,667765E+22	2,609671E+22	2,609571E+22	1,133536E+23	5,219242E+22	1,655460E+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	5,667779E+22	5,667729E+22	2,609562E+22	2,609669E+22	1,133551E+23	5,219231E+22	1,655474E+23
138	5,667608E+22	5,667640E+22	2,609585E+22	2,609522E+22	1,133525E+23	5,219108E+22	1,655436E+23
139	5,667690E+22	5,667866E+22	2,609537E+22	2,609530E+22	1,133556E+23	5,219067E+22	1,655462E+23
140	5,667917E+22	5,667693E+22	2,609424E+22	2,609497E+22	1,133561E+23	5,218921E+22	1,655453E+23
141	5,667736E+22	5,667781E+22	2,609463E+22	2,609323E+22	1,133552E+23	5,218786E+22	1,655430E+23
142	5,667916E+22	5,667989E+22	2,609373E+22	2,609407E+22	1,133590E+23	5,218781E+22	1,655469E+23
143	5,667923E+22	5,667801E+22	2,609334E+22	2,609339E+22	1,133572E+23	5,218673E+22	1,655440E+23
144	5,667720E+22	5,667971E+22	2,609406E+22	2,609311E+22	1,133569E+23	5,218717E+22	1,655441E+23
145	5,667904E+22	5,667954E+22	2,609342E+22	2,609449E+22	1,133586E+23	5,218791E+22	1,655465E+23
146	5,667803E+22	5,667728E+22	2,609417E+22	2,609364E+22	1,133553E+23	5,218781E+22	1,655431E+23
147	5,667761E+22	5,667880E+22	2,609497E+22	2,609430E+22	1,133564E+23	5,218927E+22	1,655457E+23
148	5,667931E+22	5,667706E+22	2,609446E+22	2,609566E+22	1,133564E+23	5,219012E+22	1,655465E+23
149	5,667656E+22	5,667669E+22	2,609577E+22	2,609512E+22	1,133532E+23	5,219089E+22	1,655441E+23
150	5,667674E+22	5,667838E+22	2,609618E+22	2,609677E+22	1,133551E+23	5,219295E+22	1,655481E+23
151	5,667727E+22	5,667570E+22	2,609635E+22	2,609697E+22	1,133530E+23	5,219332E+22	1,655463E+23
152	5,667490E+22	5,667625E+22	2,609786E+22	2,609652E+22	1,133511E+23	5,219438E+22	1,655455E+23
153	5,667626E+22	5,667658E+22	2,609752E+22	2,609806E+22	1,133528E+23	5,219557E+22	1,655484E+23
154	5,667562E+22	5,667444E+22	2,609779E+22	2,609731E+22	1,133501E+23	5,219509E+22	1,655452E+23
155	5,667418E+22	5,667645E+22	2,609821E+22	2,609730E+22	1,133506E+23	5,219550E+22	1,655461E+23
156	5,667646E+22	5,667563E+22	2,609677E+22	2,609821E+22	1,133521E+23	5,219498E+22	1,655471E+23
157	5,667522E+22	5,667496E+22	2,609702E+22	2,609634E+22	1,133502E+23	5,219336E+22	1,655435E+23
158	5,667591E+22	5,667736E+22	2,609666E+22	2,609640E+22	1,133533E+23	5,219306E+22	1,655463E+23
159	5,667811E+22	5,667597E+22	2,609539E+22	2,609590E+22	1,133541E+23	5,219130E+22	1,655454E+23
160	5,667618E+22	5,667699E+22	2,609587E+22	2,609457E+22	1,133532E+23	5,219045E+22	1,655436E+23
161	5,667705E+22	5,667868E+22	2,609513E+22	2,609572E+22	1,133557E+23	5,219085E+22	1,655466E+23
162	5,667742E+22	5,667668E+22	2,609485E+22	2,609493E+22	1,133541E+23	5,218978E+22	1,655439E+23
163	5,667577E+22	5,667790E+22	2,609577E+22	2,609456E+22	1,133537E+23	5,219033E+22	1,655440E+23
164	5,667809E+22	5,667729E+22	2,609485E+22	2,609599E+22	1,133554E+23	5,219084E+22	1,655462E+23
165	5,667719E+22	5,667552E+22	2,609558E+22	2,609505E+22	1,133527E+23	5,219063E+22	1,655433E+23
166	5,667604E+22	5,667758E+22	2,609647E+22	2,609602E+22	1,133536E+23	5,219249E+22	1,655461E+23
167	5,667756E+22	5,667621E+22	2,609590E+22	2,609724E+22	1,133538E+23	5,219314E+22	1,655469E+23
168	5,667506E+22	5,667556E+22	2,609747E+22	2,609677E+22	1,133506E+23	5,219424E+22	1,655449E+23
169	5,667479E+22	5,667673E+22	2,609811E+22	2,609839E+22	1,133515E+23	5,219649E+22	1,655480E+23
170	5,667579E+22	5,667409E+22	2,609824E+22	2,609842E+22	1,133499E+23	5,219666E+22	1,655465E+23
171	5,667337E+22	5,667451E+22	2,609974E+22	2,609810E+22	1,133479E+23	5,219784E+22	1,655457E+23
172	5,667471E+22	5,667480E+22	2,609887E+22	2,609988E+22	1,133495E+23	5,219874E+22	1,655483E+23
173	5,667419E+22	5,667292E+22	2,609895E+22	2,609893E+22	1,133471E+23	5,219788E+22	1,655450E+23
174	5,667262E+22	5,667502E+22	2,609945E+22	2,609882E+22	1,133476E+23	5,219827E+22	1,655459E+23
175	5,667547E+22	5,667440E+22	2,609786E+22	2,609918E+22	1,133499E+23	5,219704E+22	1,655469E+23
176	5,667466E+22	5,667374E+22	2,609821E+22	2,609728E+22	1,133484E+23	5,219549E+22	1,655439E+23
177	5,667453E+22	5,667619E+22	2,609801E+22	2,609752E+22	1,133507E+23	5,219553E+22	1,655462E+23
178	5,667654E+22	5,667522E+22	2,609673E+22	2,609712E+22	1,133518E+23	5,219385E+22	1,655456E+23
179	5,667437E+22	5,667592E+22	2,609741E+22	2,609604E+22	1,133503E+23	5,219345E+22	1,655437E+23
180	5,667546E+22	5,667694E+22	2,609646E+22	2,609730E+22	1,133524E+23	5,219376E+22	1,655462E+23
181	5,667632E+22	5,667483E+22	2,609625E+22	2,609630E+22	1,133511E+23	5,219255E+22	1,655437E+23
182	5,667465E+22	5,667612E+22	2,609726E+22	2,609607E+22	1,133508E+23	5,219332E+22	1,655441E+23
183	5,667705E+22	5,667588E+22	2,609618E+22	2,609737E+22	1,133529E+23	5,219355E+22	1,655465E+23
184	5,667603E+22	5,667448E+22	2,609696E+22	2,609675E+22	1,133505E+23	5,219371E+22	1,655442E+23
185	5,667398E+22	5,667636E+22	2,609811E+22	2,609786E+22	1,133503E+23	5,219597E+22	1,655463E+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	5,667572E+22	5,667496E+22	2,609774E+22	2,609885E+22	1,133507E+23	5,219658E+22	1,655473E+23
187	5,667350E+22	5,667387E+22	2,609955E+22	2,609833E+22	1,133474E+23	5,219788E+22	1,655453E+23
188	5,667336E+22	5,667454E+22	2,609984E+22	2,610000E+22	1,133479E+23	5,219984E+22	1,655477E+23
189	5,667440E+22	5,667228E+22	2,609983E+22	2,610002E+22	1,133467E+23	5,219985E+22	1,655465E+23
190	5,667154E+22	5,667305E+22	2,610115E+22	2,609991E+22	1,133446E+23	5,220105E+22	1,655457E+23
191	5,667302E+22	5,667352E+22	2,610003E+22	2,610136E+22	1,133465E+23	5,220139E+22	1,655479E+23
192	5,667312E+22	5,667173E+22	2,610015E+22	2,610030E+22	1,133449E+23	5,220045E+22	1,655453E+23
193	5,667131E+22	5,667360E+22	2,610082E+22	2,610000E+22	1,133449E+23	5,220082E+22	1,655457E+23
194	5,667451E+22	5,667329E+22	2,609930E+22	2,610013E+22	1,133478E+23	5,219942E+22	1,655472E+23
195	5,667353E+22	5,667265E+22	2,609974E+22	2,609844E+22	1,133462E+23	5,219818E+22	1,655444E+23
196	5,667294E+22	5,667488E+22	2,609920E+22	2,609899E+22	1,133478E+23	5,219819E+22	1,655460E+23
197	5,667497E+22	5,667391E+22	2,609795E+22	2,609858E+22	1,133489E+23	5,219653E+22	1,655454E+23
198	5,667277E+22	5,667432E+22	2,609875E+22	2,609756E+22	1,133471E+23	5,219631E+22	1,655434E+23
199	5,667441E+22	5,667528E+22	2,609771E+22	2,609846E+22	1,133497E+23	5,219617E+22	1,655459E+23
200	5,667571E+22	5,667334E+22	2,609752E+22	2,609761E+22	1,133490E+23	5,219513E+22	1,655442E+23
201	5,667318E+22	5,667479E+22	2,609871E+22	2,609759E+22	1,133480E+23	5,219630E+22	1,655443E+23
202	5,667544E+22	5,667505E+22	2,609773E+22	2,609893E+22	1,133505E+23	5,219666E+22	1,655471E+23
203	5,667423E+22	5,667337E+22	2,609882E+22	2,609845E+22	1,133476E+23	5,219727E+22	1,655449E+23
204	5,667222E+22	5,667464E+22	2,609985E+22	2,609959E+22	1,133469E+23	5,219944E+22	1,655463E+23
205	5,667435E+22	5,667306E+22	2,609954E+22	2,610038E+22	1,133474E+23	5,219992E+22	1,655473E+23
206	5,667192E+22	5,667191E+22	2,610135E+22	2,610005E+22	1,133438E+23	5,220141E+22	1,655452E+23
207	5,667184E+22	5,667288E+22	2,610130E+22	2,610160E+22	1,133447E+23	5,220290E+22	1,655476E+23
208	5,667295E+22	5,667092E+22	2,610111E+22	2,610183E+22	1,133439E+23	5,220294E+22	1,655468E+23
209	5,666961E+22	5,667158E+22	2,610252E+22	2,610165E+22	1,133412E+23	5,220417E+22	1,655454E+23
210	5,667171E+22	5,667219E+22	2,610148E+22	2,610262E+22	1,133439E+23	5,220410E+22	1,655480E+23
211	5,667219E+22	5,667033E+22	2,610175E+22	2,610136E+22	1,133425E+23	5,220311E+22	1,655456E+23
212	5,667036E+22	5,667203E+22	2,610213E+22	2,610109E+22	1,133424E+23	5,220322E+22	1,655456E+23
213	5,667334E+22	5,667213E+22	2,610059E+22	2,610126E+22	1,133455E+23	5,220185E+22	1,655473E+23
214	5,667171E+22	5,667170E+22	2,610103E+22	2,609994E+22	1,133434E+23	5,220097E+22	1,655444E+23
215	5,667122E+22	5,667373E+22	2,610035E+22	2,610032E+22	1,133450E+23	5,220067E+22	1,655456E+23
216	5,667376E+22	5,667261E+22	2,609916E+22	2,609998E+22	1,133464E+23	5,219915E+22	1,655455E+23
217	5,667144E+22	5,667268E+22	2,610013E+22	2,609894E+22	1,133441E+23	5,219908E+22	1,655432E+23
218	5,667344E+22	5,667387E+22	2,609919E+22	2,609971E+22	1,133473E+23	5,219890E+22	1,655462E+23
219	5,667460E+22	5,667218E+22	2,609912E+22	2,609913E+22	1,133468E+23	5,219825E+22	1,655450E+23
220	5,667160E+22	5,667339E+22	2,610006E+22	2,609935E+22	1,133450E+23	5,219941E+22	1,655444E+23
221	5,667377E+22	5,667364E+22	2,609932E+22	2,610059E+22	1,133474E+23	5,219990E+22	1,655473E+23
222	5,667252E+22	5,667172E+22	2,610057E+22	2,610015E+22	1,133442E+23	5,220072E+22	1,655450E+23
223	5,667080E+22	5,667274E+22	2,610150E+22	2,610097E+22	1,133435E+23	5,220247E+22	1,655460E+23
224	5,667316E+22	5,667141E+22	2,610113E+22	2,610195E+22	1,133446E+23	5,220308E+22	1,655476E+23
225	5,667002E+22	5,667031E+22	2,610296E+22	2,610182E+22	1,133403E+23	5,220478E+22	1,655451E+23
226	5,667000E+22	5,667166E+22	2,610287E+22	2,610326E+22	1,133417E+23	5,220613E+22	1,655478E+23
227	5,667132E+22	5,666964E+22	2,610279E+22	2,610346E+22	1,133410E+23	5,220624E+22	1,655472E+23
228	5,666823E+22	5,666988E+22	2,610394E+22	2,610312E+22	1,133381E+23	5,220706E+22	1,655452E+23
229	5,667080E+22	5,667061E+22	2,610298E+22	2,610379E+22	1,133414E+23	5,220677E+22	1,655482E+23
230	5,667102E+22	5,666898E+22	2,610322E+22	2,610264E+22	1,133400E+23	5,220586E+22	1,655459E+23
231	5,666902E+22	5,667093E+22	2,610331E+22	2,610231E+22	1,133400E+23	5,220562E+22	1,655456E+23
232	5,667184E+22	5,667128E+22	2,610165E+22	2,610274E+22	1,133431E+23	5,220439E+22	1,655475E+23
233	5,666972E+22	5,667040E+22	2,610230E+22	2,610149E+22	1,133401E+23	5,220379E+22	1,655439E+23
234	5,666991E+22	5,667230E+22	2,610174E+22	2,610154E+22	1,133422E+23	5,220329E+22	1,655455E+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							
235	5,667287E+22	5,667100E+22	2,610069E+22	2,610118E+22	1,133439E+23	5,220187E+22	1,655457E+23
236	5,667051E+22	5,667096E+22	2,610137E+22	2,610028E+22	1,133415E+23	5,220165E+22	1,655431E+23
237	5,667239E+22	5,667255E+22	2,610049E+22	2,610108E+22	1,133449E+23	5,220157E+22	1,655465E+23
238	5,667284E+22	5,667112E+22	2,610054E+22	2,610077E+22	1,133440E+23	5,220131E+22	1,655453E+23
239	5,666994E+22	5,667215E+22	2,610150E+22	2,610080E+22	1,133421E+23	5,220231E+22	1,655444E+23
240	5,667237E+22	5,667226E+22	2,610091E+22	2,610209E+22	1,133446E+23	5,220300E+22	1,655476E+23
241	5,667076E+22	5,666996E+22	2,610244E+22	2,610177E+22	1,133407E+23	5,220421E+22	1,655449E+23
242	5,666930E+22	5,667108E+22	2,610337E+22	2,610253E+22	1,133404E+23	5,220590E+22	1,655463E+23
243	5,667147E+22	5,666992E+22	2,610296E+22	2,610380E+22	1,133414E+23	5,220676E+22	1,655482E+23
244	5,666814E+22	5,666859E+22	2,610438E+22	2,610381E+22	1,133367E+23	5,220819E+22	1,655449E+23
245	5,666851E+22	5,666990E+22	2,610440E+22	2,610494E+22	1,133384E+23	5,220934E+22	1,655478E+23
246	5,666995E+22	5,666805E+22	2,610436E+22	2,610496E+22	1,133380E+23	5,220933E+22	1,655473E+23
247	5,666731E+22	5,666833E+22	2,610530E+22	2,610423E+22	1,133356E+23	5,220953E+22	1,655452E+23
248	5,666983E+22	5,666953E+22	2,610428E+22	2,610498E+22	1,133394E+23	5,220926E+22	1,655486E+23
249	5,666918E+22	5,666803E+22	2,610459E+22	2,610408E+22	1,133372E+23	5,220867E+22	1,655459E+23
250	5,666716E+22	5,667002E+22	2,610469E+22	2,610366E+22	1,133372E+23	5,220835E+22	1,655455E+23
251	5,667020E+22	5,667014E+22	2,610315E+22	2,610414E+22	1,133403E+23	5,220730E+22	1,655476E+23
252	5,666846E+22	5,666855E+22	2,610351E+22	2,610285E+22	1,133370E+23	5,220636E+22	1,655434E+23
253	5,666917E+22	5,667041E+22	2,610308E+22	2,610272E+22	1,133396E+23	5,220580E+22	1,655454E+23
254	5,667191E+22	5,666957E+22	2,610200E+22	2,610254E+22	1,133415E+23	5,220454E+22	1,655460E+23
255	5,666938E+22	5,666978E+22	2,610244E+22	2,610163E+22	1,133392E+23	5,220407E+22	1,655432E+23
256	5,667097E+22	5,667171E+22	2,610167E+22	2,610260E+22	1,133427E+23	5,220426E+22	1,655469E+23
257	5,667090E+22	5,666987E+22	2,610211E+22	2,610236E+22	1,133408E+23	5,220447E+22	1,655452E+23
258	5,666839E+22	5,667066E+22	2,610335E+22	2,610215E+22	1,133391E+23	5,220549E+22	1,655445E+23
259	5,667093E+22	5,667065E+22	2,610290E+22	2,610357E+22	1,133416E+23	5,220647E+22	1,655481E+23
260	5,666913E+22	5,666800E+22	2,610410E+22	2,610356E+22	1,133371E+23	5,220766E+22	1,655448E+23
261	5,666768E+22	5,666932E+22	2,610503E+22	2,610439E+22	1,133370E+23	5,220942E+22	1,655464E+23
262	5,666952E+22	5,666842E+22	2,610456E+22	2,610577E+22	1,133379E+23	5,221033E+22	1,655483E+23
263	5,666669E+22	5,666699E+22	2,610577E+22	2,610542E+22	1,133337E+23	5,221119E+22	1,655449E+23
264	5,666749E+22	5,666852E+22	2,610580E+22	2,610635E+22	1,133360E+23	5,221214E+22	1,655482E+23
265	5,666857E+22	5,666664E+22	2,610599E+22	2,610632E+22	1,133352E+23	5,221231E+22	1,655475E+23
266	5,666606E+22	5,666723E+22	2,610692E+22	2,610545E+22	1,133333E+23	5,221238E+22	1,655457E+23
267	5,666816E+22	5,666857E+22	2,610584E+22	2,610644E+22	1,133367E+23	5,221228E+22	1,655490E+23
268	5,666722E+22	5,666658E+22	2,610583E+22	2,610572E+22	1,133338E+23	5,221155E+22	1,655454E+23
269	5,666581E+22	5,666819E+22	2,610600E+22	2,610503E+22	1,133340E+23	5,221103E+22	1,655450E+23
270	5,666897E+22	5,666834E+22	2,610447E+22	2,610540E+22	1,133373E+23	5,220987E+22	1,655472E+23
271	5,666784E+22	5,666689E+22	2,610454E+22	2,610387E+22	1,133347E+23	5,220841E+22	1,655431E+23
272	5,666849E+22	5,666933E+22	2,610407E+22	2,610386E+22	1,133378E+23	5,220793E+22	1,655458E+23
273	5,667026E+22	5,666878E+22	2,610327E+22	2,610394E+22	1,133390E+23	5,220721E+22	1,655463E+23
274	5,666769E+22	5,666905E+22	2,610393E+22	2,610296E+22	1,133367E+23	5,220690E+22	1,655436E+23
275	5,666920E+22	5,667067E+22	2,610347E+22	2,610404E+22	1,133399E+23	5,220751E+22	1,655474E+23
276	5,666922E+22	5,666808E+22	2,610382E+22	2,610398E+22	1,133373E+23	5,220780E+22	1,655451E+23
277	5,666715E+22	5,666852E+22	2,610520E+22	2,610377E+22	1,133357E+23	5,220896E+22	1,655446E+23
278	5,666929E+22	5,666884E+22	2,610466E+22	2,610546E+22	1,133381E+23	5,221012E+22	1,655483E+23
279	5,666757E+22	5,666632E+22	2,610545E+22	2,610547E+22	1,133339E+23	5,221092E+22	1,655448E+23
280	5,666617E+22	5,666790E+22	2,610633E+22	2,610627E+22	1,133341E+23	5,221260E+22	1,655467E+23
281	5,666781E+22	5,666688E+22	2,610618E+22	2,610747E+22	1,133347E+23	5,221365E+22	1,655483E+23
282	5,666554E+22	5,666552E+22	2,610751E+22	2,610665E+22	1,133311E+23	5,221416E+22	1,655452E+23
283	5,666636E+22	5,666730E+22	2,610763E+22	2,610757E+22	1,133337E+23	5,221520E+22	1,655489E+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							
284	5,666702E+22	5,666521E+22	2,610748E+22	2,610776E+22	1,133322E+23	5,221524E+22	1,655475E+23
285	5,666438E+22	5,666579E+22	2,610842E+22	2,610696E+22	1,133302E+23	5,221537E+22	1,655455E+23
286	5,666612E+22	5,666729E+22	2,610726E+22	2,610799E+22	1,133334E+23	5,221526E+22	1,655487E+23
287	5,666585E+22	5,666491E+22	2,610694E+22	2,610704E+22	1,133308E+23	5,221398E+22	1,655447E+23
288	5,666500E+22	5,666666E+22	2,610705E+22	2,610621E+22	1,133317E+23	5,221326E+22	1,655449E+23
289	5,666795E+22	5,666691E+22	2,610574E+22	2,610659E+22	1,133349E+23	5,221233E+22	1,655472E+23
290	5,666689E+22	5,666594E+22	2,610580E+22	2,610498E+22	1,133328E+23	5,221078E+22	1,655436E+23
291	5,666707E+22	5,666873E+22	2,610542E+22	2,610523E+22	1,133358E+23	5,221065E+22	1,655465E+23
292	5,666840E+22	5,666760E+22	2,610459E+22	2,610552E+22	1,133360E+23	5,221011E+22	1,655461E+23
293	5,666629E+22	5,666732E+22	2,610560E+22	2,610445E+22	1,133336E+23	5,221005E+22	1,655437E+23
294	5,666764E+22	5,666888E+22	2,610525E+22	2,610552E+22	1,133365E+23	5,221077E+22	1,655473E+23
295	5,666807E+22	5,666613E+22	2,610531E+22	2,610550E+22	1,133342E+23	5,221081E+22	1,655450E+23
296	5,666595E+22	5,666694E+22	2,610655E+22	2,610547E+22	1,133329E+23	5,221202E+22	1,655449E+23
297	5,666732E+22	5,666745E+22	2,610622E+22	2,610735E+22	1,133348E+23	5,221357E+22	1,655483E+23
298	5,666594E+22	5,666511E+22	2,610707E+22	2,610710E+22	1,133311E+23	5,221417E+22	1,655452E+23
299	5,666473E+22	5,666662E+22	2,610811E+22	2,610780E+22	1,133313E+23	5,221591E+22	1,655473E+23
300	5,666633E+22	5,666516E+22	2,610791E+22	2,610899E+22	1,133315E+23	5,221690E+22	1,655484E+23
301	5,666448E+22	5,666371E+22	2,610934E+22	2,610808E+22	1,133282E+23	5,221742E+22	1,655456E+23
302	5,666455E+22	5,666588E+22	2,610934E+22	2,610913E+22	1,133304E+23	5,221848E+22	1,655489E+23
303	5,666525E+22	5,666383E+22	2,610872E+22	2,610942E+22	1,133291E+23	5,221814E+22	1,655472E+23
304	5,666281E+22	5,666436E+22	2,610951E+22	2,610852E+22	1,133272E+23	5,221804E+22	1,655452E+23
305	5,666446E+22	5,666566E+22	2,610861E+22	2,610939E+22	1,133301E+23	5,221800E+22	1,655481E+23
306	5,666496E+22	5,666349E+22	2,610824E+22	2,610804E+22	1,133284E+23	5,221628E+22	1,655447E+23
307	5,666421E+22	5,666557E+22	2,610836E+22	2,610728E+22	1,133298E+23	5,221564E+22	1,655454E+23
308	5,666666E+22	5,666579E+22	2,610692E+22	2,610791E+22	1,133325E+23	5,221483E+22	1,655473E+23
309	5,666559E+22	5,666483E+22	2,610714E+22	2,610636E+22	1,133304E+23	5,221350E+22	1,655439E+23
310	5,666524E+22	5,666768E+22	2,610693E+22	2,610663E+22	1,133329E+23	5,221356E+22	1,655465E+23
311	5,666705E+22	5,666606E+22	2,610594E+22	2,610689E+22	1,133331E+23	5,221282E+22	1,655459E+23
312	5,666524E+22	5,666564E+22	2,610701E+22	2,610586E+22	1,133309E+23	5,221287E+22	1,655438E+23
313	5,666618E+22	5,666717E+22	2,610693E+22	2,610712E+22	1,133334E+23	5,221405E+22	1,655474E+23
314	5,666665E+22	5,666474E+22	2,610689E+22	2,610712E+22	1,133314E+23	5,221401E+22	1,655454E+23
315	5,666428E+22	5,666583E+22	2,610810E+22	2,610731E+22	1,133301E+23	5,221541E+22	1,655455E+23
316	5,666548E+22	5,666576E+22	2,610775E+22	2,610919E+22	1,133312E+23	5,221694E+22	1,655482E+23
317	5,666468E+22	5,666314E+22	2,610887E+22	2,610866E+22	1,133278E+23	5,221752E+22	1,655453E+23
318	5,666329E+22	5,666499E+22	2,610998E+22	2,610920E+22	1,133283E+23	5,221918E+22	1,655475E+23
319	5,666511E+22	5,666350E+22	2,610945E+22	2,611043E+22	1,133286E+23	5,221988E+22	1,655485E+23
320	5,666297E+22	5,666245E+22	2,611074E+22	2,610967E+22	1,133254E+23	5,222041E+22	1,655458E+23
321	5,666231E+22	5,666467E+22	2,611086E+22	2,611084E+22	1,133270E+23	5,222170E+22	1,655487E+23
322	5,666344E+22	5,666258E+22	2,611017E+22	2,611085E+22	1,133260E+23	5,222102E+22	1,655470E+23
323	5,666150E+22	5,666304E+22	2,611092E+22	2,610986E+22	1,133245E+23	5,222078E+22	1,655453E+23
324	5,666334E+22	5,666387E+22	2,610991E+22	2,611067E+22	1,133272E+23	5,222058E+22	1,655478E+23
325	5,666435E+22	5,666187E+22	2,610961E+22	2,610925E+22	1,133262E+23	5,221885E+22	1,655451E+23
326	5,666294E+22	5,666457E+22	2,610965E+22	2,610857E+22	1,133275E+23	5,221822E+22	1,655457E+23
327	5,666528E+22	5,666477E+22	2,610793E+22	2,610931E+22	1,133301E+23	5,221724E+22	1,655473E+23
328	5,666432E+22	5,666367E+22	2,610826E+22	2,610772E+22	1,133280E+23	5,221598E+22	1,655440E+23
329	5,666361E+22	5,666616E+22	2,610848E+22	2,610794E+22	1,133298E+23	5,221642E+22	1,655462E+23
330	5,666589E+22	5,666464E+22	2,610753E+22	2,610805E+22	1,133305E+23	5,221558E+22	1,655461E+23
331	5,666409E+22	5,666429E+22	2,610856E+22	2,610730E+22	1,133284E+23	5,221586E+22	1,655442E+23
332	5,666437E+22	5,666557E+22	2,610843E+22	2,610889E+22	1,133299E+23	5,221731E+22	1,655473E+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							
333	5,666507E+22	5,666319E+22	2,610849E+22	2,610893E+22	1,133283E+23	5,221742E+22	1,655457E+23
334	5,666241E+22	5,666437E+22	2,610981E+22	2,610900E+22	1,133268E+23	5,221881E+22	1,655456E+23
335	5,666415E+22	5,666402E+22	2,610931E+22	2,611078E+22	1,133282E+23	5,222009E+22	1,655483E+23
336	5,666365E+22	5,666150E+22	2,611046E+22	2,611015E+22	1,133252E+23	5,222061E+22	1,655458E+23
337	5,666162E+22	5,666347E+22	2,611181E+22	2,611080E+22	1,133251E+23	5,222261E+22	1,655477E+23
338	5,666333E+22	5,666240E+22	2,611109E+22	2,611202E+22	1,133257E+23	5,222312E+22	1,655488E+23
339	5,666104E+22	5,666136E+22	2,611225E+22	2,611146E+22	1,133224E+23	5,222370E+22	1,655461E+23
340	5,666034E+22	5,666283E+22	2,611233E+22	2,611254E+22	1,133232E+23	5,222487E+22	1,655480E+23
341	5,666239E+22	5,666054E+22	2,611169E+22	2,611221E+22	1,133229E+23	5,222390E+22	1,655468E+23
342	5,666052E+22	5,666144E+22	2,611234E+22	2,611100E+22	1,133220E+23	5,222334E+22	1,655453E+23
343	5,666264E+22	5,666244E+22	2,611096E+22	2,611185E+22	1,133251E+23	5,222281E+22	1,655479E+23
344	5,666333E+22	5,666103E+22	2,611058E+22	2,611047E+22	1,133244E+23	5,222105E+22	1,655454E+23
345	5,666119E+22	5,666382E+22	2,611094E+22	2,610989E+22	1,133250E+23	5,222082E+22	1,655458E+23
346	5,666372E+22	5,666388E+22	2,610931E+22	2,611040E+22	1,133276E+23	5,221972E+22	1,655473E+23
347	5,666295E+22	5,666257E+22	2,610976E+22	2,610899E+22	1,133255E+23	5,221875E+22	1,655443E+23
348	5,666214E+22	5,666431E+22	2,611003E+22	2,610937E+22	1,133265E+23	5,221940E+22	1,655459E+23
349	5,666471E+22	5,666274E+22	2,610916E+22	2,610962E+22	1,133275E+23	5,221878E+22	1,655462E+23
350	5,666237E+22	5,666294E+22	2,611006E+22	2,610904E+22	1,133253E+23	5,221910E+22	1,655444E+23
351	5,666284E+22	5,666396E+22	2,610965E+22	2,611073E+22	1,133268E+23	5,222038E+22	1,655472E+23
352	5,666378E+22	5,666161E+22	2,610984E+22	2,611057E+22	1,133254E+23	5,222042E+22	1,655458E+23
353	5,666094E+22	5,666272E+22	2,611156E+22	2,611050E+22	1,133237E+23	5,22205E+22	1,655457E+23
354	5,666290E+22	5,666264E+22	2,611110E+22	2,611206E+22	1,133255E+23	5,222316E+22	1,655487E+23
355	5,666220E+22	5,666042E+22	2,611222E+22	2,611174E+22	1,133226E+23	5,222396E+22	1,655466E+23
356	5,665944E+22	5,666197E+22	2,611351E+22	2,611263E+22	1,133214E+23	5,222614E+22	1,655475E+23
357	5,666144E+22	5,666076E+22	2,611283E+22	2,611381E+22	1,133222E+23	5,222664E+22	1,655488E+23
358	5,665919E+22	5,665974E+22	2,611388E+22	2,611304E+22	1,133189E+23	5,222693E+22	1,655459E+23
359	5,665926E+22	5,666085E+22	2,611364E+22	2,611397E+22	1,133201E+23	5,222761E+22	1,655477E+23
360	5,666179E+22	5,665893E+22	2,611289E+22	2,611345E+22	1,133207E+23	5,222634E+22	1,655471E+23
361	5,665939E+22	5,666022E+22	2,611365E+22	2,611227E+22	1,133196E+23	5,222593E+22	1,655455E+23
362	5,666129E+22	5,666186E+22	2,611215E+22	2,611304E+22	1,133231E+23	5,222519E+22	1,655483E+23
363	5,666179E+22	5,666047E+22	2,611175E+22	2,611181E+22	1,133223E+23	5,222357E+22	1,655458E+23
364	5,665932E+22	5,666231E+22	2,611235E+22	2,611122E+22	1,133216E+23	5,222357E+22	1,655452E+23
365	5,666248E+22	5,666213E+22	2,611091E+22	2,611161E+22	1,133246E+23	5,22252E+22	1,655471E+23
366	5,666162E+22	5,666094E+22	2,611132E+22	2,611027E+22	1,133226E+23	5,222159E+22	1,655442E+23
367	5,666098E+22	5,666254E+22	2,611128E+22	2,611094E+22	1,133235E+23	5,22222E+22	1,655457E+23
368	5,666341E+22	5,666140E+22	2,611032E+22	2,611128E+22	1,133248E+23	5,222160E+22	1,655464E+23
369	5,666061E+22	5,666166E+22	2,611148E+22	2,611072E+22	1,133223E+23	5,22221E+22	1,655445E+23
370	5,666140E+22	5,666277E+22	2,611119E+22	2,611211E+22	1,133242E+23	5,222330E+22	1,655475E+23
371	5,666256E+22	5,666044E+22	2,611153E+22	2,611203E+22	1,133230E+23	5,222356E+22	1,655466E+23
372	5,665940E+22	5,666094E+22	2,611348E+22	2,611208E+22	1,133203E+23	5,222557E+22	1,655459E+23
373	5,666138E+22	5,666098E+22	2,611308E+22	2,611376E+22	1,133224E+23	5,222684E+22	1,655492E+23
374	5,666004E+22	5,665911E+22	2,611404E+22	2,611363E+22	1,133192E+23	5,222767E+22	1,655468E+23
375	5,665760E+22	5,666008E+22	2,611495E+22	2,611459E+22	1,133177E+23	5,222954E+22	1,655472E+23
376	5,666004E+22	5,665882E+22	2,611422E+22	2,611543E+22	1,133189E+23	5,222964E+22	1,655485E+23
377	5,665800E+22	5,665797E+22	2,611536E+22	2,611442E+22	1,133160E+23	5,222979E+22	1,655457E+23
378	5,665844E+22	5,665951E+22	2,611496E+22	2,611503E+22	1,133180E+23	5,222998E+22	1,655479E+23
379	5,666069E+22	5,665827E+22	2,611411E+22	2,611469E+22	1,133190E+23	5,222880E+22	1,655478E+23
380	5,665762E+22	5,665927E+22	2,611494E+22	2,611366E+22	1,133169E+23	5,222860E+22	1,655455E+23
381	5,665962E+22	5,666070E+22	2,611362E+22	2,611431E+22	1,133203E+23	5,222793E+22	1,655482E+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	5,666003E+22	5,665928E+22	2,611328E+22	2,611304E+22	1,133193E+23	5,222632E+22	1,655456E+23
383	5,665820E+22	5,666039E+22	2,611362E+22	2,611255E+22	1,133186E+23	5,222618E+22	1,655448E+23
384	5,666157E+22	5,666036E+22	2,611217E+22	2,611294E+22	1,133219E+23	5,222511E+22	1,655470E+23
385	5,666030E+22	5,665950E+22	2,611263E+22	2,611183E+22	1,133198E+23	5,222447E+22	1,655443E+23
386	5,665957E+22	5,666147E+22	2,611247E+22	2,611245E+22	1,133210E+23	5,222492E+22	1,655460E+23
387	5,666198E+22	5,666048E+22	2,611161E+22	2,611290E+22	1,133225E+23	5,222451E+22	1,655470E+23
388	5,665903E+22	5,665996E+22	2,611313E+22	2,611224E+22	1,133190E+23	5,222537E+22	1,655444E+23
389	5,666024E+22	5,666105E+22	2,611312E+22	2,611345E+22	1,133213E+23	5,222656E+22	1,655479E+23
390	5,666103E+22	5,665905E+22	2,611349E+22	2,611350E+22	1,133201E+23	5,222699E+22	1,655471E+23
391	5,665775E+22	5,665923E+22	2,611515E+22	2,611394E+22	1,133170E+23	5,222910E+22	1,655461E+23
392	5,665948E+22	5,665950E+22	2,611466E+22	2,611565E+22	1,133190E+23	5,223032E+22	1,655493E+23
393	5,665794E+22	5,665746E+22	2,611570E+22	2,611552E+22	1,133154E+23	5,223122E+22	1,655466E+23
394	5,665606E+22	5,665845E+22	2,611648E+22	2,611609E+22	1,133145E+23	5,223257E+22	1,655471E+23
395	5,665901E+22	5,665742E+22	2,611563E+22	2,611685E+22	1,133164E+23	5,223247E+22	1,655489E+23
396	5,665677E+22	5,665623E+22	2,611687E+22	2,611581E+22	1,133130E+23	5,223268E+22	1,655457E+23
397	5,665726E+22	5,665831E+22	2,611645E+22	2,611636E+22	1,133156E+23	5,223281E+22	1,655484E+23
398	5,665889E+22	5,665752E+22	2,611550E+22	2,611608E+22	1,133164E+23	5,223158E+22	1,655480E+23
399	5,665607E+22	5,665778E+22	2,611613E+22	2,611513E+22	1,133139E+23	5,223126E+22	1,655451E+23
400	5,665836E+22	5,665907E+22	2,611488E+22	2,611548E+22	1,133174E+23	5,223036E+22	1,655478E+23
401	5,665881E+22	5,665761E+22	2,611466E+22	2,611422E+22	1,133164E+23	5,222889E+22	1,655453E+23
402	5,665725E+22	5,665898E+22	2,611484E+22	2,611368E+22	1,133162E+23	5,222852E+22	1,655447E+23
403	5,666039E+22	5,665948E+22	2,611330E+22	2,611438E+22	1,133199E+23	5,222767E+22	1,655475E+23
404	5,665861E+22	5,665827E+22	2,611396E+22	2,611343E+22	1,133169E+23	5,222739E+22	1,655443E+23
405	5,665815E+22	5,666018E+22	2,611403E+22	2,611389E+22	1,133183E+23	5,222792E+22	1,655463E+23
406	5,666041E+22	5,665930E+22	2,611336E+22	2,611428E+22	1,133197E+23	5,222764E+22	1,655474E+23
407	5,665792E+22	5,665809E+22	2,611479E+22	2,611382E+22	1,133160E+23	5,222860E+22	1,655446E+23
408	5,665896E+22	5,665930E+22	2,611487E+22	2,611502E+22	1,133183E+23	5,222989E+22	1,655481E+23
409	5,665916E+22	5,665764E+22	2,611526E+22	2,611542E+22	1,133168E+23	5,223069E+22	1,655475E+23
410	5,665584E+22	5,665781E+22	2,611666E+22	2,611581E+22	1,133136E+23	5,223247E+22	1,655461E+23
411	5,665763E+22	5,665806E+22	2,611614E+22	2,611751E+22	1,133157E+23	5,223365E+22	1,655493E+23
412	5,665631E+22	5,665537E+22	2,611735E+22	2,611715E+22	1,133117E+23	5,223450E+22	1,655462E+23
413	5,665508E+22	5,665652E+22	2,611815E+22	2,611740E+22	1,133116E+23	5,223555E+22	1,655472E+23
414	5,665776E+22	5,665620E+22	2,611726E+22	2,611813E+22	1,133140E+23	5,223538E+22	1,655493E+23
415	5,665552E+22	5,665488E+22	2,611814E+22	2,611732E+22	1,133104E+23	5,223546E+22	1,655459E+23
416	5,665571E+22	5,665721E+22	2,611773E+22	2,611770E+22	1,133129E+23	5,223543E+22	1,655484E+23
417	5,665711E+22	5,665639E+22	2,611690E+22	2,611742E+22	1,133135E+23	5,223432E+22	1,655478E+23
418	5,665474E+22	5,665641E+22	2,611741E+22	2,611624E+22	1,133112E+23	5,223365E+22	1,655448E+23
419	5,665729E+22	5,665781E+22	2,611613E+22	2,611668E+22	1,133151E+23	5,223280E+22	1,655479E+23
420	5,665755E+22	5,665593E+22	2,611606E+22	2,611562E+22	1,133135E+23	5,223168E+22	1,655452E+23
421	5,665606E+22	5,665771E+22	2,611618E+22	2,611514E+22	1,133138E+23	5,223133E+22	1,655451E+23
422	5,665875E+22	5,665858E+22	2,611466E+22	2,611591E+22	1,133173E+23	5,223058E+22	1,655479E+23
423	5,665730E+22	5,665662E+22	2,611523E+22	2,611504E+22	1,133139E+23	5,223027E+22	1,655442E+23
424	5,665710E+22	5,665853E+22	2,611553E+22	2,611518E+22	1,133156E+23	5,223071E+22	1,655463E+23
425	5,665914E+22	5,665773E+22	2,611506E+22	2,611567E+22	1,133169E+23	5,223073E+22	1,655476E+23
426	5,665655E+22	5,665669E+22	2,611640E+22	2,611530E+22	1,133132E+23	5,223171E+22	1,655450E+23
427	5,665715E+22	5,665828E+22	2,611639E+22	2,611680E+22	1,133154E+23	5,223320E+22	1,655486E+23
428	5,665687E+22	5,665593E+22	2,611700E+22	2,611738E+22	1,133128E+23	5,223438E+22	1,655472E+23
429	5,665408E+22	5,665601E+22	2,611844E+22	2,611752E+22	1,133101E+23	5,223597E+22	1,655461E+23
430	5,665605E+22	5,665639E+22	2,611794E+22	2,611903E+22	1,133124E+23	5,223697E+22	1,655494E+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							
431	5,665536E+22	5,665326E+22	2,611888E+22	2,611874E+22	1,133086E+23	5,223761E+22	1,655462E+23
432	5,665414E+22	5,665491E+22	2,611964E+22	2,611879E+22	1,133091E+23	5,223843E+22	1,655475E+23
433	5,665615E+22	5,665519E+22	2,611871E+22	2,611970E+22	1,133113E+23	5,223841E+22	1,655498E+23
434	5,665387E+22	5,665395E+22	2,611938E+22	2,611876E+22	1,133078E+23	5,223814E+22	1,655460E+23
435	5,665410E+22	5,665618E+22	2,611898E+22	2,611902E+22	1,133103E+23	5,223800E+22	1,655483E+23
436	5,665557E+22	5,665464E+22	2,611840E+22	2,611867E+22	1,133102E+23	5,223707E+22	1,655473E+23
437	5,665376E+22	5,665474E+22	2,611886E+22	2,611735E+22	1,133085E+23	5,223621E+22	1,655447E+23
438	5,665597E+22	5,665666E+22	2,611753E+22	2,611794E+22	1,133126E+23	5,223547E+22	1,655481E+23
439	5,665634E+22	5,665454E+22	2,611713E+22	2,611723E+22	1,133109E+23	5,223436E+22	1,655452E+23
440	5,665477E+22	5,665642E+22	2,611734E+22	2,611655E+22	1,133112E+23	5,223389E+22	1,655451E+23
441	5,665728E+22	5,665740E+22	2,611607E+22	2,611731E+22	1,133147E+23	5,223338E+22	1,655481E+23
442	5,665626E+22	5,665526E+22	2,611658E+22	2,611624E+22	1,133115E+23	5,223282E+22	1,655443E+23
443	5,665593E+22	5,665726E+22	2,611703E+22	2,611648E+22	1,133132E+23	5,223351E+22	1,655467E+23
444	5,665746E+22	5,665614E+22	2,611684E+22	2,611732E+22	1,133136E+23	5,223416E+22	1,655478E+23
445	5,665476E+22	5,665525E+22	2,611814E+22	2,611711E+22	1,133100E+23	5,223525E+22	1,655453E+23
446	5,665496E+22	5,665692E+22	2,611818E+22	2,611868E+22	1,133119E+23	5,223686E+22	1,655487E+23
447	5,665529E+22	5,665369E+22	2,611858E+22	2,611929E+22	1,133090E+23	5,223787E+22	1,655468E+23
448	5,665300E+22	5,665383E+22	2,612004E+22	2,611901E+22	1,133068E+23	5,223906E+22	1,655459E+23
449	5,665491E+22	5,665471E+22	2,611961E+22	2,612050E+22	1,133096E+23	5,224011E+22	1,655497E+23
450	5,665420E+22	5,665206E+22	2,612028E+22	2,612016E+22	1,133063E+23	5,224043E+22	1,655467E+23
451	5,665253E+22	5,665427E+22	2,612096E+22	2,612031E+22	1,133068E+23	5,224127E+22	1,655481E+23
452	5,665407E+22	5,665400E+22	2,612031E+22	2,612126E+22	1,133081E+23	5,224157E+22	1,655496E+23
453	5,665218E+22	5,665262E+22	2,612100E+22	2,612010E+22	1,133048E+23	5,224110E+22	1,655459E+23
454	5,665252E+22	5,665482E+22	2,612060E+22	2,612025E+22	1,133073E+23	5,224085E+22	1,655482E+23
455	5,665453E+22	5,665261E+22	2,611971E+22	2,612012E+22	1,133071E+23	5,223983E+22	1,655470E+23
456	5,665289E+22	5,665312E+22	2,612004E+22	2,611872E+22	1,133060E+23	5,223876E+22	1,655448E+23
457	5,665463E+22	5,665552E+22	2,611866E+22	2,611946E+22	1,133101E+23	5,223812E+22	1,655483E+23
458	5,665507E+22	5,665347E+22	2,611810E+22	2,611859E+22	1,133085E+23	5,223669E+22	1,655452E+23
459	5,665366E+22	5,665541E+22	2,611844E+22	2,611773E+22	1,133091E+23	5,223617E+22	1,655452E+23
460	5,665596E+22	5,665579E+22	2,611765E+22	2,611846E+22	1,133117E+23	5,223612E+22	1,655479E+23
461	5,665510E+22	5,665389E+22	2,611829E+22	2,611746E+22	1,133090E+23	5,223575E+22	1,655447E+23
462	5,665414E+22	5,665618E+22	2,611883E+22	2,611798E+22	1,133103E+23	5,223681E+22	1,655471E+23
463	5,665555E+22	5,665446E+22	2,611842E+22	2,611929E+22	1,133100E+23	5,223771E+22	1,655477E+23
464	5,665301E+22	5,665344E+22	2,611975E+22	2,611893E+22	1,133064E+23	5,223868E+22	1,655451E+23
465	5,665323E+22	5,665509E+22	2,611989E+22	2,612045E+22	1,133083E+23	5,224034E+22	1,655487E+23
466	5,665416E+22	5,665191E+22	2,612007E+22	2,612085E+22	1,133061E+23	5,224092E+22	1,655470E+23
467	5,665201E+22	5,665243E+22	2,612151E+22	2,612051E+22	1,133044E+23	5,224202E+22	1,655465E+23
468	5,665333E+22	5,665331E+22	2,612134E+22	2,612217E+22	1,133066E+23	5,224351E+22	1,655502E+23
469	5,665245E+22	5,665112E+22	2,612190E+22	2,612180E+22	1,133036E+23	5,224370E+22	1,655473E+23
470	5,665041E+22	5,665328E+22	2,612267E+22	2,612186E+22	1,133037E+23	5,224453E+22	1,655482E+23
471	5,665250E+22	5,665204E+22	2,612181E+22	2,612282E+22	1,133045E+23	5,224463E+22	1,655492E+23
472	5,665115E+22	5,665052E+22	2,612242E+22	2,612132E+22	1,133017E+23	5,224374E+22	1,655454E+23
473	5,665136E+22	5,665315E+22	2,612197E+22	2,612155E+22	1,133045E+23	5,224352E+22	1,655480E+23
474	5,665351E+22	5,665137E+22	2,612066E+22	2,612141E+22	1,133049E+23	5,224207E+22	1,655470E+23
475	5,665165E+22	5,665234E+22	2,612090E+22	2,612002E+22	1,133040E+23	5,224091E+22	1,655449E+23
476	5,665305E+22	5,665440E+22	2,611996E+22	2,612076E+22	1,133075E+23	5,224072E+22	1,655482E+23
477	5,665381E+22	5,665243E+22	2,611952E+22	2,611967E+22	1,133062E+23	5,223920E+22	1,655454E+23
478	5,665230E+22	5,665432E+22	2,612014E+22	2,611882E+22	1,133066E+23	5,223896E+22	1,655456E+23
479	5,665471E+22	5,665399E+22	2,611926E+22	2,611996E+22	1,133087E+23	5,223921E+22	1,655479E+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	5,665366E+22	5,665226E+22	2,611989E+22	2,611913E+22	1,133059E+23	5,223902E+22	1,655449E+23
481	5,665211E+22	5,665477E+22	2,612043E+22	2,611996E+22	1,133069E+23	5,224039E+22	1,655473E+23
482	5,665379E+22	5,665279E+22	2,611979E+22	2,612117E+22	1,133066E+23	5,224096E+22	1,655475E+23
483	5,665171E+22	5,665177E+22	2,612113E+22	2,612055E+22	1,133035E+23	5,224169E+22	1,655452E+23
484	5,665195E+22	5,665309E+22	2,612166E+22	2,612200E+22	1,133050E+23	5,224365E+22	1,655487E+23
485	5,665297E+22	5,665057E+22	2,612182E+22	2,612230E+22	1,133035E+23	5,224412E+22	1,655477E+23
486	5,665033E+22	5,665157E+22	2,612332E+22	2,612209E+22	1,133019E+23	5,224541E+22	1,655473E+23
487	5,665142E+22	5,665184E+22	2,612299E+22	2,612400E+22	1,133033E+23	5,224699E+22	1,655502E+23
488	5,665073E+22	5,664957E+22	2,612357E+22	2,612338E+22	1,133003E+23	5,224696E+22	1,655473E+23
489	5,664871E+22	5,665157E+22	2,612429E+22	2,612334E+22	1,133003E+23	5,224763E+22	1,655479E+23
490	5,665129E+22	5,665022E+22	2,612308E+22	2,612413E+22	1,133015E+23	5,224721E+22	1,655487E+23
491	5,665026E+22	5,664911E+22	2,612349E+22	2,612258E+22	1,132994E+23	5,224607E+22	1,655454E+23
492	5,665003E+22	5,665173E+22	2,612323E+22	2,612298E+22	1,133018E+23	5,224621E+22	1,655480E+23
493	5,665208E+22	5,665062E+22	2,612183E+22	2,612275E+22	1,133027E+23	5,224458E+22	1,655473E+23
494	5,665015E+22	5,665156E+22	2,612224E+22	2,612123E+22	1,133017E+23	5,224346E+22	1,655452E+23
495	5,665185E+22	5,665272E+22	2,612133E+22	2,612199E+22	1,133046E+23	5,224333E+22	1,655479E+23
