

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							
-3000	6,703117E+22	6,702924E+22	3,888506E+22	3,888593E+22	1,340604E+23	7,777099E+22	2,118314E+23
-2999	6,702702E+22	6,702993E+22	3,888707E+22	3,888601E+22	1,340569E+23	7,777308E+22	2,118300E+23
-2998	6,702909E+22	6,702961E+22	3,888719E+22	3,888829E+22	1,340587E+23	7,777547E+22	2,118342E+23
-2997	6,702909E+22	6,702813E+22	3,888763E+22	3,888701E+22	1,340572E+23	7,777465E+22	2,118319E+23
-2996	6,702642E+22	6,702785E+22	3,888957E+22	3,888845E+22	1,340543E+23	7,777802E+22	2,118323E+23
-2995	6,702934E+22	6,702743E+22	3,888870E+22	3,889000E+22	1,340568E+23	7,777870E+22	2,118355E+23
-2994	6,702698E+22	6,702746E+22	3,888930E+22	3,888871E+22	1,340544E+23	7,777801E+22	2,118324E+23
-2993	6,702659E+22	6,702773E+22	3,888984E+22	3,889048E+22	1,340543E+23	7,778032E+22	2,118346E+23
-2992	6,702941E+22	6,702730E+22	3,888856E+22	3,888980E+22	1,340567E+23	7,777836E+22	2,118351E+23
-2991	6,702613E+22	6,702777E+22	3,888985E+22	3,888818E+22	1,340539E+23	7,777803E+22	2,118319E+23
-2990	6,702811E+22	6,702831E+22	3,888931E+22	3,888951E+22	1,340564E+23	7,777882E+22	2,118352E+23
-2989	6,702912E+22	6,702792E+22	3,888809E+22	3,888771E+22	1,340570E+23	7,777580E+22	2,118328E+23
-2988	6,702579E+22	6,702844E+22	3,888877E+22	3,888774E+22	1,340542E+23	7,777651E+22	2,118307E+23
-2987	6,702892E+22	6,702856E+22	3,888723E+22	3,888864E+22	1,340575E+23	7,777587E+22	2,118333E+23
-2986	6,702807E+22	6,702831E+22	3,888687E+22	3,888618E+22	1,340564E+23	7,777305E+22	2,118294E+23
-2985	6,702760E+22	6,702847E+22	3,888722E+22	3,888690E+22	1,340561E+23	7,777412E+22	2,118302E+23
-2984	6,703115E+22	6,702831E+22	3,888573E+22	3,888687E+22	1,340595E+23	7,777260E+22	2,118321E+23
-2983	6,702789E+22	6,702873E+22	3,888675E+22	3,888560E+22	1,340566E+23	7,777235E+22	2,118290E+23
-2982	6,702829E+22	6,702953E+22	3,888703E+22	3,888766E+22	1,340578E+23	7,777469E+22	2,118325E+23
-2981	6,702986E+22	6,702885E+22	3,888655E+22	3,888718E+22	1,340587E+23	7,777373E+22	2,118324E+23
-2980	6,702612E+22	6,702833E+22	3,888854E+22	3,888738E+22	1,340544E+23	7,777592E+22	2,118304E+23
-2979	6,702852E+22	6,702798E+22	3,888879E+22	3,888941E+22	1,340565E+23	7,777820E+22	2,118347E+23
-2978	6,702822E+22	6,702715E+22	3,888912E+22	3,888848E+22	1,340554E+23	7,777760E+22	2,118330E+23
-2977	6,702578E+22	6,702707E+22	3,889040E+22	3,888997E+22	1,340528E+23	7,778037E+22	2,118332E+23
-2976	6,702869E+22	6,702707E+22	3,888948E+22	3,889140E+22	1,340558E+23	7,778088E+22	2,118367E+23
-2975	6,702597E+22	6,702674E+22	3,889050E+22	3,889001E+22	1,340527E+23	7,778051E+22	2,118332E+23
-2974	6,702575E+22	6,702742E+22	3,889106E+22	3,889116E+22	1,340532E+23	7,778222E+22	2,118354E+23
-2973	6,702889E+22	6,702685E+22	3,889006E+22	3,889051E+22	1,340557E+23	7,778057E+22	2,118363E+23
-2972	6,702546E+22	6,702653E+22	3,889101E+22	3,888933E+22	1,340520E+23	7,778034E+22	2,118323E+23