496	5,665289E+22	5,665079E+22	2,612102E+22	2,612076E+22	1,133037E+23	5,224178E+22	1,655455E+23
497	5,665088E+22	5,665290E+22	2,612173E+22	2,612023E+22	1,133038E+23	5,224196E+22	1,655457E+23
498	5,665307E+22	5,665273E+22	2,612057E+22	2,612160E+22	1,133058E+23	5,224217E+22	1,655480E+23
499	5,665194E+22	5,665109E+22	2,612115E+22	2,612089E+22	1,133030E+23	5,224204E+22	1,655451E+23
500	5,665025E+22	5,665299E+22	2,612210E+22	2,612176E+22	1,133032E+23	5,224387E+22	1,655471E+23
501	5,665238E+22	5,665125E+22	2,612147E+22	2,612271E+22	1,133036E+23	5,224418E+22	1,655478E+23
502	5,665046E+22	5,665030E+22	2,612296E+22	2,612203E+22	1,133008E+23	5,224499E+22	1,655457E+23
503	5,665078E+22	5,665121E+22	2,612340E+22	2,612372E+22	1,133020E+23	5,224713E+22	1,655491E+23
504	5,665156E+22	5,664909E+22	2,612353E+22	2,612401E+22	1,133006E+23	5,224754E+22	1,655482E+23
505	5,664825E+22	5,665031E+22	2,612505E+22	2,612395E+22	1,132986E+23	5,224900E+22	1,655476E+23
506	5,664960E+22	5,665025E+22	2,612443E+22	2,612562E+22	1,132998E+23	5,225006E+22	1,655499E+23
507	5,664934E+22	5,664784E+22	2,612493E+22	2,612474E+22	1,132972E+23	5,224967E+22	1,655469E+23
508	5,664735E+22	5,664958E+22	2,612588E+22	2,612468E+22	1,132969E+23	5,225056E+22	1,655475E+23
509	5,665005E+22	5,664896E+22	2,612445E+22	2,612537E+22	1,132990E+23	5,224982E+22	1,655488E+23
510	5,664879E+22	5,664834E+22	2,612481E+22	2,612393E+22	1,132971E+23	5,224873E+22	1,655459E+23
511	5,664855E+22	5,665041E+22	2,612443E+22	2,612449E+22	1,132990E+23	5,224892E+22	1,655479E+23
512	5,665083E+22	5,664934E+22	2,612315E+22	2,612397E+22	1,133002E+23	5,224712E+22	1,655473E+23
513	5,664884E+22	5,665028E+22	2,612370E+22	2,612244E+22	1,132991E+23	5,224613E+22	1,655452E+23
514	5,665077E+22	5,665122E+22	2,612261E+22	2,612316E+22	1,133020E+23	5,224578E+22	1,655478E+23
515	5,665180E+22	5,664955E+22	2,612227E+22	2,612213E+22	1,133013E+23	5,224440E+22	1,655457E+23
516	5,664916E+22	5,665144E+22	2,612325E+22	2,612198E+22	1,133006E+23	5,224523E+22	1,655458E+23
517	5,665117E+22	5,665162E+22	2,612203E+22	2,612332E+22	1,133028E+23	5,224535E+22	1,655481E+23
518	5,665034E+22	5,664973E+22	2,612277E+22	2,612253E+22	1,133001E+23	5,224529E+22	1,655454E+23
519	5,664907E+22	5,665069E+22	2,612373E+22	2,612337E+22	1,132998E+23	5,224711E+22	1,655469E+23
520	5,665149E+22	5,664934E+22	2,612320E+22	2,612412E+22	1,133008E+23	5,224733E+22	1,655482E+23
521	5,664909E+22	5,664889E+22	2,612471E+22	2,612363E+22	1,132980E+23	5,224834E+22	1,655463E+23
522	5,664900E+22	5,664996E+22	2,612491E+22	2,612542E+22	1,132990E+23	5,225033E+22	1,655493E+23
523	5,664970E+22	5,664803E+22	2,612501E+22	2,612570E+22	1,132977E+23	5,225071E+22	1,655484E+23
524	5,664621E+22	5,664858E+22	2,612687E+22	2,612564E+22	1,132948E+23	5,225251E+22	1,655473E+23
525	5,664785E+22	5,664875E+22	2,612613E+22	2,612702E+22	1,132966E+23	5,225315E+22	1,655498E+23
526	5,664801E+22	5,664633E+22	2,612658E+22	2,612613E+22	1,132943E+23	5,225272E+22	1,655471E+23
527	5,664614E+22	5,664761E+22	2,612729E+22	2,612629E+22	1,132937E+23	5,225358E+22	1,655473E+23
528	5,664882E+22	5,664763E+22	2,612573E+22	2,612689E+22	1,132965E+23	5,225261E+22	1,655491E+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							
529	5,664725E+22	5,664728E+22	2,612604E+22	2,612543E+22	1,132945E+23	5,225147E+22	1,655460E+23
530	5,664736E+22	5,664906E+22	2,612549E+22	2,612569E+22	1,132964E+23	5,225119E+22	1,655476E+23
531	5,664998E+22	5,664807E+22	2,612426E+22	2,612492E+22	1,132981E+23	5,224918E+22	1,655472E+23
532	5,664769E+22	5,664873E+22	2,612520E+22	2,612360E+22	1,132964E+23	5,224880E+22	1,655452E+23
533	5,664927E+22	5,665030E+22	2,612404E+22	2,612439E+22	1,132996E+23	5,224843E+22	1,655480E+23
534	5,665003E+22	5,664869E+22	2,612377E+22	2,612368E+22	1,132987E+23	5,224745E+22	1,655462E+23
535	5,664745E+22	5,664968E+22	2,612473E+22	2,612378E+22	1,132971E+23	5,224851E+22	1,655456E+23
536	5,664986E+22	5,664977E+22	2,612361E+22	2,612486E+22	1,132996E+23	5,224848E+22	1,655481E+23
537	5,664902E+22	5,664800E+22	2,612442E+22	2,612405E+22	1,132970E+23	5,224847E+22	1,655455E+23
538	5,664808E+22	5,664893E+22	2,612517E+22	2,612484E+22	1,132970E+23	5,225001E+22	1,655470E+23
539	5,665029E+22	5,664805E+22	2,612466E+22	2,612569E+22	1,132983E+23	5,225035E+22	1,655487E+23
540	5,664713E+22	5,664759E+22	2,612650E+22	2,612555E+22	1,132947E+23	5,225205E+22	1,655468E+23
541	5,664675E+22	5,664893E+22	2,612665E+22	2,612714E+22	1,132957E+23	5,225379E+22	1,655495E+23
542	5,664778E+22	5,664658E+22	2,612688E+22	2,612735E+22	1,132944E+23	5,225423E+22	1,655486E+23
543	5,664474E+22	5,664617E+22	2,612860E+22	2,612729E+22	1,132909E+23	5,225588E+22	1,655468E+23
544	5,664673E+22	5,664669E+22	2,612776E+22	2,612845E+22	1,132934E+23	5,225621E+22	1,655496E+23
545	5,664662E+22	5,664492E+22	2,612803E+22	2,612770E+22	1,132915E+23	5,225572E+22	1,655473E+23
546	5,664481E+22	5,664636E+22	2,612832E+22	2,612781E+22	1,132912E+23	5,225612E+22	1,655473E+23
547	5,664759E+22	5,664670E+22	2,612677E+22	2,612817E+22	1,132943E+23	5,225493E+22	1,655492E+23
548	5,664591E+22	5,664602E+22	2,612745E+22	2,612665E+22	1,132919E+23	5,225410E+22	1,655460E+23
549	5,664605E+22	5,664811E+22	2,612690E+22	2,612660E+22	1,132942E+23	5,225350E+22	1,655477E+23
550	5,664886E+22	5,664706E+22	2,612579E+22	2,612603E+22	1,132959E+23	5,225182E+22	1,655477E+23
551	5,664633E+22	5,664697E+22	2,612663E+22	2,612515E+22	1,132933E+23	5,225179E+22	1,655451E+23
552	5,664765E+22	5,664891E+22	2,612545E+22	2,612602E+22	1,132966E+23	5,225148E+22	1,655480E+23
553	5,664828E+22	5,664728E+22	2,612517E+22	2,612540E+22	1,132956E+23	5,225057E+22	1,655461E+23
554	5,664621E+22	5,664774E+22	2,612592E+22	2,612528E+22	1,132940E+23	5,225120E+22	1,655452E+23
555	5,664904E+22	5,664811E+22	2,612491E+22	2,612612E+22	1,132971E+23	5,225103E+22	1,655482E+23
556	5,664787E+22	5,664638E+22	2,612607E+22	2,612552E+22	1,132943E+23	5,225159E+22	1,655458E+23
557	5,664637E+22	5,664811E+22	2,612681E+22	2,612630E+22	1,132945E+23	5,225312E+22	1,655476E+23
558	5,664831E+22	5,664729E+22	2,612645E+22	2,612743E+22	1,132956E+23	5,225389E+22	1,655495E+23
559	5,664502E+22	5,664575E+22	2,612837E+22	2,612750E+22	1,132908E+23	5,225587E+22	1,655466E+23
560	5,664498E+22	5,664700E+22	2,612856E+22	2,612882E+22	1,132920E+23	5,225738E+22	1,655493E+23
561	5,664620E+22	5,664461E+22	2,612870E+22	2,612900E+22	1,132908E+23	5,225770E+22	1,655485E+23
562	5,664368E+22	5,664405E+22	2,612997E+22	2,612888E+22	1,132877E+23	5,225885E+22	1,655466E+23
563	5,664571E+22	5,664525E+22	2,612895E+22	2,612997E+22	1,132910E+23	5,225891E+22	1,655499E+23
564	5,664508E+22	5,664376E+22	2,612936E+22	2,612935E+22	1,132888E+23	5,225871E+22	1,655475E+23
565	5,664323E+22	5,664563E+22	2,612957E+22	2,612904E+22	1,132889E+23	5,225862E+22	1,655475E+23
566	5,664635E+22	5,664571E+22	2,612823E+22	2,612924E+22	1,132921E+23	5,225747E+22	1,655495E+23
567	5,664479E+22	5,664425E+22	2,612895E+22	2,612781E+22	1,132890E+23	5,225676E+22	1,655458E+23
568	5,664491E+22	5,664660E+22	2,612839E+22	2,612770E+22	1,132915E+23	5,225609E+22	1,655476E+23
569	5,664711E+22	5,664590E+22	2,612721E+22	2,612750E+22	1,132930E+23	5,225471E+22	1,655477E+23
570	5,664474E+22	5,664556E+22	2,612768E+22	2,612678E+22	1,132903E+23	5,225445E+22	1,655448E+23
571	5,664631E+22	5,664747E+22	2,612657E+22	2,612747E+22	1,132938E+23	5,225404E+22	1,655478E+23
572	5,664694E+22	5,664566E+22	2,612663E+22	2,612690E+22	1,132926E+23	5,225352E+22	1,655461E+23
573	5,664506E+22	5,664653E+22	2,612736E+22	2,612646E+22	1,132916E+23	5,225382E+22	1,655454E+23
574	5,664795E+22	5,664698E+22	2,612658E+22	2,612752E+22	1,132949E+23	5,225410E+22	1,655490E+23
575	5,664630E+22	5,664481E+22	2,612780E+22	2,612734E+22	1,132911E+23	5,225514E+22	1,655463E+23
576	5,664443E+22	5,664675E+22	2,612863E+22	2,612813E+22	1,132912E+23	5,225675E+22	1,655479E+23
577	5,664617E+22	5,664575E+22	2,612835E+22	2,612932E+22	1,132919E+23	5,225767E+22	1,655496E+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							
578	5,664354E+22	5,664348E+22	2,612996E+22	2,612922E+22	1,132870E+23	5,225918E+22	1,655462E+23
579	5,664389E+22	5,664493E+22	2,613008E+22	2,613027E+22	1,132888E+23	5,226035E+22	1,655492E+23
580	5,664489E+22	5,664284E+22	2,613030E+22	2,613065E+22	1,132877E+23	5,226095E+22	1,655487E+23
581	5,664209E+22	5,664316E+22	2,613131E+22	2,613033E+22	1,132853E+23	5,226165E+22	1,655469E+23
582	5,664418E+22	5,664457E+22	2,613040E+22	2,613148E+22	1,132888E+23	5,226188E+22	1,655506E+23
583	5,664351E+22	5,664228E+22	2,613085E+22	2,613083E+22	1,132858E+23	5,226168E+22	1,655475E+23
584	5,664188E+22	5,664424E+22	2,613115E+22	2,613016E+22	1,132861E+23	5,226131E+22	1,655474E+23
585	5,664498E+22	5,664435E+22	2,612979E+22	2,613038E+22	1,132893E+23	5,226017E+22	1,655495E+23
586	5,664365E+22	5,664249E+22	2,613012E+22	2,612915E+22	1,132861E+23	5,225927E+22	1,655454E+23
587	5,664357E+22	5,664531E+22	2,612946E+22	2,612913E+22	1,132889E+23	5,225858E+22	1,655475E+23
588	5,664536E+22	5,664463E+22	2,612843E+22	2,612920E+22	1,132900E+23	5,225763E+22	1,655476E+23
589	5,664321E+22	5,664444E+22	2,612882E+22	2,612810E+22	1,132876E+23	5,225693E+22	1,655446E+23
590	5,664537E+22	5,664613E+22	2,612797E+22	2,612870E+22	1,132915E+23	5,225667E+22	1,655482E+23
591	5,664598E+22	5,664378E+22	2,612814E+22	2,612823E+22	1,132898E+23	5,225638E+22	1,655461E+23
592	5,664393E+22	5,664516E+22	2,612902E+22	2,612779E+22	1,132891E+23	5,225680E+22	1,655459E+23
593	5,664608E+22	5,664596E+22	2,612835E+22	2,612916E+22	1,132920E+23	5,225751E+22	1,655496E+23
594	5,664444E+22	5,664331E+22	2,612935E+22	2,612922E+22	1,132878E+23	5,225857E+22	1,655463E+23
595	5,664270E+22	5,664510E+22	2,613027E+22	2,612982E+22	1,132878E+23	5,226009E+22	1,655479E+23
596	5,664436E+22	5,664385E+22	2,613021E+22	2,613112E+22	1,132882E+23	5,226133E+22	1,655495E+23
597	5,664211E+22	5,664187E+22	2,613159E+22	2,613072E+22	1,132840E+23	5,226231E+22	1,655463E+23
598	5,664272E+22	5,664341E+22	2,613174E+22	2,613190E+22	1,132861E+23	5,226365E+22	1,655498E+23
599	5,664328E+22	5,664127E+22	2,613186E+22	2,613252E+22	1,132846E+23	5,226438E+22	1,655489E+23
600	5,664048E+22	5,664197E+22	2,613280E+22	2,613195E+22	1,132824E+23	5,226475E+22	1,655472E+23
601	5,664241E+22	5,664327E+22	2,613202E+22	2,613291E+22	1,132857E+23	5,226493E+22	1,655506E+23
602	5,664235E+22	5,664052E+22	2,613215E+22	2,613208E+22	1,132829E+23	5,226423E+22	1,655471E+23
603	5,664092E+22	5,664262E+22	2,613242E+22	2,613118E+22	1,132835E+23	5,226360E+22	1,655471E+23
604	5,664348E+22	5,664302E+22	2,613116E+22	2,613174E+22	1,132865E+23	5,226290E+22	1,655494E+23
605	5,664196E+22	5,664169E+22	2,613122E+22	2,613045E+22	1,132837E+23	5,226167E+22	1,655453E+23
606	5,664211E+22	5,664433E+22	2,613070E+22	2,613057E+22	1,132864E+23	5,226128E+22	1,655477E+23
607	5,664394E+22	5,664298E+22	2,612980E+22	2,613069E+22	1,132869E+23	5,226049E+22	1,655474E+23
608	5,664221E+22	5,664294E+22	2,613027E+22	2,612928E+22	1,132851E+23	5,225955E+22	1,655447E+23
609	5,664428E+22	5,664474E+22	2,612960E+22	2,612994E+22	1,132890E+23	5,225953E+22	1,655486E+23
610	5,664495E+22	5,664221E+22	2,612951E+22	2,612975E+22	1,132872E+23	5,225926E+22	1,655464E+23
611	5,664243E+22	5,664398E+22	2,613047E+22	2,612941E+22	1,132864E+23	5,225988E+22	1,655463E+23
612	5,664394E+22	5,664470E+22	2,613006E+22	2,613110E+22	1,132886E+23	5,226115E+22	1,655498E+23
613	5,664247E+22	5,664190E+22	2,613101E+22	2,613086E+22	1,132844E+23	5,226187E+22	1,655462E+23
614	5,664136E+22	5,664332E+22	2,613209E+22	2,613144E+22	1,132847E+23	5,226353E+22	1,655482E+23
615	5,664296E+22	5,664160E+22	2,613198E+22	2,613284E+22	1,132846E+23	5,226482E+22	1,655494E+23
616	5,664069E+22	5,664024E+22	2,613325E+22	2,613234E+22	1,132809E+23	5,226559E+22	1,655465E+23
617	5,664092E+22	5,664224E+22	2,613338E+22	2,613362E+22	1,132832E+23	5,226701E+22	1,655502E+23
618	5,664169E+22	5,663976E+22	2,613320E+22	2,613421E+22	1,132814E+23	5,226741E+22	1,655489E+23
619	5,663913E+22	5,664055E+22	2,613423E+22	2,613326E+22	1,132797E+23	5,226749E+22	1,655472E+23
620	5,664093E+22	5,664181E+22	2,613360E+22	2,613421E+22	1,132827E+23	5,226782E+22	1,655506E+23
621	5,664103E+22	5,663930E+22	2,613352E+22	2,613316E+22	1,132803E+23	5,226668E+22	1,655470E+23
622	5,663974E+22	5,664143E+22	2,613379E+22	2,613253E+22	1,132812E+23	5,226631E+22	1,655475E+23
623	5,664171E+22	5,664158E+22	2,613244E+22	2,613340E+22	1,132833E+23	5,226584E+22	1,655491E+23
624	5,664045E+22	5,664043E+22	2,613247E+22	2,613192E+22	1,132809E+23	5,226439E+22	1,655453E+23
625	5,664079E+22	5,664285E+22	2,613213E+22	2,613188E+22	1,132836E+23	5,226401E+22	1,655476E+23
626	5,664319E+22	5,664114E+22	2,613099E+22	2,613191E+22	1,132843E+23	5,226290E+22	1,655472E+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	5,664155E+22	5,664149E+22	2,613154E+22	2,613036E+22	1,132830E+23	5,226191E+22	1,655449E+23
628	5,664274E+22	5,664369E+22	2,613113E+22	2,613142E+22	1,132864E+23	5,226255E+22	1,655490E+23
629	5,664305E+22	5,664157E+22	2,613095E+22	2,613128E+22	1,132846E+23	5,226222E+22	1,655468E+23
630	5,664064E+22	5,664280E+22	2,613216E+22	2,613116E+22	1,132834E+23	5,226332E+22	1,655468E+23
631	5,664189E+22	5,664279E+22	2,613193E+22	2,613294E+22	1,132847E+23	5,226487E+22	1,655495E+23
632	5,664101E+22	5,663996E+22	2,613283E+22	2,613248E+22	1,132810E+23	5,226530E+22	1,655463E+23
633	5,663992E+22	5,664131E+22	2,613396E+22	2,613310E+22	1,132812E+23	5,226707E+22	1,655483E+23
634	5,664169E+22	5,663965E+22	2,613344E+22	2,613470E+22	1,132813E+23	5,226814E+22	1,655495E+23
635	5,663930E+22	5,663884E+22	2,613462E+22	2,613406E+22	1,132781E+23	5,226868E+22	1,655468E+23
636	5,663906E+22	5,664098E+22	2,613496E+22	2,613537E+22	1,132800E+23	5,227033E+22	1,655504E+23
637	5,664014E+22	5,663860E+22	2,613467E+22	2,613546E+22	1,132787E+23	5,227013E+22	1,655489E+23
638	5,663807E+22	5,663913E+22	2,613582E+22	2,613445E+22	1,132772E+23	5,227027E+22	1,655475E+23
639	5,663941E+22	5,664012E+22	2,613520E+22	2,613554E+22	1,132795E+23	5,227075E+22	1,655503E+23
640	5,663948E+22	5,663807E+22	2,613495E+22	2,613451E+22	1,132776E+23	5,226947E+22	1,655470E+23
641	5,663794E+22	5,664026E+22	2,613521E+22	2,613404E+22	1,132782E+23	5,226926E+22	1,655475E+23
642	5,664033E+22	5,663996E+22	2,613354E+22	2,613494E+22	1,132803E+23	5,226848E+22	1,655488E+23
643	5,663951E+22	5,663893E+22	2,613361E+22	2,613311E+22	1,132784E+23	5,226672E+22	1,655452E+23
644	5,663978E+22	5,664149E+22	2,613346E+22	2,613311E+22	1,132813E+23	5,226657E+22	1,655478E+23
645	5,664219E+22	5,664011E+22	2,613224E+22	2,613297E+22	1,132823E+23	5,226521E+22	1,655475E+23
646	5,664044E+22	5,664059E+22	2,613298E+22	2,613182E+22	1,132810E+23	5,226479E+22	1,655458E+23
647	5,664068E+22	5,664244E+22	2,613270E+22	2,613318E+22	1,132831E+23	5,226588E+22	1,655490E+23
648	5,664107E+22	5,664016E+22	2,613264E+22	2,613297E+22	1,132812E+23	5,226561E+22	1,655468E+23
649	5,663893E+22	5,664089E+22	2,613404E+22	2,613279E+22	1,132798E+23	5,226684E+22	1,655467E+23
650	5,664069E+22	5,664035E+22	2,613349E+22	2,613459E+22	1,132810E+23	5,226808E+22	1,655491E+23
651	5,664001E+22	5,663799E+22	2,613435E+22	2,613401E+22	1,132780E+23	5,226836E+22	1,655464E+23
652	5,663833E+22	5,663989E+22	2,613553E+22	2,613491E+22	1,132782E+23	5,227044E+22	1,655486E+23
653	5,663990E+22	5,663874E+22	2,613488E+22	2,613630E+22	1,132786E+23	5,227118E+22	1,655498E+23
654	5,663782E+22	5,663777E+22	2,613626E+22	2,613567E+22	1,132756E+23	5,227194E+22	1,655475E+23
655	5,663721E+22	5,663940E+22	2,613679E+22	2,613688E+22	1,132766E+23	5,227367E+22	1,655503E+23
656	5,663871E+22	5,663712E+22	2,613645E+22	2,613676E+22	1,132758E+23	5,227322E+22	1,655490E+23
657	5,663661E+22	5,663749E+22	2,613759E+22	2,613587E+22	1,132741E+23	5,227346E+22	1,655476E+23
658	5,663789E+22	5,663839E+22	2,613647E+22	2,613723E+22	1,132763E+23	5,227369E+22	1,655500E+23
659	5,663805E+22	5,663670E+22	2,613605E+22	2,613610E+22	1,132748E+23	5,227215E+22	1,655469E+23
660	5,663639E+22	5,663886E+22	2,613641E+22	2,613562E+22	1,132752E+23	5,227203E+22	1,655473E+23
661	5,663932E+22	5,663873E+22	2,613465E+22	2,613599E+22	1,132781E+23	5,227065E+22	1,655487E+23
662	5,663906E+22	5,663764E+22	2,613482E+22	2,613411E+22	1,132767E+23	5,226894E+22	1,655456E+23
663	5,663850E+22	5,664018E+22	2,613488E+22	2,613429E+22	1,132787E+23	5,226917E+22	1,655479E+23
664	5,664067E+22	5,663931E+22	2,613368E+22	2,613426E+22	1,132800E+23	5,226793E+22	1,655479E+23
665	5,663848E+22	5,663945E+22	2,613466E+22	2,613339E+22	1,132779E+23	5,226805E+22	1,655460E+23
666	5,663885E+22	5,664063E+22	2,613423E+22	2,613490E+22	1,132795E+23	5,226913E+22	1,655486E+23
667	5,663974E+22	5,663823E+22	2,613422E+22	2,613452E+22	1,132780E+23	5,226873E+22	1,655467E+23
668	5,663756E+22	5,663892E+22	2,613571E+22	2,613447E+22	1,132765E+23	5,227018E+22	1,655467E+23
669	5,663949E+22	5,663876E+22	2,613497E+22	2,613611E+22	1,132782E+23	5,227108E+22	1,655493E+23
670	5,663881E+22	5,663677E+22	2,613583E+22	2,613579E+22	1,132756E+23	5,227162E+22	1,655472E+23
671	5,663630E+22	5,663861E+22	2,613718E+22	2,613680E+22	1,132749E+23	5,227398E+22	1,655489E+23
672	5,663810E+22	5,663750E+22	2,613667E+22	2,613790E+22	1,132756E+23	5,227457E+22	1,655502E+23
673	5,663623E+22	5,663614E+22	2,613826E+22	2,613715E+22	1,132724E+23	5,227540E+22	1,655478E+23
674	5,663585E+22	5,663733E+22	2,613842E+22	2,613836E+22	1,132732E+23	5,227677E+22	1,655500E+23
675	5,663741E+22	5,663542E+22	2,613794E+22	2,613820E+22	1,132728E+23	5,227614E+22	1,655490E+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	5,663486E+22	5,663615E+22	2,613894E+22	2,613758E+22	1,132710E+23	5,227652E+22	1,655475E+23
677	5,663624E+22	5,663724E+22	2,613756E+22	2,613865E+22	1,132735E+23	5,227620E+22	1,655497E+23
678	5,663700E+22	5,663553E+22	2,613721E+22	2,613745E+22	1,132725E+23	5,227465E+22	1,655472E+23
679	5,663518E+22	5,663739E+22	2,613770E+22	2,613679E+22	1,132726E+23	5,227449E+22	1,655471E+23
680	5,663840E+22	5,663751E+22	2,613604E+22	2,613694E+22	1,132759E+23	5,227297E+22	1,655489E+23
681	5,663795E+22	5,663650E+22	2,613638E+22	2,613528E+22	1,132745E+23	5,227165E+22	1,655461E+23
682	5,663697E+22	5,663882E+22	2,613615E+22	2,613579E+22	1,132758E+23	5,227194E+22	1,655477E+23
683	5,663899E+22	5,663803E+22	2,613504E+22	2,613583E+22	1,132770E+23	5,227087E+22	1,655479E+23
684	5,663668E+22	5,663782E+22	2,613619E+22	2,613512E+22	1,132745E+23	5,227131E+22	1,655458E+23
685	5,663748E+22	5,663886E+22	2,613568E+22	2,613627E+22	1,132763E+23	5,227195E+22	1,655483E+23
686	5,663889E+22	5,663653E+22	2,613571E+22	2,613601E+22	1,132754E+23	5,227172E+22	1,655471E+23
687	5,663601E+22	5,663729E+22	2,613732E+22	2,613615E+22	1,132733E+23	5,227347E+22	1,655468E+23
688	5,663779E+22	5,663772E+22	2,613663E+22	2,613780E+22	1,132755E+23	5,227443E+22	1,655499E+23
689	5,663693E+22	5,663560E+22	2,613772E+22	2,613757E+22	1,132725E+23	5,227529E+22	1,655478E+23
690	5,663452E+22	5,663687E+22	2,613891E+22	2,613856E+22	1,132714E+23	5,227747E+22	1,655489E+23
691	5,663674E+22	5,663574E+22	2,613845E+22	2,613942E+22	1,132725E+23	5,227786E+22	1,655503E+23
692	5,663471E+22	5,663429E+22	2,614003E+22	2,613880E+22	1,132690E+23	5,227883E+22	1,655478E+23
693	5,663438E+22	5,663580E+22	2,613986E+22	2,613984E+22	1,132702E+23	5,227970E+22	1,655499E+23
694	5,663607E+22	5,663416E+22	2,613916E+22	2,613987E+22	1,132702E+23	5,227904E+22	1,655493E+23
695	5,663296E+22	5,663471E+22	2,614021E+22	2,613924E+22	1,132677E+23	5,227945E+22	1,655471E+23
696	5,663496E+22	5,663594E+22	2,613888E+22	2,613986E+22	1,132709E+23	5,227874E+22	1,655496E+23
697	5,663607E+22	5,663409E+22	2,613868E+22	2,613845E+22	1,132702E+23	5,227714E+22	1,655473E+23
698	5,663433E+22	5,663578E+22	2,613893E+22	2,613784E+22	1,132701E+23	5,227677E+22	1,655469E+23
699	5,663737E+22	5,663637E+22	2,613730E+22	2,613803E+22	1,132737E+23	5,227534E+22	1,655491E+23
700	5,663616E+22	5,663557E+22	2,613772E+22	2,613681E+22	1,132717E+23	5,227454E+22	1,655463E+23
701	5,663511E+22	5,663775E+22	2,613743E+22	2,613721E+22	1,132729E+23	5,227464E+22	1,655475E+23
702	5,663759E+22	5,663668E+22	2,613644E+22	2,613736E+22	1,132743E+23	5,227380E+22	1,655481E+23
703	5,663512E+22	5,663601E+22	2,613777E+22	2,613668E+22	1,132711E+23	5,227445E+22	1,655456E+23
704	5,663635E+22	5,663719E+22	2,613733E+22	2,613770E+22	1,132735E+23	5,227503E+22	1,655486E+23
705	5,663761E+22	5,663508E+22	2,613746E+22	2,613768E+22	1,132727E+23	5,227514E+22	1,655478E+23
706	5,663441E+22	5,663576E+22	2,613877E+22	2,613808E+22	1,132702E+23	5,227684E+22	1,655470E+23
707	5,663613E+22	5,663629E+22	2,613827E+22	2,613960E+22	1,132724E+23	5,227787E+22	1,655503E+23
708	5,663520E+22	5,663400E+22	2,613954E+22	2,613936E+22	1,132692E+23	5,227891E+22	1,655481E+23
709	5,663313E+22	5,663505E+22	2,614059E+22	2,613992E+22	1,132682E+23	5,228051E+22	1,655487E+23
710	5,663557E+22	5,663412E+22	2,614006E+22	2,614089E+22	1,132697E+23	5,228095E+22	1,655506E+23
711	5,663286E+22	5,663272E+22	2,614159E+22	2,614045E+22	1,132656E+23	5,228205E+22	1,655476E+23
712	5,663251E+22	5,663455E+22	2,614134E+22	2,614138E+22	1,132671E+23	5,228272E+22	1,655498E+23
713	5,663435E+22	5,663291E+22	2,614073E+22	2,614141E+22	1,132673E+23	5,228213E+22	1,655494E+23
714	5,663165E+22	5,663300E+22	2,614146E+22	2,614063E+22	1,132647E+23	5,228210E+22	1,655467E+23
715	5,663413E+22	5,663439E+22	2,614023E+22	2,614095E+22	1,132685E+23	5,228118E+22	1,655497E+23
716	5,663502E+22	5,663279E+22	2,614005E+22	2,613968E+22	1,132678E+23	5,227973E+22	1,655475E+23
717	5,663309E+22	5,663473E+22	2,614009E+22	2,613900E+22	1,132678E+23	5,227909E+22	1,655469E+23
718	5,663590E+22	5,663560E+22	2,613844E+22	2,613951E+22	1,132715E+23	5,227795E+22	1,655494E+23
719	5,663409E+22	5,663428E+22	2,613911E+22	2,613847E+22	1,132684E+23	5,227757E+22	1,655460E+23
720	5,663357E+22	5,663622E+22	2,613899E+22	2,613859E+22	1,132698E+23	5,227759E+22	1,655474E+23
721	5,663643E+22	5,663492E+22	2,613815E+22	2,613875E+22	1,132714E+23	5,227690E+22	1,655482E+23
722	5,663405E+22	5,663403E+22	2,613917E+22	2,613822E+22	1,132681E+23	5,227739E+22	1,655455E+23
723	5,663524E+22	5,663568E+22	2,613881E+22	2,613929E+22	1,132709E+23	5,227809E+22	1,655490E+23
724	5,663584E+22	5,663388E+22	2,613903E+22	2,613953E+22	1,132697E+23	5,227856E+22	1,655483E+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	5,663269E+22	5,663450E+22	2,614033E+22	2,613967E+22	1,132672E+23	5,228000E+22	1,655472E+23
726	5,663472E+22	5,663492E+22	2,613995E+22	2,614115E+22	1,132696E+23	5,228110E+22	1,655507E+23
727	5,663337E+22	5,663223E+22	2,614145E+22	2,614098E+22	1,132656E+23	5,228243E+22	1,655480E+23
728	5,663156E+22	5,663342E+22	2,614246E+22	2,614142E+22	1,132650E+23	5,228388E+22	1,655489E+23
729	5,663383E+22	5,663261E+22	2,614186E+22	2,614262E+22	1,132664E+23	5,228448E+22	1,655509E+23
730	5,663100E+22	5,663102E+22	2,614293E+22	2,614236E+22	1,132620E+23	5,228529E+22	1,655473E+23
731	5,663107E+22	5,663287E+22	2,614272E+22	2,614299E+22	1,132639E+23	5,228572E+22	1,655497E+23
732	5,663304E+22	5,663133E+22	2,614214E+22	2,614285E+22	1,132644E+23	5,228499E+22	1,655494E+23
733	5,663084E+22	5,663153E+22	2,614266E+22	2,614162E+22	1,132624E+23	5,228428E+22	1,655467E+23
734	5,663335E+22	5,663334E+22	2,614141E+22	2,614201E+22	1,132667E+23	5,228341E+22	1,655501E+23
735	5,663331E+22	5,663189E+22	2,614136E+22	2,614101E+22	1,132652E+23	5,228238E+22	1,655476E+23
736	5,663126E+22	5,663390E+22	2,614148E+22	2,614032E+22	1,132652E+23	5,228180E+22	1,655470E+23
737	5,663407E+22	5,663445E+22	2,614004E+22	2,614096E+22	1,132685E+23	5,228100E+22	1,655495E+23
738	5,663267E+22	5,663241E+22	2,614047E+22	2,613999E+22	1,132651E+23	5,228046E+22	1,655455E+23
739	5,663269E+22	5,663421E+22	2,614050E+22	2,613997E+22	1,132669E+23	5,228047E+22	1,655474E+23
740	5,663537E+22	5,663327E+22	2,613966E+22	2,614034E+22	1,132686E+23	5,228000E+22	1,655486E+23
741	5,663291E+22	5,663265E+22	2,614041E+22	2,613974E+22	1,132656E+23	5,228014E+22	1,655457E+23
742	5,663378E+22	5,663470E+22	2,614013E+22	2,614098E+22	1,132685E+23	5,228111E+22	1,655496E+23
743	5,663381E+22	5,663260E+22	2,614071E+22	2,614127E+22	1,132664E+23	5,228197E+22	1,655484E+23
744	5,663101E+22	5,663293E+22	2,614226E+22	2,614110E+22	1,132639E+23	5,228337E+22	1,655473E+23
745	5,663312E+22	5,663325E+22	2,614204E+22	2,614265E+22	1,132664E+23	5,228469E+22	1,655511E+23
746	5,663171E+22	5,663022E+22	2,614316E+22	2,614275E+22	1,132619E+23	5,228591E+22	1,655478E+23
747	5,662989E+22	5,663163E+22	2,614412E+22	2,614324E+22	1,132615E+23	5,228736E+22	1,655489E+23
748	5,663183E+22	5,663113E+22	2,614341E+22	2,614456E+22	1,132630E+23	5,228797E+22	1,655509E+23
749	5,662952E+22	5,662945E+22	2,614420E+22	2,614389E+22	1,132590E+23	5,228809E+22	1,655471E+23
750	5,663013E+22	5,663152E+22	2,614399E+22	2,614430E+22	1,132617E+23	5,228829E+22	1,655499E+23
751	5,663180E+22	5,662998E+22	2,614359E+22	2,614407E+22	1,132618E+23	5,228766E+22	1,655494E+23
752	5,662973E+22	5,663047E+22	2,614415E+22	2,614269E+22	1,132602E+23	5,228684E+22	1,655470E+23
753	5,663180E+22	5,663250E+22	2,614292E+22	2,614333E+22	1,132643E+23	5,228625E+22	1,655506E+23
754	5,663143E+22	5,663058E+22	2,614260E+22	2,614264E+22	1,132620E+23	5,228523E+22	1,655472E+23
755	5,662986E+22	5,663220E+22	2,614288E+22	2,614180E+22	1,132621E+23	5,228468E+22	1,655467E+23
756	5,663275E+22	5,663262E+22	2,614149E+22	2,614238E+22	1,132654E+23	5,228387E+22	1,655492E+23
757	5,663190E+22	5,663061E+22	2,614165E+22	2,614118E+22	1,132625E+23	5,228282E+22	1,655453E+23
758	5,663197E+22	5,663290E+22	2,614162E+22	2,614127E+22	1,132649E+23	5,228290E+22	1,655478E+23
759	5,663362E+22	5,663223E+22	2,614105E+22	2,614191E+22	1,132658E+23	5,228296E+22	1,655488E+23
760	5,663111E+22	5,663180E+22	2,614201E+22	2,614123E+22	1,132629E+23	5,228325E+22	1,655462E+23
761	5,663190E+22	5,663355E+22	2,614206E+22	2,614254E+22	1,132654E+23	5,228460E+22	1,655500E+23
762	5,663203E+22	5,663076E+22	2,614254E+22	2,614298E+22	1,132628E+23	5,228552E+22	1,655483E+23
763	5,662968E+22	5,663080E+22	2,614422E+22	2,614277E+22	1,132605E+23	5,228699E+22	1,655475E+23
764	5,663137E+22	5,663137E+22	2,614389E+22	2,614455E+22	1,132627E+23	5,228844E+22	1,655512E+23
765	5,663008E+22	5,662852E+22	2,614454E+22	2,614463E+22	1,132586E+23	5,228917E+22	1,655478E+23
766	5,662836E+22	5,663019E+22	2,614538E+22	2,614509E+22	1,132585E+23	5,229048E+22	1,655490E+23
767	5,663009E+22	5,662957E+22	2,614492E+22	2,614623E+22	1,132597E+23	5,229115E+22	1,655508E+23
768	5,662845E+22	5,662801E+22	2,614576E+22	2,614503E+22	1,132565E+23	5,229079E+22	1,655473E+23
769	5,662912E+22	5,663029E+22	2,614565E+22	2,614538E+22	1,132594E+23	5,229103E+22	1,655504E+23
770	5,663047E+22	5,662867E+22	2,614496E+22	2,614537E+22	1,132591E+23	5,229033E+22	1,655495E+23
771	5,662825E+22	5,662920E+22	2,614557E+22	2,614409E+22	1,132575E+23	5,228966E+22	1,655471E+23
772	5,662979E+22	5,663137E+22	2,614436E+22	2,614487E+22	1,132612E+23	5,228923E+22	1,655504E+23
773	5,663002E+22	5,662900E+22	2,614375E+22	2,614398E+22	1,132590E+23	5,228773E+22	1,655467E+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							
774	5,662891E+22	5,663059E+22	2,614402E+22	2,614307E+22	1,132595E+23	5,228709E+22	1,655466E+23
775	5,663157E+22	5,663106E+22	2,614285E+22	2,614371E+22	1,132626E+23	5,228656E+22	1,655492E+23
776	5,663085E+22	5,662941E+22	2,614301E+22	2,614242E+22	1,132603E+23	5,228543E+22	1,655457E+23
777	5,663047E+22	5,663208E+22	2,614312E+22	2,614279E+22	1,132626E+23	5,228592E+22	1,655485E+23
778	5,663174E+22	5,663095E+22	2,614249E+22	2,614367E+22	1,132627E+23	5,228617E+22	1,655489E+23
779	5,662960E+22	5,663003E+22	2,614383E+22	2,614288E+22	1,132596E+23	5,228671E+22	1,655463E+23
780	5,663020E+22	5,663171E+22	2,614401E+22	2,614415E+22	1,132619E+23	5,228816E+22	1,655501E+23
781	5,663075E+22	5,662874E+22	2,614417E+22	2,614456E+22	1,132595E+23	5,228872E+22	1,655482E+23
782	5,662837E+22	5,662913E+22	2,614570E+22	2,614452E+22	1,132575E+23	5,229023E+22	1,655477E+23
783	5,662929E+22	5,662989E+22	2,614549E+22	2,614647E+22	1,132592E+23	5,229195E+22	1,655511E+23
784	5,662830E+22	5,662725E+22	2,614615E+22	2,614627E+22	1,132556E+23	5,229242E+22	1,655480E+23
785	5,662689E+22	5,662890E+22	2,614710E+22	2,614661E+22	1,132558E+23	5,229371E+22	1,655495E+23
786	5,662874E+22	5,662789E+22	2,614652E+22	2,614768E+22	1,132566E+23	5,229420E+22	1,655508E+23
787	5,662759E+22	5,662635E+22	2,614746E+22	2,614634E+22	1,132539E+23	5,229380E+22	1,655477E+23
788	5,662761E+22	5,662899E+22	2,614724E+22	2,614677E+22	1,132566E+23	5,229401E+22	1,655506E+23
789	5,662886E+22	5,662747E+22	2,614610E+22	2,614685E+22	1,132563E+23	5,229295E+22	1,655493E+23
790	5,662675E+22	5,662797E+22	2,614660E+22	2,614558E+22	1,132547E+23	5,229218E+22	1,655469E+23
791	5,662801E+22	5,662976E+22	2,614567E+22	2,614627E+22	1,132578E+23	5,229194E+22	1,655497E+23
792	5,662897E+22	5,662751E+22	2,614509E+22	2,614503E+22	1,132565E+23	5,229012E+22	1,655466E+23
793	5,662807E+22	5,662930E+22	2,614539E+22	2,614421E+22	1,132574E+23	5,228960E+22	1,655470E+23
794	5,663028E+22	5,662971E+22	2,614411E+22	2,614514E+22	1,132600E+23	5,228925E+22	1,655492E+23
795	5,662954E+22	5,662820E+22	2,614444E+22	2,614394E+22	1,132577E+23	5,228838E+22	1,655461E+23
796	5,662856E+22	5,663093E+22	2,614475E+22	2,614435E+22	1,132595E+23	5,228911E+22	1,655486E+23
797	5,663026E+22	5,662939E+22	2,614400E+22	2,614517E+22	1,132596E+23	5,228917E+22	1,655488E+23
798	5,662842E+22	5,662830E+22	2,614542E+22	2,614442E+22	1,132567E+23	5,228983E+22	1,655466E+23
799	5,662851E+22	5,662990E+22	2,614585E+22	2,614585E+22	1,132584E+23	5,229170E+22	1,655501E+23
800	5,662917E+22	5,662724E+22	2,614590E+22	2,614626E+22	1,132564E+23	5,229216E+22	1,655486E+23
801	5,662657E+22	5,662786E+22	2,614737E+22	2,614644E+22	1,132544E+23	5,229381E+22	1,655482E+23
802	5,662740E+22	5,662817E+22	2,614706E+22	2,614842E+22	1,132556E+23	5,229548E+22	1,655511E+23
803	5,662711E+22	5,662528E+22	2,614791E+22	2,614787E+22	1,132524E+23	5,229578E+22	1,655482E+23
804	5,662558E+22	5,662728E+22	2,614888E+22	2,614797E+22	1,132529E+23	5,229686E+22	1,655497E+23
805	5,662772E+22	5,662634E+22	2,614791E+22	2,614895E+22	1,132541E+23	5,229686E+22	1,655509E+23
806	5,662623E+22	5,662520E+22	2,614872E+22	2,614774E+22	1,132514E+23	5,229646E+22	1,655479E+23
807	5,662539E+22	5,662797E+22	2,614864E+22	2,614832E+22	1,132534E+23	5,229696E+22	1,655503E+23
808	5,662699E+22	5,662634E+22	2,614747E+22	2,614817E+22	1,132533E+23	5,229564E+22	1,655490E+23
809	5,662535E+22	5,662664E+22	2,614801E+22	2,614688E+22	1,132520E+23	5,229489E+22	1,655469E+23
810	5,662686E+22	5,662794E+22	2,614697E+22	2,614758E+22	1,132548E+23	5,229455E+22	1,655494E+23
811	5,662833E+22	5,662578E+22	2,614649E+22	2,614629E+22	1,132541E+23	5,229278E+22	1,655469E+23
812	5,662682E+22	5,662816E+22	2,614674E+22	2,614560E+22	1,132550E+23	5,229234E+22	1,655473E+23
813	5,662892E+22	5,662861E+22	2,614520E+22	2,614663E+22	1,132575E+23	5,229183E+22	1,655494E+23
814	5,662819E+22	5,662704E+22	2,614569E+22	2,614545E+22	1,132552E+23	5,229114E+22	1,655464E+23
815	5,662680E+22	5,662938E+22	2,614645E+22	2,614581E+22	1,132562E+23	5,229226E+22	1,655484E+23
816	5,662888E+22	5,662786E+22	2,614578E+22	2,614646E+22	1,132567E+23	5,229224E+22	1,655490E+23
817	5,662708E+22	5,662684E+22	2,614720E+22	2,614601E+22	1,132539E+23	5,229321E+22	1,655471E+23
818	5,662659E+22	5,662817E+22	2,614752E+22	2,614777E+22	1,132548E+23	5,229529E+22	1,655501E+23
819	5,662748E+22	5,662560E+22	2,614765E+22	2,614822E+22	1,132531E+23	5,229586E+22	1,655489E+23
820	5,662469E+22	5,662628E+22	2,614910E+22	2,614824E+22	1,132510E+23	5,229734E+22	1,655483E+23
821	5,662607E+22	5,662636E+22	2,614858E+22	2,615000E+22	1,132524E+23	5,229858E+22	1,655510E+23
822	5,662616E+22	5,662373E+22	2,614937E+22	2,614928E+22	1,132499E+23	5,229866E+22	1,655485E+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	5,662402E+22	5,662579E+22	2,615055E+22	2,614941E+22	1,132498E+23	5,229996E+22	1,655498E+23
824	5,662605E+22	5,662534E+22	2,614943E+22	2,615033E+22	1,132514E+23	5,229977E+22	1,655512E+23
825	5,662438E+22	5,662427E+22	2,615013E+22	2,614935E+22	1,132487E+23	5,229948E+22	1,655481E+23
826	5,662342E+22	5,662627E+22	2,615002E+22	2,614993E+22	1,132497E+23	5,229995E+22	1,655496E+23
827	5,662591E+22	5,662438E+22	2,614895E+22	2,614949E+22	1,132503E+23	5,229844E+22	1,655487E+23
828	5,662435E+22	5,662495E+22	2,614938E+22	2,614802E+22	1,132493E+23	5,229741E+22	1,655467E+23
829	5,662619E+22	5,662640E+22	2,614801E+22	2,614876E+22	1,132526E+23	5,229677E+22	1,655494E+23
830	5,662738E+22	5,662484E+22	2,614746E+22	2,614757E+22	1,132522E+23	5,229503E+22	1,655473E+23
831	5,662500E+22	5,662733E+22	2,614807E+22	2,614701E+22	1,132523E+23	5,229508E+22	1,655474E+23
832	5,662724E+22	5,662773E+22	2,614671E+22	2,614786E+22	1,132550E+23	5,229457E+22	1,655495E+23
833	5,662669E+22	5,662589E+22	2,614740E+22	2,614689E+22	1,132526E+23	5,229428E+22	1,655469E+23
834	5,662519E+22	5,662750E+22	2,614824E+22	2,614744E+22	1,132527E+23	5,229568E+22	1,655484E+23
835	5,662761E+22	5,662584E+22	2,614765E+22	2,614820E+22	1,132535E+23	5,229585E+22	1,655493E+23
836	5,662524E+22	5,662528E+22	2,614891E+22	2,614792E+22	1,132505E+23	5,229683E+22	1,655473E+23
837	5,662497E+22	5,662642E+22	2,614885E+22	2,614974E+22	1,132514E+23	5,229859E+22	1,655500E+23
838	5,662604E+22	5,662390E+22	2,614903E+22	2,614998E+22	1,132499E+23	5,229902E+22	1,655490E+23
839	5,662314E+22	5,662458E+22	2,615082E+22	2,614979E+22	1,132477E+23	5,230061E+22	1,655483E+23
840	5,662487E+22	5,662494E+22	2,615031E+22	2,615121E+22	1,132498E+23	5,230152E+22	1,655513E+23
841	5,662479E+22	5,662267E+22	2,615107E+22	2,615072E+22	1,132475E+23	5,230179E+22	1,655493E+23
842	5,662198E+22	5,662444E+22	2,615215E+22	2,615107E+22	1,132464E+23	5,230322E+22	1,655496E+23
843	5,662419E+22	5,662386E+22	2,615107E+22	2,615195E+22	1,132481E+23	5,230302E+22	1,655511E+23
844	5,662252E+22	5,662277E+22	2,615168E+22	2,615084E+22	1,132453E+23	5,230252E+22	1,655478E+23
845	5,662233E+22	5,662434E+22	2,615122E+22	2,615127E+22	1,132467E+23	5,230249E+22	1,655492E+23
846	5,662527E+22	5,662279E+22	2,615006E+22	2,615070E+22	1,132481E+23	5,230076E+22	1,655488E+23
847	5,662329E+22	5,662368E+22	2,615062E+22	2,614929E+22	1,132470E+23	5,229990E+22	1,655469E+23
848	5,662491E+22	5,662573E+22	2,614919E+22	2,614995E+22	1,132506E+23	5,229914E+22	1,655498E+23
849	5,662587E+22	5,662432E+22	2,614871E+22	2,614901E+22	1,132502E+23	5,229772E+22	1,655479E+23
850	5,662317E+22	5,662586E+22	2,614960E+22	2,614849E+22	1,132490E+23	5,229810E+22	1,655471E+23
851	5,662596E+22	5,662596E+22	2,614851E+22	2,614923E+22	1,132519E+23	5,229774E+22	1,655497E+23
852	5,662527E+22	5,662415E+22	2,614915E+22	2,614832E+22	1,132494E+23	5,229748E+22	1,655469E+23
853	5,662386E+22	5,662553E+22	2,614967E+22	2,614914E+22	1,132494E+23	5,229882E+22	1,655482E+23
854	5,662610E+22	5,662437E+22	2,614896E+22	2,615003E+22	1,132505E+23	5,229899E+22	1,655495E+23
855	5,662326E+22	5,662379E+22	2,615042E+22	2,614976E+22	1,132470E+23	5,230018E+22	1,655472E+23
856	5,662338E+22	5,662505E+22	2,615048E+22	2,615124E+22	1,132484E+23	5,230172E+22	1,655501E+23
857	5,662479E+22	5,662265E+22	2,615076E+22	2,615149E+22	1,132474E+23	5,230225E+22	1,655497E+23
858	5,662164E+22	5,662280E+22	2,615270E+22	2,615135E+22	1,132444E+23	5,230405E+22	1,655485E+23
859	5,662347E+22	5,662333E+22	2,615226E+22	2,615280E+22	1,132468E+23	5,230505E+22	1,655519E+23
860	5,662274E+22	5,662144E+22	2,615281E+22	2,615246E+22	1,132442E+23	5,230527E+22	1,655494E+23
861	5,662014E+22	5,662272E+22	2,615349E+22	2,615288E+22	1,132429E+23	5,230637E+22	1,655492E+23
862	5,662276E+22	5,662209E+22	2,615233E+22	2,615348E+22	1,132448E+23	5,230582E+22	1,655507E+23
863	5,662123E+22	5,662099E+22	2,615304E+22	2,615216E+22	1,132422E+23	5,230520E+22	1,655474E+23
864	5,662154E+22	5,662299E+22	2,615247E+22	2,615228E+22	1,132445E+23	5,230475E+22	1,655493E+23
865	5,662429E+22	5,662206E+22	2,615125E+22	2,615193E+22	1,132464E+23	5,230317E+22	1,655495E+23
866	5,662166E+22	5,662276E+22	2,615190E+22	2,615071E+22	1,132444E+23	5,230261E+22	1,655470E+23
867	5,662337E+22	5,662461E+22	2,615070E+22	2,615128E+22	1,132480E+23	5,230198E+22	1,655500E+23
868	5,662409E+22	5,662312E+22	2,615034E+22	2,615033E+22	1,132472E+23	5,230067E+22	1,655479E+23
869	5,662196E+22	5,662395E+22	2,615101E+22	2,614991E+22	1,132459E+23	5,230092E+22	1,655468E+23
870	5,662483E+22	5,662410E+22	2,614993E+22	2,615068E+22	1,132489E+23	5,230060E+22	1,655495E+23
871	5,662372E+22	5,662253E+22	2,615067E+22	2,615003E+22	1,132462E+23	5,230070E+22	1,655469E+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	5,662227E+22	5,662426E+22	2,615105E+22	2,615082E+22	1,132465E+23	5,230187E+22	1,655484E+23
873	5,662448E+22	5,662326E+22	2,615041E+22	2,615184E+22	1,132477E+23	5,230226E+22	1,655500E+23
874	5,662160E+22	5,662198E+22	2,615215E+22	2,615145E+22	1,132436E+23	5,230360E+22	1,655472E+23
875	5,662222E+22	5,662321E+22	2,615245E+22	2,615267E+22	1,132454E+23	5,230512E+22	1,655505E+23
876	5,662330E+22	5,662122E+22	2,615273E+22	2,615295E+22	1,132445E+23	5,230567E+22	1,655502E+23
877	5,662010E+22	5,662113E+22	2,615432E+22	2,615309E+22	1,132412E+23	5,230741E+22	1,655486E+23
878	5,662156E+22	5,662199E+22	2,615377E+22	2,615457E+22	1,132435E+23	5,230833E+22	1,655519E+23
879	5,662057E+22	5,661994E+22	2,615439E+22	2,615425E+22	1,132405E+23	5,230863E+22	1,655491E+23
880	5,661855E+22	5,662115E+22	2,615494E+22	2,615428E+22	1,132397E+23	5,230922E+22	1,655489E+23
881	5,662174E+22	5,662075E+22	2,615368E+22	2,615485E+22	1,132425E+23	5,230853E+22	1,655510E+23
882	5,662018E+22	5,661928E+22	2,615444E+22	2,615348E+22	1,132395E+23	5,230792E+22	1,655474E+23
883	5,662060E+22	5,662175E+22	2,615389E+22	2,615355E+22	1,132424E+23	5,230744E+22	1,655498E+23
884	5,662270E+22	5,662134E+22	2,615256E+22	2,615325E+22	1,132440E+23	5,230581E+22	1,655499E+23
885	5,662016E+22	5,662133E+22	2,615305E+22	2,615216E+22	1,132415E+23	5,230522E+22	1,655467E+23
886	5,662203E+22	5,662307E+22	2,615201E+22	2,615250E+22	1,132451E+23	5,230451E+22	1,655496E+23
887	5,662273E+22	5,662140E+22	2,615183E+22	2,615160E+22	1,132441E+23	5,230344E+22	1,655476E+23
888	5,662083E+22	5,662240E+22	2,615242E+22	2,615115E+22	1,132432E+23	5,230358E+22	1,655468E+23
889	5,662348E+22	5,662304E+22	2,615127E+22	2,615228E+22	1,132465E+23	5,230355E+22	1,655501E+23
890	5,662183E+22	5,662110E+22	2,615216E+22	2,615183E+22	1,132429E+23	5,230399E+22	1,655469E+23
891	5,662071E+22	5,662275E+22	2,615278E+22	2,615247E+22	1,132435E+23	5,230525E+22	1,655487E+23
892	5,662279E+22	5,662188E+22	2,615228E+22	2,615339E+22	1,132447E+23	5,230567E+22	1,655503E+23
893	5,662041E+22	5,662004E+22	2,615387E+22	2,615311E+22	1,132404E+23	5,230698E+22	1,655474E+23
894	5,662094E+22	5,662148E+22	2,615422E+22	2,615426E+22	1,132424E+23	5,230848E+22	1,655509E+23
895	5,662141E+22	5,661978E+22	2,615452E+22	2,615482E+22	1,132412E+23	5,230933E+22	1,655505E+23
896	5,661815E+22	5,661984E+22	2,615586E+22	2,615490E+22	1,132380E+23	5,231076E+22	1,655487E+23
897	5,661966E+22	5,662067E+22	2,615524E+22	2,615639E+22	1,132403E+23	5,231163E+22	1,655520E+23
898	5,661893E+22	5,661795E+22	2,615600E+22	2,615586E+22	1,132369E+23	5,231186E+22	1,655487E+23
899	5,661772E+22	5,661919E+22	2,615652E+22	2,615553E+22	1,132369E+23	5,231205E+22	1,655490E+23
900	5,662061E+22	5,661945E+22	2,615518E+22	2,615602E+22	1,132401E+23	5,231120E+22	1,655513E+23
901	5,661912E+22	5,661799E+22	2,615553E+22	2,615485E+22	1,132371E+23	5,231038E+22	1,655475E+23
902	5,661916E+22	5,662073E+22	2,615501E+22	2,615480E+22	1,132399E+23	5,230981E+22	1,655497E+23
903	5,662091E+22	5,662029E+22	2,615390E+22	2,615455E+22	1,132412E+23	5,230845E+22	1,655497E+23
904	5,661880E+22	5,662004E+22	2,615438E+22	2,615328E+22	1,132388E+23	5,230766E+22	1,655465E+23
905	5,662081E+22	5,662182E+22	2,615339E+22	2,615377E+22	1,132426E+23	5,230716E+22	1,655498E+23
906	5,662133E+22	5,661965E+22	2,615338E+22	2,615312E+22	1,132410E+23	5,230650E+22	1,655475E+23
907	5,661955E+22	5,662088E+22	2,615395E+22	2,615276E+22	1,132404E+23	5,230672E+22	1,655471E+23
908	5,662168E+22	5,662192E+22	2,615280E+22	2,615400E+22	1,132436E+23	5,230680E+22	1,655504E+23
909	5,662041E+22	5,661930E+22	2,615353E+22	2,615363E+22	1,132397E+23	5,230716E+22	1,655469E+23
910	5,661952E+22	5,662097E+22	2,615436E+22	2,615394E+22	1,132405E+23	5,230830E+22	1,655488E+23
911	5,662144E+22	5,662024E+22	2,615407E+22	2,615491E+22	1,132417E+23	5,230898E+22	1,655507E+23
912	5,661903E+22	5,661860E+22	2,615559E+22	2,615463E+22	1,132376E+23	5,231022E+22	1,655479E+23
913	5,661913E+22	5,662050E+22	2,615586E+22	2,615606E+22	1,132396E+23	5,231192E+22	1,655515E+23
914	5,661913E+22	5,661816E+22	2,615629E+22	2,615676E+22	1,132373E+23	5,231305E+22	1,655503E+23
915	5,661637E+22	5,661803E+22	2,615766E+22	2,615660E+22	1,132344E+23	5,231425E+22	1,655487E+23
916	5,661806E+22	5,661900E+22	2,615696E+22	2,615783E+22	1,132371E+23	5,231479E+22	1,655519E+23
917	5,661799E+22	5,661582E+22	2,615736E+22	2,615733E+22	1,132338E+23	5,231469E+22	1,655485E+23
918	5,661688E+22	5,661761E+22	2,615782E+22	2,615680E+22	1,132345E+23	5,231462E+22	1,655491E+23
919	5,661919E+22	5,661844E+22	2,615647E+22	2,615744E+22	1,132376E+23	5,231391E+22	1,655515E+23
920	5,661758E+22	5,661717E+22	2,615666E+22	2,615616E+22	1,132348E+23	5,231282E+22	1,655476E+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	5,661760E+22	5,661987E+22	2,615622E+22	2,615607E+22	1,132375E+23	5,231229E+22	1,655498E+23
922	5,661933E+22	5,661864E+22	2,615542E+22	2,615579E+22	1,132380E+23	5,231121E+22	1,655492E+23
923	5,661776E+22	5,661833E+22	2,615595E+22	2,615446E+22	1,132361E+23	5,231041E+22	1,655465E+23
924	5,661938E+22	5,662052E+22	2,615493E+22	2,615512E+22	1,132399E+23	5,231005E+22	1,655500E+23
925	5,661996E+22	5,661809E+22	2,615460E+22	2,615487E+22	1,132380E+23	5,230947E+22	1,655475E+23
926	5,661810E+22	5,661946E+22	2,615522E+22	2,615439E+22	1,132376E+23	5,230961E+22	1,655472E+23
927	5,662005E+22	5,662052E+22	2,615434E+22	2,615562E+22	1,132406E+23	5,230996E+22	1,655505E+23
928	5,661924E+22	5,661786E+22	2,615505E+22	2,615503E+22	1,132371E+23	5,231008E+22	1,655472E+23
929	5,661834E+22	5,661966E+22	2,615601E+22	2,615540E+22	1,132380E+23	5,231142E+22	1,655494E+23
930	5,661978E+22	5,661862E+22	2,615601E+22	2,615663E+22	1,132384E+23	5,231265E+22	1,655510E+23
931	5,661730E+22	5,661713E+22	2,615746E+22	2,615646E+22	1,132344E+23	5,231392E+22	1,655483E+23
932	5,661679E+22	5,661913E+22	2,615770E+22	2,615793E+22	1,132359E+23	5,231564E+22	1,655516E+23
933	5,661741E+22	5,661598E+22	2,615784E+22	2,615866E+22	1,132334E+23	5,231650E+22	1,655499E+23
934	5,661522E+22	5,661582E+22	2,615916E+22	2,615805E+22	1,132310E+23	5,231722E+22	1,655483E+23
935	5,661694E+22	5,661723E+22	2,615850E+22	2,615922E+22	1,132342E+23	5,231772E+22	1,655519E+23
936	5,661698E+22	5,661465E+22	2,615860E+22	2,615859E+22	1,132316E+23	5,231719E+22	1,655488E+23
937	5,661545E+22	5,661705E+22	2,615898E+22	2,615816E+22	1,132325E+23	5,231714E+22	1,655496E+23
938	5,661724E+22	5,661743E+22	2,615792E+22	2,615886E+22	1,132347E+23	5,231678E+22	1,655515E+23
939	5,661600E+22	5,661594E+22	2,615821E+22	2,615740E+22	1,132319E+23	5,231561E+22	1,655476E+23
940	5,661599E+22	5,661858E+22	2,615784E+22	2,615724E+22	1,132346E+23	5,231508E+22	1,655496E+23
941	5,661825E+22	5,661665E+22	2,615675E+22	2,615724E+22	1,132349E+23	5,231399E+22	1,655489E+23
942	5,661679E+22	5,661660E+22	2,615721E+22	2,615589E+22	1,132334E+23	5,231310E+22	1,655465E+23
943	5,661793E+22	5,661923E+22	2,615619E+22	2,615680E+22	1,132372E+23	5,231298E+22	1,655501E+23
944	5,661857E+22	5,661692E+22	2,615571E+22	2,615644E+22	1,132355E+23	5,231215E+22	1,655476E+23
945	5,661689E+22	5,661836E+22	2,615650E+22	2,615583E+22	1,132352E+23	5,231232E+22	1,655476E+23
946	5,661873E+22	5,661878E+22	2,615608E+22	2,615697E+22	1,132375E+23	5,231305E+22	1,655506E+23
947	5,661807E+22	5,661632E+22	2,615694E+22	2,615638E+22	1,132344E+23	5,231332E+22	1,655477E+23
948	5,661652E+22	5,661849E+22	2,615795E+22	2,615695E+22	1,132350E+23	5,231490E+22	1,655499E+23
949	5,661774E+22	5,661688E+22	2,615768E+22	2,615863E+22	1,132346E+23	5,231631E+22	1,655509E+23
950	5,661534E+22	5,661532E+22	2,615914E+22	2,615834E+22	1,132307E+23	5,231748E+22	1,655481E+23
951	5,661489E+22	5,661723E+22	2,615944E+22	2,615974E+22	1,132321E+23	5,231918E+22	1,655513E+23
952	5,661614E+22	5,661416E+22	2,615932E+22	2,616020E+22	1,132303E+23	5,231953E+22	1,655498E+23
953	5,661426E+22	5,661443E+22	2,616053E+22	2,615950E+22	1,132287E+23	5,232003E+22	1,655487E+23
954	5,661554E+22	5,661581E+22	2,616009E+22	2,616075E+22	1,132313E+23	5,232084E+22	1,655522E+23
955	5,661546E+22	5,661377E+22	2,616008E+22	2,616007E+22	1,132292E+23	5,232015E+22	1,655494E+23
956	5,661348E+22	5,661621E+22	2,616052E+22	2,615955E+22	1,132297E+23	5,232007E+22	1,655498E+23
957	5,661570E+22	5,661566E+22	2,615931E+22	2,616030E+22	1,132314E+23	5,231961E+22	1,655510E+23
958	5,661496E+22	5,661401E+22	2,615960E+22	2,615858E+22	1,132290E+23	5,231818E+22	1,655471E+23
959	5,661479E+22	5,661689E+22	2,615923E+22	2,615855E+22	1,132317E+23	5,231779E+22	1,655495E+23
960	5,661716E+22	5,661538E+22	2,615782E+22	2,615861E+22	1,132325E+23	5,231643E+22	1,655490E+23
961	5,661553E+22	5,661574E+22	2,615817E+22	2,615735E+22	1,132313E+23	5,231553E+22	1,655468E+23
962	5,661631E+22	5,661797E+22	2,615761E+22	2,615828E+22	1,132343E+23	5,231589E+22	1,655502E+23
963	5,661730E+22	5,661572E+22	2,615726E+22	2,615770E+22	1,132330E+23	5,231496E+22	1,655480E+23
964	5,661541E+22	5,661712E+22	2,615831E+22	2,615706E+22	1,132325E+23	5,231537E+22	1,655479E+23
965	5,661738E+22	5,661693E+22	2,615781E+22	2,615858E+22	1,132343E+23	5,231639E+22	1,655507E+23
966	5,661656E+22	5,661461E+22	2,615869E+22	2,615812E+22	1,132312E+23	5,231681E+22	1,655480E+23
967	5,661434E+22	5,661699E+22	2,615969E+22	2,615900E+22	1,132313E+23	5,231869E+22	1,655500E+23
968	5,661579E+22	5,661523E+22	2,615916E+22	2,616058E+22	1,132310E+23	5,231974E+22	1,655508E+23
969	5,661386E+22	5,661359E+22	2,616058E+22	2,616005E+22	1,132275E+23	5,232063E+22	1,655481E+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							
970	5,661356E+22	5,661514E+22	2,616120E+22	2,616130E+22	1,132287E+23	5,232251E+22	1,655512E+23
971	5,661507E+22	5,661269E+22	2,616100E+22	2,616158E+22	1,132278E+23	5,232258E+22	1,655503E+23
972	5,661270E+22	5,661355E+22	2,616220E+22	2,616093E+22	1,132263E+23	5,232313E+22	1,655494E+23
973	5,661381E+22	5,661448E+22	2,616154E+22	2,616242E+22	1,132283E+23	5,232396E+22	1,655522E+23
974	5,661381E+22	5,661239E+22	2,616158E+22	2,616150E+22	1,132262E+23	5,232308E+22	1,655493E+23
975	5,661181E+22	5,661469E+22	2,616206E+22	2,616092E+22	1,132265E+23	5,232298E+22	1,655495E+23
976	5,661449E+22	5,661401E+22	2,616056E+22	2,616153E+22	1,132285E+23	5,232208E+22	1,655506E+23
977	5,661408E+22	5,661267E+22	2,616071E+22	2,615986E+22	1,132267E+23	5,232057E+22	1,655473E+23
978	5,661352E+22	5,661538E+22	2,616055E+22	2,616002E+22	1,132289E+23	5,232058E+22	1,655495E+23
979	5,661572E+22	5,661446E+22	2,615906E+22	2,616006E+22	1,132302E+23	5,231912E+22	1,655493E+23
980	5,661393E+22	5,661487E+22	2,615956E+22	2,615870E+22	1,132288E+23	5,231826E+22	1,655471E+23
981	5,661502E+22	5,661615E+22	2,615904E+22	2,615968E+22	1,132312E+23	5,231872E+22	1,655499E+23
982	5,661628E+22	5,661398E+22	2,615888E+22	2,615895E+22	1,132303E+23	5,231783E+22	1,655481E+23
983	5,661393E+22	5,661558E+22	2,616006E+22	2,615859E+22	1,132295E+23	5,231865E+22	1,655482E+23
984	5,661560E+22	5,661560E+22	2,615933E+22	2,616031E+22	1,132312E+23	5,231963E+22	1,655508E+23
985	5,661466E+22	5,661342E+22	2,616013E+22	2,616003E+22	1,132281E+23	5,232016E+22	1,655482E+23
986	5,661227E+22	5,661509E+22	2,616151E+22	2,616093E+22	1,132274E+23	5,232244E+22	1,655498E+23
987	5,661422E+22	5,661352E+22	2,616095E+22	2,616222E+22	1,132277E+23	5,232317E+22	1,655509E+23
988	5,661254E+22	5,661201E+22	2,616239E+22	2,616154E+22	1,132245E+23	5,232394E+22	1,655485E+23
989	5,661243E+22	5,661316E+22	2,616286E+22	2,616299E+22	1,132256E+23	5,232585E+22	1,655514E+23
990	5,661381E+22	5,661128E+22	2,616260E+22	2,616320E+22	1,132251E+23	5,232580E+22	1,655509E+23
991	5,661080E+22	5,661243E+22	2,616378E+22	2,616266E+22	1,132232E+23	5,232645E+22	1,655497E+23
992	5,661209E+22	5,661316E+22	2,616289E+22	2,616392E+22	1,132252E+23	5,232681E+22	1,655521E+23
993	5,661253E+22	5,661089E+22	2,616285E+22	2,616276E+22	1,132234E+23	5,232561E+22	1,655490E+23
994	5,661051E+22	5,661277E+22	2,616360E+22	2,616217E+22	1,132233E+23	5,232577E+22	1,655491E+23
995	5,661333E+22	5,661274E+22	2,616188E+22	2,616269E+22	1,132261E+23	5,232458E+22	1,655506E+23
996	5,661257E+22	5,661179E+22	2,616199E+22	2,616118E+22	1,132244E+23	5,232316E+22	1,655475E+23
997	5,661200E+22	5,661399E+22	2,616173E+22	2,616158E+22	1,132260E+23	5,232332E+22	1,655493E+23
998	5,661444E+22	5,661307E+22	2,616041E+22	2,616138E+22	1,132275E+23	5,232178E+22	1,655493E+23
999	5,661256E+22	5,661347E+22	2,616109E+22	2,616003E+22	1,132260E+23	5,232112E+22	1,655471E+23
1000	5,661388E+22	5,661464E+22	2,616045E+22	2,616094E+22	1,132285E+23	5,232139E+22	1,655499E+23
1001	5,661512E+22	5,661268E+22	2,616030E+22	2,616042E+22	1,132278E+23	5,232072E+22	1,655485E+23
1002	5,661212E+22	5,661402E+22	2,616180E+22	2,616043E+22	1,132261E+23	5,232223E+22	1,655484E+23
1003	5,661354E+22	5,661437E+22	2,616097E+22	2,616216E+22	1,132279E+23	5,232313E+22	1,655510E+23
1004	5,661275E+22	5,661194E+22	2,616190E+22	2,616181E+22	1,132247E+23	5,232372E+22	1,655484E+23
1005	5,661092E+22	5,661266E+22	2,616322E+22	2,616270E+22	1,132236E+23	5,232592E+22	1,655495E+23
1006	5,661325E+22	5,661143E+22	2,616272E+22	2,616373E+22	1,132247E+23	5,232645E+22	1,655511E+23
1007	5,661123E+22	5,661051E+22	2,616413E+22	2,616317E+22	1,132217E+23	5,232730E+22	1,655490E+23
1008	5,661084E+22	5,661197E+22	2,616430E+22	2,616462E+22	1,132228E+23	5,232892E+22	1,655517E+23
1009	5,661207E+22	5,661041E+22	2,616399E+22	2,616480E+22	1,132225E+23	5,232879E+22	1,655513E+23
1010	5,660887E+22	5,661088E+22	2,616549E+22	2,616422E+22	1,132197E+23	5,232971E+22	1,655495E+23
1011	5,661034E+22	5,661176E+22	2,616450E+22	2,616517E+22	1,132221E+23	5,232967E+22	1,655518E+23
1012	5,661113E+22	5,660951E+22	2,616441E+22	2,616402E+22	1,132206E+23	5,232844E+22	1,655491E+23
1013	5,660934E+22	5,661076E+22	2,616493E+22	2,616370E+22	1,132201E+23	5,232862E+22	1,655487E+23
1014	5,661214E+22	5,661132E+22	2,616312E+22	2,616418E+22	1,132235E+23	5,232731E+22	1,655508E+23
1015	5,661106E+22	5,661070E+22	2,616317E+22	2,616272E+22	1,132218E+23	5,232589E+22	1,655477E+23
1016	5,661078E+22	5,661264E+22	2,616280E+22	2,616287E+22	1,132234E+23	5,232567E+22	1,655491E+23
1017	5,661356E+22	5,661181E+22	2,616159E+22	2,616245E+22	1,132254E+23	5,232403E+22	1,655494E+23
1018	5,661140E+22	5,661184E+22	2,616272E+22	2,616128E+22	1,132232E+23	5,232400E+22	1,655472E+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	5,661233E+22	5,661360E+22	2,616207E+22	2,616226E+22	1,132259E+23	5,232434E+22	1,655503E+23
1020	5,661320E+22	5,661175E+22	2,616198E+22	2,616209E+22	1,132249E+23	5,232407E+22	1,655490E+23
1021	5,661017E+22	5,661213E+22	2,616345E+22	2,616241E+22	1,132223E+23	5,232586E+22	1,655482E+23
1022	5,661198E+22	5,661241E+22	2,616273E+22	2,616391E+22	1,132244E+23	5,232664E+22	1,655510E+23
1023	5,661128E+22	5,661005E+22	2,616369E+22	2,616353E+22	1,132213E+23	5,232721E+22	1,655485E+23
1024	5,660989E+22	5,661082E+22	2,616475E+22	2,616430E+22	1,132207E+23	5,232905E+22	1,655498E+23
1025	5,661219E+22	5,661009E+22	2,616419E+22	2,616532E+22	1,132223E+23	5,232951E+22	1,655518E+23
1026	5,660942E+22	5,660921E+22	2,616588E+22	2,616500E+22	1,132186E+23	5,233088E+22	1,655495E+23
1027	5,660872E+22	5,661108E+22	2,616594E+22	2,616621E+22	1,132198E+23	5,233215E+22	1,655519E+23
1028	5,661013E+22	5,660911E+22	2,616572E+22	2,616629E+22	1,132192E+23	5,233201E+22	1,655512E+23
1029	5,660740E+22	5,660859E+22	2,616711E+22	2,616572E+22	1,132160E+23	5,233283E+22	1,655488E+23
1030	5,660926E+22	5,660975E+22	2,616602E+22	2,616647E+22	1,132190E+23	5,233249E+22	1,655515E+23
1031	5,660978E+22	5,660806E+22	2,616577E+22	2,616548E+22	1,132178E+23	5,233125E+22	1,655491E+23
1032	5,660808E+22	5,660953E+22	2,616587E+22	2,616515E+22	1,132176E+23	5,233102E+22	1,655486E+23
1033	5,661094E+22	5,661038E+22	2,616409E+22	2,616547E+22	1,132213E+23	5,232955E+22	1,655509E+23
1034	5,660975E+22	5,660940E+22	2,616456E+22	2,616396E+22	1,132192E+23	5,232852E+22	1,655477E+23
1035	5,660952E+22	5,661164E+22	2,616423E+22	2,616381E+22	1,132212E+23	5,232805E+22	1,655492E+23
1036	5,661234E+22	5,661078E+22	2,616321E+22	2,616361E+22	1,132231E+23	5,232682E+22	1,655499E+23
1037	5,660999E+22	5,661005E+22	2,616433E+22	2,616295E+22	1,132200E+23	5,232728E+22	1,655473E+23
1038	5,661058E+22	5,661212E+22	2,616370E+22	2,616405E+22	1,132227E+23	5,232776E+22	1,655505E+23
1039	5,661122E+22	5,661026E+22	2,616361E+22	2,616405E+22	1,132215E+23	5,232766E+22	1,655491E+23
1040	5,660876E+22	5,661006E+22	2,616485E+22	2,616415E+22	1,132188E+23	5,232900E+22	1,655478E+23
1041	5,661102E+22	5,661057E+22	2,616419E+22	2,616539E+22	1,132216E+23	5,232958E+22	1,655512E+23
1042	5,661012E+22	5,660825E+22	2,616542E+22	2,616509E+22	1,132184E+23	5,233051E+22	1,655489E+23
1043	5,660822E+22	5,660982E+22	2,616642E+22	2,616578E+22	1,132180E+23	5,233220E+22	1,655502E+23
1044	5,661018E+22	5,660936E+22	2,616597E+22	2,616702E+22	1,132195E+23	5,233298E+22	1,655525E+23
1045	5,660734E+22	5,660746E+22	2,616767E+22	2,616688E+22	1,132148E+23	5,233455E+22	1,655494E+23
1046	5,660692E+22	5,660923E+22	2,616779E+22	2,616777E+22	1,132162E+23	5,233556E+22	1,655517E+23
1047	5,660853E+22	5,660727E+22	2,616745E+22	2,616781E+22	1,132158E+23	5,233526E+22	1,655511E+23
1048	5,660634E+22	5,660655E+22	2,616838E+22	2,616717E+22	1,132129E+23	5,233555E+22	1,655484E+23
1049	5,660831E+22	5,660836E+22	2,616711E+22	2,616786E+22	1,132167E+23	5,233497E+22	1,655516E+23
1050	5,660836E+22	5,660690E+22	2,616698E+22	2,616704E+22	1,132153E+23	5,233402E+22	1,655493E+23
1051	5,660655E+22	5,660883E+22	2,616702E+22	2,616636E+22	1,132154E+23	5,233338E+22	1,655488E+23
1052	5,660971E+22	5,660946E+22	2,616549E+22	2,616654E+22	1,132192E+23	5,233203E+22	1,655512E+23
1053	5,660867E+22	5,660762E+22	2,616606E+22	2,616516E+22	1,132163E+23	5,233121E+22	1,655475E+23
1054	5,660840E+22	5,661013E+22	2,616583E+22	2,616498E+22	1,132185E+23	5,233081E+22	1,655493E+23
1055	5,661060E+22	5,660958E+22	2,616479E+22	2,616517E+22	1,132202E+23	5,232997E+22	1,655502E+23
1056	5,660828E+22	5,660862E+22	2,616559E+22	2,616474E+22	1,132169E+23	5,233033E+22	1,655472E+23
1057	5,660905E+22	5,661060E+22	2,616501E+22	2,616571E+22	1,132197E+23	5,233072E+22	1,655504E+23
1058	5,660963E+22	5,660842E+22	2,616525E+22	2,616574E+22	1,132181E+23	5,233100E+22	1,655491E+23
1059	5,660744E+22	5,660865E+22	2,616640E+22	2,616552E+22	1,132161E+23	5,233191E+22	1,655480E+23
1060	5,660983E+22	5,660923E+22	2,616594E+22	2,616688E+22	1,132191E+23	5,233282E+22	1,655519E+23
1061	5,660858E+22	5,660655E+22	2,616720E+22	2,616695E+22	1,132151E+23	5,233415E+22	1,655493E+23
1062	5,660637E+22	5,660848E+22	2,616823E+22	2,616759E+22	1,132148E+23	5,233582E+22	1,655507E+23
1063	5,660802E+22	5,660791E+22	2,616784E+22	2,616886E+22	1,132159E+23	5,233669E+22	1,655526E+23
1064	5,660579E+22	5,660536E+22	2,616923E+22	2,616853E+22	1,132112E+23	5,233776E+22	1,655489E+23
1065	5,660579E+22	5,660725E+22	2,616924E+22	2,616912E+22	1,132130E+23	5,233837E+22	1,655514E+23
1066	5,660723E+22	5,660549E+22	2,616898E+22	2,616932E+22	1,132127E+23	5,233829E+22	1,655510E+23
1067	5,660486E+22	5,660563E+22	2,616959E+22	2,616850E+22	1,132105E+23	5,233810E+22	1,655486E+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							
1068	5,660681E+22	5,660767E+22	2,616842E+22	2,616928E+22	1,132145E+23	5,233770E+22	1,655522E+23
1069	5,660686E+22	5,660551E+22	2,616835E+22	2,616849E+22	1,132124E+23	5,233684E+22	1,655492E+23
1070	5,660531E+22	5,660749E+22	2,616853E+22	2,616748E+22	1,132128E+23	5,233601E+22	1,655488E+23
1071	5,660840E+22	5,660819E+22	2,616707E+22	2,616772E+22	1,132166E+23	5,233479E+22	1,655514E+23
1072	5,660762E+22	5,660592E+22	2,616733E+22	2,616653E+22	1,132135E+23	5,233386E+22	1,655474E+23
1073	5,660706E+22	5,660882E+22	2,616706E+22	2,616648E+22	1,132159E+23	5,233354E+22	1,655494E+23
1074	5,660874E+22	5,660826E+22	2,616617E+22	2,616699E+22	1,132170E+23	5,233316E+22	1,655502E+23
1075	5,660649E+22	5,660734E+22	2,616690E+22	2,616626E+22	1,132138E+23	5,233316E+22	1,655470E+23
1076	5,660782E+22	5,660905E+22	2,616659E+22	2,616714E+22	1,132169E+23	5,233373E+22	1,655506E+23
1077	5,660855E+22	5,660629E+22	2,616691E+22	2,616727E+22	1,132148E+23	5,233418E+22	1,655490E+23
1078	5,660629E+22	5,660706E+22	2,616817E+22	2,616697E+22	1,132134E+23	5,233514E+22	1,655485E+23
1079	5,660799E+22	5,660812E+22	2,616778E+22	2,616861E+22	1,132161E+23	5,233639E+22	1,655525E+23
1080	5,660670E+22	5,660509E+22	2,616879E+22	2,616884E+22	1,132118E+23	5,233762E+22	1,655494E+23
1081	5,660456E+22	5,660693E+22	2,616989E+22	2,616926E+22	1,132115E+23	5,233915E+22	1,655506E+23
1082	5,660615E+22	5,660606E+22	2,616968E+22	2,617057E+22	1,132122E+23	5,234025E+22	1,655525E+23
1083	5,660425E+22	5,660379E+22	2,617081E+22	2,616994E+22	1,132080E+23	5,234076E+22	1,655488E+23
1084	5,660459E+22	5,660576E+22	2,617082E+22	2,617065E+22	1,132103E+23	5,234147E+22	1,655518E+23
1085	5,660574E+22	5,660387E+22	2,617041E+22	2,617108E+22	1,132096E+23	5,234150E+22	1,655511E+23
1086	5,660342E+22	5,660450E+22	2,617094E+22	2,617005E+22	1,132079E+23	5,234099E+22	1,655489E+23
1087	5,660523E+22	5,660648E+22	2,616988E+22	2,617066E+22	1,132117E+23	5,234054E+22	1,655523E+23
1088	5,660585E+22	5,660388E+22	2,616956E+22	2,616968E+22	1,132097E+23	5,233925E+22	1,655490E+23
1089	5,660451E+22	5,660598E+22	2,616975E+22	2,616843E+22	1,132105E+23	5,233818E+22	1,655487E+23
1090	5,660693E+22	5,660683E+22	2,616848E+22	2,616902E+22	1,132138E+23	5,233750E+22	1,655513E+23
1091	5,660584E+22	5,660513E+22	2,616853E+22	2,616788E+22	1,132110E+23	5,233641E+22	1,655474E+23
1092	5,660537E+22	5,660775E+22	2,616844E+22	2,616805E+22	1,132131E+23	5,233649E+22	1,655496E+23
1093	5,660707E+22	5,660642E+22	2,616770E+22	2,616868E+22	1,132135E+23	5,233638E+22	1,655499E+23
1094	5,660534E+22	5,660561E+22	2,616849E+22	2,616764E+22	1,132110E+23	5,233613E+22	1,655471E+23
1095	5,660661E+22	5,660744E+22	2,616834E+22	2,616857E+22	1,132140E+23	5,233691E+22	1,655510E+23
1096	5,660748E+22	5,660460E+22	2,616841E+22	2,616892E+22	1,132121E+23	5,233732E+22	1,655494E+23
1097	5,660482E+22	5,660580E+22	2,616972E+22	2,616867E+22	1,132106E+23	5,233839E+22	1,655490E+23
1098	5,660578E+22	5,660686E+22	2,616958E+22	2,617059E+22	1,132126E+23	5,234017E+22	1,655528E+23
1099	5,660460E+22	5,660376E+22	2,617050E+22	2,617052E+22	1,132084E+23	5,234102E+22	1,655494E+23
1100	5,660302E+22	5,660516E+22	2,617174E+22	2,617088E+22	1,132082E+23	5,234262E+22	1,655508E+23
1101	5,660467E+22	5,660381E+22	2,617146E+22	2,617228E+22	1,132085E+23	5,234374E+22	1,655522E+23
1102	5,660293E+22	5,660210E+22	2,617243E+22	2,617152E+22	1,132050E+23	5,234395E+22	1,655490E+23
1103	5,660293E+22	5,660459E+22	2,617238E+22	2,617231E+22	1,132075E+23	5,234469E+22	1,655522E+23
1104	5,660433E+22	5,660246E+22	2,617160E+22	2,617269E+22	1,132068E+23	5,234429E+22	1,655511E+23
1105	5,660221E+22	5,660319E+22	2,617220E+22	2,617125E+22	1,132054E+23	5,234345E+22	1,655489E+23
1106	5,660387E+22	5,660514E+22	2,617133E+22	2,617183E+22	1,132090E+23	5,234316E+22	1,655522E+23
1107	5,660456E+22	5,660276E+22	2,617084E+22	2,617065E+22	1,132073E+23	5,234149E+22	1,655488E+23
1108	5,660331E+22	5,660483E+22	2,617115E+22	2,616971E+22	1,132081E+23	5,234086E+22	1,655490E+23
1109	5,660515E+22	5,660539E+22	2,616985E+22	2,617069E+22	1,132105E+23	5,234054E+22	1,655511E+23
1110	5,660420E+22	5,660380E+22	2,616990E+22	2,616948E+22	1,132080E+23	5,233937E+22	1,655474E+23
1111	5,660386E+22	5,660616E+22	2,616999E+22	2,616955E+22	1,132100E+23	5,233954E+22	1,655496E+23
1112	5,660617E+22	5,660438E+22	2,616902E+22	2,617010E+22	1,132106E+23	5,233913E+22	1,655497E+23
1113	5,660460E+22	5,660398E+22	2,616987E+22	2,616889E+22	1,132086E+23	5,233877E+22	1,655473E+23
1114	5,660510E+22	5,660619E+22	2,616997E+22	2,617017E+22	1,132113E+23	5,234013E+22	1,655514E+23
1115	5,660549E+22	5,660388E+22	2,616995E+22	2,617053E+22	1,132094E+23	5,234049E+22	1,655499E+23
1116	5,660288E+22	5,660468E+22	2,617153E+22	2,617050E+22	1,132076E+23	5,234204E+22	1,655496E+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	5,660360E+22	5,660493E+22	2,617157E+22	2,617250E+22	1,132085E+23	5,234406E+22	1,655526E+23
1118	5,660305E+22	5,660182E+22	2,617243E+22	2,617220E+22	1,132049E+23	5,234463E+22	1,655495E+23
1119	5,660158E+22	5,660310E+22	2,617364E+22	2,617256E+22	1,132047E+23	5,234619E+22	1,655509E+23
1120	5,660348E+22	5,660181E+22	2,617289E+22	2,617408E+22	1,132053E+23	5,234697E+22	1,655523E+23
1121	5,660171E+22	5,660074E+22	2,617364E+22	2,617313E+22	1,132024E+23	5,234677E+22	1,655492E+23
1122	5,660119E+22	5,660334E+22	2,617376E+22	2,617393E+22	1,132045E+23	5,234769E+22	1,655522E+23
1123	5,660282E+22	5,660146E+22	2,617289E+22	2,617381E+22	1,132043E+23	5,234670E+22	1,655510E+23
1124	5,660122E+22	5,660188E+22	2,617365E+22	2,617230E+22	1,132031E+23	5,234595E+22	1,655491E+23
1125	5,660246E+22	5,660350E+22	2,617287E+22	2,617303E+22	1,132060E+23	5,234590E+22	1,655519E+23
1126	5,660312E+22	5,660157E+22	2,617228E+22	2,617193E+22	1,132047E+23	5,234421E+22	1,655489E+23
1127	5,660146E+22	5,660367E+22	2,617261E+22	2,617125E+22	1,132051E+23	5,234387E+22	1,655490E+23
1128	5,660361E+22	5,660376E+22	2,617104E+22	2,617234E+22	1,132074E+23	5,234338E+22	1,655507E+23
1129	5,660310E+22	5,660219E+22	2,617112E+22	2,617083E+22	1,132053E+23	5,234195E+22	1,655472E+23
1130	5,660268E+22	5,660458E+22	2,617144E+22	2,617097E+22	1,132073E+23	5,234241E+22	1,655497E+23
1131	5,660506E+22	5,660321E+22	2,617039E+22	2,617134E+22	1,132083E+23	5,234174E+22	1,655500E+23
1132	5,660344E+22	5,660290E+22	2,617146E+22	2,617048E+22	1,132063E+23	5,234194E+22	1,655483E+23
1133	5,660304E+22	5,660488E+22	2,617172E+22	2,617207E+22	1,132079E+23	5,234379E+22	1,655517E+23
1134	5,660350E+22	5,660248E+22	2,617181E+22	2,617238E+22	1,132060E+23	5,234419E+22	1,655502E+23
1135	5,660103E+22	5,660279E+22	2,617359E+22	2,617228E+22	1,132038E+23	5,234586E+22	1,655497E+23
1136	5,660231E+22	5,660247E+22	2,617323E+22	2,617421E+22	1,132048E+23	5,234744E+22	1,655522E+23
1137	5,660196E+22	5,659974E+22	2,617397E+22	2,617374E+22	1,132017E+23	5,234771E+22	1,655494E+23
1138	5,660000E+22	5,660158E+22	2,617516E+22	2,617431E+22	1,132016E+23	5,234947E+22	1,655510E+23
1139	5,660170E+22	5,660088E+22	2,617419E+22	2,617560E+22	1,132026E+23	5,234979E+22	1,655524E+23
1140	5,660026E+22	5,659974E+22	2,617513E+22	2,617462E+22	1,132000E+23	5,234974E+22	1,655497E+23
1141	5,659950E+22	5,660186E+22	2,617541E+22	2,617529E+22	1,132014E+23	5,235071E+22	1,655521E+23
1142	5,660152E+22	5,660011E+22	2,617452E+22	2,617494E+22	1,132016E+23	5,234946E+22	1,655511E+23
1143	5,659986E+22	5,660041E+22	2,617533E+22	2,617357E+22	1,132003E+23	5,234890E+22	1,655492E+23
1144	5,660103E+22	5,660184E+22	2,617410E+22	2,617459E+22	1,132029E+23	5,234869E+22	1,655516E+23
1145	5,660168E+22	5,660027E+22	2,617338E+22	2,617349E+22	1,132020E+23	5,234687E+22	1,655488E+23
1146	5,659984E+22	5,660222E+22	2,617383E+22	2,617290E+22	1,132021E+23	5,234673E+22	1,655488E+23
1147	5,660241E+22	5,660240E+22	2,617220E+22	2,617353E+22	1,132048E+23	5,234573E+22	1,655505E+23
1148	5,660252E+22	5,660079E+22	2,617244E+22	2,617200E+22	1,132033E+23	5,234443E+22	1,655477E+23
1149	5,660145E+22	5,660308E+22	2,617299E+22	2,617231E+22	1,132045E+23	5,234529E+22	1,655498E+23
1150	5,660361E+22	5,660228E+22	2,617202E+22	2,617280E+22	1,132059E+23	5,234482E+22	1,655507E+23
1151	5,660148E+22	5,660174E+22	2,617332E+22	2,617220E+22	1,132032E+23	5,234552E+22	1,655487E+23
1152	5,660108E+22	5,660305E+22	2,617343E+22	2,617393E+22	1,132041E+23	5,234736E+22	1,655515E+23
1153	5,660198E+22	5,660054E+22	2,617352E+22	2,617402E+22	1,132025E+23	5,234754E+22	1,655501E+23
1154	5,659945E+22	5,660065E+22	2,617535E+22	2,617404E+22	1,132001E+23	5,234938E+22	1,655495E+23
1155	5,660090E+22	5,660077E+22	2,617477E+22	2,617577E+22	1,132017E+23	5,235054E+22	1,655522E+23
1156	5,660073E+22	5,659840E+22	2,617546E+22	2,617550E+22	1,131991E+23	5,235096E+22	1,655501E+23
1157	5,659805E+22	5,660025E+22	2,617674E+22	2,617618E+22	1,131983E+23	5,235291E+22	1,655512E+23
1158	5,660002E+22	5,659971E+22	2,617585E+22	2,617714E+22	1,131997E+23	5,235299E+22	1,655527E+23
1159	5,659875E+22	5,659823E+22	2,617696E+22	2,617596E+22	1,131970E+23	5,235292E+22	1,655499E+23
1160	5,659828E+22	5,659994E+22	2,617690E+22	2,617659E+22	1,131982E+23	5,235349E+22	1,655517E+23
1161	5,660038E+22	5,659855E+22	2,617588E+22	2,617618E+22	1,131989E+23	5,235206E+22	1,655510E+23
1162	5,659814E+22	5,659911E+22	2,617662E+22	2,617517E+22	1,131972E+23	5,235179E+22	1,655490E+23
1163	5,659928E+22	5,660081E+22	2,617516E+22	2,617599E+22	1,132001E+23	5,235116E+22	1,655513E+23
1164	5,660049E+22	5,659907E+22	2,617456E+22	2,617490E+22	1,131996E+23	5,234947E+22	1,655490E+23
1165	5,659859E+22	5,660066E+22	2,617519E+22	2,617422E+22	1,131992E+23	5,234941E+22	1,655487E+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							
1166	5,660156E+22	5,660104E+22	2,617368E+22	2,617463E+22	1,132026E+23	5,234830E+22	1,655509E+23
1167	5,660146E+22	5,659953E+22	2,617412E+22	2,617329E+22	1,132010E+23	5,234741E+22	1,655484E+23
1168	5,660003E+22	5,660165E+22	2,617439E+22	2,617391E+22	1,132017E+23	5,234829E+22	1,655500E+23
1169	5,660185E+22	5,660099E+22	2,617351E+22	2,617448E+22	1,132028E+23	5,234799E+22	1,655508E+23
1170	5,659946E+22	5,660011E+22	2,617502E+22	2,617408E+22	1,131996E+23	5,234911E+22	1,655487E+23
1171	5,659940E+22	5,660121E+22	2,617504E+22	2,617544E+22	1,132006E+23	5,235047E+22	1,655511E+23
1172	5,660089E+22	5,659867E+22	2,617517E+22	2,617562E+22	1,131996E+23	5,235079E+22	1,655504E+23
1173	5,659787E+22	5,659881E+22	2,617704E+22	2,617579E+22	1,131967E+23	5,235282E+22	1,655495E+23
1174	5,659924E+22	5,659955E+22	2,617644E+22	2,617748E+22	1,131988E+23	5,235392E+22	1,655527E+23
1175	5,659888E+22	5,659726E+22	2,617727E+22	2,617725E+22	1,131961E+23	5,235452E+22	1,655507E+23
1176	5,659638E+22	5,659857E+22	2,617833E+22	2,617784E+22	1,131949E+23	5,235617E+22	1,655511E+23
1177	5,659874E+22	5,659810E+22	2,617748E+22	2,617850E+22	1,131968E+23	5,235597E+22	1,655528E+23
1178	5,659733E+22	5,659655E+22	2,617857E+22	2,617744E+22	1,131939E+23	5,235601E+22	1,655499E+23
1179	5,659683E+22	5,659854E+22	2,617823E+22	2,617788E+22	1,131954E+23	5,235611E+22	1,655515E+23
1180	5,659907E+22	5,659742E+22	2,617706E+22	2,617774E+22	1,131965E+23	5,235480E+22	1,655513E+23
1181	5,659632E+22	5,659773E+22	2,617786E+22	2,617681E+22	1,131941E+23	5,235467E+22	1,655487E+23
1182	5,659801E+22	5,659952E+22	2,617650E+22	2,617729E+22	1,131975E+23	5,235380E+22	1,655513E+23
1183	5,659957E+22	5,659756E+22	2,617605E+22	2,617601E+22	1,131971E+23	5,235206E+22	1,655492E+23
1184	5,659778E+22	5,659891E+22	2,617645E+22	2,617537E+22	1,131967E+23	5,235181E+22	1,655485E+23
1185	5,660058E+22	5,659983E+22	2,617499E+22	2,617579E+22	1,132004E+23	5,235079E+22	1,655512E+23
1186	5,659963E+22	5,659848E+22	2,617556E+22	2,617492E+22	1,131981E+23	5,235048E+22	1,655486E+23
1187	5,659796E+22	5,660059E+22	2,617583E+22	2,617545E+22	1,131985E+23	5,235128E+22	1,655498E+23
1188	5,660020E+22	5,659960E+22	2,617512E+22	2,617615E+22	1,131998E+23	5,235127E+22	1,655511E+23
1189	5,659764E+22	5,659815E+22	2,617682E+22	2,617582E+22	1,131958E+23	5,235264E+22	1,655484E+23
1190	5,659808E+22	5,659937E+22	2,617686E+22	2,617703E+22	1,131974E+23	5,235388E+22	1,655513E+23
1191	5,659949E+22	5,659699E+22	2,617704E+22	2,617739E+22	1,131965E+23	5,235443E+22	1,655509E+23
1192	5,659630E+22	5,659713E+22	2,617852E+22	2,617776E+22	1,131934E+23	5,235627E+22	1,655497E+23
1193	5,659766E+22	5,659813E+22	2,617801E+22	2,617927E+22	1,131958E+23	5,235728E+22	1,655531E+23
1194	5,659714E+22	5,659572E+22	2,617899E+22	2,617900E+22	1,131929E+23	5,235799E+22	1,655508E+23
1195	5,659499E+22	5,659695E+22	2,617989E+22	2,617908E+22	1,131919E+23	5,235897E+22	1,655509E+23
1196	5,659766E+22	5,659661E+22	2,617900E+22	2,617980E+22	1,131943E+23	5,235880E+22	1,655531E+23
1197	5,659563E+22	5,659510E+22	2,618009E+22	2,617896E+22	1,131907E+23	5,235905E+22	1,655498E+23
1198	5,659511E+22	5,659739E+22	2,617965E+22	2,617933E+22	1,131925E+23	5,235898E+22	1,655515E+23
1199	5,659735E+22	5,659625E+22	2,617857E+22	2,617923E+22	1,131936E+23	5,235780E+22	1,655514E+23
1200	5,659507E+22	5,659603E+22	2,617902E+22	2,617820E+22	1,131911E+23	5,235722E+22	1,655483E+23
1201	5,659718E+22	5,659790E+22	2,617777E+22	2,617839E+22	1,131951E+23	5,235616E+22	1,655512E+23
1202	5,659852E+22	5,659621E+22	2,617739E+22	2,617727E+22	1,131947E+23	5,235466E+22	1,655494E+23
1203	5,659656E+22	5,659781E+22	2,617765E+22	2,617654E+22	1,131944E+23	5,235419E+22	1,655486E+23
1204	5,659910E+22	5,659901E+22	2,617627E+22	2,617732E+22	1,131981E+23	5,235360E+22	1,655517E+23
1205	5,659750E+22	5,659722E+22	2,617711E+22	2,617670E+22	1,131947E+23	5,235381E+22	1,655485E+23
1206	5,659622E+22	5,659899E+22	2,617758E+22	2,617700E+22	1,131952E+23	5,235458E+22	1,655498E+23
1207	5,659879E+22	5,659771E+22	2,617703E+22	2,617771E+22	1,131965E+23	5,235473E+22	1,655512E+23
1208	5,659646E+22	5,659592E+22	2,617836E+22	2,617750E+22	1,131924E+23	5,235586E+22	1,655482E+23
1209	5,659688E+22	5,659762E+22	2,617844E+22	2,617872E+22	1,131945E+23	5,235715E+22	1,655517E+23
1210	5,659767E+22	5,659569E+22	2,617864E+22	2,617934E+22	1,131934E+23	5,235797E+22	1,655513E+23
1211	5,659450E+22	5,659587E+22	2,618005E+22	2,617940E+22	1,131904E+23	5,235945E+22	1,655498E+23
1212	5,659626E+22	5,659684E+22	2,617968E+22	2,618083E+22	1,131931E+23	5,236051E+22	1,655536E+23
1213	5,659542E+22	5,659406E+22	2,618085E+22	2,618055E+22	1,131895E+23	5,236139E+22	1,655509E+23
1214	5,659355E+22	5,659544E+22	2,618172E+22	2,618046E+22	1,131890E+23	5,236218E+22	1,655512E+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							
1215	5,659604E+22	5,659520E+22	2,618073E+22	2,618136E+22	1,131912E+23	5,236209E+22	1,655533E+23
1216	5,659384E+22	5,659345E+22	2,618133E+22	2,618074E+22	1,131873E+23	5,236207E+22	1,655494E+23
1217	5,659366E+22	5,659582E+22	2,618090E+22	2,618088E+22	1,131895E+23	5,236178E+22	1,655513E+23
1218	5,659598E+22	5,659464E+22	2,617986E+22	2,618066E+22	1,131906E+23	5,236052E+22	1,655511E+23
1219	5,659423E+22	5,659453E+22	2,618013E+22	2,617917E+22	1,131888E+23	5,235930E+22	1,655481E+23
1220	5,659652E+22	5,659679E+22	2,617892E+22	2,617943E+22	1,131933E+23	5,235835E+22	1,655517E+23
1221	5,659691E+22	5,659525E+22	2,617875E+22	2,617862E+22	1,131922E+23	5,235737E+22	1,655495E+23
1222	5,659475E+22	5,659700E+22	2,617915E+22	2,617793E+22	1,131918E+23	5,235708E+22	1,655488E+23
1223	5,659713E+22	5,659785E+22	2,617804E+22	2,617887E+22	1,131950E+23	5,235691E+22	1,655519E+23
1224	5,659587E+22	5,659527E+22	2,617867E+22	2,617839E+22	1,131911E+23	5,235706E+22	1,655482E+23
1225	5,659513E+22	5,659685E+22	2,617924E+22	2,617855E+22	1,131920E+23	5,235779E+22	1,655498E+23
1226	5,659748E+22	5,659582E+22	2,617869E+22	2,617948E+22	1,131933E+23	5,235817E+22	1,655515E+23
1227	5,659519E+22	5,659439E+22	2,617973E+22	2,617917E+22	1,131896E+23	5,235890E+22	1,655485E+23
1228	5,659544E+22	5,659653E+22	2,617986E+22	2,618055E+22	1,131920E+23	5,236040E+22	1,655524E+23
1229	5,659566E+22	5,659443E+22	2,618039E+22	2,618119E+22	1,131901E+23	5,236158E+22	1,655517E+23
1230	5,659291E+22	5,659436E+22	2,618198E+22	2,618086E+22	1,131873E+23	5,236284E+22	1,655501E+23
1231	5,659469E+22	5,659521E+22	2,618176E+22	2,618224E+22	1,131899E+23	5,236399E+22	1,655539E+23
1232	5,659388E+22	5,659213E+22	2,618247E+22	2,618216E+22	1,131860E+23	5,236462E+22	1,655506E+23
1233	5,659194E+22	5,659369E+22	2,618325E+22	2,618210E+22	1,131856E+23	5,236535E+22	1,655510E+23
1234	5,659399E+22	5,659381E+22	2,618215E+22	2,618318E+22	1,131878E+23	5,236532E+22	1,655531E+23
1235	5,659232E+22	5,659197E+22	2,618244E+22	2,618217E+22	1,131843E+23	5,236461E+22	1,655489E+23
1236	5,659276E+22	5,659446E+22	2,618205E+22	2,618212E+22	1,131872E+23	5,236417E+22	1,655514E+23
1237	5,659486E+22	5,659330E+22	2,618121E+22	2,618183E+22	1,131882E+23	5,236304E+22	1,655512E+23
1238	5,659327E+22	5,659344E+22	2,618155E+22	2,618018E+22	1,131867E+23	5,236173E+22	1,655484E+23
1239	5,659508E+22	5,659594E+22	2,618047E+22	2,618070E+22	1,131910E+23	5,236117E+22	1,655522E+23
1240	5,659512E+22	5,659397E+22	2,618004E+22	2,618027E+22	1,131891E+23	5,236030E+22	1,655494E+23
1241	5,659319E+22	5,659532E+22	2,618067E+22	2,617953E+22	1,131885E+23	5,236020E+22	1,655487E+23
1242	5,659552E+22	5,659599E+22	2,617965E+22	2,618049E+22	1,131915E+23	5,236014E+22	1,655517E+23
1243	5,659482E+22	5,659330E+22	2,618003E+22	2,617978E+22	1,131881E+23	5,235981E+22	1,655479E+23
1244	5,659428E+22	5,659530E+22	2,618060E+22	2,618008E+22	1,131896E+23	5,236068E+22	1,655503E+23
1245	5,659574E+22	5,659454E+22	2,618026E+22	2,618126E+22	1,131903E+23	5,236151E+22	1,655518E+23
1246	5,659337E+22	5,659343E+22	2,618145E+22	2,618083E+22	1,131868E+23	5,236228E+22	1,655491E+23
1247	5,659355E+22	5,659535E+22	2,618184E+22	2,618219E+22	1,131889E+23	5,236403E+22	1,655529E+23
1248	5,659386E+22	5,659255E+22	2,618223E+22	2,618292E+22	1,131864E+23	5,236514E+22	1,655516E+23
1249	5,659153E+22	5,659232E+22	2,618391E+22	2,618247E+22	1,131839E+23	5,236638E+22	1,655502E+23
1250	5,659291E+22	5,659334E+22	2,618356E+22	2,618402E+22	1,131863E+23	5,236757E+22	1,655538E+23
1251	5,659224E+22	5,659047E+22	2,618380E+22	2,618389E+22	1,131827E+23	5,236769E+22	1,655504E+23
1252	5,659047E+22	5,659233E+22	2,618442E+22	2,618385E+22	1,131828E+23	5,236827E+22	1,655511E+23
1253	5,659227E+22	5,659231E+22	2,618352E+22	2,618477E+22	1,131846E+23	5,236830E+22	1,655529E+23
1254	5,659131E+22	5,659059E+22	2,618386E+22	2,618323E+22	1,131819E+23	5,236709E+22	1,655490E+23
1255	5,659190E+22	5,659321E+22	2,618358E+22	2,618308E+22	1,131851E+23	5,236667E+22	1,655518E+23
1256	5,659371E+22	5,659199E+22	2,618248E+22	2,618303E+22	1,131857E+23	5,236552E+22	1,655512E+23
1257	5,659193E+22	5,659228E+22	2,618293E+22	2,618153E+22	1,131842E+23	5,236446E+22	1,655487E+23
1258	5,659300E+22	5,659486E+22	2,618194E+22	2,618227E+22	1,131879E+23	5,236421E+22	1,655521E+23
1259	5,659351E+22	5,659249E+22	2,618132E+22	2,618172E+22	1,131860E+23	5,236304E+22	1,655490E+23
1260	5,659210E+22	5,659365E+22	2,618200E+22	2,618098E+22	1,131858E+23	5,236298E+22	1,655487E+23
1261	5,659419E+22	5,659428E+22	2,618122E+22	2,618204E+22	1,131885E+23	5,236326E+22	1,655517E+23
1262	5,659373E+22	5,659188E+22	2,618157E+22	2,618121E+22	1,131856E+23	5,236278E+22	1,655484E+23
1263	5,659274E+22	5,659421E+22	2,618226E+22	2,618174E+22	1,131869E+23	5,236400E+22	1,655509E+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							
1264	5,659386E+22	5,659317E+22	2,618177E+22	2,618316E+22	1,131870E+23	5,236493E+22	1,655520E+23
1265	5,659179E+22	5,659162E+22	2,618330E+22	2,618257E+22	1,131834E+23	5,236587E+22	1,655493E+23
1266	5,659174E+22	5,659349E+22	2,618383E+22	2,618385E+22	1,131852E+23	5,236768E+22	1,655529E+23
1267	5,659252E+22	5,659057E+22	2,618387E+22	2,618443E+22	1,131831E+23	5,236831E+22	1,655514E+23
1268	5,659022E+22	5,659064E+22	2,618541E+22	2,618413E+22	1,131809E+23	5,236954E+22	1,655504E+23
1269	5,659082E+22	5,659191E+22	2,618512E+22	2,618585E+22	1,131827E+23	5,237097E+22	1,655537E+23
1270	5,659043E+22	5,658924E+22	2,618531E+22	2,618546E+22	1,131797E+23	5,237076E+22	1,655504E+23
1271	5,658899E+22	5,659104E+22	2,618602E+22	2,618527E+22	1,131800E+23	5,237129E+22	1,655513E+23
1272	5,659107E+22	5,659063E+22	2,618494E+22	2,618612E+22	1,131817E+23	5,237106E+22	1,655528E+23
1273	5,659056E+22	5,658898E+22	2,618537E+22	2,618441E+22	1,131795E+23	5,236979E+22	1,655493E+23
1274	5,659053E+22	5,659200E+22	2,618505E+22	2,618438E+22	1,131825E+23	5,236944E+22	1,655520E+23
1275	5,659221E+22	5,659092E+22	2,618359E+22	2,618443E+22	1,131831E+23	5,236802E+22	1,655511E+23
1276	5,659045E+22	5,659120E+22	2,618405E+22	2,618308E+22	1,131817E+23	5,236713E+22	1,655488E+23
1277	5,659115E+22	5,659332E+22	2,618338E+22	2,618381E+22	1,131845E+23	5,236719E+22	1,655517E+23
1278	5,659229E+22	5,659090E+22	2,618283E+22	2,618295E+22	1,131832E+23	5,236578E+22	1,655490E+23
1279	5,659114E+22	5,659213E+22	2,618353E+22	2,618227E+22	1,131833E+23	5,236580E+22	1,655491E+23
1280	5,659284E+22	5,659260E+22	2,618260E+22	2,618363E+22	1,131854E+23	5,236623E+22	1,655517E+23
1281	5,659233E+22	5,659050E+22	2,618312E+22	2,618288E+22	1,131828E+23	5,236600E+22	1,655488E+23
1282	5,659074E+22	5,659294E+22	2,618396E+22	2,618348E+22	1,131837E+23	5,236744E+22	1,655511E+23
1283	5,659224E+22	5,659157E+22	2,618339E+22	2,618475E+22	1,131838E+23	5,236815E+22	1,655520E+23
1284	5,659054E+22	5,658992E+22	2,618499E+22	2,618417E+22	1,131805E+23	5,236916E+22	1,655496E+23
1285	5,658995E+22	5,659168E+22	2,618574E+22	2,618554E+22	1,131816E+23	5,237129E+22	1,655529E+23
1286	5,659090E+22	5,658906E+22	2,618566E+22	2,618608E+22	1,131800E+23	5,237174E+22	1,655517E+23
1287	5,658842E+22	5,658933E+22	2,618707E+22	2,618597E+22	1,131777E+23	5,237305E+22	1,655508E+23
1288	5,658891E+22	5,659020E+22	2,618660E+22	2,618775E+22	1,131791E+23	5,237435E+22	1,655535E+23
1289	5,658923E+22	5,658738E+22	2,618690E+22	2,618700E+22	1,131766E+23	5,237390E+22	1,655505E+23
1290	5,658776E+22	5,658942E+22	2,618760E+22	2,618656E+22	1,131772E+23	5,237417E+22	1,655513E+23
1291	5,659022E+22	5,658917E+22	2,618618E+22	2,618725E+22	1,131794E+23	5,237343E+22	1,655528E+23
1292	5,658951E+22	5,658795E+22	2,618652E+22	2,618568E+22	1,131775E+23	5,237220E+22	1,655497E+23
1293	5,658850E+22	5,659113E+22	2,618641E+22	2,618584E+22	1,131796E+23	5,237226E+22	1,655519E+23
1294	5,659039E+22	5,658995E+22	2,618496E+22	2,618571E+22	1,131803E+23	5,237068E+22	1,655510E+23
1295	5,658892E+22	5,658985E+22	2,618554E+22	2,618442E+22	1,131788E+23	5,236996E+22	1,655487E+23
1296	5,658983E+22	5,659142E+22	2,618477E+22	2,618522E+22	1,131813E+23	5,237000E+22	1,655513E+23
1297	5,659151E+22	5,658897E+22	2,618432E+22	2,618434E+22	1,131805E+23	5,236866E+22	1,655491E+23
1298	5,658980E+22	5,659072E+22	2,618500E+22	2,618381E+22	1,131805E+23	5,236881E+22	1,655493E+23
1299	5,659146E+22	5,659135E+22	2,618381E+22	2,618526E+22	1,131828E+23	5,236907E+22	1,655519E+23
1300	5,659090E+22	5,658929E+22	2,618448E+22	2,618456E+22	1,131802E+23	5,236904E+22	1,655492E+23
1301	5,658886E+22	5,659139E+22	2,618579E+22	2,618509E+22	1,131803E+23	5,237087E+22	1,655511E+23
1302	5,659075E+22	5,658998E+22	2,618530E+22	2,618613E+22	1,131807E+23	5,237143E+22	1,655522E+23
1303	5,658907E+22	5,658837E+22	2,618693E+22	2,618578E+22	1,131774E+23	5,237271E+22	1,655501E+23
1304	5,658800E+22	5,658987E+22	2,618747E+22	2,618747E+22	1,131779E+23	5,237494E+22	1,655528E+23
1305	5,658908E+22	5,658738E+22	2,618740E+22	2,618803E+22	1,131765E+23	5,237544E+22	1,655519E+23
1306	5,658644E+22	5,658776E+22	2,618875E+22	2,618780E+22	1,131742E+23	5,237655E+22	1,655508E+23
1307	5,658763E+22	5,658841E+22	2,618801E+22	2,618929E+22	1,131760E+23	5,237730E+22	1,655533E+23
1308	5,658844E+22	5,658593E+22	2,618824E+22	2,618834E+22	1,131744E+23	5,237658E+22	1,655509E+23
1309	5,658647E+22	5,658804E+22	2,618911E+22	2,618785E+22	1,131745E+23	5,237696E+22	1,655515E+23
1310	5,658877E+22	5,658827E+22	2,618760E+22	2,618844E+22	1,131770E+23	5,237604E+22	1,655531E+23
1311	5,658780E+22	5,658719E+22	2,618786E+22	2,618714E+22	1,131750E+23	5,237500E+22	1,655500E+23
1312	5,658650E+22	5,658955E+22	2,618774E+22	2,618741E+22	1,131760E+23	5,237514E+22	1,655512E+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							
1313	5,658914E+22	5,658804E+22	2,618647E+22	2,618707E+22	1,131772E+23	5,237355E+22	1,655507E+23
1314	5,658779E+22	5,658804E+22	2,618697E+22	2,618566E+22	1,131758E+23	5,237264E+22	1,655485E+23
1315	5,658909E+22	5,658968E+22	2,618591E+22	2,618649E+22	1,131788E+23	5,237240E+22	1,655512E+23
1316	5,659056E+22	5,658789E+22	2,618540E+22	2,618576E+22	1,131784E+23	5,237116E+22	1,655496E+23
1317	5,658793E+22	5,658978E+22	2,618642E+22	2,618539E+22	1,131777E+23	5,237181E+22	1,655495E+23
1318	5,658967E+22	5,659041E+22	2,618545E+22	2,618665E+22	1,131801E+23	5,237210E+22	1,655522E+23
1319	5,658929E+22	5,658806E+22	2,618635E+22	2,618611E+22	1,131774E+23	5,237245E+22	1,655498E+23
1320	5,658710E+22	5,658944E+22	2,618771E+22	2,618680E+22	1,131765E+23	5,237451E+22	1,655511E+23
1321	5,658934E+22	5,658795E+22	2,618729E+22	2,618792E+22	1,131773E+23	5,237522E+22	1,655525E+23
1322	5,658714E+22	5,658667E+22	2,618873E+22	2,618776E+22	1,131738E+23	5,237649E+22	1,655503E+23
1323	5,658631E+22	5,658810E+22	2,618886E+22	2,618949E+22	1,131744E+23	5,237835E+22	1,655528E+23
1324	5,658769E+22	5,658571E+22	2,618876E+22	2,618985E+22	1,131734E+23	5,237862E+22	1,655520E+23
1325	5,658497E+22	5,658608E+22	2,619036E+22	2,618934E+22	1,131710E+23	5,237969E+22	1,655507E+23
1326	5,658661E+22	5,658704E+22	2,618957E+22	2,619037E+22	1,131736E+23	5,237994E+22	1,655536E+23
1327	5,658726E+22	5,658488E+22	2,618978E+22	2,618956E+22	1,131721E+23	5,237933E+22	1,655515E+23
1328	5,658461E+22	5,658682E+22	2,619055E+22	2,618930E+22	1,131714E+23	5,237985E+22	1,655513E+23
1329	5,658698E+22	5,658697E+22	2,618911E+22	2,618990E+22	1,131740E+23	5,237901E+22	1,655530E+23
1330	5,658586E+22	5,658578E+22	2,618937E+22	2,618857E+22	1,131716E+23	5,237794E+22	1,655496E+23
1331	5,658533E+22	5,658766E+22	2,618894E+22	2,618875E+22	1,131730E+23	5,237769E+22	1,655507E+23
1332	5,658840E+22	5,658640E+22	2,618762E+22	2,618835E+22	1,131748E+23	5,237597E+22	1,655508E+23
1333	5,658668E+22	5,658663E+22	2,618826E+22	2,618703E+22	1,131733E+23	5,237528E+22	1,655486E+23
1334	5,658783E+22	5,658880E+22	2,618718E+22	2,618779E+22	1,131766E+23	5,237497E+22	1,655516E+23
1335	5,658898E+22	5,658726E+22	2,618678E+22	2,618735E+22	1,131762E+23	5,237412E+22	1,655504E+23
1336	5,658602E+22	5,658830E+22	2,618806E+22	2,618705E+22	1,131743E+23	5,237511E+22	1,655494E+23
1337	5,658822E+22	5,658856E+22	2,618741E+22	2,618818E+22	1,131768E+23	5,237559E+22	1,655524E+23
1338	5,658772E+22	5,658625E+22	2,618830E+22	2,618771E+22	1,131740E+23	5,237601E+22	1,655500E+23
1339	5,658571E+22	5,658737E+22	2,618932E+22	2,618860E+22	1,131731E+23	5,237792E+22	1,655510E+23
1340	5,658776E+22	5,658641E+22	2,618877E+22	2,618986E+22	1,131742E+23	5,237863E+22	1,655528E+23
1341	5,658512E+22	5,658513E+22	2,619029E+22	2,618969E+22	1,131702E+23	5,237998E+22	1,655502E+23
1342	5,658465E+22	5,658664E+22	2,619049E+22	2,619101E+22	1,131713E+23	5,238150E+22	1,655528E+23
1343	5,658643E+22	5,658446E+22	2,619041E+22	2,619131E+22	1,131709E+23	5,238172E+22	1,655526E+23
1344	5,658357E+22	5,658433E+22	2,619206E+22	2,619077E+22	1,131679E+23	5,238282E+22	1,655507E+23
1345	5,658537E+22	5,658549E+22	2,619137E+22	2,619176E+22	1,131709E+23	5,238313E+22	1,655540E+23
1346	5,658538E+22	5,658379E+22	2,619137E+22	2,619109E+22	1,131692E+23	5,238246E+22	1,655516E+23
1347	5,658286E+22	5,658531E+22	2,619177E+22	2,619094E+22	1,131682E+23	5,238272E+22	1,655509E+23
1348	5,658552E+22	5,658543E+22	2,619029E+22	2,619137E+22	1,131709E+23	5,238167E+22	1,655526E+23
1349	5,658450E+22	5,658403E+22	2,619068E+22	2,618989E+22	1,131685E+23	5,238057E+22	1,655491E+23
1350	5,658450E+22	5,658621E+22	2,619020E+22	2,618977E+22	1,131707E+23	5,237996E+22	1,655507E+23
1351	5,658748E+22	5,658549E+22	2,618883E+22	2,618961E+22	1,131730E+23	5,237844E+22	1,655514E+23
1352	5,658506E+22	5,658556E+22	2,618955E+22	2,618853E+22	1,131706E+23	5,237808E+22	1,655487E+23
1353	5,658626E+22	5,658767E+22	2,618876E+22	2,618926E+22	1,131739E+23	5,237802E+22	1,655519E+23
1354	5,658713E+22	5,658601E+22	2,618854E+22	2,618883E+22	1,131731E+23	5,237737E+22	1,655505E+23
1355	5,658472E+22	5,658639E+22	2,618967E+22	2,618863E+22	1,131711E+23	5,237830E+22	1,655494E+23
1356	5,658704E+22	5,658669E+22	2,618903E+22	2,618976E+22	1,131737E+23	5,237879E+22	1,655525E+23
1357	5,658605E+22	5,658449E+22	2,619001E+22	2,618954E+22	1,131705E+23	5,237955E+22	1,655501E+23
1358	5,658403E+22	5,658595E+22	2,619085E+22	2,619036E+22	1,131700E+23	5,238121E+22	1,655512E+23
1359	5,658596E+22	5,658515E+22	2,619029E+22	2,619177E+22	1,131711E+23	5,238206E+22	1,655532E+23
1360	5,658332E+22	5,658327E+22	2,619200E+22	2,619145E+22	1,131666E+23	5,238345E+22	1,655500E+23
1361	5,658351E+22	5,658472E+22	2,619239E+22	2,619244E+22	1,131682E+23	5,238483E+22	1,655531E+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							
1362	5,658502E+22	5,658299E+22	2,619228E+22	2,619267E+22	1,131680E+23	5,238495E+22	1,655530E+23
1363	5,658222E+22	5,658277E+22	2,619355E+22	2,619232E+22	1,131650E+23	5,238586E+22	1,655509E+23
1364	5,658359E+22	5,658433E+22	2,619274E+22	2,619334E+22	1,131679E+23	5,238608E+22	1,655540E+23
1365	5,658322E+22	5,658250E+22	2,619283E+22	2,619274E+22	1,131657E+23	5,238557E+22	1,655513E+23
1366	5,658125E+22	5,658384E+22	2,619314E+22	2,619225E+22	1,131651E+23	5,238539E+22	1,655505E+23
1367	5,658440E+22	5,658409E+22	2,619160E+22	2,619269E+22	1,131685E+23	5,238429E+22	1,655528E+23
1368	5,658344E+22	5,658231E+22	2,619201E+22	2,619122E+22	1,131657E+23	5,238323E+22	1,655490E+23
1369	5,658364E+22	5,658480E+22	2,619161E+22	2,619107E+22	1,131684E+23	5,238268E+22	1,655511E+23
1370	5,658597E+22	5,658468E+22	2,619020E+22	2,619103E+22	1,131707E+23	5,238123E+22	1,655519E+23
1371	5,658367E+22	5,658417E+22	2,619078E+22	2,619010E+22	1,131678E+23	5,238088E+22	1,655487E+23
1372	5,658490E+22	5,658620E+22	2,619022E+22	2,619065E+22	1,131711E+23	5,238086E+22	1,655520E+23
1373	5,658568E+22	5,658428E+22	2,619019E+22	2,619025E+22	1,131700E+23	5,238044E+22	1,655504E+23
1374	5,658343E+22	5,658468E+22	2,619129E+22	2,618998E+22	1,131681E+23	5,238127E+22	1,655494E+23
1375	5,658548E+22	5,658548E+22	2,619057E+22	2,619148E+22	1,131710E+23	5,238205E+22	1,655530E+23
1376	5,658396E+22	5,658289E+22	2,619162E+22	2,619148E+22	1,131668E+23	5,238310E+22	1,655499E+23
1377	5,658229E+22	5,658427E+22	2,619266E+22	2,619216E+22	1,131666E+23	5,238483E+22	1,655514E+23
1378	5,658420E+22	5,658363E+22	2,619219E+22	2,619341E+22	1,131678E+23	5,238560E+22	1,655534E+23
1379	5,658216E+22	5,658130E+22	2,619366E+22	2,619309E+22	1,131635E+23	5,238676E+22	1,655502E+23
1380	5,658236E+22	5,658309E+22	2,619405E+22	2,619393E+22	1,131655E+23	5,238799E+22	1,655534E+23
1381	5,658329E+22	5,658162E+22	2,619395E+22	2,619435E+22	1,131649E+23	5,238830E+22	1,655532E+23
1382	5,658037E+22	5,658163E+22	2,619498E+22	2,619392E+22	1,131620E+23	5,238890E+22	1,655509E+23
1383	5,658172E+22	5,658322E+22	2,619410E+22	2,619501E+22	1,131649E+23	5,238911E+22	1,655540E+23
1384	5,658150E+22	5,658061E+22	2,619431E+22	2,619427E+22	1,131621E+23	5,238858E+22	1,655507E+23
1385	5,658041E+22	5,658189E+22	2,619465E+22	2,619346E+22	1,131623E+23	5,238811E+22	1,655504E+23
1386	5,658339E+22	5,658269E+22	2,619304E+22	2,619384E+22	1,131661E+23	5,238688E+22	1,655530E+23
1387	5,658257E+22	5,658097E+22	2,619309E+22	2,619258E+22	1,131635E+23	5,238567E+22	1,655492E+23
1388	5,658238E+22	5,658384E+22	2,619271E+22	2,619236E+22	1,131662E+23	5,238507E+22	1,655513E+23
1389	5,658417E+22	5,658365E+22	2,619159E+22	2,619241E+22	1,131678E+23	5,238400E+22	1,655518E+23
1390	5,658221E+22	5,658292E+22	2,619223E+22	2,619130E+22	1,131651E+23	5,238353E+22	1,655487E+23
1391	5,658348E+22	5,658488E+22	2,619176E+22	2,619202E+22	1,131684E+23	5,238378E+22	1,655521E+23
1392	5,658406E+22	5,658242E+22	2,619193E+22	2,619190E+22	1,131665E+23	5,238383E+22	1,655503E+23
1393	5,658201E+22	5,658292E+22	2,619303E+22	2,619174E+22	1,131649E+23	5,238477E+22	1,655497E+23
1394	5,658350E+22	5,658414E+22	2,619227E+22	2,619337E+22	1,131676E+23	5,238564E+22	1,655533E+23
1395	5,658240E+22	5,658100E+22	2,619309E+22	2,619345E+22	1,131634E+23	5,238654E+22	1,655499E+23
1396	5,658102E+22	5,658240E+22	2,619427E+22	2,619378E+22	1,131634E+23	5,238805E+22	1,655515E+23
1397	5,658283E+22	5,658191E+22	2,619399E+22	2,619496E+22	1,131647E+23	5,238895E+22	1,655537E+23
1398	5,658089E+22	5,657986E+22	2,619534E+22	2,619451E+22	1,131607E+23	5,238985E+22	1,655506E+23
1399	5,658062E+22	5,658215E+22	2,619564E+22	2,619559E+22	1,131628E+23	5,239123E+22	1,655540E+23
1400	5,658104E+22	5,658021E+22	2,619562E+22	2,619615E+22	1,131613E+23	5,239177E+22	1,655530E+23
1401	5,657859E+22	5,657994E+22	2,619669E+22	2,619552E+22	1,131585E+23	5,239222E+22	1,655507E+23
1402	5,658009E+22	5,658165E+22	2,619576E+22	2,619640E+22	1,131617E+23	5,239216E+22	1,655539E+23
1403	5,658067E+22	5,657857E+22	2,619558E+22	2,619567E+22	1,131592E+23	5,239125E+22	1,655505E+23
1404	5,657973E+22	5,658034E+22	2,619585E+22	2,619468E+22	1,131601E+23	5,239053E+22	1,655506E+23
1405	5,658216E+22	5,658165E+22	2,619424E+22	2,619519E+22	1,131638E+23	5,238943E+22	1,655532E+23
1406	5,658111E+22	5,658017E+22	2,619415E+22	2,619385E+22	1,131613E+23	5,238801E+22	1,655493E+23
1407	5,658078E+22	5,658307E+22	2,619394E+22	2,619368E+22	1,131639E+23	5,238761E+22	1,655515E+23
1408	5,658250E+22	5,658203E+22	2,619317E+22	2,619373E+22	1,131645E+23	5,238690E+22	1,655514E+23
1409	5,658107E+22	5,658110E+22	2,619397E+22	2,619259E+22	1,131622E+23	5,238656E+22	1,655487E+23
1410	5,658193E+22	5,658341E+22	2,619350E+22	2,619348E+22	1,131653E+23	5,238698E+22	1,655523E+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							
1411	5,658256E+22	5,658069E+22	2,619332E+22	2,619378E+22	1,131632E+23	5,238710E+22	1,655503E+23
1412	5,658040E+22	5,658139E+22	2,619443E+22	2,619355E+22	1,131618E+23	5,238798E+22	1,655498E+23
1413	5,658171E+22	5,658254E+22	2,619390E+22	2,619516E+22	1,131643E+23	5,238907E+22	1,655533E+23
1414	5,658109E+22	5,657944E+22	2,619469E+22	2,619494E+22	1,131605E+23	5,238964E+22	1,655502E+23
1415	5,657983E+22	5,658107E+22	2,619594E+22	2,619529E+22	1,131609E+23	5,239122E+22	1,655521E+23
1416	5,658120E+22	5,658026E+22	2,619591E+22	2,619664E+22	1,131615E+23	5,239254E+22	1,655540E+23
1417	5,657925E+22	5,657843E+22	2,619722E+22	2,619627E+22	1,131577E+23	5,239349E+22	1,655512E+23
1418	5,657835E+22	5,658091E+22	2,619745E+22	2,619737E+22	1,131593E+23	5,239482E+22	1,655541E+23
1419	5,657934E+22	5,657823E+22	2,619711E+22	2,619799E+22	1,131576E+23	5,239510E+22	1,655527E+23
1420	5,657749E+22	5,657786E+22	2,619808E+22	2,619692E+22	1,131553E+23	5,239500E+22	1,655504E+23
1421	5,657899E+22	5,657982E+22	2,619717E+22	2,619769E+22	1,131588E+23	5,239486E+22	1,655537E+23
1422	5,657976E+22	5,657740E+22	2,619668E+22	2,619680E+22	1,131572E+23	5,239348E+22	1,655506E+23
1423	5,657842E+22	5,657975E+22	2,619687E+22	2,619595E+22	1,131582E+23	5,239282E+22	1,655510E+23
1424	5,658025E+22	5,658071E+22	2,619560E+22	2,619657E+22	1,131610E+23	5,239218E+22	1,655531E+23
1425	5,657957E+22	5,657898E+22	2,619571E+22	2,619511E+22	1,131585E+23	5,239083E+22	1,655494E+23
1426	5,657909E+22	5,658178E+22	2,619564E+22	2,619489E+22	1,131609E+23	5,239053E+22	1,655514E+23
1427	5,658133E+22	5,658006E+22	2,619463E+22	2,619526E+22	1,131614E+23	5,238989E+22	1,655513E+23
1428	5,657998E+22	5,657926E+22	2,619539E+22	2,619415E+22	1,131592E+23	5,238955E+22	1,655488E+23
1429	5,658032E+22	5,658191E+22	2,619494E+22	2,619530E+22	1,131622E+23	5,239024E+22	1,655525E+23
1430	5,658100E+22	5,657938E+22	2,619458E+22	2,619553E+22	1,131604E+23	5,239011E+22	1,655505E+23
1431	5,657898E+22	5,658013E+22	2,619582E+22	2,619520E+22	1,131591E+23	5,239102E+22	1,655501E+23
1432	5,658027E+22	5,658072E+22	2,619573E+22	2,619670E+22	1,131610E+23	5,239244E+22	1,655534E+23
1433	5,657996E+22	5,657779E+22	2,619667E+22	2,619638E+22	1,131577E+23	5,239305E+22	1,655508E+23
1434	5,657809E+22	5,657989E+22	2,619795E+22	2,619683E+22	1,131580E+23	5,239479E+22	1,655528E+23
1435	5,657931E+22	5,657863E+22	2,619758E+22	2,619857E+22	1,131579E+23	5,239616E+22	1,655541E+23
1436	5,657727E+22	5,657678E+22	2,619887E+22	2,619810E+22	1,131541E+23	5,239696E+22	1,655510E+23
1437	5,657638E+22	5,657911E+22	2,619910E+22	2,619910E+22	1,131555E+23	5,239819E+22	1,655537E+23
1438	5,657798E+22	5,657643E+22	2,619847E+22	2,619941E+22	1,131544E+23	5,239788E+22	1,655523E+23
1439	5,657654E+22	5,657648E+22	2,619930E+22	2,619825E+22	1,131530E+23	5,239755E+22	1,655506E+23
1440	5,657777E+22	5,657837E+22	2,619858E+22	2,619907E+22	1,131561E+23	5,239766E+22	1,655538E+23
1441	5,657846E+22	5,657650E+22	2,619803E+22	2,619814E+22	1,131550E+23	5,239617E+22	1,655511E+23
1442	5,657661E+22	5,657904E+22	2,619830E+22	2,619725E+22	1,131557E+23	5,239556E+22	1,655512E+23
1443	5,657877E+22	5,657908E+22	2,619694E+22	2,619798E+22	1,131578E+23	5,239492E+22	1,655528E+23
1444	5,657849E+22	5,657716E+22	2,619714E+22	2,619633E+22	1,131556E+23	5,239347E+22	1,655491E+23
1445	5,657782E+22	5,657999E+22	2,619714E+22	2,619625E+22	1,131578E+23	5,239339E+22	1,655512E+23
1446	5,658006E+22	5,657866E+22	2,619586E+22	2,619671E+22	1,131587E+23	5,239257E+22	1,655513E+23
1447	5,657854E+22	5,657828E+22	2,619651E+22	2,619579E+22	1,131568E+23	5,239230E+22	1,655491E+23
1448	5,657850E+22	5,658045E+22	2,619649E+22	2,619701E+22	1,131590E+23	5,239351E+22	1,655525E+23
1449	5,657960E+22	5,657799E+22	2,619631E+22	2,619703E+22	1,131576E+23	5,239334E+22	1,655509E+23
1450	5,657748E+22	5,657877E+22	2,619776E+22	2,619661E+22	1,131562E+23	5,239437E+22	1,655506E+23
1451	5,657897E+22	5,657884E+22	2,619758E+22	2,619841E+22	1,131578E+23	5,239599E+22	1,655538E+23
1452	5,657853E+22	5,657610E+22	2,619848E+22	2,619813E+22	1,131546E+23	5,239662E+22	1,655512E+23
1453	5,657589E+22	5,657835E+22	2,619973E+22	2,619885E+22	1,131542E+23	5,239858E+22	1,655528E+23
1454	5,657721E+22	5,657711E+22	2,619906E+22	2,620046E+22	1,131543E+23	5,239953E+22	1,655539E+23
1455	5,657566E+22	5,657510E+22	2,620025E+22	2,619978E+22	1,131508E+23	5,240003E+22	1,655508E+23
1456	5,657499E+22	5,657697E+22	2,620077E+22	2,620059E+22	1,131520E+23	5,240136E+22	1,655533E+23
1457	5,657705E+22	5,657488E+22	2,620003E+22	2,620067E+22	1,131519E+23	5,240070E+22	1,655526E+23
1458	5,657518E+22	5,657557E+22	2,620080E+22	2,619952E+22	1,131508E+23	5,240031E+22	1,655511E+23
1459	5,657628E+22	5,657717E+22	2,619985E+22	2,620059E+22	1,131534E+23	5,240044E+22	1,655539E+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							
1460	5,657695E+22	5,657529E+22	2,619938E+22	2,619946E+22	1,131522E+23	5,239884E+22	1,655511E+23
1461	5,657496E+22	5,657763E+22	2,619979E+22	2,619856E+22	1,131526E+23	5,239835E+22	1,655509E+23
1462	5,657750E+22	5,657757E+22	2,619821E+22	2,619916E+22	1,131551E+23	5,239737E+22	1,655524E+23
1463	5,657747E+22	5,657580E+22	2,619835E+22	2,619767E+22	1,131533E+23	5,239601E+22	1,655493E+23
1464	5,657643E+22	5,657839E+22	2,619861E+22	2,619784E+22	1,131548E+23	5,239646E+22	1,655513E+23
1465	5,657858E+22	5,657754E+22	2,619728E+22	2,619834E+22	1,131561E+23	5,239563E+22	1,655517E+23
1466	5,657685E+22	5,657728E+22	2,619805E+22	2,619738E+22	1,131541E+23	5,239543E+22	1,655496E+23
1467	5,657721E+22	5,657853E+22	2,619804E+22	2,619863E+22	1,131557E+23	5,239667E+22	1,655524E+23
1468	5,657854E+22	5,657613E+22	2,619804E+22	2,619844E+22	1,131547E+23	5,239648E+22	1,655511E+23
1469	5,657601E+22	5,657714E+22	2,619960E+22	2,619820E+22	1,131531E+23	5,239780E+22	1,655509E+23
1470	5,657714E+22	5,657744E+22	2,619918E+22	2,620012E+22	1,131546E+23	5,239930E+22	1,655539E+23
1471	5,657650E+22	5,657494E+22	2,620000E+22	2,620004E+22	1,131514E+23	5,240004E+22	1,655515E+23
1472	5,657367E+22	5,657648E+22	2,620156E+22	2,620077E+22	1,131502E+23	5,240233E+22	1,655525E+23
1473	5,657553E+22	5,657533E+22	2,620086E+22	2,620208E+22	1,131509E+23	5,240294E+22	1,655538E+23
1474	5,657430E+22	5,657351E+22	2,620198E+22	2,620121E+22	1,131478E+23	5,240319E+22	1,655510E+23
1475	5,657401E+22	5,657497E+22	2,620228E+22	2,620215E+22	1,131490E+23	5,240443E+22	1,655534E+23
1476	5,657600E+22	5,657351E+22	2,620146E+22	2,620213E+22	1,131495E+23	5,240359E+22	1,655531E+23
1477	5,657350E+22	5,657455E+22	2,620218E+22	2,620108E+22	1,131480E+23	5,240325E+22	1,655513E+23
1478	5,657460E+22	5,657605E+22	2,620106E+22	2,620195E+22	1,131506E+23	5,240301E+22	1,655537E+23
1479	5,657565E+22	5,657404E+22	2,620058E+22	2,620068E+22	1,131497E+23	5,240126E+22	1,655509E+23
1480	5,657363E+22	5,657576E+22	2,620135E+22	2,619981E+22	1,131494E+23	5,240115E+22	1,655506E+23
1481	5,657632E+22	5,657624E+22	2,619967E+22	2,620039E+22	1,131526E+23	5,240007E+22	1,655526E+23
1482	5,657596E+22	5,657482E+22	2,619975E+22	2,619909E+22	1,131508E+23	5,239884E+22	1,655496E+23
1483	5,657488E+22	5,657687E+22	2,619992E+22	2,619959E+22	1,131518E+23	5,239950E+22	1,655513E+23
1484	5,657721E+22	5,657604E+22	2,619872E+22	2,619987E+22	1,131532E+23	5,239859E+22	1,655518E+23
1485	5,657533E+22	5,657567E+22	2,619968E+22	2,619887E+22	1,131510E+23	5,239855E+22	1,655496E+23
1486	5,657595E+22	5,657694E+22	2,619957E+22	2,620002E+22	1,131529E+23	5,239958E+22	1,655525E+23
1487	5,657731E+22	5,657477E+22	2,619958E+22	2,620000E+22	1,131521E+23	5,239958E+22	1,655517E+23
1488	5,657414E+22	5,657549E+22	2,620149E+22	2,620008E+22	1,131496E+23	5,240157E+22	1,655512E+23
1489	5,657502E+22	5,657619E+22	2,620096E+22	2,620200E+22	1,131512E+23	5,240296E+22	1,655542E+23
1490	5,657441E+22	5,657347E+22	2,620184E+22	2,620187E+22	1,131479E+23	5,240372E+22	1,655516E+23
1491	5,657223E+22	5,657404E+22	2,620329E+22	2,620258E+22	1,131463E+23	5,240586E+22	1,655521E+23
1492	5,657458E+22	5,657317E+22	2,620255E+22	2,620356E+22	1,131477E+23	5,240611E+22	1,655539E+23
1493	5,657309E+22	5,657194E+22	2,620357E+22	2,620272E+22	1,131450E+23	5,240629E+22	1,655513E+23
1494	5,657260E+22	5,657387E+22	2,620352E+22	2,620361E+22	1,131465E+23	5,240713E+22	1,655536E+23
1495	5,657438E+22	5,657280E+22	2,620265E+22	2,620357E+22	1,131472E+23	5,240622E+22	1,655534E+23
1496	5,657167E+22	5,657322E+22	2,620376E+22	2,620250E+22	1,131449E+23	5,240627E+22	1,655512E+23
1497	5,657300E+22	5,657478E+22	2,620263E+22	2,620311E+22	1,131478E+23	5,240574E+22	1,655535E+23
1498	5,657429E+22	5,657277E+22	2,620216E+22	2,620189E+22	1,131471E+23	5,240405E+22	1,655511E+23
1499	5,657257E+22	5,657376E+22	2,620269E+22	2,620133E+22	1,131463E+23	5,240402E+22	1,655503E+23
1500	5,657512E+22	5,657469E+22	2,620096E+22	2,620193E+22	1,131498E+23	5,240290E+22	1,655527E+23
1501	5,657438E+22	5,657362E+22	2,620097E+22	2,620074E+22	1,131480E+23	5,240172E+22	1,655497E+23
1502	5,657353E+22	5,657542E+22	2,620103E+22	2,620102E+22	1,131489E+23	5,240205E+22	1,655510E+23
1503	5,657619E+22	5,657466E+22	2,620001E+22	2,620112E+22	1,131509E+23	5,240113E+22	1,655520E+23
1504	5,657414E+22	5,657391E+22	2,620144E+22	2,620024E+22	1,131481E+23	5,240169E+22	1,655497E+23
1505	5,657439E+22	5,657574E+22	2,620137E+22	2,620142E+22	1,131501E+23	5,240278E+22	1,655529E+23
1506	5,657530E+22	5,657380E+22	2,620143E+22	2,620173E+22	1,131491E+23	5,240316E+22	1,655523E+23
1507	5,657206E+22	5,657357E+22	2,620326E+22	2,620215E+22	1,131456E+23	5,240541E+22	1,655510E+23
1508	5,657323E+22	5,657418E+22	2,620281E+22	2,620384E+22	1,131474E+23	5,240665E+22	1,655541E+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							
1509	5,657279E+22	5,657148E+22	2,620364E+22	2,620364E+22	1,131443E+23	5,240728E+22	1,655515E+23
1510	5,657109E+22	5,657212E+22	2,620476E+22	2,620417E+22	1,131432E+23	5,240893E+22	1,655521E+23
1511	5,657357E+22	5,657184E+22	2,620393E+22	2,620510E+22	1,131454E+23	5,240904E+22	1,655544E+23
1512	5,657149E+22	5,657068E+22	2,620519E+22	2,620442E+22	1,131422E+23	5,240961E+22	1,655518E+23
1513	5,657072E+22	5,657313E+22	2,620504E+22	2,620508E+22	1,131439E+23	5,241013E+22	1,655540E+23
1514	5,657260E+22	5,657175E+22	2,620425E+22	2,620493E+22	1,131443E+23	5,240918E+22	1,655535E+23
1515	5,657029E+22	5,657109E+22	2,620530E+22	2,620391E+22	1,131414E+23	5,240921E+22	1,655506E+23
1516	5,657195E+22	5,657287E+22	2,620409E+22	2,620431E+22	1,131448E+23	5,240840E+22	1,655532E+23
1517	5,657292E+22	5,657123E+22	2,620348E+22	2,620330E+22	1,131442E+23	5,240678E+22	1,655509E+23
1518	5,657123E+22	5,657247E+22	2,620365E+22	2,620280E+22	1,131437E+23	5,240644E+22	1,655501E+23
1519	5,657385E+22	5,657368E+22	2,620195E+22	2,620332E+22	1,131475E+23	5,240527E+22	1,655528E+23
1520	5,657297E+22	5,657220E+22	2,620243E+22	2,620211E+22	1,131452E+23	5,240454E+22	1,655497E+23
1521	5,657224E+22	5,657432E+22	2,620257E+22	2,620210E+22	1,131466E+23	5,240467E+22	1,655512E+23
1522	5,657490E+22	5,657356E+22	2,620176E+22	2,620239E+22	1,131485E+23	5,240415E+22	1,655526E+23
1523	5,657270E+22	5,657208E+22	2,620322E+22	2,620201E+22	1,131448E+23	5,240524E+22	1,655500E+23
1524	5,657257E+22	5,657418E+22	2,620316E+22	2,620330E+22	1,131468E+23	5,240645E+22	1,655532E+23
1525	5,657310E+22	5,657224E+22	2,620319E+22	2,620381E+22	1,131453E+23	5,240700E+22	1,655523E+23
1526	5,657040E+22	5,657149E+22	2,620475E+22	2,620402E+22	1,131419E+23	5,240878E+22	1,655507E+23
1527	5,657211E+22	5,657223E+22	2,620431E+22	2,620543E+22	1,131443E+23	5,240974E+22	1,655541E+23
1528	5,657164E+22	5,656958E+22	2,620538E+22	2,620524E+22	1,131412E+23	5,241062E+22	1,655518E+23
1529	5,656967E+22	5,657105E+22	2,620637E+22	2,620560E+22	1,131407E+23	5,241197E+22	1,655527E+23
1530	5,657177E+22	5,657119E+22	2,620561E+22	2,620668E+22	1,131430E+23	5,241229E+22	1,655552E+23
1531	5,656963E+22	5,656915E+22	2,620680E+22	2,620613E+22	1,131388E+23	5,241294E+22	1,655517E+23
1532	5,656900E+22	5,657143E+22	2,620674E+22	2,620646E+22	1,131404E+23	5,241320E+22	1,655536E+23
1533	5,657099E+22	5,657008E+22	2,620585E+22	2,620628E+22	1,131411E+23	5,241213E+22	1,655532E+23
1534	5,656923E+22	5,656916E+22	2,620646E+22	2,620523E+22	1,131384E+23	5,241169E+22	1,655501E+23
1535	5,657099E+22	5,657147E+22	2,620514E+22	2,620564E+22	1,131425E+23	5,241078E+22	1,655532E+23
1536	5,657152E+22	5,657002E+22	2,620469E+22	2,620485E+22	1,131415E+23	5,240954E+22	1,655511E+23
1537	5,656971E+22	5,657169E+22	2,620480E+22	2,620409E+22	1,131414E+23	5,240890E+22	1,655503E+23
1538	5,657255E+22	5,657272E+22	2,620340E+22	2,620451E+22	1,131453E+23	5,240792E+22	1,655532E+23
1539	5,657189E+22	5,657033E+22	2,620400E+22	2,620343E+22	1,131422E+23	5,240743E+22	1,655497E+23
1540	5,657110E+22	5,657270E+22	2,620430E+22	2,620337E+22	1,131438E+23	5,240767E+22	1,655515E+23
1541	5,657311E+22	5,657228E+22	2,620349E+22	2,620405E+22	1,131454E+23	5,240754E+22	1,655529E+23
1542	5,657079E+22	5,657058E+22	2,620467E+22	2,620393E+22	1,131414E+23	5,240860E+22	1,655500E+23
1543	5,657076E+22	5,657266E+22	2,620465E+22	2,620515E+22	1,131434E+23	5,240980E+22	1,655532E+23
1544	5,657132E+22	5,657026E+22	2,620501E+22	2,620568E+22	1,131416E+23	5,241069E+22	1,655523E+23
1545	5,656902E+22	5,656992E+22	2,620644E+22	2,620554E+22	1,131389E+23	5,241198E+22	1,655509E+23
1546	5,657097E+22	5,657078E+22	2,620609E+22	2,620697E+22	1,131417E+23	5,241306E+22	1,655548E+23
1547	5,657025E+22	5,656781E+22	2,620711E+22	2,620705E+22	1,131381E+23	5,241416E+22	1,655522E+23
1548	5,656800E+22	5,656980E+22	2,620806E+22	2,620728E+22	1,131378E+23	5,241533E+22	1,655531E+23
1549	5,656967E+22	5,656989E+22	2,620730E+22	2,620836E+22	1,131396E+23	5,241566E+22	1,655552E+23
1550	5,656804E+22	5,656727E+22	2,620823E+22	2,620763E+22	1,131353E+23	5,241586E+22	1,655512E+23
1551	5,656787E+22	5,656962E+22	2,620807E+22	2,620767E+22	1,131375E+23	5,241574E+22	1,655532E+23
1552	5,656971E+22	5,656833E+22	2,620730E+22	2,620764E+22	1,131380E+23	5,241494E+22	1,655530E+23
1553	5,656784E+22	5,656822E+22	2,620762E+22	2,620648E+22	1,131361E+23	5,241409E+22	1,655502E+23
1554	5,656951E+22	5,657075E+22	2,620638E+22	2,620702E+22	1,131403E+23	5,241340E+22	1,655537E+23
1555	5,657005E+22	5,656862E+22	2,620601E+22	2,620634E+22	1,131387E+23	5,241235E+22	1,655510E+23
1556	5,656850E+22	5,657030E+22	2,620630E+22	2,620527E+22	1,131388E+23	5,241156E+22	1,655504E+23
1557	5,657119E+22	5,657138E+22	2,620502E+22	2,620576E+22	1,131426E+23	5,241078E+22	1,655534E+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	5,657078E+22	5,656868E+22	2,620538E+22	2,620489E+22	1,131395E+23	5,241027E+22	1,655497E+23
1559	5,656971E+22	5,657134E+22	2,620571E+22	2,620497E+22	1,131411E+23	5,241069E+22	1,655517E+23
1560	5,657114E+22	5,657091E+22	2,620511E+22	2,620601E+22	1,131420E+23	5,241112E+22	1,655532E+23
1561	5,656888E+22	5,656923E+22	2,620618E+22	2,620565E+22	1,131381E+23	5,241183E+22	1,655499E+23
1562	5,656932E+22	5,657097E+22	2,620641E+22	2,620678E+22	1,131403E+23	5,241318E+22	1,655535E+23
1563	5,657016E+22	5,656797E+22	2,620675E+22	2,620734E+22	1,131381E+23	5,241409E+22	1,655522E+23
1564	5,656787E+22	5,656810E+22	2,620821E+22	2,620704E+22	1,131360E+23	5,241525E+22	1,655512E+23
1565	5,656918E+22	5,656958E+22	2,620789E+22	2,620866E+22	1,131388E+23	5,241655E+22	1,655553E+23
1566	5,656842E+22	5,656646E+22	2,620859E+22	2,620883E+22	1,131349E+23	5,241743E+22	1,655523E+23
1567	5,656620E+22	5,656842E+22	2,620961E+22	2,620882E+22	1,131346E+23	5,241843E+22	1,655530E+23
1568	5,656782E+22	5,656821E+22	2,620906E+22	2,620991E+22	1,131360E+23	5,241897E+22	1,655550E+23
1569	5,656651E+22	5,656583E+22	2,620972E+22	2,620890E+22	1,131323E+23	5,241863E+22	1,655510E+23
1570	5,656667E+22	5,656821E+22	2,620958E+22	2,620906E+22	1,131349E+23	5,241864E+22	1,655535E+23
1571	5,656833E+22	5,656669E+22	2,620864E+22	2,620931E+22	1,131350E+23	5,241795E+22	1,655530E+23
1572	5,656646E+22	5,656706E+22	2,620887E+22	2,620798E+22	1,131335E+23	5,241685E+22	1,655504E+23
1573	5,656798E+22	5,656959E+22	2,620774E+22	2,620843E+22	1,131376E+23	5,241617E+22	1,655537E+23
1574	5,656903E+22	5,656699E+22	2,620719E+22	2,620758E+22	1,131360E+23	5,241477E+22	1,655508E+23
1575	5,656772E+22	5,656883E+22	2,620758E+22	2,620631E+22	1,131366E+23	5,241389E+22	1,655504E+23
1576	5,656981E+22	5,656998E+22	2,620659E+22	2,620713E+22	1,131398E+23	5,241372E+22	1,655535E+23
1577	5,656901E+22	5,656785E+22	2,620681E+22	2,620637E+22	1,131369E+23	5,241317E+22	1,655500E+23
1578	5,656788E+22	5,657025E+22	2,620729E+22	2,620669E+22	1,131381E+23	5,241397E+22	1,655521E+23
1579	5,656922E+22	5,656892E+22	2,620682E+22	2,620788E+22	1,131381E+23	5,241470E+22	1,655528E+23
1580	5,656750E+22	5,656732E+22	2,620791E+22	2,620722E+22	1,131348E+23	5,241513E+22	1,655500E+23
1581	5,656796E+22	5,656913E+22	2,620822E+22	2,620834E+22	1,131371E+23	5,241657E+22	1,655537E+23
1582	5,656903E+22	5,656614E+22	2,620830E+22	2,620905E+22	1,131352E+23	5,241735E+22	1,655525E+23
1583	5,656649E+22	5,656683E+22	2,620974E+22	2,620874E+22	1,131333E+23	5,241848E+22	1,655518E+23
1584	5,656705E+22	5,656837E+22	2,620966E+22	2,621057E+22	1,131354E+23	5,242023E+22	1,655556E+23
1585	5,656635E+22	5,656531E+22	2,621025E+22	2,621042E+22	1,131317E+23	5,242067E+22	1,655523E+23
1586	5,656464E+22	5,656678E+22	2,621137E+22	2,621030E+22	1,131314E+23	5,242168E+22	1,655531E+23
1587	5,656637E+22	5,656603E+22	2,621074E+22	2,621146E+22	1,131324E+23	5,242220E+22	1,655546E+23
1588	5,656529E+22	5,656415E+22	2,621121E+22	2,621033E+22	1,131294E+23	5,242153E+22	1,655510E+23
1589	5,656506E+22	5,656699E+22	2,621099E+22	2,621061E+22	1,131321E+23	5,242160E+22	1,655537E+23
1590	5,656696E+22	5,656537E+22	2,620969E+22	2,621087E+22	1,131323E+23	5,242056E+22	1,655529E+23
1591	5,656535E+22	5,656582E+22	2,621001E+22	2,620918E+22	1,131312E+23	5,241919E+22	1,655504E+23
1592	5,656674E+22	5,656829E+22	2,620919E+22	2,620961E+22	1,131350E+23	5,241879E+22	1,655538E+23
1593	5,656788E+22	5,656594E+22	2,620851E+22	2,620857E+22	1,131338E+23	5,241708E+22	1,655509E+23
1594	5,656653E+22	5,656768E+22	2,620911E+22	2,620762E+22	1,131342E+23	5,241673E+22	1,655509E+23
1595	5,656799E+22	5,656851E+22	2,620811E+22	2,620886E+22	1,131365E+23	5,241697E+22	1,655535E+23
1596	5,656717E+22	5,656640E+22	2,620833E+22	2,620811E+22	1,131336E+23	5,241645E+22	1,655500E+23
1597	5,656607E+22	5,656849E+22	2,620901E+22	2,620841E+22	1,131346E+23	5,241741E+22	1,655520E+23
1598	5,656809E+22	5,656670E+22	2,620828E+22	2,620952E+22	1,131348E+23	5,241780E+22	1,655526E+23
1599	5,656664E+22	5,656547E+22	2,620940E+22	2,620863E+22	1,131321E+23	5,241803E+22	1,655501E+23
1600	5,656648E+22	5,656770E+22	2,620993E+22	2,621003E+22	1,131342E+23	5,241996E+22	1,655541E+23
1601	5,656707E+22	5,656538E+22	2,620989E+22	2,621070E+22	1,131324E+23	5,242058E+22	1,655530E+23
1602	5,656451E+22	5,656580E+22	2,621157E+22	2,621054E+22	1,131303E+23	5,242211E+22	1,655524E+23
1603	5,656488E+22	5,656651E+22	2,621161E+22	2,621241E+22	1,131314E+23	5,242402E+22	1,655554E+23
1604	5,656473E+22	5,656341E+22	2,621213E+22	2,621200E+22	1,131281E+23	5,242413E+22	1,655523E+23
1605	5,656317E+22	5,656481E+22	2,621317E+22	2,621187E+22	1,131280E+23	5,242505E+22	1,655530E+23
1606	5,656522E+22	5,656405E+22	2,621205E+22	2,621314E+22	1,131293E+23	5,242519E+22	1,655545E+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							
1607	5,656420E+22	5,656286E+22	2,621230E+22	2,621185E+22	1,131271E+23	5,242415E+22	1,655512E+23
1608	5,656355E+22	5,656582E+22	2,621224E+22	2,621217E+22	1,131294E+23	5,242440E+22	1,655538E+23
1609	5,656558E+22	5,656449E+22	2,621089E+22	2,621196E+22	1,131301E+23	5,242285E+22	1,655529E+23
1610	5,656449E+22	5,656462E+22	2,621139E+22	2,621017E+22	1,131291E+23	5,242156E+22	1,655507E+23
1611	5,656540E+22	5,656663E+22	2,621072E+22	2,621076E+22	1,131320E+23	5,242148E+22	1,655535E+23
1612	5,656645E+22	5,656475E+22	2,621001E+22	2,620985E+22	1,131312E+23	5,241986E+22	1,655511E+23
1613	5,656459E+22	5,656646E+22	2,621067E+22	2,620922E+22	1,131311E+23	5,241990E+22	1,655510E+23
1614	5,656622E+22	5,656682E+22	2,620944E+22	2,621065E+22	1,131330E+23	5,242009E+22	1,655531E+23
1615	5,656586E+22	5,656469E+22	2,620971E+22	2,620965E+22	1,131305E+23	5,241936E+22	1,655499E+23
1616	5,656473E+22	5,656668E+22	2,621061E+22	2,621000E+22	1,131314E+23	5,242061E+22	1,655520E+23
1617	5,656688E+22	5,656536E+22	2,620978E+22	2,621092E+22	1,131322E+23	5,242070E+22	1,655529E+23
1618	5,656547E+22	5,656424E+22	2,621108E+22	2,621028E+22	1,131297E+23	5,242136E+22	1,655511E+23
1619	5,656448E+22	5,656631E+22	2,621175E+22	2,621196E+22	1,131308E+23	5,242372E+22	1,655545E+23
1620	5,656508E+22	5,656404E+22	2,621175E+22	2,621254E+22	1,131291E+23	5,242429E+22	1,655534E+23
1621	5,656254E+22	5,656397E+22	2,621361E+22	2,621230E+22	1,131265E+23	5,242591E+22	1,655524E+23
1622	5,656349E+22	5,656416E+22	2,621327E+22	2,621408E+22	1,131276E+23	5,242735E+22	1,655550E+23
1623	5,656369E+22	5,656138E+22	2,621362E+22	2,621347E+22	1,131251E+23	5,242710E+22	1,655522E+23
1624	5,656172E+22	5,656326E+22	2,621464E+22	2,621355E+22	1,131250E+23	5,242818E+22	1,655532E+23
1625	5,656361E+22	5,656318E+22	2,621322E+22	2,621456E+22	1,131268E+23	5,242778E+22	1,655546E+23
1626	5,656283E+22	5,656193E+22	2,621362E+22	2,621322E+22	1,131248E+23	5,242684E+22	1,655516E+23
1627	5,656199E+22	5,656442E+22	2,621372E+22	2,621342E+22	1,131264E+23	5,242714E+22	1,655536E+23
1628	5,656437E+22	5,656318E+22	2,621240E+22	2,621299E+22	1,131276E+23	5,242539E+22	1,655529E+23
1629	5,656314E+22	5,656320E+22	2,621304E+22	2,621138E+22	1,131263E+23	5,242443E+22	1,655508E+23
1630	5,656400E+22	5,656501E+22	2,621200E+22	2,621230E+22	1,131290E+23	5,242430E+22	1,655533E+23
1631	5,656494E+22	5,656345E+22	2,621121E+22	2,621147E+22	1,131284E+23	5,242268E+22	1,655511E+23
1632	5,656282E+22	5,656495E+22	2,621203E+22	2,621102E+22	1,131278E+23	5,242305E+22	1,655508E+23
1633	5,656479E+22	5,656532E+22	2,621075E+22	2,621204E+22	1,131301E+23	5,242279E+22	1,655529E+23
1634	5,656507E+22	5,656309E+22	2,621118E+22	2,621101E+22	1,131282E+23	5,242218E+22	1,655503E+23
1635	5,656348E+22	5,656494E+22	2,621226E+22	2,621150E+22	1,131284E+23	5,242376E+22	1,655522E+23
1636	5,656540E+22	5,656422E+22	2,621152E+22	2,621249E+22	1,131296E+23	5,242401E+22	1,655536E+23
1637	5,656346E+22	5,656309E+22	2,621303E+22	2,621210E+22	1,131265E+23	5,242513E+22	1,655517E+23
1638	5,656246E+22	5,656454E+22	2,621353E+22	2,621387E+22	1,131270E+23	5,242740E+22	1,655544E+23
1639	5,656350E+22	5,656220E+22	2,621354E+22	2,621422E+22	1,131257E+23	5,242776E+22	1,655535E+23
1640	5,656097E+22	5,656188E+22	2,621540E+22	2,621405E+22	1,131228E+23	5,242945E+22	1,655523E+23
1641	5,656203E+22	5,656251E+22	2,621479E+22	2,621558E+22	1,131245E+23	5,243037E+22	1,655549E+23
1642	5,656251E+22	5,656008E+22	2,621502E+22	2,621512E+22	1,131226E+23	5,243014E+22	1,655527E+23
1643	5,655990E+22	5,656189E+22	2,621604E+22	2,621528E+22	1,131218E+23	5,243132E+22	1,655531E+23
1644	5,656204E+22	5,656208E+22	2,621469E+22	2,621598E+22	1,131241E+23	5,243067E+22	1,655548E+23
1645	5,656144E+22	5,656053E+22	2,621525E+22	2,621443E+22	1,131220E+23	5,242968E+22	1,655516E+23
1646	5,656092E+22	5,656260E+22	2,621507E+22	2,621457E+22	1,131235E+23	5,242964E+22	1,655532E+23
1647	5,656337E+22	5,656176E+22	2,621368E+22	2,621410E+22	1,131251E+23	5,242778E+22	1,655529E+23
1648	5,656148E+22	5,656194E+22	2,621436E+22	2,621293E+22	1,131234E+23	5,242729E+22	1,655507E+23
1649	5,656212E+22	5,656406E+22	2,621315E+22	2,621375E+22	1,131262E+23	5,242690E+22	1,655531E+23
1650	5,656355E+22	5,656219E+22	2,621251E+22	2,621300E+22	1,131257E+23	5,242551E+22	1,655513E+23
1651	5,656138E+22	5,656318E+22	2,621352E+22	2,621251E+22	1,131246E+23	5,242604E+22	1,655506E+23
1652	5,656383E+22	5,656376E+22	2,621234E+22	2,621333E+22	1,131276E+23	5,242567E+22	1,655533E+23
1653	5,656393E+22	5,656163E+22	2,621297E+22	2,621245E+22	1,131256E+23	5,242542E+22	1,655510E+23
1654	5,656209E+22	5,656342E+22	2,621380E+22	2,621324E+22	1,131255E+23	5,242705E+22	1,655526E+23
1655	5,656370E+22	5,656296E+22	2,621314E+22	2,621429E+22	1,131267E+23	5,242743E+22	1,655541E+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							
1656	5,656138E+22	5,656151E+22	2,621488E+22	2,621410E+22	1,131229E+23	5,242898E+22	1,655519E+23
1657	5,656065E+22	5,656277E+22	2,621523E+22	2,621544E+22	1,131234E+23	5,243067E+22	1,655541E+23
1658	5,656224E+22	5,656027E+22	2,621525E+22	2,621582E+22	1,131225E+23	5,243107E+22	1,655536E+23
1659	5,655935E+22	5,655994E+22	2,621708E+22	2,621576E+22	1,131193E+23	5,243283E+22	1,655521E+23
1660	5,656043E+22	5,656116E+22	2,621637E+22	2,621721E+22	1,131216E+23	5,243358E+22	1,655552E+23
1661	5,656068E+22	5,655895E+22	2,621668E+22	2,621676E+22	1,131196E+23	5,243344E+22	1,655531E+23
1662	5,655837E+22	5,656032E+22	2,621743E+22	2,621682E+22	1,131187E+23	5,243425E+22	1,655529E+23
1663	5,656090E+22	5,656060E+22	2,621613E+22	2,621718E+22	1,131215E+23	5,243331E+22	1,655548E+23
1664	5,656016E+22	5,655902E+22	2,621673E+22	2,621575E+22	1,131192E+23	5,243248E+22	1,655517E+23
1665	5,655955E+22	5,656134E+22	2,621633E+22	2,621572E+22	1,131209E+23	5,243204E+22	1,655529E+23
1666	5,656207E+22	5,656072E+22	2,621489E+22	2,621556E+22	1,131228E+23	5,243045E+22	1,655532E+23
1667	5,655964E+22	5,656059E+22	2,621563E+22	2,621460E+22	1,131202E+23	5,243023E+22	1,655505E+23
1668	5,656068E+22	5,656266E+22	2,621457E+22	2,621517E+22	1,131233E+23	5,242973E+22	1,655531E+23
1669	5,656244E+22	5,656058E+22	2,621411E+22	2,621430E+22	1,131230E+23	5,242841E+22	1,655514E+23
1670	5,656055E+22	5,656125E+22	2,621488E+22	2,621385E+22	1,131218E+23	5,242873E+22	1,655505E+23
1671	5,656292E+22	5,656240E+22	2,621380E+22	2,621467E+22	1,131253E+23	5,242847E+22	1,655538E+23
1672	5,656219E+22	5,656050E+22	2,621455E+22	2,621422E+22	1,131227E+23	5,242876E+22	1,655515E+23
1673	5,655993E+22	5,656237E+22	2,621538E+22	2,621488E+22	1,131223E+23	5,243026E+22	1,655526E+23
1674	5,656190E+22	5,656160E+22	2,621487E+22	2,621602E+22	1,131235E+23	5,243090E+22	1,655544E+23
1675	5,655939E+22	5,655946E+22	2,621678E+22	2,621589E+22	1,131188E+23	5,243266E+22	1,655515E+23
1676	5,655914E+22	5,656083E+22	2,621713E+22	2,621706E+22	1,131200E+23	5,243418E+22	1,655542E+23
1677	5,656076E+22	5,655849E+22	2,621713E+22	2,621756E+22	1,131193E+23	5,243469E+22	1,655539E+23
1678	5,655785E+22	5,655817E+22	2,621848E+22	2,621767E+22	1,131160E+23	5,243615E+22	1,655522E+23
1679	5,655900E+22	5,655981E+22	2,621778E+22	2,621890E+22	1,131188E+23	5,243668E+22	1,655555E+23
1680	5,655907E+22	5,655752E+22	2,621820E+22	2,621838E+22	1,131166E+23	5,243659E+22	1,655532E+23
1681	5,655708E+22	5,655889E+22	2,621882E+22	2,621790E+22	1,131160E+23	5,243672E+22	1,655527E+23
1682	5,655997E+22	5,655926E+22	2,621751E+22	2,621829E+22	1,131192E+23	5,243580E+22	1,655550E+23
1683	5,655855E+22	5,655764E+22	2,621817E+22	2,621712E+22	1,131162E+23	5,243529E+22	1,655515E+23
1684	5,655785E+22	5,656029E+22	2,621771E+22	2,621711E+22	1,131181E+23	5,243482E+22	1,655530E+23
1685	5,656023E+22	5,655958E+22	2,621641E+22	2,621708E+22	1,131198E+23	5,243348E+22	1,655533E+23
1686	5,655831E+22	5,655886E+22	2,621686E+22	2,621611E+22	1,131172E+23	5,243298E+22	1,655501E+23
1687	5,655986E+22	5,656094E+22	2,621591E+22	2,621641E+22	1,131208E+23	5,243233E+22	1,655531E+23
1688	5,656137E+22	5,655909E+22	2,621556E+22	2,621574E+22	1,131205E+23	5,243130E+22	1,655518E+23
1689	5,655934E+22	5,656008E+22	2,621618E+22	2,621515E+22	1,131194E+23	5,243133E+22	1,655508E+23
1690	5,656140E+22	5,656146E+22	2,621522E+22	2,621630E+22	1,131229E+23	5,243153E+22	1,655544E+23
1691	5,655995E+22	5,655922E+22	2,621625E+22	2,621612E+22	1,131192E+23	5,243237E+22	1,655515E+23
1692	5,655802E+22	5,656071E+22	2,621728E+22	2,621655E+22	1,131187E+23	5,243383E+22	1,655526E+23
1693	5,656024E+22	5,655963E+22	2,621694E+22	2,621766E+22	1,131199E+23	5,243460E+22	1,655545E+23
1694	5,655811E+22	5,655712E+22	2,621842E+22	2,621764E+22	1,131152E+23	5,243606E+22	1,655513E+23
1695	5,655792E+22	5,655895E+22	2,621873E+22	2,621877E+22	1,131169E+23	5,243750E+22	1,655544E+23
1696	5,655896E+22	5,655713E+22	2,621869E+22	2,621950E+22	1,131161E+23	5,243819E+22	1,655543E+23
1697	5,655610E+22	5,655698E+22	2,621987E+22	2,621923E+22	1,131131E+23	5,243910E+22	1,655522E+23
1698	5,655766E+22	5,655860E+22	2,621931E+22	2,622033E+22	1,131163E+23	5,243964E+22	1,655559E+23
1699	5,655748E+22	5,655602E+22	2,621988E+22	2,621975E+22	1,131135E+23	5,243963E+22	1,655531E+23
1700	5,655574E+22	5,655751E+22	2,622049E+22	2,621908E+22	1,131132E+23	5,243958E+22	1,655528E+23
1701	5,655841E+22	5,655801E+22	2,621918E+22	2,621968E+22	1,131164E+23	5,243886E+22	1,655553E+23
1702	5,655691E+22	5,655610E+22	2,621937E+22	2,621883E+22	1,131130E+23	5,243820E+22	1,655512E+23
1703	5,655646E+22	5,655882E+22	2,621896E+22	2,621868E+22	1,131153E+23	5,243765E+22	1,655529E+23
1704	5,655888E+22	5,655796E+22	2,621770E+22	2,621860E+22	1,131168E+23	5,243630E+22	1,655531E+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	5,655740E+22	5,655726E+22	2,621798E+22	2,621717E+22	1,131147E+23	5,243515E+22	1,655498E+23
1706	5,655921E+22	5,655972E+22	2,621711E+22	2,621753E+22	1,131189E+23	5,243464E+22	1,655536E+23
1707	5,655980E+22	5,655797E+22	2,621699E+22	2,621716E+22	1,131178E+23	5,243414E+22	1,655519E+23
1708	5,655748E+22	5,655919E+22	2,621782E+22	2,621664E+22	1,131167E+23	5,243445E+22	1,655511E+23
1709	5,655928E+22	5,656028E+22	2,621715E+22	2,621795E+22	1,131196E+23	5,243510E+22	1,655547E+23
1710	5,655815E+22	5,655719E+22	2,621799E+22	2,621794E+22	1,131153E+23	5,243592E+22	1,655513E+23
1711	5,655675E+22	5,655851E+22	2,621909E+22	2,621822E+22	1,131153E+23	5,243731E+22	1,655526E+23
1712	5,655876E+22	5,655758E+22	2,621870E+22	2,621953E+22	1,131163E+23	5,243824E+22	1,655546E+23
1713	5,655671E+22	5,655547E+22	2,621984E+22	2,621934E+22	1,131122E+23	5,243918E+22	1,655514E+23
1714	5,655652E+22	5,655777E+22	2,622013E+22	2,622060E+22	1,131143E+23	5,244073E+22	1,655550E+23
1715	5,655697E+22	5,655587E+22	2,622034E+22	2,622132E+22	1,131128E+23	5,244167E+22	1,655545E+23
1716	5,655456E+22	5,655560E+22	2,622168E+22	2,622062E+22	1,131102E+23	5,244230E+22	1,655525E+23
1717	5,655621E+22	5,655708E+22	2,622126E+22	2,622159E+22	1,131133E+23	5,244286E+22	1,655561E+23
1718	5,655615E+22	5,655424E+22	2,622141E+22	2,622122E+22	1,131104E+23	5,244262E+22	1,655530E+23
1719	5,655435E+22	5,655592E+22	2,622193E+22	2,622058E+22	1,131103E+23	5,244251E+22	1,655528E+23
1720	5,655640E+22	5,655674E+22	2,622052E+22	2,622142E+22	1,131131E+23	5,244194E+22	1,655551E+23
1721	5,655533E+22	5,655474E+22	2,622041E+22	2,622022E+22	1,131101E+23	5,244062E+22	1,655507E+23
1722	5,655549E+22	5,655736E+22	2,622008E+22	2,621993E+22	1,131128E+23	5,244002E+22	1,655529E+23
1723	5,655771E+22	5,655649E+22	2,621905E+22	2,621982E+22	1,131142E+23	5,243887E+22	1,655531E+23
1724	5,655648E+22	5,655605E+22	2,621941E+22	2,621824E+22	1,131125E+23	5,243765E+22	1,655502E+23
1725	5,655780E+22	5,655876E+22	2,621875E+22	2,621884E+22	1,131166E+23	5,243760E+22	1,655542E+23
1726	5,655805E+22	5,655670E+22	2,621840E+22	2,621889E+22	1,131147E+23	5,243729E+22	1,655520E+23
1727	5,655582E+22	5,655755E+22	2,621949E+22	2,621836E+22	1,131134E+23	5,243785E+22	1,655512E+23
1728	5,655744E+22	5,655840E+22	2,621896E+22	2,621974E+22	1,131158E+23	5,243869E+22	1,655545E+23
1729	5,655686E+22	5,655512E+22	2,621952E+22	2,621946E+22	1,131120E+23	5,243898E+22	1,655510E+23
1730	5,655573E+22	5,655674E+22	2,622059E+22	2,621987E+22	1,131125E+23	5,244046E+22	1,655529E+23
1731	5,655696E+22	5,655613E+22	2,622033E+22	2,622141E+22	1,131131E+23	5,244174E+22	1,655548E+23
1732	5,655488E+22	5,655440E+22	2,622154E+22	2,622105E+22	1,131093E+23	5,244259E+22	1,655519E+23
1733	5,655465E+22	5,655662E+22	2,622209E+22	2,622224E+22	1,131113E+23	5,244432E+22	1,655556E+23
1734	5,655536E+22	5,655409E+22	2,622210E+22	2,622298E+22	1,131094E+23	5,244508E+22	1,655545E+23
1735	5,655336E+22	5,655375E+22	2,622351E+22	2,622210E+22	1,131071E+23	5,244560E+22	1,655527E+23
1736	5,655459E+22	5,655539E+22	2,622294E+22	2,622319E+22	1,131100E+23	5,244613E+22	1,655561E+23
1737	5,655454E+22	5,655271E+22	2,622262E+22	2,622275E+22	1,131073E+23	5,244537E+22	1,655526E+23
1738	5,655292E+22	5,655467E+22	2,622299E+22	2,622219E+22	1,131076E+23	5,244518E+22	1,655528E+23
1739	5,655466E+22	5,655527E+22	2,622178E+22	2,622296E+22	1,131099E+23	5,244474E+22	1,655547E+23
1740	5,655429E+22	5,655332E+22	2,622175E+22	2,622127E+22	1,131076E+23	5,244302E+22	1,655506E+23
1741	5,655467E+22	5,655604E+22	2,622158E+22	2,622090E+22	1,131107E+23	5,244248E+22	1,655532E+23
1742	5,655669E+22	5,655508E+22	2,622033E+22	2,622105E+22	1,131118E+23	5,244138E+22	1,655531E+23
1743	5,655522E+22	5,655489E+22	2,622085E+22	2,621963E+22	1,131101E+23	5,244048E+22	1,655506E+23
1744	5,655567E+22	5,655767E+22	2,622033E+22	2,622051E+22	1,131133E+23	5,244084E+22	1,655542E+23
1745	5,655622E+22	5,655523E+22	2,621984E+22	2,622046E+22	1,131115E+23	5,244031E+22	1,655518E+23
1746	5,655451E+22	5,655580E+22	2,622101E+22	2,621996E+22	1,131103E+23	5,244098E+22	1,655513E+23
1747	5,655582E+22	5,655650E+22	2,622069E+22	2,622146E+22	1,131123E+23	5,244215E+22	1,655545E+23
1748	5,655557E+22	5,655352E+22	2,622123E+22	2,622107E+22	1,131091E+23	5,244229E+22	1,655514E+23
1749	5,655416E+22	5,655543E+22	2,622238E+22	2,622168E+22	1,131096E+23	5,244406E+22	1,655536E+23
1750	5,655517E+22	5,655467E+22	2,622193E+22	2,622343E+22	1,131098E+23	5,244536E+22	1,655552E+23
1751	5,655344E+22	5,655266E+22	2,622335E+22	2,622283E+22	1,131061E+23	5,244618E+22	1,655523E+23
1752	5,655292E+22	5,655482E+22	2,622401E+22	2,622385E+22	1,131077E+23	5,244786E+22	1,655556E+23
1753	5,655407E+22	5,655228E+22	2,622364E+22	2,622432E+22	1,131064E+23	5,244796E+22	1,655543E+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	5,655211E+22	5,655215E+22	2,622490E+22	2,622357E+22	1,131043E+23	5,244846E+22	1,655527E+23
1755	5,655250E+22	5,655405E+22	2,622440E+22	2,622486E+22	1,131065E+23	5,244926E+22	1,655558E+23
1756	5,655273E+22	5,655157E+22	2,622401E+22	2,622419E+22	1,131043E+23	5,244820E+22	1,655525E+23
1757	5,655142E+22	5,655338E+22	2,622450E+22	2,622352E+22	1,131048E+23	5,244802E+22	1,655528E+23
1758	5,655356E+22	5,655359E+22	2,622309E+22	2,622426E+22	1,131071E+23	5,244735E+22	1,655545E+23
1759	5,655364E+22	5,655172E+22	2,622316E+22	2,622241E+22	1,131054E+23	5,244556E+22	1,655509E+23
1760	5,655340E+22	5,655482E+22	2,622301E+22	2,622219E+22	1,131082E+23	5,244519E+22	1,655534E+23
1761	5,655526E+22	5,655405E+22	2,622146E+22	2,622242E+22	1,131093E+23	5,244388E+22	1,655532E+23
1762	5,655369E+22	5,655385E+22	2,622208E+22	2,622125E+22	1,131075E+23	5,244333E+22	1,655509E+23
1763	5,655364E+22	5,655617E+22	2,622192E+22	2,622219E+22	1,131098E+23	5,244411E+22	1,655539E+23
1764	5,655479E+22	5,655354E+22	2,622154E+22	2,622187E+22	1,131083E+23	5,244340E+22	1,655517E+23
1765	5,655338E+22	5,655408E+22	2,622278E+22	2,622144E+22	1,131075E+23	5,244422E+22	1,655517E+23
1766	5,655449E+22	5,655460E+22	2,622225E+22	2,622322E+22	1,131091E+23	5,244547E+22	1,655546E+23
1767	5,655415E+22	5,655200E+22	2,622289E+22	2,622289E+22	1,131062E+23	5,244578E+22	1,655519E+23
1768	5,655216E+22	5,655411E+22	2,622410E+22	2,622353E+22	1,131063E+23	5,244763E+22	1,655539E+23
1769	5,655347E+22	5,655304E+22	2,622354E+22	2,622504E+22	1,131065E+23	5,244857E+22	1,655551E+23
1770	5,655216E+22	5,655104E+22	2,622502E+22	2,622436E+22	1,131032E+23	5,244938E+22	1,655526E+23
1771	5,655114E+22	5,655307E+22	2,622584E+22	2,622542E+22	1,131042E+23	5,245126E+22	1,655555E+23
1772	5,655246E+22	5,655084E+22	2,622536E+22	2,622580E+22	1,131033E+23	5,245116E+22	1,655545E+23
1773	5,655036E+22	5,655092E+22	2,622649E+22	2,622524E+22	1,131013E+23	5,245174E+22	1,655530E+23
1774	5,655064E+22	5,655243E+22	2,622575E+22	2,622665E+22	1,131031E+23	5,245241E+22	1,655555E+23
1775	5,655155E+22	5,654982E+22	2,622546E+22	2,622567E+22	1,131014E+23	5,245113E+22	1,655525E+23
1776	5,655027E+22	5,655174E+22	2,622593E+22	2,622477E+22	1,131020E+23	5,245070E+22	1,655527E+23
1777	5,655279E+22	5,655211E+22	2,622422E+22	2,622530E+22	1,131049E+23	5,244952E+22	1,655544E+23
1778	5,655274E+22	5,655073E+22	2,622424E+22	2,622362E+22	1,131035E+23	5,244786E+22	1,655513E+23
1779	5,655142E+22	5,655397E+22	2,622437E+22	2,622364E+22	1,131054E+23	5,244800E+22	1,655534E+23
1780	5,655336E+22	5,655318E+22	2,622294E+22	2,622379E+22	1,131065E+23	5,244673E+22	1,655533E+23
1781	5,655204E+22	5,655248E+22	2,622377E+22	2,622273E+22	1,131045E+23	5,244651E+22	1,655510E+23
1782	5,655220E+22	5,655418E+22	2,622354E+22	2,622380E+22	1,131064E+23	5,244734E+22	1,655537E+23
1783	5,655390E+22	5,655148E+22	2,622320E+22	2,622345E+22	1,131054E+23	5,244665E+22	1,655520E+23
1784	5,655193E+22	5,655240E+22	2,622438E+22	2,622317E+22	1,131043E+23	5,244755E+22	1,655519E+23
1785	5,655303E+22	5,655320E+22	2,622355E+22	2,622497E+22	1,131062E+23	5,244852E+22	1,655547E+23
1786	5,655267E+22	5,655073E+22	2,622429E+22	2,622466E+22	1,131034E+23	5,244896E+22	1,655523E+23
1787	5,655020E+22	5,655255E+22	2,622595E+22	2,622519E+22	1,131028E+23	5,245115E+22	1,655539E+23
1788	5,655196E+22	5,655150E+22	2,622546E+22	2,622638E+22	1,131035E+23	5,245184E+22	1,655553E+23
1789	5,655068E+22	5,654950E+22	2,622697E+22	2,622588E+22	1,131002E+23	5,245284E+22	1,655530E+23
1790	5,654925E+22	5,655133E+22	2,622752E+22	2,622722E+22	1,131006E+23	5,245474E+22	1,655553E+23
1791	5,655067E+22	5,654923E+22	2,622700E+22	2,622762E+22	1,130999E+23	5,245462E+22	1,655545E+23
1792	5,654837E+22	5,654941E+22	2,622802E+22	2,622697E+22	1,130978E+23	5,245500E+22	1,655528E+23
1793	5,654940E+22	5,655068E+22	2,622699E+22	2,622806E+22	1,131001E+23	5,245505E+22	1,655551E+23
1794	5,655083E+22	5,654840E+22	2,622663E+22	2,622689E+22	1,130992E+23	5,245352E+22	1,655527E+23
1795	5,654910E+22	5,655046E+22	2,622729E+22	2,622597E+22	1,130996E+23	5,245325E+22	1,655528E+23
1796	5,655152E+22	5,655127E+22	2,622557E+22	2,622641E+22	1,131028E+23	5,245198E+22	1,655548E+23
1797	5,655118E+22	5,655006E+22	2,622564E+22	2,622505E+22	1,131012E+23	5,245069E+22	1,655519E+23
1798	5,654953E+22	5,655250E+22	2,622577E+22	2,622526E+22	1,131020E+23	5,245102E+22	1,655531E+23
1799	5,655200E+22	5,655131E+22	2,622458E+22	2,622526E+22	1,131033E+23	5,244985E+22	1,655532E+23
1800	5,655075E+22	5,655057E+22	2,622534E+22	2,622414E+22	1,131013E+23	5,244948E+22	1,655508E+23
1801	5,655125E+22	5,655218E+22	2,622481E+22	2,622521E+22	1,131034E+23	5,245002E+22	1,655534E+23
1802	5,655279E+22	5,655017E+22	2,622443E+22	2,622504E+22	1,131030E+23	5,244947E+22	1,655524E+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							
1803	5,654996E+22	5,655128E+22	2,622588E+22	2,622491E+22	1,131012E+23	5,245080E+22	1,655520E+23
1804	5,655114E+22	5,655215E+22	2,622529E+22	2,622650E+22	1,131033E+23	5,245178E+22	1,655551E+23
1805	5,655100E+22	5,654947E+22	2,622626E+22	2,622627E+22	1,131005E+23	5,245253E+22	1,655530E+23
1806	5,654843E+22	5,655062E+22	2,622792E+22	2,622691E+22	1,130990E+23	5,245483E+22	1,655539E+23
1807	5,655051E+22	5,654953E+22	2,622748E+22	2,622812E+22	1,131000E+23	5,245560E+22	1,655556E+23
1808	5,654875E+22	5,654779E+22	2,622876E+22	2,622778E+22	1,130965E+23	5,245654E+22	1,655531E+23
1809	5,654751E+22	5,654959E+22	2,622885E+22	2,622913E+22	1,130971E+23	5,245799E+22	1,655551E+23
1810	5,654926E+22	5,654769E+22	2,622823E+22	2,622938E+22	1,130970E+23	5,245761E+22	1,655546E+23
1811	5,654693E+22	5,654775E+22	2,622945E+22	2,622844E+22	1,130947E+23	5,245789E+22	1,655526E+23
1812	5,654854E+22	5,654935E+22	2,622841E+22	2,622905E+22	1,130979E+23	5,245746E+22	1,655553E+23
1813	5,654992E+22	5,654742E+22	2,622805E+22	2,622798E+22	1,130973E+23	5,245604E+22	1,655534E+23
1814	5,654752E+22	5,654935E+22	2,622865E+22	2,622732E+22	1,130969E+23	5,245598E+22	1,655528E+23
1815	5,654987E+22	5,655015E+22	2,622705E+22	2,622780E+22	1,131000E+23	5,245485E+22	1,655549E+23
1816	5,654916E+22	5,654870E+22	2,622717E+22	2,622652E+22	1,130979E+23	5,245369E+22	1,655515E+23
1817	5,654818E+22	5,655063E+22	2,622706E+22	2,622665E+22	1,130988E+23	5,245371E+22	1,655525E+23
1818	5,655107E+22	5,654957E+22	2,622583E+22	2,622665E+22	1,131006E+23	5,245248E+22	1,655531E+23
1819	5,654945E+22	5,654896E+22	2,622675E+22	2,622565E+22	1,130984E+23	5,245240E+22	1,655508E+23
1820	5,654994E+22	5,655108E+22	2,622622E+22	2,622665E+22	1,131010E+23	5,245286E+22	1,655539E+23
1821	5,655117E+22	5,654937E+22	2,622595E+22	2,622676E+22	1,131005E+23	5,245271E+22	1,655533E+23
1822	5,654803E+22	5,654978E+22	2,622761E+22	2,622672E+22	1,130978E+23	5,245434E+22	1,655521E+23
1823	5,654966E+22	5,655027E+22	2,622734E+22	2,622811E+22	1,130999E+23	5,245544E+22	1,655554E+23
1824	5,654934E+22	5,654762E+22	2,622829E+22	2,622790E+22	1,130970E+23	5,245619E+22	1,655531E+23
1825	5,654700E+22	5,654856E+22	2,622956E+22	2,622866E+22	1,130956E+23	5,245821E+22	1,655538E+23
1826	5,654885E+22	5,654799E+22	2,622895E+22	2,623000E+22	1,130968E+23	5,245895E+22	1,655558E+23
1827	5,654662E+22	5,654631E+22	2,623028E+22	2,622969E+22	1,130929E+23	5,245997E+22	1,655529E+23
1828	5,654586E+22	5,654813E+22	2,623040E+22	2,623062E+22	1,130940E+23	5,246102E+22	1,655550E+23
1829	5,654811E+22	5,654645E+22	2,622980E+22	2,623077E+22	1,130946E+23	5,246057E+22	1,655551E+23
1830	5,654580E+22	5,654609E+22	2,623096E+22	2,622975E+22	1,130919E+23	5,246071E+22	1,655526E+23
1831	5,654752E+22	5,654789E+22	2,623004E+22	2,623027E+22	1,130954E+23	5,246032E+22	1,655557E+23
1832	5,654822E+22	5,654646E+22	2,622951E+22	2,622935E+22	1,130947E+23	5,245886E+22	1,655535E+23
1833	5,654583E+22	5,654797E+22	2,622979E+22	2,622884E+22	1,130938E+23	5,245863E+22	1,655524E+23
1834	5,654831E+22	5,654875E+22	2,622825E+22	2,622926E+22	1,130971E+23	5,245750E+22	1,655546E+23
1835	5,654766E+22	5,654696E+22	2,622855E+22	2,622791E+22	1,130946E+23	5,245646E+22	1,655511E+23
1836	5,654719E+22	5,654901E+22	2,622844E+22	2,622779E+22	1,130962E+23	5,245622E+22	1,655524E+23
1837	5,655007E+22	5,654844E+22	2,622719E+22	2,622806E+22	1,130985E+23	5,245525E+22	1,655538E+23
1838	5,654782E+22	5,654769E+22	2,622814E+22	2,622730E+22	1,130955E+23	5,245544E+22	1,655509E+23
1839	5,654831E+22	5,654982E+22	2,622791E+22	2,622829E+22	1,130981E+23	5,245619E+22	1,655543E+23
1840	5,654923E+22	5,654803E+22	2,622781E+22	2,622839E+22	1,130973E+23	5,245620E+22	1,655535E+23
1841	5,654660E+22	5,654781E+22	2,622935E+22	2,622837E+22	1,130944E+23	5,245772E+22	1,655521E+23
1842	5,654835E+22	5,654845E+22	2,622906E+22	2,622976E+22	1,130968E+23	5,245882E+22	1,655556E+23
1843	5,654758E+22	5,654581E+22	2,623010E+22	2,622977E+22	1,130934E+23	5,245987E+22	1,655533E+23
1844	5,654527E+22	5,654711E+22	2,623118E+22	2,623044E+22	1,130924E+23	5,246162E+22	1,655540E+23
1845	5,654709E+22	5,654674E+22	2,623050E+22	2,623192E+22	1,130938E+23	5,246242E+22	1,655562E+23
1846	5,654487E+22	5,654450E+22	2,623190E+22	2,623146E+22	1,130894E+23	5,246336E+22	1,655527E+23
1847	5,654486E+22	5,654626E+22	2,623215E+22	2,623196E+22	1,130911E+23	5,246411E+22	1,655552E+23
1848	5,654684E+22	5,654496E+22	2,623147E+22	2,623197E+22	1,130918E+23	5,246343E+22	1,655552E+23
1849	5,654464E+22	5,654463E+22	2,623226E+22	2,623107E+22	1,130893E+23	5,246333E+22	1,655526E+23
1850	5,654594E+22	5,654690E+22	2,623125E+22	2,623166E+22	1,130928E+23	5,246290E+22	1,655557E+23
1851	5,654609E+22	5,654534E+22	2,623087E+22	2,623087E+22	1,130914E+23	5,246174E+22	1,655532E+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	5,654419E+22	5,654662E+22	2,623115E+22	2,623009E+22	1,130908E+23	5,246123E+22	1,655520E+23
1853	5,654707E+22	5,654740E+22	2,622961E+22	2,623059E+22	1,130945E+23	5,246020E+22	1,655547E+23
1854	5,654650E+22	5,654517E+22	2,622993E+22	2,622933E+22	1,130917E+23	5,245926E+22	1,655509E+23
1855	5,654632E+22	5,654739E+22	2,622994E+22	2,622920E+22	1,130937E+23	5,245913E+22	1,655528E+23
1856	5,654852E+22	5,654741E+22	2,622866E+22	2,622962E+22	1,130959E+23	5,245828E+22	1,655542E+23
1857	5,654639E+22	5,654625E+22	2,622944E+22	2,622901E+22	1,130926E+23	5,245844E+22	1,655511E+23
1858	5,654687E+22	5,654833E+22	2,622946E+22	2,622983E+22	1,130952E+23	5,245929E+22	1,655545E+23
1859	5,654766E+22	5,654630E+22	2,622962E+22	2,622996E+22	1,130940E+23	5,245959E+22	1,655535E+23
1860	5,654525E+22	5,654606E+22	2,623115E+22	2,622982E+22	1,130913E+23	5,246097E+22	1,655523E+23
1861	5,654672E+22	5,654717E+22	2,623080E+22	2,623155E+22	1,130939E+23	5,246235E+22	1,655562E+23
1862	5,654546E+22	5,654418E+22	2,623178E+22	2,623177E+22	1,130896E+23	5,246355E+22	1,655532E+23
1863	5,654344E+22	5,654533E+22	2,623300E+22	2,623229E+22	1,130888E+23	5,246529E+22	1,655541E+23
1864	5,654526E+22	5,654516E+22	2,623232E+22	2,623354E+22	1,130904E+23	5,246587E+22	1,655563E+23
1865	5,654376E+22	5,654253E+22	2,623339E+22	2,623298E+22	1,130863E+23	5,246637E+22	1,655527E+23
1866	5,654384E+22	5,654472E+22	2,623362E+22	2,623331E+22	1,130886E+23	5,246693E+22	1,655555E+23
1867	5,654529E+22	5,654373E+22	2,623296E+22	2,623344E+22	1,130890E+23	5,246640E+22	1,655554E+23
1868	5,654295E+22	5,654366E+22	2,623358E+22	2,623248E+22	1,130866E+23	5,246605E+22	1,655527E+23
1869	5,654412E+22	5,654600E+22	2,623254E+22	2,623320E+22	1,130901E+23	5,246574E+22	1,655559E+23
1870	5,654436E+22	5,654358E+22	2,623230E+22	2,623236E+22	1,130879E+23	5,246465E+22	1,655526E+23
1871	5,654330E+22	5,654464E+22	2,623268E+22	2,623131E+22	1,130879E+23	5,246399E+22	1,655519E+23
1872	5,654603E+22	5,654586E+22	2,623107E+22	2,623179E+22	1,130919E+23	5,246286E+22	1,655548E+23
1873	5,654558E+22	5,654367E+22	2,623103E+22	2,623076E+22	1,130893E+23	5,246180E+22	1,655510E+23
1874	5,654503E+22	5,654639E+22	2,623109E+22	2,623064E+22	1,130914E+23	5,246173E+22	1,655532E+23
1875	5,654667E+22	5,654632E+22	2,623015E+22	2,623117E+22	1,130930E+23	5,246132E+22	1,655543E+23
1876	5,654488E+22	5,654498E+22	2,623108E+22	2,623037E+22	1,130899E+23	5,246145E+22	1,655513E+23
1877	5,654543E+22	5,654700E+22	2,623120E+22	2,623133E+22	1,130924E+23	5,246253E+22	1,655550E+23
1878	5,654594E+22	5,654441E+22	2,623152E+22	2,623172E+22	1,130903E+23	5,246324E+22	1,655536E+23
1879	5,654375E+22	5,654420E+22	2,623304E+22	2,623165E+22	1,130879E+23	5,246469E+22	1,655526E+23
1880	5,654458E+22	5,654566E+22	2,623257E+22	2,623349E+22	1,130902E+23	5,246606E+22	1,655563E+23
1881	5,654376E+22	5,654224E+22	2,623325E+22	2,623378E+22	1,130860E+23	5,246703E+22	1,655530E+23
1882	5,654215E+22	5,654345E+22	2,623453E+22	2,623392E+22	1,130856E+23	5,246845E+22	1,655540E+23
1883	5,654395E+22	5,654339E+22	2,623401E+22	2,623502E+22	1,130873E+23	5,246903E+22	1,655564E+23
1884	5,654267E+22	5,654117E+22	2,623492E+22	2,623422E+22	1,130838E+23	5,246914E+22	1,655530E+23
1885	5,654231E+22	5,654389E+22	2,623506E+22	2,623474E+22	1,130862E+23	5,246980E+22	1,655560E+23
1886	5,654317E+22	5,654255E+22	2,623447E+22	2,623505E+22	1,130857E+23	5,246952E+22	1,655552E+23
1887	5,654122E+22	5,654213E+22	2,623518E+22	2,623394E+22	1,130833E+23	5,246912E+22	1,655525E+23
1888	5,654239E+22	5,654447E+22	2,623414E+22	2,623450E+22	1,130869E+23	5,246864E+22	1,655555E+23
1889	5,654346E+22	5,654160E+22	2,623351E+22	2,623374E+22	1,130851E+23	5,246725E+22	1,655523E+23
1890	5,654260E+22	5,654302E+22	2,623384E+22	2,623258E+22	1,130856E+23	5,246642E+22	1,655520E+23
1891	5,654484E+22	5,654469E+22	2,623232E+22	2,623323E+22	1,130895E+23	5,246555E+22	1,655551E+23
1892	5,654423E+22	5,654282E+22	2,623219E+22	2,623214E+22	1,130871E+23	5,246433E+22	1,655514E+23
1893	5,654345E+22	5,654564E+22	2,623244E+22	2,623211E+22	1,130891E+23	5,246456E+22	1,655536E+23
1894	5,654497E+22	5,654472E+22	2,623185E+22	2,623265E+22	1,130897E+23	5,246450E+22	1,655542E+23
1895	5,654360E+22	5,654304E+22	2,623300E+22	2,623180E+22	1,130866E+23	5,246480E+22	1,655515E+23
1896	5,654368E+22	5,654539E+22	2,623312E+22	2,623289E+22	1,130891E+23	5,246602E+22	1,655551E+23
1897	5,654428E+22	5,654252E+22	2,623305E+22	2,623368E+22	1,130868E+23	5,246674E+22	1,655535E+23
1898	5,654196E+22	5,654255E+22	2,623454E+22	2,623358E+22	1,130845E+23	5,246812E+22	1,655526E+23
1899	5,654266E+22	5,654394E+22	2,623425E+22	2,623538E+22	1,130866E+23	5,246963E+22	1,655562E+23
1900	5,654238E+22	5,654062E+22	2,623486E+22	2,623529E+22	1,130830E+23	5,247015E+22	1,655531E+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							
1901	5,654102E+22	5,654215E+22	2,623613E+22	2,623538E+22	1,130832E+23	5,247151E+22	1,655547E+23
1902	5,654247E+22	5,654181E+22	2,623579E+22	2,623656E+22	1,130843E+23	5,247235E+22	1,655566E+23
1903	5,654119E+22	5,653984E+22	2,623668E+22	2,623577E+22	1,130810E+23	5,247245E+22	1,655535E+23
1904	5,654016E+22	5,654284E+22	2,623672E+22	2,623632E+22	1,130830E+23	5,247303E+22	1,655560E+23
1905	5,654146E+22	5,654077E+22	2,623582E+22	2,623674E+22	1,130822E+23	5,247255E+22	1,655548E+23
1906	5,654009E+22	5,654022E+22	2,623649E+22	2,623529E+22	1,130803E+23	5,247177E+22	1,655521E+23
1907	5,654134E+22	5,654265E+22	2,623549E+22	2,623578E+22	1,130840E+23	5,247128E+22	1,655553E+23
1908	5,654264E+22	5,654038E+22	2,623462E+22	2,623487E+22	1,130830E+23	5,246949E+22	1,655525E+23
1909	5,654148E+22	5,654239E+22	2,623485E+22	2,623389E+22	1,130839E+23	5,246874E+22	1,655526E+23
1910	5,654300E+22	5,654372E+22	2,623368E+22	2,623468E+22	1,130867E+23	5,246836E+22	1,655551E+23
1911	5,654270E+22	5,654163E+22	2,623380E+22	2,623348E+22	1,130843E+23	5,246728E+22	1,655516E+23
1912	5,654166E+22	5,654426E+22	2,623426E+22	2,623339E+22	1,130859E+23	5,246765E+22	1,655536E+23
1913	5,654364E+22	5,654272E+22	2,623347E+22	2,623425E+22	1,130864E+23	5,246772E+22	1,655541E+23
1914	5,654237E+22	5,654114E+22	2,623460E+22	2,623348E+22	1,130835E+23	5,246807E+22	1,655516E+23
1915	5,654190E+22	5,654370E+22	2,623474E+22	2,623484E+22	1,130856E+23	5,246958E+22	1,655552E+23
1916	5,654255E+22	5,654111E+22	2,623446E+22	2,623555E+22	1,130837E+23	5,247001E+22	1,655537E+23
1917	5,654043E+22	5,654118E+22	2,623598E+22	2,623536E+22	1,130816E+23	5,247135E+22	1,655530E+23
1918	5,654117E+22	5,654204E+22	2,623608E+22	2,623699E+22	1,130832E+23	5,247308E+22	1,655563E+23
1919	5,654134E+22	5,653890E+22	2,623678E+22	2,623668E+22	1,130802E+23	5,247346E+22	1,655537E+23
1920	5,653937E+22	5,654094E+22	2,623805E+22	2,623679E+22	1,130803E+23	5,247484E+22	1,655551E+23
1921	5,654070E+22	5,654036E+22	2,623735E+22	2,623833E+22	1,130811E+23	5,247568E+22	1,655567E+23
1922	5,653928E+22	5,653841E+22	2,623819E+22	2,623747E+22	1,130777E+23	5,247567E+22	1,655534E+23
1923	5,653819E+22	5,654119E+22	2,623829E+22	2,623795E+22	1,130794E+23	5,247624E+22	1,655556E+23
1924	5,654015E+22	5,653910E+22	2,623712E+22	2,623806E+22	1,130793E+23	5,247518E+22	1,655544E+23
1925	5,653920E+22	5,653889E+22	2,623763E+22	2,623657E+22	1,130781E+23	5,247421E+22	1,655523E+23
1926	5,654023E+22	5,654117E+22	2,623681E+22	2,623712E+22	1,130814E+23	5,247393E+22	1,655553E+23
1927	5,654146E+22	5,653935E+22	2,623593E+22	2,623618E+22	1,130808E+23	5,247211E+22	1,655529E+23
1928	5,653969E+22	5,654166E+22	2,623626E+22	2,623521E+22	1,130814E+23	5,247147E+22	1,655528E+23
1929	5,654152E+22	5,654214E+22	2,623505E+22	2,623614E+22	1,130837E+23	5,247119E+22	1,655548E+23
1930	5,654154E+22	5,653983E+22	2,623535E+22	2,623479E+22	1,130814E+23	5,247014E+22	1,655515E+23
1931	5,654028E+22	5,654242E+22	2,623592E+22	2,623486E+22	1,130827E+23	5,247078E+22	1,655535E+23
1932	5,654221E+22	5,654122E+22	2,623490E+22	2,623580E+22	1,130834E+23	5,247070E+22	1,655541E+23
1933	5,654074E+22	5,654003E+22	2,623591E+22	2,623527E+22	1,130808E+23	5,247118E+22	1,655520E+23
1934	5,653990E+22	5,654208E+22	2,623641E+22	2,623671E+22	1,130820E+23	5,247313E+22	1,655551E+23
1935	5,654100E+22	5,653951E+22	2,623629E+22	2,623720E+22	1,130805E+23	5,247349E+22	1,655540E+23
1936	5,653887E+22	5,653973E+22	2,623793E+22	2,623685E+22	1,130786E+23	5,247478E+22	1,655534E+23
1937	5,653991E+22	5,654014E+22	2,623788E+22	2,623869E+22	1,130800E+23	5,247656E+22	1,655566E+23
1938	5,654002E+22	5,653732E+22	2,623855E+22	2,623837E+22	1,130773E+23	5,247692E+22	1,655543E+23
1939	5,653735E+22	5,653953E+22	2,623976E+22	2,623867E+22	1,130769E+23	5,247843E+22	1,655553E+23
1940	5,653869E+22	5,653907E+22	2,623877E+22	2,624007E+22	1,130778E+23	5,247884E+22	1,655566E+23
1941	5,653772E+22	5,653695E+22	2,623948E+22	2,623906E+22	1,130747E+23	5,247853E+22	1,655532E+23
1942	5,653679E+22	5,653909E+22	2,623984E+22	2,623934E+22	1,130759E+23	5,247918E+22	1,655551E+23
1943	5,653929E+22	5,653751E+22	2,623855E+22	2,623922E+22	1,130768E+23	5,247777E+22	1,655546E+23
1944	5,653795E+22	5,653788E+22	2,623897E+22	2,623773E+22	1,130758E+23	5,247670E+22	1,655525E+23
1945	5,653887E+22	5,653996E+22	2,623797E+22	2,623856E+22	1,130788E+23	5,247654E+22	1,655554E+23
1946	5,654003E+22	5,653824E+22	2,623721E+22	2,623750E+22	1,130783E+23	5,247471E+22	1,655530E+23
1947	5,653802E+22	5,654027E+22	2,623779E+22	2,623654E+22	1,130783E+23	5,247433E+22	1,655526E+23
1948	5,654016E+22	5,654069E+22	2,623645E+22	2,623736E+22	1,130808E+23	5,247381E+22	1,655547E+23
1949	5,654038E+22	5,653845E+22	2,623671E+22	2,623624E+22	1,130788E+23	5,247295E+22	1,655518E+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	5,653871E+22	5,654066E+22	2,623759E+22	2,623658E+22	1,130794E+23	5,247416E+22	1,655535E+23
1951	5,654058E+22	5,653988E+22	2,623650E+22	2,623759E+22	1,130805E+23	5,247409E+22	1,655546E+23
1952	5,653882E+22	5,653883E+22	2,623757E+22	2,623704E+22	1,130777E+23	5,247461E+22	1,655523E+23
1953	5,653848E+22	5,654005E+22	2,623805E+22	2,623854E+22	1,130785E+23	5,247659E+22	1,655551E+23
1954	5,653992E+22	5,653757E+22	2,623809E+22	2,623876E+22	1,130775E+23	5,247685E+22	1,655543E+23
1955	5,653748E+22	5,653805E+22	2,623982E+22	2,623849E+22	1,130755E+23	5,247831E+22	1,655538E+23
1956	5,653826E+22	5,653880E+22	2,623949E+22	2,624032E+22	1,130771E+23	5,247981E+22	1,655569E+23
1957	5,653806E+22	5,653630E+22	2,624004E+22	2,624019E+22	1,130744E+23	5,248022E+22	1,655546E+23
1958	5,653512E+22	5,653783E+22	2,624150E+22	2,624047E+22	1,130729E+23	5,248197E+22	1,655549E+23
1959	5,653696E+22	5,653731E+22	2,624046E+22	2,624156E+22	1,130743E+23	5,248202E+22	1,655563E+23
1960	5,653630E+22	5,653538E+22	2,624109E+22	2,624035E+22	1,130717E+23	5,248144E+22	1,655531E+23
1961	5,653592E+22	5,653710E+22	2,624118E+22	2,624078E+22	1,130730E+23	5,248196E+22	1,655550E+23
1962	5,653840E+22	5,653613E+22	2,623984E+22	2,624056E+22	1,130745E+23	5,248040E+22	1,655549E+23
1963	5,653647E+22	5,653691E+22	2,624022E+22	2,623919E+22	1,130734E+23	5,247941E+22	1,655528E+23
1964	5,653730E+22	5,653899E+22	2,623910E+22	2,623986E+22	1,130763E+23	5,247895E+22	1,655552E+23
1965	5,653872E+22	5,653714E+22	2,623842E+22	2,623873E+22	1,130759E+23	5,247716E+22	1,655530E+23
1966	5,653666E+22	5,653843E+22	2,623942E+22	2,623783E+22	1,130751E+23	5,247724E+22	1,655523E+23
1967	5,653886E+22	5,653922E+22	2,623806E+22	2,623867E+22	1,130781E+23	5,247673E+22	1,655548E+23
1968	5,653871E+22	5,653734E+22	2,623827E+22	2,623779E+22	1,130761E+23	5,247606E+22	1,655521E+23
1969	5,653703E+22	5,653897E+22	2,623902E+22	2,623851E+22	1,130760E+23	5,247753E+22	1,655535E+23
1970	5,653907E+22	5,653825E+22	2,623809E+22	2,623936E+22	1,130773E+23	5,247745E+22	1,655548E+23
1971	5,653728E+22	5,653707E+22	2,623931E+22	2,623873E+22	1,130743E+23	5,247804E+22	1,655524E+23
1972	5,653722E+22	5,653841E+22	2,623967E+22	2,624004E+22	1,130756E+23	5,247971E+22	1,655553E+23
1973	5,653875E+22	5,653624E+22	2,623967E+22	2,624034E+22	1,130750E+23	5,248001E+22	1,655550E+23
1974	5,653563E+22	5,653637E+22	2,624172E+22	2,624031E+22	1,130720E+23	5,248203E+22	1,655540E+23
1975	5,653615E+22	5,653759E+22	2,624128E+22	2,624210E+22	1,130737E+23	5,248338E+22	1,655571E+23
1976	5,653589E+22	5,653491E+22	2,624181E+22	2,624191E+22	1,130708E+23	5,248372E+22	1,655545E+23
1977	5,653361E+22	5,653545E+22	2,624313E+22	2,624219E+22	1,130691E+23	5,248532E+22	1,655544E+23
1978	5,653603E+22	5,653519E+22	2,624202E+22	2,624294E+22	1,130712E+23	5,248496E+22	1,655562E+23
1979	5,653520E+22	5,653378E+22	2,624251E+22	2,624173E+22	1,130690E+23	5,248424E+22	1,655532E+23
1980	5,653469E+22	5,653606E+22	2,624227E+22	2,624210E+22	1,130708E+23	5,248436E+22	1,655551E+23
1981	5,653693E+22	5,653553E+22	2,624088E+22	2,624190E+22	1,130725E+23	5,248277E+22	1,655552E+23
1982	5,653468E+22	5,653568E+22	2,624172E+22	2,624054E+22	1,130704E+23	5,248226E+22	1,655526E+23
1983	5,653573E+22	5,653778E+22	2,624067E+22	2,624098E+22	1,130735E+23	5,248165E+22	1,655552E+23
1984	5,653725E+22	5,653588E+22	2,624005E+22	2,623997E+22	1,130731E+23	5,248002E+22	1,655532E+23
1985	5,653550E+22	5,653640E+22	2,624090E+22	2,623946E+22	1,130719E+23	5,248036E+22	1,655523E+23
1986	5,653761E+22	5,653755E+22	2,623953E+22	2,624036E+22	1,130752E+23	5,247989E+22	1,655551E+23
1987	5,653704E+22	5,653599E+22	2,623969E+22	2,623966E+22	1,130730E+23	5,247934E+22	1,655524E+23
1988	5,653561E+22	5,653742E+22	2,624027E+22	2,624015E+22	1,130730E+23	5,248042E+22	1,655535E+23
1989	5,653794E+22	5,653674E+22	2,623950E+22	2,624082E+22	1,130747E+23	5,248032E+22	1,655550E+23
1990	5,653604E+22	5,653522E+22	2,624116E+22	2,624019E+22	1,130713E+23	5,248135E+22	1,655526E+23
1991	5,653570E+22	5,653707E+22	2,624154E+22	2,624146E+22	1,130728E+23	5,248300E+22	1,655558E+23
1992	5,653669E+22	5,653525E+22	2,624158E+22	2,624204E+22	1,130719E+23	5,248361E+22	1,655555E+23
1993	5,653352E+22	5,653454E+22	2,624349E+22	2,624235E+22	1,130681E+23	5,248584E+22	1,655539E+23
1994	5,653423E+22	5,653564E+22	2,624310E+22	2,624391E+22	1,130699E+23	5,248701E+22	1,655569E+23
1995	5,653420E+22	5,653296E+22	2,624354E+22	2,624362E+22	1,130672E+23	5,248716E+22	1,655543E+23
1996	5,653250E+22	5,653355E+22	2,624448E+22	2,624367E+22	1,130660E+23	5,248815E+22	1,655542E+23
1997	5,653513E+22	5,653388E+22	2,624325E+22	2,624436E+22	1,130690E+23	5,248760E+22	1,655566E+23
1998	5,653382E+22	5,653255E+22	2,624392E+22	2,624324E+22	1,130664E+23	5,248716E+22	1,655535E+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							
1999	5,653301E+22	5,653538E+22	2,624361E+22	2,624341E+22	1,130684E+23	5,248702E+22	1,655554E+23
2000	5,653522E+22	5,653471E+22	2,624235E+22	2,624314E+22	1,130699E+23	5,248550E+22	1,655554E+23
2001	5,653339E+22	5,653371E+22	2,624321E+22	2,624192E+22	1,130671E+23	5,248513E+22	1,655522E+23
2002	5,653470E+22	5,653595E+22	2,624220E+22	2,624221E+22	1,130707E+23	5,248442E+22	1,655551E+23
2003	5,653593E+22	5,653430E+22	2,624148E+22	2,624144E+22	1,130702E+23	5,248293E+22	1,655532E+23
2004	5,653410E+22	5,653503E+22	2,624199E+22	2,624104E+22	1,130691E+23	5,248303E+22	1,655522E+23
2005	5,653621E+22	5,653646E+22	2,624062E+22	2,624192E+22	1,130727E+23	5,248254E+22	1,655552E+23
2006	5,653544E+22	5,653436E+22	2,624124E+22	2,624119E+22	1,130698E+23	5,248243E+22	1,655522E+23
2007	5,653420E+22	5,653612E+22	2,624194E+22	2,624140E+22	1,130703E+23	5,248334E+22	1,655537E+23
2008	5,653656E+22	5,653552E+22	2,624136E+22	2,624218E+22	1,130721E+23	5,248354E+22	1,655556E+23
2009	5,653458E+22	5,653331E+22	2,624305E+22	2,624202E+22	1,130679E+23	5,248507E+22	1,655530E+23
2010	5,653387E+22	5,653551E+22	2,624344E+22	2,624335E+22	1,130694E+23	5,248679E+22	1,655562E+23
2011	5,653440E+22	5,653372E+22	2,624339E+22	2,624412E+22	1,130681E+23	5,248752E+22	1,655556E+23
2012	5,653171E+22	5,653254E+22	2,624502E+22	2,624423E+22	1,130642E+23	5,248924E+22	1,655535E+23
2013	5,653300E+22	5,653370E+22	2,624457E+22	2,624549E+22	1,130667E+23	5,249005E+22	1,655568E+23
2014	5,653302E+22	5,653099E+22	2,624519E+22	2,624514E+22	1,130640E+23	5,249032E+22	1,655543E+23
2015	5,653126E+22	5,653244E+22	2,624592E+22	2,624498E+22	1,130637E+23	5,249090E+22	1,655546E+23
2016	5,653350E+22	5,653326E+22	2,624473E+22	2,624577E+22	1,130668E+23	5,249050E+22	1,655573E+23
2017	5,653215E+22	5,653121E+22	2,624537E+22	2,624484E+22	1,130634E+23	5,249021E+22	1,655536E+23
2018	5,653148E+22	5,653387E+22	2,624520E+22	2,624469E+22	1,130654E+23	5,248989E+22	1,655552E+23
2019	5,653370E+22	5,653319E+22	2,624393E+22	2,624444E+22	1,130669E+23	5,248836E+22	1,655553E+23
2020	5,653236E+22	5,653193E+22	2,624439E+22	2,624321E+22	1,130643E+23	5,248760E+22	1,655519E+23
2021	5,653365E+22	5,653451E+22	2,624332E+22	2,624358E+22	1,130682E+23	5,248690E+22	1,655551E+23
2022	5,653442E+22	5,653298E+22	2,624278E+22	2,624306E+22	1,130674E+23	5,248584E+22	1,655532E+23
2023	5,653249E+22	5,653407E+22	2,624322E+22	2,624248E+22	1,130666E+23	5,248570E+22	1,655523E+23
2024	5,653473E+22	5,653534E+22	2,624218E+22	2,624330E+22	1,130701E+23	5,248548E+22	1,655555E+23
2025	5,653431E+22	5,653239E+22	2,624291E+22	2,624268E+22	1,130667E+23	5,248559E+22	1,655523E+23
2026	5,653306E+22	5,653438E+22	2,624379E+22	2,624278E+22	1,130674E+23	5,248657E+22	1,655540E+23
2027	5,653478E+22	5,653417E+22	2,624321E+22	2,624391E+22	1,130690E+23	5,248712E+22	1,655561E+23
2028	5,653261E+22	5,653183E+22	2,624460E+22	2,624397E+22	1,130644E+23	5,248857E+22	1,655530E+23
2029	5,653187E+22	5,653403E+22	2,624501E+22	2,624525E+22	1,130659E+23	5,249026E+22	1,655562E+23
2030	5,653245E+22	5,653171E+22	2,624524E+22	2,624600E+22	1,130642E+23	5,249125E+22	1,655554E+23
2031	5,653021E+22	5,653086E+22	2,624668E+22	2,624573E+22	1,130611E+23	5,249241E+22	1,655535E+23
2032	5,653185E+22	5,653223E+22	2,624627E+22	2,624697E+22	1,130641E+23	5,249324E+22	1,655573E+23
2033	5,653184E+22	5,652922E+22	2,624678E+22	2,624684E+22	1,130611E+23	5,249362E+22	1,655547E+23
2034	5,652988E+22	5,653128E+22	2,624746E+22	2,624652E+22	1,130612E+23	5,249399E+22	1,655551E+23
2035	5,653167E+22	5,653218E+22	2,624624E+22	2,624730E+22	1,130639E+23	5,249355E+22	1,655574E+23
2036	5,653067E+22	5,652959E+22	2,624666E+22	2,624620E+22	1,130603E+23	5,249285E+22	1,655531E+23
2037	5,653039E+22	5,653227E+22	2,624644E+22	2,624579E+22	1,130627E+23	5,249222E+22	1,655549E+23
2038	5,653239E+22	5,653144E+22	2,624534E+22	2,624570E+22	1,130638E+23	5,249104E+22	1,655549E+23
2039	5,653093E+22	5,653089E+22	2,624559E+22	2,624445E+22	1,130618E+23	5,249004E+22	1,655519E+23
2040	5,653209E+22	5,653369E+22	2,624461E+22	2,624502E+22	1,130658E+23	5,248963E+22	1,655554E+23
2041	5,653285E+22	5,653144E+22	2,624417E+22	2,624470E+22	1,130643E+23	5,248887E+22	1,655532E+23
2042	5,653122E+22	5,653256E+22	2,624480E+22	2,624383E+22	1,130638E+23	5,248862E+22	1,655524E+23
2043	5,653333E+22	5,653386E+22	2,624389E+22	2,624470E+22	1,130672E+23	5,248859E+22	1,655558E+23
2044	5,653314E+22	5,653070E+22	2,624442E+22	2,624425E+22	1,130638E+23	5,248867E+22	1,655525E+23
2045	5,653163E+22	5,653297E+22	2,624534E+22	2,624445E+22	1,130646E+23	5,248979E+22	1,655544E+23
2046	5,653267E+22	5,653272E+22	2,624498E+22	2,624592E+22	1,130654E+23	5,249090E+22	1,655563E+23
2047	5,653052E+22	5,653048E+22	2,624624E+22	2,624580E+22	1,130610E+23	5,249204E+22	1,655530E+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	5,653021E+22	5,653228E+22	2,624685E+22	2,624697E+22	1,130625E+23	5,249381E+22	1,655563E+23
2049	5,653124E+22	5,652935E+22	2,624704E+22	2,624775E+22	1,130606E+23	5,249478E+22	1,655554E+23
2050	5,652924E+22	5,652897E+22	2,624840E+22	2,624723E+22	1,130582E+23	5,249563E+22	1,655538E+23
2051	5,653029E+22	5,653101E+22	2,624796E+22	2,624858E+22	1,130613E+23	5,249654E+22	1,655578E+23
2052	5,653022E+22	5,652807E+22	2,624807E+22	2,624846E+22	1,130583E+23	5,249652E+22	1,655548E+23
2053	5,652817E+22	5,653010E+22	2,624881E+22	2,624789E+22	1,130583E+23	5,249670E+22	1,655550E+23
2054	5,652986E+22	5,653067E+22	2,624786E+22	2,624865E+22	1,130605E+23	5,249651E+22	1,655570E+23
2055	5,652917E+22	5,652828E+22	2,624805E+22	2,624732E+22	1,130574E+23	5,249536E+22	1,655528E+23
2056	5,652914E+22	5,653092E+22	2,624790E+22	2,624707E+22	1,130601E+23	5,249497E+22	1,655550E+23
2057	5,653105E+22	5,652978E+22	2,624668E+22	2,624733E+22	1,130608E+23	5,249402E+22	1,655548E+23
2058	5,652959E+22	5,652964E+22	2,624684E+22	2,624599E+22	1,130592E+23	5,249283E+22	1,655521E+23
2059	5,653053E+22	5,653247E+22	2,624599E+22	2,624654E+22	1,130630E+23	5,249253E+22	1,655555E+23
2060	5,653178E+22	5,652977E+22	2,624538E+22	2,624607E+22	1,130616E+23	5,249146E+22	1,655530E+23
2061	5,653038E+22	5,653102E+22	2,624616E+22	2,624499E+22	1,130614E+23	5,249115E+22	1,655526E+23
2062	5,653194E+22	5,653237E+22	2,624558E+22	2,624614E+22	1,130643E+23	5,249172E+22	1,655560E+23
2063	5,653130E+22	5,652976E+22	2,624601E+22	2,624581E+22	1,130611E+23	5,249182E+22	1,655529E+23
2064	5,652961E+22	5,653187E+22	2,624710E+22	2,624629E+22	1,130615E+23	5,249339E+22	1,655549E+23
2065	5,653061E+22	5,653069E+22	2,624685E+22	2,624794E+22	1,130613E+23	5,249479E+22	1,655561E+23
2066	5,652902E+22	5,652846E+22	2,624812E+22	2,624751E+22	1,130575E+23	5,249563E+22	1,655531E+23
2067	5,652883E+22	5,653033E+22	2,624869E+22	2,624862E+22	1,130592E+23	5,249731E+22	1,655565E+23
2068	5,653012E+22	5,652745E+22	2,624854E+22	2,624945E+22	1,130576E+23	5,249798E+22	1,655555E+23
2069	5,652799E+22	5,652773E+22	2,624980E+22	2,624882E+22	1,130557E+23	5,249863E+22	1,655543E+23
2070	5,652832E+22	5,652985E+22	2,624955E+22	2,625032E+22	1,130582E+23	5,249986E+22	1,655580E+23
2071	5,652822E+22	5,652711E+22	2,624956E+22	2,624988E+22	1,130553E+23	5,249944E+22	1,655548E+23
2072	5,652664E+22	5,652867E+22	2,625044E+22	2,624920E+22	1,130553E+23	5,249965E+22	1,655550E+23
2073	5,652846E+22	5,652860E+22	2,624945E+22	2,625005E+22	1,130571E+23	5,249950E+22	1,655566E+23
2074	5,652804E+22	5,652663E+22	2,624948E+22	2,624864E+22	1,130547E+23	5,249811E+22	1,655528E+23
2075	5,652760E+22	5,652964E+22	2,624926E+22	2,624857E+22	1,130572E+23	5,249783E+22	1,655551E+23
2076	5,652966E+22	5,652845E+22	2,624770E+22	2,624891E+22	1,130581E+23	5,249661E+22	1,655547E+23
2077	5,652845E+22	5,652838E+22	2,624794E+22	2,624726E+22	1,130568E+23	5,249520E+22	1,655520E+23
2078	5,652923E+22	5,653104E+22	2,624746E+22	2,624780E+22	1,130603E+23	5,249526E+22	1,655555E+23
2079	5,653058E+22	5,652871E+22	2,624680E+22	2,624717E+22	1,130593E+23	5,249397E+22	1,655533E+23
2080	5,652915E+22	5,652983E+22	2,624785E+22	2,624639E+22	1,130590E+23	5,249425E+22	1,655532E+23
2081	5,653013E+22	5,653085E+22	2,624734E+22	2,624799E+22	1,130610E+23	5,249533E+22	1,655563E+23
2082	5,652944E+22	5,652829E+22	2,624774E+22	2,624771E+22	1,130577E+23	5,249545E+22	1,655532E+23
2083	5,652762E+22	5,653006E+22	2,624897E+22	2,624820E+22	1,130577E+23	5,249717E+22	1,655548E+23
2084	5,652928E+22	5,652841E+22	2,624840E+22	2,624972E+22	1,130577E+23	5,249811E+22	1,655558E+23
2085	5,652805E+22	5,652644E+22	2,624961E+22	2,624900E+22	1,130545E+23	5,249861E+22	1,655531E+23
2086	5,652740E+22	5,652873E+22	2,625038E+22	2,625027E+22	1,130561E+23	5,250066E+22	1,655568E+23
2087	5,652829E+22	5,652666E+22	2,625003E+22	2,625099E+22	1,130550E+23	5,250102E+22	1,655560E+23
2088	5,652609E+22	5,652683E+22	2,625150E+22	2,625048E+22	1,130529E+23	5,250198E+22	1,655549E+23
2089	5,652626E+22	5,652817E+22	2,625137E+22	2,625198E+22	1,130544E+23	5,250335E+22	1,655578E+23
2090	5,652668E+22	5,652536E+22	2,625131E+22	2,625128E+22	1,130520E+23	5,250260E+22	1,655546E+23
2091	5,652521E+22	5,652684E+22	2,625212E+22	2,625061E+22	1,130520E+23	5,250273E+22	1,655548E+23
2092	5,652735E+22	5,652670E+22	2,625064E+22	2,625159E+22	1,130541E+23	5,250223E+22	1,655563E+23
2093	5,652698E+22	5,652534E+22	2,625048E+22	2,625008E+22	1,130523E+23	5,250055E+22	1,655529E+23
2094	5,652614E+22	5,652847E+22	2,625042E+22	2,625012E+22	1,130546E+23	5,250053E+22	1,655551E+23
2095	5,652827E+22	5,652755E+22	2,624886E+22	2,625007E+22	1,130558E+23	5,249892E+22	1,655547E+23
2096	5,652756E+22	5,652719E+22	2,624937E+22	2,624836E+22	1,130548E+23	5,249773E+22	1,655525E+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	5,652803E+22	5,652934E+22	2,624910E+22	2,624905E+22	1,130574E+23	5,249815E+22	1,655555E+23
2098	5,652925E+22	5,652746E+22	2,624847E+22	2,624856E+22	1,130567E+23	5,249703E+22	1,655537E+23
2099	5,652719E+22	5,652859E+22	2,624958E+22	2,624812E+22	1,130558E+23	5,249770E+22	1,655535E+23
2100	5,652811E+22	5,652911E+22	2,624882E+22	2,624993E+22	1,130572E+23	5,249875E+22	1,655560E+23
2101	5,652783E+22	5,652650E+22	2,624926E+22	2,624942E+22	1,130543E+23	5,249868E+22	1,655530E+23
2102	5,652607E+22	5,652800E+22	2,625068E+22	2,624994E+22	1,130541E+23	5,250062E+22	1,655547E+23
2103	5,652793E+22	5,652687E+22	2,624999E+22	2,625122E+22	1,130548E+23	5,250121E+22	1,655560E+23
2104	5,652689E+22	5,652511E+22	2,625131E+22	2,625066E+22	1,130520E+23	5,250197E+22	1,655540E+23
2105	5,652556E+22	5,652729E+22	2,625216E+22	2,625216E+22	1,130528E+23	5,250432E+22	1,655572E+23
2106	5,652644E+22	5,652546E+22	2,625182E+22	2,625274E+22	1,130519E+23	5,250455E+22	1,655565E+23
2107	5,652417E+22	5,652519E+22	2,625341E+22	2,625211E+22	1,130494E+23	5,250552E+22	1,655549E+23
2108	5,652486E+22	5,652601E+22	2,625292E+22	2,625349E+22	1,130509E+23	5,250641E+22	1,655573E+23
2109	5,652568E+22	5,652348E+22	2,625266E+22	2,625259E+22	1,130492E+23	5,250525E+22	1,655544E+23
2110	5,652382E+22	5,652526E+22	2,625346E+22	2,625214E+22	1,130491E+23	5,250560E+22	1,655547E+23
2111	5,652579E+22	5,652589E+22	2,625171E+22	2,625294E+22	1,130517E+23	5,250466E+22	1,655563E+23
2112	5,652566E+22	5,652448E+22	2,625170E+22	2,625144E+22	1,130501E+23	5,250313E+22	1,655533E+23
2113	5,652471E+22	5,652709E+22	2,625187E+22	2,625142E+22	1,130518E+23	5,250329E+22	1,655551E+23
2114	5,652723E+22	5,652626E+22	2,625037E+22	2,625113E+22	1,130535E+23	5,250150E+22	1,655550E+23
2115	5,652627E+22	5,652579E+22	2,625107E+22	2,624961E+22	1,130521E+23	5,250068E+22	1,655527E+23
2116	5,652663E+22	5,652775E+22	2,625049E+22	2,625061E+22	1,130544E+23	5,250109E+22	1,655555E+23
2117	5,652765E+22	5,652610E+22	2,624980E+22	2,625024E+22	1,130538E+23	5,250004E+22	1,655538E+23
2118	5,652521E+22	5,652698E+22	2,625110E+22	2,625005E+22	1,130522E+23	5,250116E+22	1,655533E+23
2119	5,652642E+22	5,652751E+22	2,625028E+22	2,625151E+22	1,130539E+23	5,250179E+22	1,655557E+23
2120	5,652681E+22	5,652471E+22	2,625088E+22	2,625094E+22	1,130515E+23	5,250182E+22	1,655533E+23
2121	5,652482E+22	5,652605E+22	2,625243E+22	2,625155E+22	1,130509E+23	5,250398E+22	1,655548E+23
2122	5,652654E+22	5,652555E+22	2,625177E+22	2,625283E+22	1,130521E+23	5,250460E+22	1,655567E+23
2123	5,652493E+22	5,652398E+22	2,625323E+22	2,625245E+22	1,130489E+23	5,250568E+22	1,655546E+23
2124	5,652358E+22	5,652565E+22	2,625384E+22	2,625398E+22	1,130492E+23	5,250783E+22	1,655571E+23
2125	5,652481E+22	5,652375E+22	2,625350E+22	2,625429E+22	1,130486E+23	5,250779E+22	1,655564E+23
2126	5,652256E+22	5,652324E+22	2,625511E+22	2,625372E+22	1,130458E+23	5,250883E+22	1,655546E+23
2127	5,652339E+22	5,652446E+22	2,625433E+22	2,625486E+22	1,130478E+23	5,250919E+22	1,655570E+23
2128	5,652456E+22	5,652223E+22	2,625400E+22	2,625412E+22	1,130468E+23	5,250813E+22	1,655549E+23
2129	5,652224E+22	5,652390E+22	2,625477E+22	2,625380E+22	1,130461E+23	5,250857E+22	1,655547E+23
2130	5,652439E+22	5,652484E+22	2,625307E+22	2,625435E+22	1,130492E+23	5,250742E+22	1,655566E+23
2131	5,652438E+22	5,652317E+22	2,625320E+22	2,625263E+22	1,130476E+23	5,250583E+22	1,655534E+23
2132	5,652370E+22	5,652527E+22	2,625315E+22	2,625255E+22	1,130490E+23	5,250569E+22	1,655547E+23
2133	5,652627E+22	5,652486E+22	2,625166E+22	2,625222E+22	1,130511E+23	5,250388E+22	1,655550E+23
2134	5,652463E+22	5,652447E+22	2,625247E+22	2,625117E+22	1,130491E+23	5,250365E+22	1,655528E+23
2135	5,652459E+22	5,652677E+22	2,625179E+22	2,625215E+22	1,130514E+23	5,250394E+22	1,655553E+23
2136	5,652601E+22	5,652481E+22	2,625128E+22	2,625193E+22	1,130508E+23	5,250321E+22	1,655540E+23
2137	5,652356E+22	5,652500E+22	2,625278E+22	2,625173E+22	1,130486E+23	5,250451E+22	1,655531E+23
2138	5,652531E+22	5,652573E+22	2,625203E+22	2,625297E+22	1,130510E+23	5,250500E+22	1,655560E+23
2139	5,652558E+22	5,652307E+22	2,625275E+22	2,625250E+22	1,130487E+23	5,250525E+22	1,655539E+23
2140	5,652344E+22	5,652441E+22	2,625402E+22	2,625335E+22	1,130478E+23	5,250737E+22	1,655552E+23
2141	5,652490E+22	5,652435E+22	2,625337E+22	2,625463E+22	1,130493E+23	5,250800E+22	1,655573E+23
2142	5,652283E+22	5,652249E+22	2,625504E+22	2,625442E+22	1,130453E+23	5,250946E+22	1,655548E+23
2143	5,652168E+22	5,652407E+22	2,625553E+22	2,625551E+22	1,130458E+23	5,251104E+22	1,655568E+23
2144	5,652357E+22	5,652195E+22	2,625519E+22	2,625580E+22	1,130455E+23	5,251099E+22	1,655565E+23
2145	5,652108E+22	5,652133E+22	2,625674E+22	2,625533E+22	1,130424E+23	5,251207E+22	1,655545E+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	5,652200E+22	5,652313E+22	2,625579E+22	2,625635E+22	1,130451E+23	5,251214E+22	1,655573E+23
2147	5,652282E+22	5,652115E+22	2,625548E+22	2,625565E+22	1,130440E+23	5,251113E+22	1,655551E+23
2148	5,652081E+22	5,652244E+22	2,625595E+22	2,625524E+22	1,130432E+23	5,251119E+22	1,655544E+23
2149	5,652334E+22	5,652341E+22	2,625434E+22	2,625543E+22	1,130468E+23	5,250977E+22	1,655565E+23
2150	5,652317E+22	5,652170E+22	2,625461E+22	2,625386E+22	1,130449E+23	5,250847E+22	1,655533E+23
2151	5,652238E+22	5,652410E+22	2,625441E+22	2,625363E+22	1,130465E+23	5,250803E+22	1,655545E+23
2152	5,652496E+22	5,652384E+22	2,625298E+22	2,625367E+22	1,130488E+23	5,250665E+22	1,655554E+23
2153	5,652273E+22	5,652311E+22	2,625390E+22	2,625293E+22	1,130458E+23	5,250683E+22	1,655527E+23
2154	5,652296E+22	5,652528E+22	2,625335E+22	2,625374E+22	1,130482E+23	5,250710E+22	1,655553E+23
2155	5,652462E+22	5,652305E+22	2,625304E+22	2,625344E+22	1,130477E+23	5,250648E+22	1,655541E+23
2156	5,652261E+22	5,652286E+22	2,625424E+22	2,625326E+22	1,130455E+23	5,250750E+22	1,655530E+23
2157	5,652434E+22	5,652413E+22	2,625357E+22	2,625445E+22	1,130485E+23	5,250802E+22	1,655565E+23
2158	5,652385E+22	5,652185E+22	2,625441E+22	2,625437E+22	1,130457E+23	5,250878E+22	1,655545E+23
2159	5,652128E+22	5,652342E+22	2,625564E+22	2,625506E+22	1,130447E+23	5,251069E+22	1,655554E+23
2160	5,652306E+22	5,652310E+22	2,625519E+22	2,625640E+22	1,130462E+23	5,251159E+22	1,655578E+23
2161	5,652088E+22	5,652051E+22	2,625698E+22	2,625620E+22	1,130414E+23	5,251318E+22	1,655546E+23
2162	5,652016E+22	5,652216E+22	2,625741E+22	2,625707E+22	1,130423E+23	5,251448E+22	1,655568E+23
2163	5,652209E+22	5,652021E+22	2,625698E+22	2,625741E+22	1,130423E+23	5,251439E+22	1,655567E+23
2164	5,651968E+22	5,651950E+22	2,625799E+22	2,625709E+22	1,130392E+23	5,251508E+22	1,655543E+23
2165	5,652068E+22	5,652182E+22	2,625701E+22	2,625791E+22	1,130425E+23	5,251492E+22	1,655574E+23
2166	5,652133E+22	5,651982E+22	2,625679E+22	2,625715E+22	1,130412E+23	5,251395E+22	1,655551E+23
2167	5,651959E+22	5,652116E+22	2,625718E+22	2,625621E+22	1,130407E+23	5,251339E+22	1,655541E+23
2168	5,652253E+22	5,652220E+22	2,625566E+22	2,625642E+22	1,130447E+23	5,251208E+22	1,655568E+23
2169	5,652170E+22	5,652036E+22	2,625604E+22	2,625515E+22	1,130421E+23	5,251120E+22	1,655533E+23
2170	5,652071E+22	5,652308E+22	2,625587E+22	2,625501E+22	1,130438E+23	5,251088E+22	1,655547E+23
2171	5,652297E+22	5,652270E+22	2,625458E+22	2,625526E+22	1,130457E+23	5,250983E+22	1,655555E+23
2172	5,652117E+22	5,652127E+22	2,625524E+22	2,625460E+22	1,130424E+23	5,250984E+22	1,655523E+23
2173	5,652196E+22	5,652342E+22	2,625481E+22	2,625516E+22	1,130454E+23	5,250997E+22	1,655554E+23
2174	5,652343E+22	5,652134E+22	2,625459E+22	2,625506E+22	1,130448E+23	5,250965E+22	1,655544E+23
2175	5,652135E+22	5,652157E+22	2,625567E+22	2,625472E+22	1,130429E+23	5,251038E+22	1,655533E+23
2176	5,652294E+22	5,652311E+22	2,625513E+22	2,625619E+22	1,130461E+23	5,251133E+22	1,655574E+23
2177	5,652170E+22	5,652058E+22	2,625622E+22	2,625635E+22	1,130423E+23	5,251257E+22	1,655549E+23
2178	5,651937E+22	5,652186E+22	2,625758E+22	2,625676E+22	1,130412E+23	5,251434E+22	1,655556E+23
2179	5,652126E+22	5,652114E+22	2,625727E+22	2,625801E+22	1,130424E+23	5,251528E+22	1,655577E+23
2180	5,651954E+22	5,651817E+22	2,625860E+22	2,625788E+22	1,130377E+23	5,251648E+22	1,655542E+23
2181	5,651897E+22	5,652023E+22	2,625893E+22	2,625865E+22	1,130392E+23	5,251758E+22	1,655568E+23
2182	5,652034E+22	5,651882E+22	2,625841E+22	2,625924E+22	1,130392E+23	5,251765E+22	1,655568E+23
2183	5,651799E+22	5,651844E+22	2,625918E+22	2,625853E+22	1,130364E+23	5,251771E+22	1,655541E+23
2184	5,651946E+22	5,652070E+22	2,625836E+22	2,625920E+22	1,130402E+23	5,251756E+22	1,655577E+23
2185	5,651989E+22	5,651845E+22	2,625832E+22	2,625838E+22	1,130383E+23	5,251669E+22	1,655550E+23
2186	5,651841E+22	5,651988E+22	2,625874E+22	2,625725E+22	1,130383E+23	5,251599E+22	1,655543E+23
2187	5,652101E+22	5,652103E+22	2,625731E+22	2,625769E+22	1,130420E+23	5,251500E+22	1,655570E+23
2188	5,652010E+22	5,651889E+22	2,625726E+22	2,625684E+22	1,130390E+23	5,251410E+22	1,655531E+23
2189	5,651920E+22	5,652160E+22	2,625716E+22	2,625667E+22	1,130408E+23	5,251383E+22	1,655546E+23
2190	5,652141E+22	5,652104E+22	2,625598E+22	2,625697E+22	1,130424E+23	5,251296E+22	1,655554E+23
2191	5,652011E+22	5,651956E+22	2,625648E+22	2,625587E+22	1,130397E+23	5,251235E+22	1,655520E+23
2192	5,652131E+22	5,652199E+22	2,625618E+22	2,625648E+22	1,130433E+23	5,251266E+22	1,655560E+23
2193	5,652199E+22	5,652004E+22	2,625615E+22	2,625663E+22	1,130420E+23	5,251278E+22	1,655548E+23
2194	5,651954E+22	5,652058E+22	2,625742E+22	2,625631E+22	1,130401E+23	5,251373E+22	1,655539E+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							
2195	5,652073E+22	5,652197E+22	2,625715E+22	2,625790E+22	1,130427E+23	5,251505E+22	1,655578E+23
2196	5,651976E+22	5,651853E+22	2,625803E+22	2,625820E+22	1,130383E+23	5,251624E+22	1,655545E+23
2197	5,651792E+22	5,651965E+22	2,625945E+22	2,625843E+22	1,130376E+23	5,251788E+22	1,655555E+23
2198	5,651966E+22	5,651907E+22	2,625904E+22	2,625985E+22	1,130387E+23	5,251890E+22	1,655576E+23
2199	5,651808E+22	5,651650E+22	2,625998E+22	2,625951E+22	1,130346E+23	5,251950E+22	1,655541E+23
2200	5,651766E+22	5,651904E+22	2,626024E+22	2,626039E+22	1,130367E+23	5,252063E+22	1,655573E+23
2201	5,651849E+22	5,651761E+22	2,625989E+22	2,626096E+22	1,130361E+23	5,252085E+22	1,655570E+23
2202	5,651659E+22	5,651719E+22	2,626078E+22	2,625980E+22	1,130338E+23	5,252057E+22	1,655544E+23
2203	5,651815E+22	5,651931E+22	2,626012E+22	2,626029E+22	1,130375E+23	5,252041E+22	1,655579E+23
2204	5,651872E+22	5,651676E+22	2,625969E+22	2,625966E+22	1,130355E+23	5,251935E+22	1,655548E+23
2205	5,651717E+22	5,651843E+22	2,626009E+22	2,625861E+22	1,130356E+23	5,251870E+22	1,655543E+23
2206	5,651903E+22	5,651984E+22	2,625863E+22	2,625940E+22	1,130389E+23	5,251802E+22	1,655569E+23
2207	5,651841E+22	5,651763E+22	2,625836E+22	2,625831E+22	1,130360E+23	5,251667E+22	1,655527E+23
2208	5,651818E+22	5,652008E+22	2,625839E+22	2,625806E+22	1,130383E+23	5,251645E+22	1,655547E+23
2209	5,652020E+22	5,651940E+22	2,625745E+22	2,625837E+22	1,130396E+23	5,251582E+22	1,655554E+23
2210	5,651920E+22	5,651820E+22	2,625799E+22	2,625707E+22	1,130374E+23	5,251506E+22	1,655525E+23
2211	5,651988E+22	5,652082E+22	2,625792E+22	2,625789E+22	1,130407E+23	5,251581E+22	1,655565E+23
2212	5,652023E+22	5,651870E+22	2,625768E+22	2,625845E+22	1,130389E+23	5,251613E+22	1,655551E+23
2213	5,651780E+22	5,651898E+22	2,625918E+22	2,625812E+22	1,130368E+23	5,251730E+22	1,655541E+23
2214	5,651868E+22	5,652008E+22	2,625908E+22	2,625979E+22	1,130388E+23	5,251886E+22	1,655576E+23
2215	5,651827E+22	5,651648E+22	2,625967E+22	2,625979E+22	1,130347E+23	5,251946E+22	1,655542E+23
2216	5,651682E+22	5,651776E+22	2,626102E+22	2,626010E+22	1,130346E+23	5,252112E+22	1,655557E+23
2217	5,651787E+22	5,651751E+22	2,626068E+22	2,626171E+22	1,130354E+23	5,252239E+22	1,655578E+23
2218	5,651632E+22	5,651539E+22	2,626156E+22	2,626117E+22	1,130317E+23	5,252273E+22	1,655544E+23
2219	5,651584E+22	5,651792E+22	2,626203E+22	2,626193E+22	1,130338E+23	5,252396E+22	1,655577E+23
2220	5,651701E+22	5,651596E+22	2,626144E+22	2,626247E+22	1,130330E+23	5,252391E+22	1,655569E+23
2221	5,651552E+22	5,651548E+22	2,626240E+22	2,626109E+22	1,130310E+23	5,252349E+22	1,655545E+23
2222	5,651667E+22	5,651778E+22	2,626168E+22	2,626173E+22	1,130345E+23	5,252341E+22	1,655579E+23
2223	5,651727E+22	5,651540E+22	2,626086E+22	2,626105E+22	1,130327E+23	5,252191E+22	1,655546E+23
2224	5,651585E+22	5,651729E+22	2,626118E+22	2,626018E+22	1,130331E+23	5,252137E+22	1,655545E+23
2225	5,651731E+22	5,651846E+22	2,625989E+22	2,626098E+22	1,130358E+23	5,252087E+22	1,655566E+23
2226	5,651725E+22	5,651613E+22	2,625973E+22	2,625948E+22	1,130334E+23	5,251921E+22	1,655526E+23
2227	5,651726E+22	5,651862E+22	2,625994E+22	2,625913E+22	1,130359E+23	5,251907E+22	1,655550E+23
2228	5,651920E+22	5,651777E+22	2,625878E+22	2,625970E+22	1,130370E+23	5,251848E+22	1,655555E+23
2229	5,651796E+22	5,651691E+22	2,625952E+22	2,625855E+22	1,130349E+23	5,251807E+22	1,655529E+23
2230	5,651772E+22	5,651972E+22	2,625960E+22	2,625967E+22	1,130374E+23	5,251927E+22	1,655567E+23
2231	5,651822E+22	5,651728E+22	2,625926E+22	2,626012E+22	1,130355E+23	5,251938E+22	1,655549E+23
2232	5,651632E+22	5,651723E+22	2,626087E+22	2,625982E+22	1,130336E+23	5,252070E+22	1,655542E+23
2233	5,651690E+22	5,651810E+22	2,626093E+22	2,626158E+22	1,130350E+23	5,252250E+22	1,655575E+23
2234	5,651684E+22	5,651475E+22	2,626146E+22	2,626144E+22	1,130316E+23	5,252290E+22	1,655545E+23
2235	5,651524E+22	5,651630E+22	2,626281E+22	2,626188E+22	1,130315E+23	5,252470E+22	1,655562E+23
2236	5,651615E+22	5,651596E+22	2,626218E+22	2,626369E+22	1,130321E+23	5,252587E+22	1,655580E+23
2237	5,651496E+22	5,651380E+22	2,626321E+22	2,626287E+22	1,130288E+23	5,252608E+22	1,655548E+23
2238	5,651426E+22	5,651625E+22	2,626377E+22	2,626344E+22	1,130305E+23	5,252721E+22	1,655577E+23
2239	5,651590E+22	5,651436E+22	2,626285E+22	2,626365E+22	1,130303E+23	5,252649E+22	1,655567E+23
2240	5,651455E+22	5,651407E+22	2,626369E+22	2,626237E+22	1,130286E+23	5,252606E+22	1,655547E+23
2241	5,651473E+22	5,651658E+22	2,626306E+22	2,626325E+22	1,130313E+23	5,252631E+22	1,655576E+23
2242	5,651547E+22	5,651441E+22	2,626216E+22	2,626241E+22	1,130299E+23	5,252458E+22	1,655545E+23
2243	5,651423E+22	5,651596E+22	2,626264E+22	2,626150E+22	1,130302E+23	5,252415E+22	1,655543E+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							
2244	5,651611E+22	5,651665E+22	2,626120E+22	2,626234E+22	1,130328E+23	5,252354E+22	1,655563E+23
2245	5,651658E+22	5,651444E+22	2,626113E+22	2,626068E+22	1,130310E+23	5,252181E+22	1,655528E+23
2246	5,651600E+22	5,651726E+22	2,626141E+22	2,626052E+22	1,130333E+23	5,252193E+22	1,655552E+23
2247	5,651778E+22	5,651670E+22	2,626002E+22	2,626115E+22	1,130345E+23	5,252118E+22	1,655557E+23
2248	5,651641E+22	5,651587E+22	2,626089E+22	2,626028E+22	1,130323E+23	5,252117E+22	1,655535E+23
2249	5,651553E+22	5,651824E+22	2,626136E+22	2,626149E+22	1,130338E+23	5,252284E+22	1,655566E+23
2250	5,651659E+22	5,651552E+22	2,626111E+22	2,626166E+22	1,130321E+23	5,252277E+22	1,655549E+23
2251	5,651496E+22	5,651531E+22	2,626280E+22	2,626140E+22	1,130303E+23	5,252420E+22	1,655545E+23
2252	5,651548E+22	5,651603E+22	2,626257E+22	2,626342E+22	1,130315E+23	5,252599E+22	1,655575E+23
2253	5,651541E+22	5,651311E+22	2,626312E+22	2,626330E+22	1,130285E+23	5,252642E+22	1,655549E+23
2254	5,651327E+22	5,651497E+22	2,626450E+22	2,626379E+22	1,130282E+23	5,252829E+22	1,655565E+23
2255	5,651456E+22	5,651443E+22	2,626371E+22	2,626526E+22	1,130290E+23	5,252897E+22	1,655580E+23
2256	5,651384E+22	5,651233E+22	2,626478E+22	2,626429E+22	1,130262E+23	5,252907E+22	1,655552E+23
2257	5,651268E+22	5,651471E+22	2,626544E+22	2,626481E+22	1,130274E+23	5,253025E+22	1,655576E+23
2258	5,651439E+22	5,651304E+22	2,626442E+22	2,626490E+22	1,130274E+23	5,252932E+22	1,655568E+23
2259	5,651286E+22	5,651295E+22	2,626519E+22	2,626384E+22	1,130258E+23	5,252903E+22	1,655548E+23
2260	5,651290E+22	5,651506E+22	2,626429E+22	2,626494E+22	1,130280E+23	5,252923E+22	1,655572E+23
2261	5,651422E+22	5,651273E+22	2,626354E+22	2,626387E+22	1,130270E+23	5,252741E+22	1,655544E+23
2262	5,651307E+22	5,651429E+22	2,626401E+22	2,626280E+22	1,130274E+23	5,252681E+22	1,655542E+23
2263	5,651537E+22	5,651508E+22	2,626232E+22	2,626341E+22	1,130305E+23	5,252572E+22	1,655562E+23
2264	5,651580E+22	5,651338E+22	2,626225E+22	2,626192E+22	1,130292E+23	5,252417E+22	1,655534E+23
2265	5,651411E+22	5,651636E+22	2,626283E+22	2,626201E+22	1,130305E+23	5,252484E+22	1,655553E+23
2266	5,651580E+22	5,651584E+22	2,626162E+22	2,626260E+22	1,130316E+23	5,252422E+22	1,655559E+23
2267	5,651457E+22	5,651449E+22	2,626276E+22	2,626187E+22	1,130291E+23	5,252463E+22	1,655537E+23
2268	5,651387E+22	5,651611E+22	2,626313E+22	2,626323E+22	1,130300E+23	5,252637E+22	1,655564E+23
2269	5,651548E+22	5,651337E+22	2,626294E+22	2,626339E+22	1,130288E+23	5,252633E+22	1,655552E+23
2270	5,651344E+22	5,651343E+22	2,626453E+22	2,626327E+22	1,130269E+23	5,252780E+22	1,655547E+23
2271	5,651405E+22	5,651451E+22	2,626397E+22	2,626526E+22	1,130286E+23	5,252923E+22	1,655578E+23
2272	5,651405E+22	5,651188E+22	2,626451E+22	2,626512E+22	1,130259E+23	5,252963E+22	1,655556E+23
2273	5,651137E+22	5,651349E+22	2,626625E+22	2,626545E+22	1,130249E+23	5,253170E+22	1,655566E+23
2274	5,651311E+22	5,651302E+22	2,626551E+22	2,626649E+22	1,130261E+23	5,253199E+22	1,655581E+23
2275	5,651244E+22	5,651085E+22	2,626659E+22	2,626561E+22	1,130233E+23	5,253219E+22	1,655555E+23
2276	5,651090E+22	5,651304E+22	2,626700E+22	2,626640E+22	1,130239E+23	5,253340E+22	1,655573E+23
2277	5,651268E+22	5,651159E+22	2,626592E+22	2,626654E+22	1,130243E+23	5,253246E+22	1,655567E+23
2278	5,651085E+22	5,651153E+22	2,626660E+22	2,626549E+22	1,130224E+23	5,253209E+22	1,655545E+23
2279	5,651163E+22	5,651338E+22	2,626544E+22	2,626628E+22	1,130250E+23	5,253173E+22	1,655567E+23
2280	5,651354E+22	5,651128E+22	2,626464E+22	2,626508E+22	1,130248E+23	5,252972E+22	1,655545E+23
2281	5,651196E+22	5,651296E+22	2,626531E+22	2,626401E+22	1,130249E+23	5,252932E+22	1,655542E+23
2282	5,651422E+22	5,651417E+22	2,626367E+22	2,626451E+22	1,130284E+23	5,252818E+22	1,655566E+23
2283	5,651426E+22	5,651265E+22	2,626373E+22	2,626337E+22	1,130269E+23	5,252710E+22	1,655540E+23
2284	5,651218E+22	5,651497E+22	2,626434E+22	2,626373E+22	1,130271E+23	5,252807E+22	1,655552E+23
2285	5,651429E+22	5,651401E+22	2,626341E+22	2,626423E+22	1,130283E+23	5,252764E+22	1,655559E+23
2286	5,651308E+22	5,651251E+22	2,626455E+22	2,626349E+22	1,130256E+23	5,252804E+22	1,655536E+23
2287	5,651282E+22	5,651398E+22	2,626460E+22	2,626480E+22	1,130268E+23	5,252940E+22	1,655562E+23
2288	5,651433E+22	5,651188E+22	2,626433E+22	2,626513E+22	1,130262E+23	5,252946E+22	1,655557E+23
2289	5,651148E+22	5,651222E+22	2,626606E+22	2,626512E+22	1,130237E+23	5,253118E+22	1,655549E+23
2290	5,651211E+22	5,651337E+22	2,626568E+22	2,626683E+22	1,130255E+23	5,253251E+22	1,655580E+23
2291	5,651233E+22	5,651062E+22	2,626645E+22	2,626667E+22	1,130230E+23	5,253312E+22	1,655561E+23
2292	5,650969E+22	5,651163E+22	2,626810E+22	2,626704E+22	1,130213E+23	5,253514E+22	1,655565E+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	5,651174E+22	5,651117E+22	2,626742E+22	2,626804E+22	1,130229E+23	5,253546E+22	1,655584E+23
2294	5,651060E+22	5,650927E+22	2,626828E+22	2,626733E+22	1,130199E+23	5,253560E+22	1,655555E+23
2295	5,650923E+22	5,651143E+22	2,626821E+22	2,626813E+22	1,130207E+23	5,253634E+22	1,655570E+23
2296	5,651130E+22	5,651022E+22	2,626703E+22	2,626818E+22	1,130215E+23	5,253521E+22	1,655567E+23
2297	5,650944E+22	5,650993E+22	2,626786E+22	2,626689E+22	1,130194E+23	5,253476E+22	1,655541E+23
2298	5,651081E+22	5,651200E+22	2,626675E+22	2,626721E+22	1,130228E+23	5,253396E+22	1,655568E+23
2299	5,651274E+22	5,651027E+22	2,626598E+22	2,626610E+22	1,130230E+23	5,253209E+22	1,655551E+23
2300	5,651054E+22	5,651181E+22	2,626663E+22	2,626533E+22	1,130224E+23	5,253196E+22	1,655543E+23
2301	5,651263E+22	5,651314E+22	2,626521E+22	2,626595E+22	1,130258E+23	5,253116E+22	1,655569E+23
2302	5,651222E+22	5,651136E+22	2,626539E+22	2,626498E+22	1,130236E+23	5,253037E+22	1,655539E+23
2303	5,651068E+22	5,651310E+22	2,626584E+22	2,626527E+22	1,130238E+23	5,253111E+22	1,655549E+23
2304	5,651322E+22	5,651224E+22	2,626484E+22	2,626578E+22	1,130255E+23	5,253062E+22	1,655561E+23
2305	5,651158E+22	5,651070E+22	2,626610E+22	2,626517E+22	1,130223E+23	5,253127E+22	1,655536E+23
2306	5,651138E+22	5,651265E+22	2,626615E+22	2,626637E+22	1,130240E+23	5,253252E+22	1,655566E+23
2307	5,651264E+22	5,651087E+22	2,626593E+22	2,626695E+22	1,130235E+23	5,253288E+22	1,655564E+23
2308	5,650951E+22	5,651065E+22	2,626779E+22	2,626703E+22	1,130202E+23	5,253482E+22	1,655550E+23
2309	5,651064E+22	5,651153E+22	2,626771E+22	2,626846E+22	1,130222E+23	5,253617E+22	1,655583E+23
2310	5,651070E+22	5,650880E+22	2,626844E+22	2,626824E+22	1,130195E+23	5,253668E+22	1,655562E+23
2311	5,650834E+22	5,650968E+22	2,626968E+22	2,626861E+22	1,130180E+23	5,253830E+22	1,655563E+23
2312	5,651019E+22	5,650974E+22	2,626880E+22	2,626974E+22	1,130199E+23	5,253853E+22	1,655585E+23
2313	5,650848E+22	5,650792E+22	2,626968E+22	2,626910E+22	1,130164E+23	5,253878E+22	1,655552E+23
2314	5,650757E+22	5,651006E+22	2,626962E+22	2,626950E+22	1,130176E+23	5,253912E+22	1,655567E+23
2315	5,651012E+22	5,650895E+22	2,626847E+22	2,626947E+22	1,130191E+23	5,253794E+22	1,655570E+23
2316	5,650841E+22	5,650832E+22	2,626922E+22	2,626813E+22	1,130167E+23	5,253736E+22	1,655541E+23
2317	5,651001E+22	5,651057E+22	2,626827E+22	2,626837E+22	1,130206E+23	5,253664E+22	1,655572E+23
2318	5,651125E+22	5,650935E+22	2,626743E+22	2,626746E+22	1,130206E+23	5,253489E+22	1,655555E+23
2319	5,650902E+22	5,651059E+22	2,626780E+22	2,626684E+22	1,130196E+23	5,253464E+22	1,655543E+23
2320	5,651102E+22	5,651187E+22	2,626650E+22	2,626748E+22	1,130229E+23	5,253398E+22	1,655569E+23
2321	5,651054E+22	5,650965E+22	2,626689E+22	2,626650E+22	1,130202E+23	5,253339E+22	1,655536E+23
2322	5,650949E+22	5,651128E+22	2,626736E+22	2,626654E+22	1,130208E+23	5,253390E+22	1,655547E+23
2323	5,651203E+22	5,651083E+22	2,626638E+22	2,626731E+22	1,130229E+23	5,253369E+22	1,655565E+23
2324	5,650991E+22	5,650919E+22	2,626759E+22	2,626695E+22	1,130191E+23	5,253454E+22	1,655536E+23
2325	5,650972E+22	5,651124E+22	2,626791E+22	2,626814E+22	1,130210E+23	5,253605E+22	1,655570E+23
2326	5,651065E+22	5,650950E+22	2,626784E+22	2,626869E+22	1,130201E+23	5,253653E+22	1,655567E+23
2327	5,650806E+22	5,650871E+22	2,626954E+22	2,626867E+22	1,130168E+23	5,253821E+22	1,655550E+23
2328	5,650934E+22	5,650981E+22	2,626944E+22	2,627005E+22	1,130191E+23	5,253949E+22	1,655586E+23
2329	5,650896E+22	5,650706E+22	2,627020E+22	2,626999E+22	1,130160E+23	5,254019E+22	1,655562E+23
2330	5,650661E+22	5,650824E+22	2,627126E+22	2,627024E+22	1,130148E+23	5,254150E+22	1,655563E+23
2331	5,650840E+22	5,650861E+22	2,627025E+22	2,627153E+22	1,130170E+23	5,254178E+22	1,655588E+23
2332	5,650674E+22	5,650620E+22	2,627112E+22	2,627080E+22	1,130129E+23	5,254192E+22	1,655549E+23
2333	5,650665E+22	5,650825E+22	2,627123E+22	2,627081E+22	1,130149E+23	5,254204E+22	1,655569E+23
2334	5,650908E+22	5,650747E+22	2,627000E+22	2,627062E+22	1,130166E+23	5,254061E+22	1,655572E+23
2335	5,650753E+22	5,650692E+22	2,627040E+22	2,626935E+22	1,130144E+23	5,253975E+22	1,655542E+23
2336	5,650867E+22	5,650972E+22	2,626938E+22	2,626967E+22	1,130184E+23	5,253904E+22	1,655574E+23
2337	5,650914E+22	5,650834E+22	2,626875E+22	2,626895E+22	1,130175E+23	5,253770E+22	1,655552E+23
2338	5,650724E+22	5,650930E+22	2,626924E+22	2,626812E+22	1,130165E+23	5,253736E+22	1,655539E+23
2339	5,650958E+22	5,651046E+22	2,626801E+22	2,626889E+22	1,130200E+23	5,253690E+22	1,655569E+23
2340	5,650918E+22	5,650771E+22	2,626842E+22	2,626806E+22	1,130169E+23	5,253648E+22	1,655534E+23
2341	5,650851E+22	5,650944E+22	2,626902E+22	2,626810E+22	1,130180E+23	5,253712E+22	1,655551E+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							
2342	5,651042E+22	5,650952E+22	2,626799E+22	2,626904E+22	1,130199E+23	5,253703E+22	1,655570E+23
2343	5,650845E+22	5,650769E+22	2,626897E+22	2,626878E+22	1,130161E+23	5,253775E+22	1,655539E+23
2344	5,650825E+22	5,650978E+22	2,626949E+22	2,626980E+22	1,130180E+23	5,253929E+22	1,655573E+23
2345	5,650898E+22	5,650778E+22	2,626970E+22	2,627031E+22	1,130168E+23	5,254001E+22	1,655568E+23
2346	5,650667E+22	5,650701E+22	2,627138E+22	2,627008E+22	1,130137E+23	5,254146E+22	1,655551E+23
2347	5,650767E+22	5,650849E+22	2,627119E+22	2,627175E+22	1,130162E+23	5,254294E+22	1,655591E+23
2348	5,650684E+22	5,650549E+22	2,627186E+22	2,627193E+22	1,130123E+23	5,254378E+22	1,655561E+23
2349	5,650482E+22	5,650653E+22	2,627300E+22	2,627204E+22	1,130113E+23	5,254504E+22	1,655564E+23
2350	5,650663E+22	5,650706E+22	2,627197E+22	2,627311E+22	1,130137E+23	5,254508E+22	1,655588E+23
2351	5,650581E+22	5,650433E+22	2,627243E+22	2,627219E+22	1,130101E+23	5,254461E+22	1,655548E+23
2352	5,650584E+22	5,650680E+22	2,627249E+22	2,627200E+22	1,130126E+23	5,254449E+22	1,655571E+23
2353	5,650773E+22	5,650635E+22	2,627131E+22	2,627191E+22	1,130141E+23	5,254321E+22	1,655573E+23
2354	5,650600E+22	5,650602E+22	2,627161E+22	2,627058E+22	1,130120E+23	5,254219E+22	1,655542E+23
2355	5,650687E+22	5,650894E+22	2,627067E+22	2,627112E+22	1,130158E+23	5,254178E+22	1,655576E+23
2356	5,650735E+22	5,650670E+22	2,627020E+22	2,627046E+22	1,130140E+23	5,254066E+22	1,655547E+23
2357	5,650622E+22	5,650725E+22	2,627087E+22	2,626944E+22	1,130135E+23	5,254032E+22	1,655538E+23
2358	5,650842E+22	5,650875E+22	2,626960E+22	2,627022E+22	1,130172E+23	5,253981E+22	1,655570E+23
2359	5,650820E+22	5,650601E+22	2,626963E+22	2,626962E+22	1,130142E+23	5,253925E+22	1,655535E+23
2360	5,650717E+22	5,650830E+22	2,627027E+22	2,626971E+22	1,130155E+23	5,253998E+22	1,655554E+23
2361	5,650848E+22	5,650833E+22	2,626955E+22	2,627076E+22	1,130168E+23	5,254030E+22	1,655571E+23
2362	5,650679E+22	5,650633E+22	2,627071E+22	2,627025E+22	1,130131E+23	5,254096E+22	1,655541E+23
2363	5,650671E+22	5,650843E+22	2,627135E+22	2,627137E+22	1,130151E+23	5,254272E+22	1,655579E+23
2364	5,650723E+22	5,650590E+22	2,627166E+22	2,627209E+22	1,130131E+23	5,254375E+22	1,655569E+23
2365	5,650517E+22	5,650514E+22	2,627337E+22	2,627192E+22	1,130103E+23	5,254529E+22	1,655556E+23
2366	5,650557E+22	5,650699E+22	2,627300E+22	2,627368E+22	1,130126E+23	5,254668E+22	1,655592E+23
2367	5,650514E+22	5,650364E+22	2,627326E+22	2,627391E+22	1,130088E+23	5,254718E+22	1,655560E+23
2368	5,650358E+22	5,650476E+22	2,627436E+22	2,627363E+22	1,130083E+23	5,254799E+22	1,655563E+23
2369	5,650539E+22	5,650526E+22	2,627346E+22	2,627447E+22	1,130106E+23	5,254793E+22	1,655586E+23
2370	5,650487E+22	5,650301E+22	2,627377E+22	2,627322E+22	1,130079E+23	5,254699E+22	1,655549E+23
2371	5,650456E+22	5,650604E+22	2,627376E+22	2,627321E+22	1,130106E+23	5,254697E+22	1,655576E+23
2372	5,650576E+22	5,650534E+22	2,627269E+22	2,627334E+22	1,130111E+23	5,254603E+22	1,655571E+23
2373	5,650432E+22	5,650468E+22	2,627318E+22	2,627198E+22	1,130090E+23	5,254515E+22	1,655542E+23
2374	5,650505E+22	5,650747E+22	2,627230E+22	2,627243E+22	1,130125E+23	5,254473E+22	1,655572E+23
2375	5,650632E+22	5,650473E+22	2,627149E+22	2,627188E+22	1,130110E+23	5,254337E+22	1,655544E+23
2376	5,650545E+22	5,650553E+22	2,627210E+22	2,627081E+22	1,130110E+23	5,254291E+22	1,655539E+23
2377	5,650713E+22	5,650735E+22	2,627094E+22	2,627179E+22	1,130145E+23	5,254272E+22	1,655572E+23
2378	5,650679E+22	5,650505E+22	2,627088E+22	2,627111E+22	1,130118E+23	5,254199E+22	1,655538E+23
2379	5,650553E+22	5,650746E+22	2,627171E+22	2,627135E+22	1,130130E+23	5,254305E+22	1,655560E+23
2380	5,650671E+22	5,650675E+22	2,627138E+22	2,627241E+22	1,130135E+23	5,254378E+22	1,655572E+23
2381	5,650554E+22	5,650436E+22	2,627279E+22	2,627180E+22	1,130099E+23	5,254459E+22	1,655545E+23
2382	5,650497E+22	5,650678E+22	2,627341E+22	2,627299E+22	1,130117E+23	5,254640E+22	1,655581E+23
2383	5,650561E+22	5,650402E+22	2,627326E+22	2,627403E+22	1,130096E+23	5,254728E+22	1,655569E+23
2384	5,650334E+22	5,650349E+22	2,627485E+22	2,627384E+22	1,130068E+23	5,254869E+22	1,655555E+23
2385	5,650354E+22	5,650529E+22	2,627460E+22	2,627552E+22	1,130088E+23	5,255012E+22	1,655590E+23
2386	5,650372E+22	5,650201E+22	2,627475E+22	2,627532E+22	1,130057E+23	5,255006E+22	1,655558E+23
2387	5,650252E+22	5,650346E+22	2,627581E+22	2,627495E+22	1,130060E+23	5,255076E+22	1,655567E+23
2388	5,650411E+22	5,650378E+22	2,627504E+22	2,627582E+22	1,130079E+23	5,255086E+22	1,655587E+23
2389	5,650364E+22	5,650177E+22	2,627537E+22	2,627457E+22	1,130054E+23	5,254994E+22	1,655553E+23
2390	5,650259E+22	5,650517E+22	2,627529E+22	2,627461E+22	1,130078E+23	5,254989E+22	1,655577E+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	5,650411E+22	5,650380E+22	2,627393E+22	2,627491E+22	1,130079E+23	5,254884E+22	1,655568E+23
2392	5,650310E+22	5,650293E+22	2,627446E+22	2,627333E+22	1,130060E+23	5,254778E+22	1,655538E+23
2393	5,650387E+22	5,650561E+22	2,627367E+22	2,627375E+22	1,130095E+23	5,254742E+22	1,655569E+23
2394	5,650538E+22	5,650333E+22	2,627267E+22	2,627309E+22	1,130087E+23	5,254576E+22	1,655545E+23
2395	5,650428E+22	5,650474E+22	2,627321E+22	2,627226E+22	1,130090E+23	5,254547E+22	1,655545E+23
2396	5,650531E+22	5,650624E+22	2,627239E+22	2,627341E+22	1,130115E+23	5,254580E+22	1,655574E+23
2397	5,650526E+22	5,650378E+22	2,627265E+22	2,627265E+22	1,130090E+23	5,254530E+22	1,655543E+23
2398	5,650374E+22	5,650605E+22	2,627367E+22	2,627277E+22	1,130098E+23	5,254644E+22	1,655562E+23
2399	5,650533E+22	5,650474E+22	2,627313E+22	2,627410E+22	1,130101E+23	5,254723E+22	1,655573E+23
2400	5,650422E+22	5,650248E+22	2,627449E+22	2,627353E+22	1,130067E+23	5,254803E+22	1,655547E+23
2401	5,650304E+22	5,650495E+22	2,627511E+22	2,627495E+22	1,130080E+23	5,255006E+22	1,655580E+23
2402	5,650372E+22	5,650255E+22	2,627472E+22	2,627589E+22	1,130063E+23	5,255062E+22	1,655569E+23
2403	5,650172E+22	5,650211E+22	2,627626E+22	2,627564E+22	1,130038E+23	5,255190E+22	1,655557E+23
2404	5,650204E+22	5,650337E+22	2,627634E+22	2,627711E+22	1,130054E+23	5,255345E+22	1,655588E+23
2405	5,650282E+22	5,650031E+22	2,627653E+22	2,627660E+22	1,130031E+23	5,255313E+22	1,655563E+23
2406	5,650109E+22	5,650230E+22	2,627753E+22	2,627618E+22	1,130034E+23	5,255371E+22	1,655571E+23
2407	5,650258E+22	5,650250E+22	2,627641E+22	2,627736E+22	1,130051E+23	5,255377E+22	1,655588E+23
2408	5,650188E+22	5,650060E+22	2,627669E+22	2,627608E+22	1,130025E+23	5,255278E+22	1,655553E+23
2409	5,650058E+22	5,650367E+22	2,627674E+22	2,627612E+22	1,130043E+23	5,255286E+22	1,655571E+23
2410	5,650270E+22	5,650227E+22	2,627520E+22	2,627615E+22	1,130050E+23	5,255135E+22	1,655563E+23
2411	5,650216E+22	5,650157E+22	2,627560E+22	2,627462E+22	1,130037E+23	5,255022E+22	1,655540E+23
2412	5,650278E+22	5,650404E+22	2,627505E+22	2,627516E+22	1,130068E+23	5,255021E+22	1,655570E+23
2413	5,650435E+22	5,650214E+22	2,627406E+22	2,627451E+22	1,130065E+23	5,254858E+22	1,655551E+23
2414	5,650257E+22	5,650394E+22	2,627470E+22	2,627372E+22	1,130065E+23	5,254841E+22	1,655549E+23
2415	5,650386E+22	5,650471E+22	2,627381E+22	2,627500E+22	1,130086E+23	5,254881E+22	1,655574E+23
2416	5,650401E+22	5,650197E+22	2,627428E+22	2,627409E+22	1,130060E+23	5,254837E+22	1,655543E+23
2417	5,650222E+22	5,650414E+22	2,627548E+22	2,627431E+22	1,130064E+23	5,254978E+22	1,655561E+23
2418	5,650376E+22	5,650315E+22	2,627471E+22	2,627566E+22	1,130069E+23	5,255038E+22	1,655573E+23
2419	5,650243E+22	5,650127E+22	2,627596E+22	2,627540E+22	1,130037E+23	5,255135E+22	1,655551E+23
2420	5,650090E+22	5,650327E+22	2,627685E+22	2,627690E+22	1,130042E+23	5,255376E+22	1,655579E+23
2421	5,650208E+22	5,650084E+22	2,627658E+22	2,627761E+22	1,130029E+23	5,255419E+22	1,655571E+23
2422	5,650015E+22	5,650061E+22	2,627814E+22	2,627711E+22	1,130008E+23	5,255525E+22	1,655560E+23
2423	5,650093E+22	5,650148E+22	2,627797E+22	2,627869E+22	1,130024E+23	5,255666E+22	1,655591E+23
2424	5,650166E+22	5,649885E+22	2,627812E+22	2,627811E+22	1,130005E+23	5,255622E+22	1,655567E+23
2425	5,649926E+22	5,650105E+22	2,627907E+22	2,627783E+22	1,130003E+23	5,255689E+22	1,655572E+23
2426	5,650064E+22	5,650142E+22	2,627768E+22	2,627890E+22	1,130021E+23	5,255658E+22	1,655586E+23
2427	5,650031E+22	5,649938E+22	2,627791E+22	2,627759E+22	1,129997E+23	5,255550E+22	1,655552E+23
2428	5,649921E+22	5,650166E+22	2,627825E+22	2,627749E+22	1,130009E+23	5,255574E+22	1,655566E+23
2429	5,650193E+22	5,650061E+22	2,627666E+22	2,627734E+22	1,130025E+23	5,255400E+22	1,655565E+23
2430	5,650106E+22	5,650048E+22	2,627693E+22	2,627579E+22	1,130015E+23	5,255272E+22	1,655543E+23
2431	5,650153E+22	5,650273E+22	2,627619E+22	2,627666E+22	1,130043E+23	5,255285E+22	1,655571E+23
2432	5,650291E+22	5,650107E+22	2,627535E+22	2,627592E+22	1,130040E+23	5,255127E+22	1,655552E+23
2433	5,650081E+22	5,650249E+22	2,627628E+22	2,627514E+22	1,130033E+23	5,255142E+22	1,655547E+23
2434	5,650235E+22	5,650323E+22	2,627537E+22	2,627630E+22	1,130056E+23	5,255167E+22	1,655572E+23
2435	5,650272E+22	5,650057E+22	2,627582E+22	2,627563E+22	1,130033E+23	5,255145E+22	1,655547E+23
2436	5,650051E+22	5,650227E+22	2,627731E+22	2,627611E+22	1,130028E+23	5,255342E+22	1,655562E+23
2437	5,650202E+22	5,650168E+22	2,627648E+22	2,627755E+22	1,130037E+23	5,255403E+22	1,655577E+23
2438	5,650038E+22	5,649996E+22	2,627769E+22	2,627726E+22	1,130003E+23	5,255495E+22	1,655553E+23
2439	5,649939E+22	5,650118E+22	2,627850E+22	2,627881E+22	1,130006E+23	5,255731E+22	1,655579E+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							
2440	5,650101E+22	5,649888E+22	2,627830E+22	2,627917E+22	1,129999E+23	5,255747E+22	1,655574E+23
2441	5,649885E+22	5,649887E+22	2,627989E+22	2,627865E+22	1,129977E+23	5,255854E+22	1,655563E+23
2442	5,649946E+22	5,650026E+22	2,627945E+22	2,628014E+22	1,129997E+23	5,255958E+22	1,655593E+23
2443	5,649988E+22	5,649802E+22	2,627945E+22	2,627973E+22	1,129979E+23	5,255919E+22	1,655571E+23
2444	5,649714E+22	5,649960E+22	2,628069E+22	2,627948E+22	1,129967E+23	5,256017E+22	1,655569E+23
2445	5,649901E+22	5,649983E+22	2,627930E+22	2,628027E+22	1,129988E+23	5,255957E+22	1,655584E+23
2446	5,649890E+22	5,649788E+22	2,627945E+22	2,627881E+22	1,129968E+23	5,255826E+22	1,655550E+23
2447	5,649842E+22	5,649970E+22	2,627949E+22	2,627887E+22	1,129981E+23	5,255836E+22	1,655565E+23
2448	5,650109E+22	5,649912E+22	2,627786E+22	2,627865E+22	1,130002E+23	5,255651E+22	1,655567E+23
2449	5,649962E+22	5,649941E+22	2,627813E+22	2,627725E+22	1,129990E+23	5,255539E+22	1,655544E+23
2450	5,649997E+22	5,650180E+22	2,627731E+22	2,627799E+22	1,130018E+23	5,255529E+22	1,655571E+23
2451	5,650153E+22	5,650002E+22	2,627664E+22	2,627726E+22	1,130015E+23	5,255391E+22	1,655554E+23
2452	5,649935E+22	5,650066E+22	2,627805E+22	2,627654E+22	1,130000E+23	5,255459E+22	1,655546E+23
2453	5,650097E+22	5,650163E+22	2,627719E+22	2,627771E+22	1,130026E+23	5,255489E+22	1,655575E+23
2454	5,650090E+22	5,649932E+22	2,627758E+22	2,627729E+22	1,130002E+23	5,255488E+22	1,655551E+23
2455	5,649870E+22	5,650043E+22	2,627887E+22	2,627818E+22	1,129991E+23	5,255705E+22	1,655562E+23
2456	5,650030E+22	5,649991E+22	2,627815E+22	2,627947E+22	1,130002E+23	5,255762E+22	1,655578E+23
2457	5,649870E+22	5,649809E+22	2,627945E+22	2,627906E+22	1,129968E+23	5,255850E+22	1,655553E+23
2458	5,649811E+22	5,649947E+22	2,628009E+22	2,628033E+22	1,129976E+23	5,256042E+22	1,655580E+23
2459	5,649992E+22	5,649760E+22	2,627985E+22	2,628073E+22	1,129975E+23	5,256058E+22	1,655581E+23
2460	5,649724E+22	5,649730E+22	2,628172E+22	2,628034E+22	1,129945E+23	5,256206E+22	1,655566E+23
2461	5,649759E+22	5,649918E+22	2,628117E+22	2,628176E+22	1,129968E+23	5,256293E+22	1,655597E+23
2462	5,649784E+22	5,649690E+22	2,628109E+22	2,628129E+22	1,129947E+23	5,256238E+22	1,655571E+23
2463	5,649565E+22	5,649738E+22	2,628217E+22	2,628107E+22	1,129930E+23	5,256324E+22	1,655563E+23
2464	5,649805E+22	5,649782E+22	2,628073E+22	2,628154E+22	1,129959E+23	5,256227E+22	1,655581E+23
2465	5,649784E+22	5,649622E+22	2,628073E+22	2,628009E+22	1,129941E+23	5,256082E+22	1,655549E+23
2466	5,649728E+22	5,649860E+22	2,628048E+22	2,628010E+22	1,129959E+23	5,256059E+22	1,655565E+23
2467	5,649973E+22	5,649856E+22	2,627884E+22	2,627998E+22	1,129983E+23	5,255882E+22	1,655571E+23
2468	5,649788E+22	5,649822E+22	2,627961E+22	2,627863E+22	1,129961E+23	5,255824E+22	1,655543E+23
2469	5,649843E+22	5,650060E+22	2,627896E+22	2,627915E+22	1,129990E+23	5,255811E+22	1,655571E+23
2470	5,650000E+22	5,649875E+22	2,627838E+22	2,627854E+22	1,129988E+23	5,255693E+22	1,655557E+23
2471	5,649809E+22	5,649859E+22	2,627969E+22	2,627826E+22	1,129967E+23	5,255795E+22	1,655546E+23
2472	5,649956E+22	5,649987E+22	2,627880E+22	2,627951E+22	1,129994E+23	5,255831E+22	1,655577E+23
2473	5,649903E+22	5,649778E+22	2,627913E+22	2,627930E+22	1,129968E+23	5,255843E+22	1,655552E+23
2474	5,649709E+22	5,649880E+22	2,628024E+22	2,628000E+22	1,129959E+23	5,256024E+22	1,655561E+23
2475	5,649910E+22	5,649831E+22	2,627964E+22	2,628110E+22	1,129974E+23	5,256074E+22	1,655582E+23
2476	5,649751E+22	5,649618E+22	2,628133E+22	2,628059E+22	1,129937E+23	5,256193E+22	1,655556E+23
2477	5,649683E+22	5,649811E+22	2,628194E+22	2,628171E+22	1,129949E+23	5,256365E+22	1,655586E+23
2478	5,649800E+22	5,649668E+22	2,628169E+22	2,628229E+22	1,129947E+23	5,256398E+22	1,655587E+23
2479	5,649521E+22	5,649569E+22	2,628336E+22	2,628222E+22	1,129909E+23	5,256558E+22	1,655565E+23
2480	5,649562E+22	5,649740E+22	2,628285E+22	2,628341E+22	1,129930E+23	5,256626E+22	1,655593E+23
2481	5,649605E+22	5,649502E+22	2,628271E+22	2,628286E+22	1,129911E+23	5,256557E+22	1,655566E+23
2482	5,649454E+22	5,649555E+22	2,628338E+22	2,628241E+22	1,129901E+23	5,256579E+22	1,655559E+23
2483	5,649723E+22	5,649651E+22	2,628182E+22	2,628286E+22	1,129937E+23	5,256468E+22	1,655584E+23
2484	5,649661E+22	5,649499E+22	2,628202E+22	2,628150E+22	1,129916E+23	5,256352E+22	1,655551E+23
2485	5,649579E+22	5,649792E+22	2,628174E+22	2,628137E+22	1,129937E+23	5,256311E+22	1,655568E+23
2486	5,649805E+22	5,649783E+22	2,628029E+22	2,628122E+22	1,129959E+23	5,256151E+22	1,655574E+23
2487	5,649661E+22	5,649632E+22	2,628112E+22	2,628006E+22	1,129929E+23	5,256118E+22	1,655541E+23
2488	5,649731E+22	5,649872E+22	2,628060E+22	2,628044E+22	1,129960E+23	5,256105E+22	1,655571E+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							
2489	5,649856E+22	5,649710E+22	2,627996E+22	2,628012E+22	1,129957E+23	5,256007E+22	1,655557E+23
2490	5,649655E+22	5,649708E+22	2,628095E+22	2,627996E+22	1,129936E+23	5,256091E+22	1,655546E+23
2491	5,649799E+22	5,649868E+22	2,628008E+22	2,628129E+22	1,129967E+23	5,256137E+22	1,655580E+23
2492	5,649732E+22	5,649604E+22	2,628082E+22	2,628105E+22	1,129934E+23	5,256187E+22	1,655552E+23
2493	5,649568E+22	5,649733E+22	2,628202E+22	2,628142E+22	1,129930E+23	5,256344E+22	1,655565E+23
2494	5,649774E+22	5,649705E+22	2,628153E+22	2,628252E+22	1,129948E+23	5,256405E+22	1,655588E+23
2495	5,649611E+22	5,649424E+22	2,628319E+22	2,628238E+22	1,129904E+23	5,256557E+22	1,655559E+23
2496	5,649507E+22	5,649661E+22	2,628380E+22	2,628347E+22	1,129917E+23	5,256726E+22	1,655589E+23
2497	5,649574E+22	5,649528E+22	2,628341E+22	2,628422E+22	1,129910E+23	5,256764E+22	1,655587E+23
2498	5,649333E+22	5,649388E+22	2,628479E+22	2,628397E+22	1,129872E+23	5,256876E+22	1,655560E+23
2499	5,649435E+22	5,649561E+22	2,628421E+22	2,628488E+22	1,129900E+23	5,256908E+22	1,655590E+23
2500	5,649492E+22	5,649306E+22	2,628421E+22	2,628424E+22	1,129880E+23	5,256845E+22	1,655564E+23
2501	5,649349E+22	5,649439E+22	2,628468E+22	2,628358E+22	1,129879E+23	5,256826E+22	1,655561E+23
2502	5,649580E+22	5,649589E+22	2,628314E+22	2,628411E+22	1,129917E+23	5,256725E+22	1,655589E+23
2503	5,649509E+22	5,649376E+22	2,628332E+22	2,628299E+22	1,129888E+23	5,256631E+22	1,655552E+23
2504	5,649434E+22	5,649656E+22	2,628323E+22	2,628259E+22	1,129909E+23	5,256582E+22	1,655567E+23
2505	5,649651E+22	5,649635E+22	2,628185E+22	2,628250E+22	1,129929E+23	5,256435E+22	1,655572E+23
2506	5,649549E+22	5,649462E+22	2,628242E+22	2,628140E+22	1,129901E+23	5,256383E+22	1,655539E+23
2507	5,649620E+22	5,649726E+22	2,628189E+22	2,628193E+22	1,129935E+23	5,256382E+22	1,655573E+23
2508	5,649697E+22	5,649565E+22	2,628147E+22	2,628189E+22	1,129926E+23	5,256336E+22	1,655560E+23
2509	5,649491E+22	5,649599E+22	2,628233E+22	2,628159E+22	1,129909E+23	5,256392E+22	1,655548E+23
2510	5,649635E+22	5,649740E+22	2,628175E+22	2,628286E+22	1,129938E+23	5,256460E+22	1,655584E+23
2511	5,649609E+22	5,649397E+22	2,628256E+22	2,628268E+22	1,129901E+23	5,256525E+22	1,655553E+23
2512	5,649452E+22	5,649547E+22	2,628389E+22	2,628287E+22	1,129900E+23	5,256676E+22	1,655567E+23
2513	5,649597E+22	5,649561E+22	2,628342E+22	2,628423E+22	1,129916E+23	5,256765E+22	1,655592E+23
2514	5,649417E+22	5,649285E+22	2,628474E+22	2,628426E+22	1,129870E+23	5,256900E+22	1,655560E+23
2515	5,649302E+22	5,649526E+22	2,628533E+22	2,628530E+22	1,129883E+23	5,257064E+22	1,655589E+23
2516	5,649372E+22	5,649338E+22	2,628521E+22	2,628600E+22	1,129871E+23	5,257121E+22	1,655583E+23
2517	5,649185E+22	5,649220E+22	2,628637E+22	2,628536E+22	1,129840E+23	5,257173E+22	1,655558E+23
2518	5,649320E+22	5,649414E+22	2,628578E+22	2,628621E+22	1,129873E+23	5,257200E+22	1,655593E+23
2519	5,649391E+22	5,649133E+22	2,628561E+22	2,628579E+22	1,129852E+23	5,257140E+22	1,655566E+23
2520	5,649230E+22	5,649325E+22	2,628602E+22	2,628498E+22	1,129855E+23	5,257100E+22	1,655565E+23
2521	5,649412E+22	5,649496E+22	2,628449E+22	2,628555E+22	1,129891E+23	5,257004E+22	1,655591E+23
2522	5,649371E+22	5,649236E+22	2,628451E+22	2,628429E+22	1,129861E+23	5,256881E+22	1,655549E+23
2523	5,649329E+22	5,649513E+22	2,628451E+22	2,628371E+22	1,129884E+23	5,256822E+22	1,655566E+23
2524	5,649525E+22	5,649467E+22	2,628336E+22	2,628379E+22	1,129899E+23	5,256715E+22	1,655571E+23
2525	5,649405E+22	5,649350E+22	2,628377E+22	2,628273E+22	1,129875E+23	5,256651E+22	1,655541E+23
2526	5,649450E+22	5,649635E+22	2,628331E+22	2,628348E+22	1,129909E+23	5,256679E+22	1,655576E+23
2527	5,649523E+22	5,649393E+22	2,628294E+22	2,628370E+22	1,129892E+23	5,256664E+22	1,655558E+23
2528	5,649347E+22	5,649428E+22	2,628400E+22	2,628311E+22	1,129878E+23	5,256711E+22	1,655549E+23
2529	5,649488E+22	5,649575E+22	2,628353E+22	2,628438E+22	1,129906E+23	5,256792E+22	1,655585E+23
2530	5,649488E+22	5,649223E+22	2,628415E+22	2,628430E+22	1,129871E+23	5,256845E+22	1,655556E+23
2531	5,649312E+22	5,649409E+22	2,628551E+22	2,628454E+22	1,129872E+23	5,257005E+22	1,655573E+23
2532	5,649389E+22	5,649417E+22	2,628523E+22	2,628619E+22	1,129881E+23	5,257142E+22	1,655595E+23
2533	5,649204E+22	5,649160E+22	2,628641E+22	2,628604E+22	1,129836E+23	5,257246E+22	1,655561E+23
2534	5,649124E+22	5,649359E+22	2,628713E+22	2,628696E+22	1,129848E+23	5,257409E+22	1,655589E+23
2535	5,649245E+22	5,649101E+22	2,628692E+22	2,628766E+22	1,129835E+23	5,257458E+22	1,655580E+23
2536	5,649095E+22	5,649031E+22	2,628793E+22	2,628674E+22	1,129813E+23	5,257467E+22	1,655559E+23
2537	5,649184E+22	5,649288E+22	2,628726E+22	2,628768E+22	1,129847E+23	5,257495E+22	1,655597E+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	5,649248E+22	5,649032E+22	2,628673E+22	2,628727E+22	1,129828E+23	5,257400E+22	1,655568E+23
2539	5,649082E+22	5,649229E+22	2,628721E+22	2,628625E+22	1,129831E+23	5,257346E+22	1,655566E+23
2540	5,649245E+22	5,649362E+22	2,628604E+22	2,628681E+22	1,129861E+23	5,257285E+22	1,655589E+23
2541	5,649232E+22	5,649118E+22	2,628589E+22	2,628536E+22	1,129835E+23	5,257125E+22	1,655548E+23
2542	5,649197E+22	5,649378E+22	2,628601E+22	2,628497E+22	1,129858E+23	5,257098E+22	1,655567E+23
2543	5,649382E+22	5,649294E+22	2,628480E+22	2,628546E+22	1,129868E+23	5,257026E+22	1,655570E+23
2544	5,649261E+22	5,649209E+22	2,628511E+22	2,628438E+22	1,129847E+23	5,256949E+22	1,655542E+23
2545	5,649279E+22	5,649495E+22	2,628479E+22	2,628517E+22	1,129877E+23	5,256996E+22	1,655577E+23
2546	5,649403E+22	5,649217E+22	2,628426E+22	2,628526E+22	1,129862E+23	5,256952E+22	1,655557E+23
2547	5,649257E+22	5,649263E+22	2,628547E+22	2,628443E+22	1,129852E+23	5,256990E+22	1,655551E+23
2548	5,649352E+22	5,649415E+22	2,628534E+22	2,628590E+22	1,129877E+23	5,257124E+22	1,655589E+23
2549	5,649308E+22	5,649123E+22	2,628584E+22	2,628588E+22	1,129843E+23	5,257172E+22	1,655560E+23
2550	5,649100E+22	5,649303E+22	2,628735E+22	2,628637E+22	1,129840E+23	5,257372E+22	1,655577E+23
2551	5,649170E+22	5,649223E+22	2,628712E+22	2,628820E+22	1,129839E+23	5,257532E+22	1,655593E+23
2552	5,649039E+22	5,648954E+22	2,628828E+22	2,628775E+22	1,129799E+23	5,257603E+22	1,655560E+23
2553	5,648979E+22	5,649161E+22	2,628893E+22	2,628858E+22	1,129814E+23	5,257751E+22	1,655589E+23
2554	5,649144E+22	5,648913E+22	2,628830E+22	2,628928E+22	1,129806E+23	5,257758E+22	1,655581E+23
2555	5,648995E+22	5,648914E+22	2,628917E+22	2,628822E+22	1,129791E+23	5,257740E+22	1,655565E+23
2556	5,649021E+22	5,649186E+22	2,628866E+22	2,628925E+22	1,129821E+23	5,257790E+22	1,655600E+23
2557	5,649068E+22	5,648957E+22	2,628804E+22	2,628854E+22	1,129802E+23	5,257658E+22	1,655568E+23
2558	5,648937E+22	5,649110E+22	2,628872E+22	2,628740E+22	1,129805E+23	5,257612E+22	1,655566E+23
2559	5,649109E+22	5,649163E+22	2,628756E+22	2,628809E+22	1,129827E+23	5,257565E+22	1,655584E+23
2560	5,649118E+22	5,648951E+22	2,628734E+22	2,628663E+22	1,129807E+23	5,257397E+22	1,655547E+23
2561	5,649041E+22	5,649242E+22	2,628741E+22	2,628649E+22	1,129828E+23	5,257390E+22	1,655567E+23
2562	5,649232E+22	5,649154E+22	2,628588E+22	2,628714E+22	1,129839E+23	5,257301E+22	1,655569E+23
2563	5,649134E+22	5,649078E+22	2,628628E+22	2,628580E+22	1,129821E+23	5,257208E+22	1,655542E+23
2564	5,649142E+22	5,649334E+22	2,628635E+22	2,628658E+22	1,129848E+23	5,257293E+22	1,655577E+23
2565	5,649277E+22	5,649100E+22	2,628580E+22	2,628648E+22	1,129838E+23	5,257228E+22	1,655561E+23
2566	5,649129E+22	5,649138E+22	2,628726E+22	2,628590E+22	1,129827E+23	5,257317E+22	1,655558E+23
2567	5,649167E+22	5,649253E+22	2,628722E+22	2,628780E+22	1,129842E+23	5,257501E+22	1,655592E+23
2568	5,649114E+22	5,648978E+22	2,628768E+22	2,628783E+22	1,129809E+23	5,257551E+22	1,655564E+23
2569	5,648886E+22	5,649122E+22	2,628928E+22	2,628835E+22	1,129801E+23	5,257763E+22	1,655577E+23
2570	5,649023E+22	5,648997E+22	2,628874E+22	2,629004E+22	1,129802E+23	5,257878E+22	1,655590E+23
2571	5,648945E+22	5,648752E+22	2,628974E+22	2,628926E+22	1,129770E+23	5,257900E+22	1,655560E+23
2572	5,648852E+22	5,648994E+22	2,629053E+22	2,629018E+22	1,129785E+23	5,258071E+22	1,655592E+23
2573	5,648985E+22	5,648839E+22	2,628963E+22	2,629069E+22	1,129782E+23	5,258031E+22	1,655586E+23
2574	5,648819E+22	5,648836E+22	2,629065E+22	2,628968E+22	1,129765E+23	5,258033E+22	1,655569E+23
2575	5,648828E+22	5,649035E+22	2,629030E+22	2,629072E+22	1,129786E+23	5,258101E+22	1,655596E+23
2576	5,648924E+22	5,648798E+22	2,628965E+22	2,628975E+22	1,129772E+23	5,257940E+22	1,655566E+23
2577	5,648795E+22	5,648937E+22	2,629032E+22	2,628868E+22	1,129773E+23	5,257901E+22	1,655563E+23
2578	5,648997E+22	5,648984E+22	2,628874E+22	2,628955E+22	1,129798E+23	5,257830E+22	1,655581E+23
2579	5,649010E+22	5,648821E+22	2,628836E+22	2,628808E+22	1,129783E+23	5,257645E+22	1,655548E+23
2580	5,648891E+22	5,649116E+22	2,628862E+22	2,628811E+22	1,129801E+23	5,257673E+22	1,655568E+23
2581	5,649088E+22	5,649054E+22	2,628708E+22	2,628844E+22	1,129814E+23	5,257552E+22	1,655569E+23
2582	5,649033E+22	5,648948E+22	2,628779E+22	2,628703E+22	1,129798E+23	5,257482E+22	1,655546E+23
2583	5,649022E+22	5,649156E+22	2,628807E+22	2,628795E+22	1,129818E+23	5,257602E+22	1,655578E+23
2584	5,649143E+22	5,648962E+22	2,628759E+22	2,628796E+22	1,129811E+23	5,257555E+22	1,655566E+23
2585	5,648928E+22	5,649011E+22	2,628915E+22	2,628773E+22	1,129794E+23	5,257688E+22	1,655563E+23
2586	5,648957E+22	5,649085E+22	2,628884E+22	2,628983E+22	1,129804E+23	5,257867E+22	1,655591E+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							
2587	5,648941E+22	5,648801E+22	2,628933E+22	2,628966E+22	1,129774E+23	5,257898E+22	1,655564E+23
2588	5,648727E+22	5,648910E+22	2,629104E+22	2,629014E+22	1,129764E+23	5,258118E+22	1,655575E+23
2589	5,648883E+22	5,648834E+22	2,629030E+22	2,629154E+22	1,129772E+23	5,258184E+22	1,655590E+23
2590	5,648832E+22	5,648619E+22	2,629134E+22	2,629081E+22	1,129745E+23	5,258215E+22	1,655567E+23
2591	5,648687E+22	5,648848E+22	2,629213E+22	2,629189E+22	1,129754E+23	5,258402E+22	1,655594E+23
2592	5,648816E+22	5,648730E+22	2,629122E+22	2,629225E+22	1,129755E+23	5,258347E+22	1,655589E+23
2593	5,648640E+22	5,648695E+22	2,629236E+22	2,629113E+22	1,129733E+23	5,258349E+22	1,655568E+23
2594	5,648696E+22	5,648840E+22	2,629170E+22	2,629205E+22	1,129754E+23	5,258375E+22	1,655591E+23
2595	5,648831E+22	5,648628E+22	2,629090E+22	2,629091E+22	1,129746E+23	5,258182E+22	1,655564E+23
2596	5,648663E+22	5,648780E+22	2,629161E+22	2,629011E+22	1,129744E+23	5,258172E+22	1,655562E+23
2597	5,648837E+22	5,648901E+22	2,628981E+22	2,629089E+22	1,129774E+23	5,258070E+22	1,655581E+23
2598	5,648869E+22	5,648733E+22	2,628957E+22	2,628950E+22	1,129760E+23	5,257906E+22	1,655551E+23
2599	5,648741E+22	5,648963E+22	2,629008E+22	2,628953E+22	1,129770E+23	5,257961E+22	1,655567E+23
2600	5,648980E+22	5,648914E+22	2,628868E+22	2,628964E+22	1,129789E+23	5,257832E+22	1,655573E+23
2601	5,648905E+22	5,648800E+22	2,628958E+22	2,628841E+22	1,129771E+23	5,257800E+22	1,655550E+23
2602	5,648885E+22	5,648995E+22	2,628963E+22	2,628963E+22	1,129788E+23	5,257926E+22	1,655581E+23
2603	5,648987E+22	5,648830E+22	2,628908E+22	2,628976E+22	1,129782E+23	5,257884E+22	1,655570E+23
2604	5,648719E+22	5,648847E+22	2,629084E+22	2,628979E+22	1,129757E+23	5,258063E+22	1,655563E+23
2605	5,648766E+22	5,648926E+22	2,629042E+22	2,629152E+22	1,129769E+23	5,258194E+22	1,655589E+23
2606	5,648816E+22	5,648608E+22	2,629102E+22	2,629125E+22	1,129742E+23	5,258227E+22	1,655565E+23
2607	5,648597E+22	5,648695E+22	2,629280E+22	2,629178E+22	1,129729E+23	5,258458E+22	1,655575E+23
2608	5,648757E+22	5,648690E+22	2,629201E+22	2,629309E+22	1,129745E+23	5,258510E+22	1,655596E+23
2609	5,648649E+22	5,648509E+22	2,629311E+22	2,629248E+22	1,129716E+23	5,258558E+22	1,655572E+23
2610	5,648504E+22	5,648706E+22	2,629363E+22	2,629355E+22	1,129721E+23	5,258718E+22	1,655593E+23
2611	5,648664E+22	5,648583E+22	2,629273E+22	2,629361E+22	1,129725E+23	5,258633E+22	1,655588E+23
2612	5,648486E+22	5,648519E+22	2,629393E+22	2,629255E+22	1,129700E+23	5,258649E+22	1,655565E+23
2613	5,648551E+22	5,648701E+22	2,629300E+22	2,629325E+22	1,129725E+23	5,258625E+22	1,655588E+23
2614	5,648715E+22	5,648507E+22	2,629218E+22	2,629233E+22	1,129722E+23	5,258451E+22	1,655567E+23
2615	5,648511E+22	5,648643E+22	2,629285E+22	2,629173E+22	1,129715E+23	5,258458E+22	1,655561E+23
2616	5,648702E+22	5,648789E+22	2,629112E+22	2,629233E+22	1,129749E+23	5,258345E+22	1,655584E+23
2617	5,648740E+22	5,648601E+22	2,629108E+22	2,629079E+22	1,129734E+23	5,258188E+22	1,655553E+23
2618	5,648651E+22	5,648782E+22	2,629141E+22	2,629077E+22	1,129743E+23	5,258218E+22	1,655565E+23
2619	5,648894E+22	5,648774E+22	2,629007E+22	2,629084E+22	1,129767E+23	5,258091E+22	1,655576E+23
2620	5,648749E+22	5,648667E+22	2,629112E+22	2,629004E+22	1,129742E+23	5,258116E+22	1,655553E+23
2621	5,648668E+22	5,648893E+22	2,629109E+22	2,629125E+22	1,129756E+23	5,258233E+22	1,655579E+23
2622	5,648795E+22	5,648699E+22	2,629073E+22	2,629154E+22	1,129749E+23	5,258227E+22	1,655572E+23
2623	5,648533E+22	5,648633E+22	2,629265E+22	2,629158E+22	1,129717E+23	5,258423E+22	1,655559E+23
2624	5,648637E+22	5,648726E+22	2,629227E+22	2,629309E+22	1,129736E+23	5,258536E+22	1,655590E+23
2625	5,648686E+22	5,648432E+22	2,629290E+22	2,629287E+22	1,129712E+23	5,258577E+22	1,655570E+23
2626	5,648468E+22	5,648524E+22	2,629433E+22	2,629356E+22	1,129699E+23	5,258789E+22	1,655578E+23
2627	5,648609E+22	5,648577E+22	2,629351E+22	2,629479E+22	1,129719E+23	5,258830E+22	1,655602E+23
2628	5,648453E+22	5,648376E+22	2,629475E+22	2,629430E+22	1,129683E+23	5,258905E+22	1,655573E+23
2629	5,648317E+22	5,648570E+22	2,629517E+22	2,629490E+22	1,129689E+23	5,259008E+22	1,655590E+23
2630	5,648540E+22	5,648424E+22	2,629428E+22	2,629492E+22	1,129696E+23	5,258920E+22	1,655588E+23
2631	5,648342E+22	5,648332E+22	2,629544E+22	2,629401E+22	1,129667E+23	5,258945E+22	1,655562E+23
2632	5,648418E+22	5,648570E+22	2,629439E+22	2,629466E+22	1,129699E+23	5,258905E+22	1,655589E+23
2633	5,648550E+22	5,648400E+22	2,629358E+22	2,629383E+22	1,129695E+23	5,258741E+22	1,655569E+23
2634	5,648379E+22	5,648500E+22	2,629398E+22	2,629322E+22	1,129688E+23	5,258720E+22	1,655560E+23
2635	5,648610E+22	5,648650E+22	2,629235E+22	2,629347E+22	1,129726E+23	5,258582E+22	1,655584E+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							
2636	5,648626E+22	5,648451E+22	2,629250E+22	2,629207E+22	1,129708E+23	5,258457E+22	1,655553E+23
2637	5,648519E+22	5,648670E+22	2,629274E+22	2,629187E+22	1,129719E+23	5,258461E+22	1,655565E+23
2638	5,648755E+22	5,648666E+22	2,629152E+22	2,629231E+22	1,129742E+23	5,258383E+22	1,655580E+23
2639	5,648546E+22	5,648524E+22	2,629273E+22	2,629190E+22	1,129707E+23	5,258463E+22	1,655553E+23
2640	5,648486E+22	5,648738E+22	2,629281E+22	2,629299E+22	1,129722E+23	5,258580E+22	1,655580E+23
2641	5,648629E+22	5,648510E+22	2,629264E+22	2,629321E+22	1,129714E+23	5,258586E+22	1,655572E+23
2642	5,648425E+22	5,648406E+22	2,629421E+22	2,629325E+22	1,129683E+23	5,258745E+22	1,655558E+23
2643	5,648541E+22	5,648550E+22	2,629384E+22	2,629464E+22	1,129709E+23	5,258848E+22	1,655594E+23
2644	5,648520E+22	5,648302E+22	2,629454E+22	2,629472E+22	1,129682E+23	5,258926E+22	1,655575E+23
2645	5,648260E+22	5,648435E+22	2,629584E+22	2,629518E+22	1,129670E+23	5,259102E+22	1,655580E+23
2646	5,648425E+22	5,648464E+22	2,629522E+22	2,629643E+22	1,129689E+23	5,259165E+22	1,655605E+23
2647	5,648263E+22	5,648196E+22	2,629659E+22	2,629592E+22	1,129646E+23	5,259251E+22	1,655571E+23
2648	5,648173E+22	5,648392E+22	2,629694E+22	2,629629E+22	1,129656E+23	5,259324E+22	1,655589E+23
2649	5,648398E+22	5,648263E+22	2,629599E+22	2,629639E+22	1,129666E+23	5,259238E+22	1,655590E+23
2650	5,648222E+22	5,648158E+22	2,629659E+22	2,629565E+22	1,129638E+23	5,259224E+22	1,655560E+23
2651	5,648303E+22	5,648445E+22	2,629549E+22	2,629614E+22	1,129675E+23	5,259163E+22	1,655591E+23
2652	5,648412E+22	5,648276E+22	2,629475E+22	2,629530E+22	1,129669E+23	5,259005E+22	1,655569E+23
2653	5,648259E+22	5,648375E+22	2,629510E+22	2,629417E+22	1,129663E+23	5,258928E+22	1,655556E+23
2654	5,648529E+22	5,648528E+22	2,629367E+22	2,629444E+22	1,129706E+23	5,258811E+22	1,655587E+23
2655	5,648486E+22	5,648313E+22	2,629399E+22	2,629337E+22	1,129680E+23	5,258736E+22	1,655554E+23
2656	5,648349E+22	5,648561E+22	2,629433E+22	2,629331E+22	1,129691E+23	5,258764E+22	1,655567E+23
2657	5,648540E+22	5,648553E+22	2,629328E+22	2,629400E+22	1,129709E+23	5,258728E+22	1,655582E+23
2658	5,648368E+22	5,648332E+22	2,629424E+22	2,629374E+22	1,129670E+23	5,258798E+22	1,655550E+23
2659	5,648364E+22	5,648537E+22	2,629443E+22	2,629458E+22	1,129690E+23	5,258901E+22	1,655580E+23
2660	5,648497E+22	5,648318E+22	2,629429E+22	2,629499E+22	1,129682E+23	5,258928E+22	1,655574E+23
2661	5,648289E+22	5,648262E+22	2,629568E+22	2,629480E+22	1,129655E+23	5,259048E+22	1,655560E+23
2662	5,648404E+22	5,648442E+22	2,629542E+22	2,629640E+22	1,129685E+23	5,259182E+22	1,655603E+23
2663	5,648312E+22	5,648176E+22	2,629631E+22	2,629666E+22	1,129649E+23	5,259298E+22	1,655579E+23
2664	5,648075E+22	5,648293E+22	2,629775E+22	2,629683E+22	1,129637E+23	5,259458E+22	1,655583E+23
2665	5,648252E+22	5,648284E+22	2,629726E+22	2,629793E+22	1,129654E+23	5,259519E+22	1,655605E+23
2666	5,648140E+22	5,647976E+22	2,629815E+22	2,629749E+22	1,129612E+23	5,259564E+22	1,655568E+23
2667	5,648069E+22	5,648211E+22	2,629832E+22	2,629773E+22	1,129628E+23	5,259605E+22	1,655589E+23
2668	5,648231E+22	5,648126E+22	2,629726E+22	2,629808E+22	1,129636E+23	5,259535E+22	1,655589E+23
2669	5,648056E+22	5,648063E+22	2,629760E+22	2,629697E+22	1,129612E+23	5,259457E+22	1,655558E+23
2670	5,648186E+22	5,648336E+22	2,629668E+22	2,629734E+22	1,129652E+23	5,259402E+22	1,655592E+23
2671	5,648276E+22	5,648138E+22	2,629619E+22	2,629646E+22	1,129641E+23	5,259264E+22	1,655568E+23
2672	5,648152E+22	5,648250E+22	2,629662E+22	2,629517E+22	1,129640E+23	5,259180E+22	1,655558E+23
2673	5,648382E+22	5,648414E+22	2,629536E+22	2,629568E+22	1,129680E+23	5,259105E+22	1,655590E+23
2674	5,648329E+22	5,648169E+22	2,629532E+22	2,629508E+22	1,129650E+23	5,259040E+22	1,655554E+23
2675	5,648190E+22	5,648414E+22	2,629574E+22	2,629505E+22	1,129660E+23	5,259079E+22	1,655568E+23
2676	5,648360E+22	5,648380E+22	2,629483E+22	2,629588E+22	1,129674E+23	5,259071E+22	1,655581E+23
2677	5,648237E+22	5,648150E+22	2,629560E+22	2,629517E+22	1,129639E+23	5,259077E+22	1,655546E+23
2678	5,648283E+22	5,648368E+22	2,629592E+22	2,629605E+22	1,129665E+23	5,259196E+22	1,655585E+23
2679	5,648353E+22	5,648170E+22	2,629595E+22	2,629667E+22	1,129652E+23	5,259263E+22	1,655578E+23
2680	5,648120E+22	5,648154E+22	2,629747E+22	2,629646E+22	1,129627E+23	5,259393E+22	1,655567E+23
2681	5,648190E+22	5,648335E+22	2,629747E+22	2,629813E+22	1,129652E+23	5,259560E+22	1,655608E+23
2682	5,648130E+22	5,647987E+22	2,629811E+22	2,629848E+22	1,129612E+23	5,259659E+22	1,655578E+23
2683	5,647933E+22	5,648087E+22	2,629957E+22	2,629840E+22	1,129602E+23	5,259796E+22	1,655582E+23
2684	5,648091E+22	5,648091E+22	2,629892E+22	2,629963E+22	1,129618E+23	5,259856E+22	1,655604E+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	5,647990E+22	5,647814E+22	2,629939E+22	2,629896E+22	1,129580E+23	5,259835E+22	1,655564E+23
2686	5,647944E+22	5,648091E+22	2,629952E+22	2,629931E+22	1,129603E+23	5,259883E+22	1,655592E+23
2687	5,648060E+22	5,648009E+22	2,629856E+22	2,629969E+22	1,129607E+23	5,259825E+22	1,655589E+23
2688	5,647928E+22	5,647944E+22	2,629902E+22	2,629815E+22	1,129587E+23	5,259718E+22	1,655559E+23
2689	5,648068E+22	5,648206E+22	2,629832E+22	2,629834E+22	1,129627E+23	5,259666E+22	1,655594E+23
2690	5,648174E+22	5,647975E+22	2,629750E+22	2,629767E+22	1,129615E+23	5,259517E+22	1,655567E+23
2691	5,648036E+22	5,648113E+22	2,629800E+22	2,629648E+22	1,129615E+23	5,259448E+22	1,655560E+23
2692	5,648182E+22	5,648297E+22	2,629675E+22	2,629741E+22	1,129648E+23	5,259416E+22	1,655589E+23
2693	5,648136E+22	5,648043E+22	2,629654E+22	2,629666E+22	1,129618E+23	5,259320E+22	1,655550E+23
2694	5,648064E+22	5,648252E+22	2,629713E+22	2,629661E+22	1,129632E+23	5,259374E+22	1,655569E+23
2695	5,648221E+22	5,648193E+22	2,629644E+22	2,629747E+22	1,129641E+23	5,259391E+22	1,655581E+23
2696	5,648138E+22	5,647994E+22	2,629726E+22	2,629657E+22	1,129613E+23	5,259382E+22	1,655551E+23
2697	5,648148E+22	5,648237E+22	2,629778E+22	2,629760E+22	1,129638E+23	5,259537E+22	1,655592E+23
2698	5,648189E+22	5,648032E+22	2,629757E+22	2,629859E+22	1,129622E+23	5,259616E+22	1,655584E+23
2699	5,647953E+22	5,648008E+22	2,629923E+22	2,629828E+22	1,129596E+23	5,259752E+22	1,655571E+23
2700	5,647979E+22	5,648153E+22	2,629939E+22	2,629998E+22	1,129613E+23	5,259937E+22	1,655607E+23
2701	5,647967E+22	5,647794E+22	2,629973E+22	2,629997E+22	1,129576E+23	5,259970E+22	1,655573E+23
2702	5,647818E+22	5,647899E+22	2,630108E+22	2,629994E+22	1,129572E+23	5,260101E+22	1,655582E+23
2703	5,647914E+22	5,647931E+22	2,630046E+22	2,630135E+22	1,129585E+23	5,260181E+22	1,655603E+23
2704	5,647825E+22	5,647707E+22	2,630081E+22	2,630048E+22	1,129553E+23	5,260130E+22	1,655566E+23
2705	5,647772E+22	5,647983E+22	2,630112E+22	2,630072E+22	1,129576E+23	5,260183E+22	1,655594E+23
2706	5,647930E+22	5,647853E+22	2,629994E+22	2,630106E+22	1,129578E+23	5,260099E+22	1,655588E+23
2707	5,647841E+22	5,647786E+22	2,630046E+22	2,629929E+22	1,129563E+23	5,259975E+22	1,655560E+23
2708	5,647930E+22	5,648064E+22	2,629978E+22	2,629966E+22	1,129599E+23	5,259944E+22	1,655594E+23
2709	5,648032E+22	5,647856E+22	2,629864E+22	2,629896E+22	1,129589E+23	5,259760E+22	1,655565E+23
2710	5,647900E+22	5,648001E+22	2,629915E+22	2,629806E+22	1,129590E+23	5,259721E+22	1,655562E+23
2711	5,647994E+22	5,648159E+22	2,629814E+22	2,629911E+22	1,129615E+23	5,259725E+22	1,655588E+23
2712	5,648008E+22	5,647884E+22	2,629805E+22	2,629803E+22	1,129589E+23	5,259608E+22	1,655550E+23
2713	5,647963E+22	5,648087E+22	2,629886E+22	2,629788E+22	1,129605E+23	5,259674E+22	1,655572E+23
2714	5,648129E+22	5,648012E+22	2,629790E+22	2,629898E+22	1,129614E+23	5,259688E+22	1,655583E+23
2715	5,648018E+22	5,647852E+22	2,629886E+22	2,629816E+22	1,129587E+23	5,259702E+22	1,655557E+23
2716	5,647932E+22	5,648124E+22	2,629950E+22	2,629946E+22	1,129606E+23	5,259895E+22	1,655595E+23
2717	5,647975E+22	5,647894E+22	2,629918E+22	2,630028E+22	1,129587E+23	5,259946E+22	1,655582E+23
2718	5,647790E+22	5,647835E+22	2,630101E+22	2,629998E+22	1,129562E+23	5,260099E+22	1,655572E+23
2719	5,647790E+22	5,647956E+22	2,630127E+22	2,630173E+22	1,129575E+23	5,260299E+22	1,655605E+23
2720	5,647818E+22	5,647619E+22	2,630150E+22	2,630156E+22	1,129544E+23	5,260306E+22	1,655574E+23
2721	5,647663E+22	5,647750E+22	2,630281E+22	2,630162E+22	1,129541E+23	5,260443E+22	1,655586E+23
2722	5,647758E+22	5,647775E+22	2,630181E+22	2,630322E+22	1,129553E+23	5,260503E+22	1,655604E+23
2723	5,647701E+22	5,647561E+22	2,630224E+22	2,630204E+22	1,129526E+23	5,260429E+22	1,655569E+23
2724	5,647631E+22	5,647830E+22	2,630261E+22	2,630209E+22	1,129546E+23	5,260471E+22	1,655593E+23
2725	5,647827E+22	5,647707E+22	2,630116E+22	2,630206E+22	1,129553E+23	5,260322E+22	1,655585E+23
2726	5,647758E+22	5,647661E+22	2,630166E+22	2,630043E+22	1,129542E+23	5,260209E+22	1,655563E+23
2727	5,647748E+22	5,647952E+22	2,630114E+22	2,630109E+22	1,129570E+23	5,260223E+22	1,655592E+23
2728	5,647853E+22	5,647765E+22	2,630001E+22	2,630036E+22	1,129562E+23	5,260038E+22	1,655566E+23
2729	5,647734E+22	5,647870E+22	2,630072E+22	2,629949E+22	1,129560E+23	5,260020E+22	1,655562E+23
2730	5,647867E+22	5,647968E+22	2,629957E+22	2,630063E+22	1,129583E+23	5,260020E+22	1,655585E+23
2731	5,647932E+22	5,647706E+22	2,629952E+22	2,629937E+22	1,129564E+23	5,259889E+22	1,655553E+23
2732	5,647830E+22	5,647930E+22	2,630038E+22	2,629942E+22	1,129576E+23	5,259980E+22	1,655574E+23
2733	5,647981E+22	5,647892E+22	2,629924E+22	2,630052E+22	1,129587E+23	5,259976E+22	1,655585E+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	5,647863E+22	5,647745E+22	2,630032E+22	2,629995E+22	1,129561E+23	5,260027E+22	1,655564E+23
2735	5,647705E+22	5,647978E+22	2,630135E+22	2,630133E+22	1,129568E+23	5,260267E+22	1,655595E+23
2736	5,647802E+22	5,647724E+22	2,630113E+22	2,630185E+22	1,129553E+23	5,260297E+22	1,655582E+23
2737	5,647643E+22	5,647639E+22	2,630300E+22	2,630155E+22	1,129528E+23	5,260455E+22	1,655574E+23
2738	5,647646E+22	5,647745E+22	2,630291E+22	2,630353E+22	1,129539E+23	5,260645E+22	1,655604E+23
2739	5,647680E+22	5,647452E+22	2,630307E+22	2,630334E+22	1,129513E+23	5,260641E+22	1,655577E+23
2740	5,647471E+22	5,647617E+22	2,630432E+22	2,630344E+22	1,129509E+23	5,260777E+22	1,655586E+23
2741	5,647605E+22	5,647636E+22	2,630313E+22	2,630464E+22	1,129524E+23	5,260777E+22	1,655602E+23
2742	5,647603E+22	5,647425E+22	2,630361E+22	2,630330E+22	1,129503E+23	5,260690E+22	1,655572E+23
2743	5,647491E+22	5,647692E+22	2,630413E+22	2,630330E+22	1,129518E+23	5,260743E+22	1,655593E+23
2744	5,647699E+22	5,647593E+22	2,630263E+22	2,630316E+22	1,129529E+23	5,260580E+22	1,655587E+23
2745	5,647603E+22	5,647562E+22	2,630317E+22	2,630181E+22	1,129516E+23	5,260499E+22	1,655566E+23
2746	5,647575E+22	5,647813E+22	2,630237E+22	2,630277E+22	1,129539E+23	5,260514E+22	1,655590E+23
2747	5,647718E+22	5,647600E+22	2,630140E+22	2,630189E+22	1,129532E+23	5,260329E+22	1,655565E+23
2748	5,647602E+22	5,647693E+22	2,630213E+22	2,630091E+22	1,129529E+23	5,260304E+22	1,655560E+23
2749	5,647781E+22	5,647792E+22	2,630075E+22	2,630181E+22	1,129557E+23	5,260256E+22	1,655583E+23
2750	5,647851E+22	5,647581E+22	2,630075E+22	2,630073E+22	1,129543E+23	5,260147E+22	1,655558E+23
2751	5,647644E+22	5,647829E+22	2,630189E+22	2,630102E+22	1,129547E+23	5,260292E+22	1,655576E+23
2752	5,647779E+22	5,647802E+22	2,630095E+22	2,630207E+22	1,129558E+23	5,260302E+22	1,655588E+23
2753	5,647667E+22	5,647609E+22	2,630235E+22	2,630162E+22	1,129528E+23	5,260397E+22	1,655567E+23
2754	5,647528E+22	5,647763E+22	2,630324E+22	2,630313E+22	1,129529E+23	5,260637E+22	1,655593E+23
2755	5,647674E+22	5,647506E+22	2,630303E+22	2,630359E+22	1,129518E+23	5,260663E+22	1,655584E+23
2756	5,647482E+22	5,647444E+22	2,630473E+22	2,630343E+22	1,129493E+23	5,260816E+22	1,655574E+23
2757	5,647497E+22	5,647583E+22	2,630426E+22	2,630531E+22	1,129508E+23	5,260957E+22	1,655604E+23
2758	5,647549E+22	5,647336E+22	2,630435E+22	2,630509E+22	1,129488E+23	5,260944E+22	1,655583E+23
2759	5,647298E+22	5,647480E+22	2,630589E+22	2,630502E+22	1,129478E+23	5,261091E+22	1,655587E+23
2760	5,647482E+22	5,647510E+22	2,630479E+22	2,630575E+22	1,129499E+23	5,261054E+22	1,655605E+23
2761	5,647489E+22	5,647297E+22	2,630527E+22	2,630441E+22	1,129479E+23	5,260968E+22	1,655575E+23
2762	5,647337E+22	5,647540E+22	2,630556E+22	2,630470E+22	1,129488E+23	5,261026E+22	1,655590E+23
2763	5,647538E+22	5,647469E+22	2,630402E+22	2,630464E+22	1,129501E+23	5,260866E+22	1,655587E+23
2764	5,647398E+22	5,647425E+22	2,630450E+22	2,630342E+22	1,129482E+23	5,260791E+22	1,655561E+23
2765	5,647432E+22	5,647644E+22	2,630352E+22	2,630411E+22	1,129508E+23	5,260763E+22	1,655584E+23
2766	5,647641E+22	5,647446E+22	2,630253E+22	2,630316E+22	1,129509E+23	5,260569E+22	1,655566E+23
2767	5,647488E+22	5,647545E+22	2,630346E+22	2,630221E+22	1,129503E+23	5,260567E+22	1,655560E+23
2768	5,647669E+22	5,647689E+22	2,630218E+22	2,630301E+22	1,129536E+23	5,260519E+22	1,655588E+23
2769	5,647700E+22	5,647497E+22	2,630234E+22	2,630225E+22	1,129520E+23	5,260459E+22	1,655566E+23
2770	5,647450E+22	5,647691E+22	2,630352E+22	2,630283E+22	1,129514E+23	5,260635E+22	1,655578E+23
2771	5,647616E+22	5,647624E+22	2,630285E+22	2,630379E+22	1,129524E+23	5,260664E+22	1,655590E+23
2772	5,647495E+22	5,647403E+22	2,630427E+22	2,630335E+22	1,129490E+23	5,260762E+22	1,655566E+23
2773	5,647403E+22	5,647545E+22	2,630481E+22	2,630476E+22	1,129495E+23	5,260956E+22	1,655590E+23
2774	5,647552E+22	5,647344E+22	2,630448E+22	2,630538E+22	1,129490E+23	5,260986E+22	1,655588E+23
2775	5,647287E+22	5,647315E+22	2,630626E+22	2,630532E+22	1,129460E+23	5,261158E+22	1,655576E+23
2776	5,647318E+22	5,647471E+22	2,630589E+22	2,630688E+22	1,129479E+23	5,261277E+22	1,655607E+23
2777	5,647391E+22	5,647218E+22	2,630618E+22	2,630656E+22	1,129461E+23	5,261274E+22	1,655588E+23
2778	5,647153E+22	5,647311E+22	2,630755E+22	2,630644E+22	1,129446E+23	5,261399E+22	1,655586E+23
2779	5,647359E+22	5,647340E+22	2,630650E+22	2,630708E+22	1,129470E+23	5,261358E+22	1,655606E+23
2780	5,647315E+22	5,647153E+22	2,630682E+22	2,630594E+22	1,129447E+23	5,261275E+22	1,655574E+23
2781	5,647174E+22	5,647392E+22	2,630666E+22	2,630624E+22	1,129457E+23	5,261291E+22	1,655586E+23
2782	5,647397E+22	5,647343E+22	2,630508E+22	2,630621E+22	1,129474E+23	5,261128E+22	1,655587E+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	5,647251E+22	5,647269E+22	2,630573E+22	2,630483E+22	1,129452E+23	5,261056E+22	1,655558E+23
2784	5,647348E+22	5,647495E+22	2,630484E+22	2,630509E+22	1,129484E+23	5,260993E+22	1,655584E+23
2785	5,647565E+22	5,647332E+22	2,630393E+22	2,630424E+22	1,129490E+23	5,260817E+22	1,655571E+23
2786	5,647357E+22	5,647420E+22	2,630481E+22	2,630361E+22	1,129478E+23	5,260843E+22	1,655562E+23
2787	5,647510E+22	5,647582E+22	2,630380E+22	2,630453E+22	1,129509E+23	5,260833E+22	1,655592E+23
2788	5,647485E+22	5,647372E+22	2,630410E+22	2,630397E+22	1,129486E+23	5,260807E+22	1,655566E+23
2789	5,647279E+22	5,647501E+22	2,630516E+22	2,630447E+22	1,129478E+23	5,260963E+22	1,655574E+23
2790	5,647488E+22	5,647443E+22	2,630447E+22	2,630546E+22	1,129493E+23	5,260992E+22	1,655592E+23
2791	5,647335E+22	5,647212E+22	2,630597E+22	2,630515E+22	1,129455E+23	5,261112E+22	1,655566E+23
2792	5,647257E+22	5,647397E+22	2,630648E+22	2,630642E+22	1,129465E+23	5,261290E+22	1,655594E+23
2793	5,647392E+22	5,647236E+22	2,630611E+22	2,630723E+22	1,129463E+23	5,261334E+22	1,655596E+23
2794	5,647103E+22	5,647159E+22	2,630788E+22	2,630721E+22	1,129426E+23	5,261509E+22	1,655577E+23
2795	5,647181E+22	5,647299E+22	2,630776E+22	2,630841E+22	1,129448E+23	5,261617E+22	1,655610E+23
2796	5,647238E+22	5,647045E+22	2,630798E+22	2,630795E+22	1,129428E+23	5,261593E+22	1,655588E+23
2797	5,647029E+22	5,647130E+22	2,630897E+22	2,630776E+22	1,129416E+23	5,261673E+22	1,655583E+23
2798	5,647220E+22	5,647216E+22	2,630773E+22	2,630854E+22	1,129444E+23	5,261627E+22	1,655606E+23
2799	5,647108E+22	5,647033E+22	2,630809E+22	2,630756E+22	1,129414E+23	5,261565E+22	1,655571E+23
2800	5,647008E+22	5,647267E+22	2,630798E+22	2,630754E+22	1,129427E+23	5,261552E+22	1,655583E+23
2801	5,647276E+22	5,647212E+22	2,630647E+22	2,630746E+22	1,129449E+23	5,261394E+22	1,655588E+23
2802	5,647151E+22	5,647102E+22	2,630703E+22	2,630608E+22	1,129425E+23	5,261311E+22	1,655556E+23
2803	5,647275E+22	5,647346E+22	2,630630E+22	2,630629E+22	1,129462E+23	5,261259E+22	1,655588E+23
2804	5,647418E+22	5,647229E+22	2,630540E+22	2,630565E+22	1,129465E+23	5,261105E+22	1,655575E+23
2805	5,647205E+22	5,647301E+22	2,630607E+22	2,630518E+22	1,129451E+23	5,261125E+22	1,655563E+23
2806	5,647346E+22	5,647461E+22	2,630522E+22	2,630619E+22	1,129481E+23	5,261141E+22	1,655595E+23
2807	5,647303E+22	5,647203E+22	2,630581E+22	2,630568E+22	1,129451E+23	5,261149E+22	1,655565E+23
2808	5,647149E+22	5,647312E+22	2,630689E+22	2,630590E+22	1,129446E+23	5,261279E+22	1,655574E+23
2809	5,647357E+22	5,647285E+22	2,630619E+22	2,630712E+22	1,129464E+23	5,261332E+22	1,655597E+23
2810	5,647165E+22	5,647046E+22	2,630752E+22	2,630703E+22	1,129421E+23	5,261455E+22	1,655567E+23
2811	5,647088E+22	5,647241E+22	2,630822E+22	2,630825E+22	1,129433E+23	5,261647E+22	1,655598E+23
2812	5,647189E+22	5,647093E+22	2,630797E+22	2,630897E+22	1,129428E+23	5,261694E+22	1,655598E+23
2813	5,646962E+22	5,646972E+22	2,630951E+22	2,630875E+22	1,129393E+23	5,261826E+22	1,655576E+23
2814	5,647062E+22	5,647139E+22	2,630937E+22	2,630984E+22	1,129420E+23	5,261920E+22	1,655612E+23
2815	5,647075E+22	5,646890E+22	2,630960E+22	2,630950E+22	1,129397E+23	5,261910E+22	1,655587E+23
2816	5,646866E+22	5,647000E+22	2,631043E+22	2,630918E+22	1,129387E+23	5,261961E+22	1,655583E+23
2817	5,647045E+22	5,647118E+22	2,630910E+22	2,631015E+22	1,129416E+23	5,261925E+22	1,655609E+23
2818	5,646938E+22	5,646874E+22	2,630939E+22	2,630916E+22	1,129381E+23	5,261855E+22	1,655567E+23
2819	5,646915E+22	5,647085E+22	2,630948E+22	2,630880E+22	1,129400E+23	5,261828E+22	1,655583E+23
2820	5,647176E+22	5,647061E+22	2,630791E+22	2,630860E+22	1,129424E+23	5,261651E+22	1,655589E+23
2821	5,647073E+22	5,646956E+22	2,630813E+22	2,630727E+22	1,129403E+23	5,261540E+22	1,655557E+23
2822	5,647155E+22	5,647263E+22	2,630744E+22	2,630761E+22	1,129442E+23	5,261505E+22	1,655592E+23
2823	5,647217E+22	5,647135E+22	2,630678E+22	2,630723E+22	1,129435E+23	5,261401E+22	1,655575E+23
2824	5,647024E+22	5,647178E+22	2,630767E+22	2,630658E+22	1,129420E+23	5,261425E+22	1,655563E+23
2825	5,647190E+22	5,647319E+22	2,630692E+22	2,630769E+22	1,129451E+23	5,261462E+22	1,655597E+23
2826	5,647149E+22	5,646996E+22	2,630749E+22	2,630738E+22	1,129415E+23	5,261486E+22	1,655563E+23
2827	5,647034E+22	5,647109E+22	2,630868E+22	2,630759E+22	1,129414E+23	5,261627E+22	1,655577E+23
2828	5,647185E+22	5,647130E+22	2,630789E+22	2,630896E+22	1,129431E+23	5,261685E+22	1,655600E+23
2829	5,647012E+22	5,646886E+22	2,630892E+22	2,630891E+22	1,129390E+23	5,261783E+22	1,655568E+23
2830	5,646945E+22	5,647098E+22	2,630976E+22	2,630995E+22	1,129404E+23	5,261970E+22	1,655601E+23
2831	5,647025E+22	5,646926E+22	2,630976E+22	2,631055E+22	1,129395E+23	5,262031E+22	1,655598E+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	5,646832E+22	5,646814E+22	2,631128E+22	2,631002E+22	1,129365E+23	5,262130E+22	1,655578E+23
2833	5,646906E+22	5,647017E+22	2,631104E+22	2,631133E+22	1,129392E+23	5,262237E+22	1,655616E+23
2834	5,646870E+22	5,646746E+22	2,631113E+22	2,631126E+22	1,129362E+23	5,262239E+22	1,655586E+23
2835	5,646691E+22	5,646843E+22	2,631202E+22	2,631084E+22	1,129353E+23	5,262285E+22	1,655582E+23
2836	5,646862E+22	5,646965E+22	2,631066E+22	2,631165E+22	1,129383E+23	5,262232E+22	1,655606E+23
2837	5,646846E+22	5,646692E+22	2,631057E+22	2,631048E+22	1,129354E+23	5,262105E+22	1,655564E+23
2838	5,646852E+22	5,646943E+22	2,631062E+22	2,630997E+22	1,129379E+23	5,262059E+22	1,655585E+23
2839	5,647059E+22	5,646950E+22	2,630918E+22	2,630989E+22	1,129401E+23	5,261907E+22	1,655592E+23
2840	5,646943E+22	5,646872E+22	2,630936E+22	2,630849E+22	1,129382E+23	5,261785E+22	1,655560E+23
2841	5,646982E+22	5,647192E+22	2,630881E+22	2,630908E+22	1,129417E+23	5,261789E+22	1,655596E+23
2842	5,647031E+22	5,646982E+22	2,630832E+22	2,630882E+22	1,129401E+23	5,261713E+22	1,655573E+23
2843	5,646902E+22	5,646965E+22	2,630945E+22	2,630801E+22	1,129387E+23	5,261746E+22	1,655561E+23
2844	5,647048E+22	5,647129E+22	2,630869E+22	2,630916E+22	1,129418E+23	5,261785E+22	1,655596E+23
2845	5,647037E+22	5,646807E+22	2,630883E+22	2,630905E+22	1,129384E+23	5,261788E+22	1,655563E+23
2846	5,646893E+22	5,646977E+22	2,631002E+22	2,630934E+22	1,129387E+23	5,261937E+22	1,655581E+23
2847	5,646985E+22	5,647002E+22	2,630949E+22	2,631080E+22	1,129399E+23	5,262029E+22	1,655602E+23
2848	5,646844E+22	5,646748E+22	2,631067E+22	2,631042E+22	1,129359E+23	5,262109E+22	1,655570E+23
2849	5,646792E+22	5,646967E+22	2,631162E+22	2,631146E+22	1,129376E+23	5,262307E+22	1,655607E+23
2850	5,646857E+22	5,646749E+22	2,631164E+22	2,631221E+22	1,129361E+23	5,262385E+22	1,655599E+23
2851	5,646684E+22	5,646635E+22	2,631318E+22	2,631170E+22	1,129332E+23	5,262488E+22	1,655581E+23
2852	5,646699E+22	5,646878E+22	2,631274E+22	2,631310E+22	1,129358E+23	5,262584E+22	1,655616E+23
2853	5,646705E+22	5,646576E+22	2,631239E+22	2,631309E+22	1,129328E+23	5,262548E+22	1,655583E+23
2854	5,646575E+22	5,646680E+22	2,631324E+22	2,631235E+22	1,129326E+23	5,262560E+22	1,655582E+23
2855	5,646756E+22	5,646791E+22	2,631200E+22	2,631295E+22	1,129355E+23	5,262495E+22	1,655604E+23
2856	5,646773E+22	5,646564E+22	2,631179E+22	2,631142E+22	1,129334E+23	5,262320E+22	1,655566E+23
2857	5,646749E+22	5,646874E+22	2,631177E+22	2,631107E+22	1,129362E+23	5,262284E+22	1,655591E+23
2858	5,646877E+22	5,646854E+22	2,631047E+22	2,631126E+22	1,129373E+23	5,262173E+22	1,655590E+23
2859	5,646774E+22	5,646748E+22	2,631095E+22	2,630989E+22	1,129352E+23	5,262083E+22	1,655560E+23
2860	5,646785E+22	5,647045E+22	2,631053E+22	2,631045E+22	1,129383E+23	5,262098E+22	1,655593E+23
2861	5,646908E+22	5,646778E+22	2,630975E+22	2,631033E+22	1,129369E+23	5,262008E+22	1,655569E+23
2862	5,646809E+22	5,646783E+22	2,631081E+22	2,630953E+22	1,129359E+23	5,262035E+22	1,655563E+23
2863	5,646905E+22	5,646966E+22	2,631017E+22	2,631089E+22	1,129387E+23	5,262106E+22	1,655598E+23
2864	5,646886E+22	5,646695E+22	2,631021E+22	2,631068E+22	1,129358E+23	5,262089E+22	1,655567E+23
2865	5,646726E+22	5,646885E+22	2,631153E+22	2,631111E+22	1,129361E+23	5,262263E+22	1,655587E+23
2866	5,646802E+22	5,646841E+22	2,631135E+22	2,631254E+22	1,129364E+23	5,262390E+22	1,655603E+23
2867	5,646718E+22	5,646554E+22	2,631275E+22	2,631198E+22	1,129327E+23	5,262473E+22	1,655574E+23
2868	5,646618E+22	5,646799E+22	2,631365E+22	2,631301E+22	1,129342E+23	5,262666E+22	1,655608E+23
2869	5,646700E+22	5,646570E+22	2,631320E+22	2,631404E+22	1,129327E+23	5,262724E+22	1,655599E+23
2870	5,646511E+22	5,646483E+22	2,631459E+22	2,631353E+22	1,129299E+23	5,262812E+22	1,655581E+23
2871	5,646499E+22	5,646720E+22	2,631425E+22	2,631488E+22	1,129322E+23	5,262913E+22	1,655613E+23
2872	5,646572E+22	5,646424E+22	2,631374E+22	2,631439E+22	1,129300E+23	5,262812E+22	1,655581E+23
2873	5,646480E+22	5,646553E+22	2,631452E+22	2,631356E+22	1,129303E+23	5,262808E+22	1,655584E+23
2874	5,646645E+22	5,646650E+22	2,631339E+22	2,631416E+22	1,129329E+23	5,262754E+22	1,655605E+23
2875	5,646669E+22	5,646442E+22	2,631324E+22	2,631261E+22	1,129311E+23	5,262585E+22	1,655570E+23
2876	5,646563E+22	5,646793E+22	2,631324E+22	2,631235E+22	1,129336E+23	5,262559E+22	1,655591E+23
2877	5,646716E+22	5,646718E+22	2,631170E+22	2,631277E+22	1,129343E+23	5,262447E+22	1,655588E+23
2878	5,646643E+22	5,646584E+22	2,631229E+22	2,631130E+22	1,129323E+23	5,262360E+22	1,655559E+23
2879	5,646651E+22	5,646855E+22	2,631203E+22	2,631188E+22	1,129351E+23	5,262391E+22	1,655590E+23
2880	5,646800E+22	5,646623E+22	2,631108E+22	2,631165E+22	1,129342E+23	5,262273E+22	1,655570E+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	5,646682E+22	5,646682E+22	2,631207E+22	2,631112E+22	1,129336E+23	5,262318E+22	1,655568E+23
2882	5,646719E+22	5,646839E+22	2,631168E+22	2,631267E+22	1,129356E+23	5,262435E+22	1,655599E+23
2883	5,646724E+22	5,646554E+22	2,631205E+22	2,631234E+22	1,129328E+23	5,262439E+22	1,655572E+23
2884	5,646541E+22	5,646739E+22	2,631355E+22	2,631262E+22	1,129328E+23	5,262617E+22	1,655590E+23
2885	5,646667E+22	5,646643E+22	2,631315E+22	2,631424E+22	1,129331E+23	5,262739E+22	1,655605E+23
2886	5,646590E+22	5,646376E+22	2,631451E+22	2,631370E+22	1,129297E+23	5,262822E+22	1,655579E+23
2887	5,646433E+22	5,646624E+22	2,631537E+22	2,631491E+22	1,129306E+23	5,263027E+22	1,655608E+23
2888	5,646512E+22	5,646433E+22	2,631464E+22	2,631580E+22	1,129294E+23	5,263044E+22	1,655599E+23
2889	5,646351E+22	5,646359E+22	2,631589E+22	2,631523E+22	1,129271E+23	5,263112E+22	1,655582E+23
2890	5,646351E+22	5,646528E+22	2,631580E+22	2,631635E+22	1,129288E+23	5,263215E+22	1,655609E+23
2891	5,646491E+22	5,646254E+22	2,631535E+22	2,631553E+22	1,129274E+23	5,263087E+22	1,655583E+23
2892	5,646358E+22	5,646439E+22	2,631604E+22	2,631461E+22	1,129280E+23	5,263065E+22	1,655586E+23
2893	5,646513E+22	5,646531E+22	2,631459E+22	2,631552E+22	1,129304E+23	5,263011E+22	1,655606E+23
2894	5,646508E+22	5,646348E+22	2,631445E+22	2,631402E+22	1,129286E+23	5,262847E+22	1,655570E+23
2895	5,646361E+22	5,646656E+22	2,631467E+22	2,631383E+22	1,129302E+23	5,262850E+22	1,655587E+23
2896	5,646562E+22	5,646573E+22	2,631305E+22	2,631402E+22	1,129313E+23	5,262707E+22	1,655584E+23
2897	5,646535E+22	5,646443E+22	2,631354E+22	2,631268E+22	1,129298E+23	5,262622E+22	1,655560E+23
2898	5,646525E+22	5,646678E+22	2,631352E+22	2,631342E+22	1,129320E+23	5,262693E+22	1,655590E+23
2899	5,646688E+22	5,646482E+22	2,631261E+22	2,631323E+22	1,129317E+23	5,262584E+22	1,655575E+23
2900	5,646507E+22	5,646581E+22	2,631364E+22	2,631274E+22	1,129309E+23	5,262637E+22	1,655573E+23
2901	5,646573E+22	5,646682E+22	2,631321E+22	2,631444E+22	1,129325E+23	5,262764E+22	1,655602E+23
2902	5,646603E+22	5,646378E+22	2,631378E+22	2,631392E+22	1,129298E+23	5,262770E+22	1,655575E+23
2903	5,646391E+22	5,646549E+22	2,631546E+22	2,631422E+22	1,129294E+23	5,262968E+22	1,655591E+23
2904	5,646513E+22	5,646490E+22	2,631480E+22	2,631577E+22	1,129300E+23	5,263057E+22	1,655606E+23
2905	5,646407E+22	5,646255E+22	2,631601E+22	2,631552E+22	1,129266E+23	5,263153E+22	1,655581E+23
2906	5,646208E+22	5,646460E+22	2,631706E+22	2,631680E+22	1,129267E+23	5,263386E+22	1,655606E+23
2907	5,646342E+22	5,646259E+22	2,631641E+22	2,631744E+22	1,129260E+23	5,263385E+22	1,655599E+23
2908	5,646194E+22	5,646204E+22	2,631762E+22	2,631659E+22	1,129240E+23	5,263421E+22	1,655582E+23
2909	5,646259E+22	5,646346E+22	2,631722E+22	2,631777E+22	1,129261E+23	5,263498E+22	1,655610E+23
2910	5,646398E+22	5,646120E+22	2,631670E+22	2,631684E+22	1,129252E+23	5,263355E+22	1,655587E+23
2911	5,646198E+22	5,646328E+22	2,631740E+22	2,631605E+22	1,129253E+23	5,263345E+22	1,655587E+23
2912	5,646336E+22	5,646445E+22	2,631576E+22	2,631686E+22	1,129278E+23	5,263262E+22	1,655604E+23
2913	5,646350E+22	5,646245E+22	2,631563E+22	2,631546E+22	1,129260E+23	5,263109E+22	1,655570E+23
2914	5,646216E+22	5,646464E+22	2,631617E+22	2,631520E+22	1,129268E+23	5,263137E+22	1,655582E+23
2915	5,646472E+22	5,646393E+22	2,631458E+22	2,631526E+22	1,129287E+23	5,262984E+22	1,655585E+23
2916	5,646416E+22	5,646316E+22	2,631497E+22	2,631396E+22	1,129273E+23	5,262893E+22	1,655562E+23
2917	5,646406E+22	5,646531E+22	2,631475E+22	2,631506E+22	1,129294E+23	5,262980E+22	1,655592E+23
2918	5,646547E+22	5,646370E+22	2,631399E+22	2,631484E+22	1,129292E+23	5,262883E+22	1,655580E+23
2919	5,646332E+22	5,646435E+22	2,631531E+22	2,631433E+22	1,129277E+23	5,262964E+22	1,655573E+23
2920	5,646416E+22	5,646531E+22	2,631489E+22	2,631582E+22	1,129295E+23	5,263071E+22	1,655602E+23
2921	5,646466E+22	5,646242E+22	2,631543E+22	2,631551E+22	1,129271E+23	5,263093E+22	1,655580E+23
2922	5,646208E+22	5,646357E+22	2,631736E+22	2,631602E+22	1,129257E+23	5,263338E+22	1,655590E+23
2923	5,646328E+22	5,646333E+22	2,631666E+22	2,631762E+22	1,129266E+23	5,263428E+22	1,655609E+23
2924	5,646193E+22	5,646122E+22	2,631773E+22	2,631737E+22	1,129231E+23	5,263510E+22	1,655582E+23
2925	5,646055E+22	5,646252E+22	2,631862E+22	2,631869E+22	1,129231E+23	5,263731E+22	1,655604E+23
2926	5,646241E+22	5,646068E+22	2,631799E+22	2,631895E+22	1,129231E+23	5,263694E+22	1,655600E+23
2927	5,646081E+22	5,646031E+22	2,631916E+22	2,631799E+22	1,129211E+23	5,263715E+22	1,655583E+23
2928	5,646135E+22	5,646234E+22	2,631850E+22	2,631899E+22	1,129237E+23	5,263750E+22	1,655612E+23
2929	5,646242E+22	5,646056E+22	2,631785E+22	2,631825E+22	1,129230E+23	5,263610E+22	1,655591E+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							
2930	5,645994E+22	5,646201E+22	2,631887E+22	2,631753E+22	1,129220E+23	5,263641E+22	1,655584E+23
2931	5,646172E+22	5,646302E+22	2,631733E+22	2,631813E+22	1,129247E+23	5,263547E+22	1,655602E+23
2932	5,646204E+22	5,646098E+22	2,631718E+22	2,631667E+22	1,129230E+23	5,263384E+22	1,655569E+23
2933	5,646135E+22	5,646265E+22	2,631747E+22	2,631665E+22	1,129240E+23	5,263413E+22	1,655581E+23
2934	5,646395E+22	5,646237E+22	2,631585E+22	2,631670E+22	1,129263E+23	5,263255E+22	1,655589E+23
2935	5,646276E+22	5,646196E+22	2,631624E+22	2,631556E+22	1,129247E+23	5,263180E+22	1,655565E+23
2936	5,646253E+22	5,646437E+22	2,631592E+22	2,631649E+22	1,129269E+23	5,263241E+22	1,655593E+23
2937	5,646400E+22	5,646262E+22	2,631536E+22	2,631631E+22	1,129266E+23	5,263168E+22	1,655583E+23
2938	5,646174E+22	5,646249E+22	2,631720E+22	2,631581E+22	1,129242E+23	5,263301E+22	1,655572E+23
2939	5,646273E+22	5,646361E+22	2,631685E+22	2,631727E+22	1,129263E+23	5,263411E+22	1,655604E+23
2940	5,646275E+22	5,646106E+22	2,631732E+22	2,631719E+22	1,129238E+23	5,263451E+22	1,655583E+23
2941	5,646022E+22	5,646170E+22	2,631898E+22	2,631811E+22	1,129219E+23	5,263709E+22	1,655590E+23
2942	5,646146E+22	5,646156E+22	2,631831E+22	2,631957E+22	1,129230E+23	5,263789E+22	1,655609E+23
2943	5,646017E+22	5,645933E+22	2,631943E+22	2,631915E+22	1,129195E+23	5,263858E+22	1,655581E+23
2944	5,645933E+22	5,646082E+22	2,632009E+22	2,632010E+22	1,129201E+23	5,264019E+22	1,655603E+23
2945	5,646143E+22	5,645946E+22	2,631937E+22	2,632036E+22	1,129209E+23	5,263972E+22	1,655606E+23
2946	5,645939E+22	5,645889E+22	2,632077E+22	2,631946E+22	1,129183E+23	5,264023E+22	1,655585E+23
2947	5,645970E+22	5,646136E+22	2,632006E+22	2,632038E+22	1,129211E+23	5,264044E+22	1,655615E+23
2948	5,646048E+22	5,645968E+22	2,631936E+22	2,631965E+22	1,129202E+23	5,263902E+22	1,655592E+23
2949	5,645857E+22	5,646002E+22	2,632026E+22	2,631906E+22	1,129186E+23	5,263933E+22	1,655579E+23
2950	5,646078E+22	5,646113E+22	2,631874E+22	2,631942E+22	1,129219E+23	5,263816E+22	1,655601E+23
2951	5,646103E+22	5,645931E+22	2,631844E+22	2,631798E+22	1,129203E+23	5,263642E+22	1,655568E+23
2952	5,646023E+22	5,646143E+22	2,631848E+22	2,631793E+22	1,129217E+23	5,263641E+22	1,655581E+23
2953	5,646258E+22	5,646172E+22	2,631686E+22	2,631813E+22	1,129243E+23	5,263499E+22	1,655593E+23
2954	5,646096E+22	5,646068E+22	2,631774E+22	2,631704E+22	1,129216E+23	5,263477E+22	1,655564E+23
2955	5,646092E+22	5,646305E+22	2,631769E+22	2,631777E+22	1,129240E+23	5,263546E+22	1,655594E+23
2956	5,646239E+22	5,646131E+22	2,631724E+22	2,631767E+22	1,129237E+23	5,263491E+22	1,655586E+23
2957	5,646039E+22	5,646037E+22	2,631898E+22	2,631761E+22	1,129208E+23	5,263659E+22	1,655574E+23
2958	5,646121E+22	5,646181E+22	2,631861E+22	2,631914E+22	1,129230E+23	5,263775E+22	1,655608E+23
2959	5,646076E+22	5,645940E+22	2,631896E+22	2,631927E+22	1,129202E+23	5,263823E+22	1,655584E+23
2960	5,645847E+22	5,646003E+22	2,632040E+22	2,631999E+22	1,129185E+23	5,264038E+22	1,655589E+23
2961	5,646018E+22	5,645995E+22	2,631977E+22	2,632125E+22	1,129201E+23	5,264102E+22	1,655611E+23
2962	5,645898E+22	5,645736E+22	2,632119E+22	2,632063E+22	1,129163E+23	5,264183E+22	1,655582E+23
2963	5,645824E+22	5,645946E+22	2,632181E+22	2,632135E+22	1,129177E+23	5,264316E+22	1,655609E+23
2964	5,645976E+22	5,645865E+22	2,632104E+22	2,632172E+22	1,129184E+23	5,264277E+22	1,655612E+23
2965	5,645762E+22	5,645754E+22	2,632227E+22	2,632117E+22	1,129152E+23	5,264344E+22	1,655586E+23
2966	5,645790E+22	5,645988E+22	2,632160E+22	2,632189E+22	1,129178E+23	5,264348E+22	1,655613E+23
2967	5,645872E+22	5,645796E+22	2,632088E+22	2,632111E+22	1,129167E+23	5,264199E+22	1,655587E+23
2968	5,645746E+22	5,645830E+22	2,632139E+22	2,632029E+22	1,129158E+23	5,264168E+22	1,655574E+23
2969	5,645993E+22	5,645977E+22	2,631977E+22	2,632069E+22	1,129197E+23	5,264046E+22	1,655602E+23
2970	5,645979E+22	5,645797E+22	2,631971E+22	2,631936E+22	1,129178E+23	5,263907E+22	1,655568E+23
2971	5,645885E+22	5,646063E+22	2,631973E+22	2,631923E+22	1,129195E+23	5,263896E+22	1,655584E+23
2972	5,646089E+22	5,646096E+22	2,631834E+22	2,631945E+22	1,129219E+23	5,263779E+22	1,655596E+23
2973	5,645969E+22	5,645884E+22	2,631933E+22	2,631857E+22	1,129185E+23	5,263790E+22	1,655564E+23
2974	5,645976E+22	5,646116E+22	2,631946E+22	2,631916E+22	1,129209E+23	5,263861E+22	1,655595E+23
2975	5,646085E+22	5,645958E+22	2,631897E+22	2,631932E+22	1,129204E+23	5,263829E+22	1,655587E+23
2976	5,645874E+22	5,645880E+22	2,632039E+22	2,631938E+22	1,129175E+23	5,263977E+22	1,655573E+23
2977	5,645941E+22	5,646053E+22	2,632000E+22	2,632104E+22	1,129199E+23	5,264103E+22	1,655610E+23
2978	5,645884E+22	5,645760E+22	2,632071E+22	2,632112E+22	1,129164E+23	5,264183E+22	1,655583E+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	5,645701E+22	5,645839E+22	2,632219E+22	2,632148E+22	1,129154E+23	5,264367E+22	1,655591E+23
2980	5,645886E+22	5,645862E+22	2,632164E+22	2,632267E+22	1,129175E+23	5,264431E+22	1,655618E+23
2981	5,645784E+22	5,645552E+22	2,632293E+22	2,632233E+22	1,129134E+23	5,264526E+22	1,655586E+23
2982	5,645675E+22	5,645811E+22	2,632353E+22	2,632296E+22	1,129149E+23	5,264649E+22	1,655614E+23
2983	5,645772E+22	5,645749E+22	2,632259E+22	2,632345E+22	1,129152E+23	5,264604E+22	1,655613E+23
2984	5,645577E+22	5,645599E+22	2,632353E+22	2,632274E+22	1,129118E+23	5,264627E+22	1,655580E+23
2985	5,645656E+22	5,645828E+22	2,632284E+22	2,632324E+22	1,129148E+23	5,264607E+22	1,655609E+23
2986	5,645756E+22	5,645602E+22	2,632228E+22	2,632238E+22	1,129136E+23	5,264466E+22	1,655582E+23
2987	5,645649E+22	5,645701E+22	2,632263E+22	2,632140E+22	1,129135E+23	5,264403E+22	1,655575E+23
2988	5,645861E+22	5,645906E+22	2,632103E+22	2,632191E+22	1,129177E+23	5,264294E+22	1,655606E+23
2989	5,645838E+22	5,645672E+22	2,632095E+22	2,632088E+22	1,129151E+23	5,264184E+22	1,655569E+23
2990	5,645742E+22	5,645934E+22	2,632123E+22	2,632051E+22	1,129168E+23	5,264175E+22	1,655585E+23
2991	5,645933E+22	5,645947E+22	2,631998E+22	2,632080E+22	1,129188E+23	5,264078E+22	1,655596E+23
2992	5,645844E+22	5,645716E+22	2,632078E+22	2,631999E+22	1,129156E+23	5,264076E+22	1,655564E+23
2993	5,645848E+22	5,645969E+22	2,632090E+22	2,632074E+22	1,129182E+23	5,264164E+22	1,655598E+23
2994	5,645907E+22	5,645797E+22	2,632064E+22	2,632120E+22	1,129170E+23	5,264183E+22	1,655589E+23
2995	5,645696E+22	5,645755E+22	2,632193E+22	2,632115E+22	1,129145E+23	5,264309E+22	1,655576E+23
2996	5,645768E+22	5,645916E+22	2,632176E+22	2,632275E+22	1,129168E+23	5,264451E+22	1,655613E+23
2997	5,645762E+22	5,645549E+22	2,632250E+22	2,632288E+22	1,129131E+23	5,264538E+22	1,655585E+23
2998	5,645602E+22	5,645655E+22	2,632400E+22	2,632295E+22	1,129126E+23	5,264695E+22	1,655595E+23
2999	5,645728E+22	5,645717E+22	2,632342E+22	2,632429E+22	1,129145E+23	5,264771E+22	1,655622E+23