-2971	6,702703E+22	6,702741E+22	3,889032E+22	3,889066E+22	1,340544E+23	7,778098E+22	2,118354E+23
-2970	6,702782E+22	6,702738E+22	3,888899E+22	3,888906E+22	1,340552E+23	7,777805E+22	2,118332E+23
-2969	6,702524E+22	6,702737E+22	3,888923E+22	3,888868E+22	1,340526E+23	7,777791E+22	2,118305E+23
-2968	6,702892E+22	6,702767E+22	3,888785E+22	3,888924E+22	1,340566E+23	7,777709E+22	2,118337E+23
-2967	6,702789E+22	6,702720E+22	3,888790E+22	3,888692E+22	1,340551E+23	7,777481E+22	2,118299E+23
-2966	6,702698E+22	6,702832E+22	3,888815E+22	3,888759E+22	1,340553E+23	7,777573E+22	2,118310E+23
-2965	6,703026E+22	6,702848E+22	3,888692E+22	3,888798E+22	1,340587E+23	7,777490E+22	2,118336E+23
-2964	6,702674E+22	6,702792E+22	3,888791E+22	3,888713E+22	1,340547E+23	7,777504E+22	2,118297E+23
-2963	6,702710E+22	6,702857E+22	3,888853E+22	3,888887E+22	1,340557E+23	7,777741E+22	2,118331E+23
-2962	6,702878E+22	6,702788E+22	3,888823E+22	3,888848E+22	1,340567E+23	7,777671E+22	2,118334E+23
-2961	6,702574E+22	6,702683E+22	3,888981E+22	3,888866E+22	1,340526E+23	7,777847E+22	2,118310E+23
-2960	6,702809E+22	6,702697E+22	3,888989E+22	3,889084E+22	1,340551E+23	7,778073E+22	2,118358E+23
-2959	6,702704E+22	6,702617E+22	3,889030E+22	3,889026E+22	1,340532E+23	7,778056E+22	2,118338E+23
-2958	6,702455E+22	6,702683E+22	3,889137E+22	3,889132E+22	1,340514E+23	7,778269E+22	2,118341E+23
-2957	6,702790E+22	6,702671E+22	3,889079E+22	3,889246E+22	1,340546E+23	7,778326E+22	2,118379E+23
-2956	6,702550E+22	6,702547E+22	3,889180E+22	3,889100E+22	1,340510E+23	7,778280E+22	2,118338E+23
-2955	6,702538E+22	6,702637E+22	3,889248E+22	3,889181E+22	1,340517E+23	7,778430E+22	2,118360E+23
-2954	6,702794E+22	6,702637E+22	3,889134E+22	3,889151E+22	1,340543E+23	7,778285E+22	2,118372E+23
-2953	6,702470E+22	6,702587E+22	3,889168E+22	3,889053E+22	1,340506E+23	7,778220E+22	2,118328E+23
-2952	6,702625E+22	6,702683E+22	3,889090E+22	3,889172E+22	1,340531E+23	7,778261E+22	2,118357E+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							
-2951	6,702678E+22	6,702637E+22	3,888992E+22	3,889014E+22	1,340531E+23	7,778006E+22	2,118332E+23
-2950	6,702470E+22	6,702683E+22	3,889007E+22	3,888923E+22	1,340515E+23	7,777930E+22	2,118308E+23
-2949	6,702877E+22	6,702708E+22	3,888898E+22	3,888992E+22	1,340558E+23	7,777890E+22	2,118347E+23
-2948	6,702739E+22	6,702619E+22	3,888883E+22	3,888811E+22	1,340536E+23	7,777694E+22	2,118305E+23
-2947	6,702600E+22	6,702773E+22	3,888919E+22	3,888871E+22	1,340537E+23	7,777790E+22	2,118316E+23
-2946	6,702886E+22	6,702816E+22	3,888815E+22	3,888932E+22	1,340570E+23	7,777747E+22	2,118345E+23
-2945	6,702601E+22	6,702687E+22	3,888896E+22	3,888834E+22	1,340529E+23	7,777730E+22	2,118302E+23
-2944	6,702664E+22	6,702745E+22	3,888978E+22	3,888988E+22	1,340541E+23	7,777966E+22	2,118338E+23
-2943	6,702801E+22	6,702655E+22	3,888976E+22	3,888988E+22	1,340546E+23	7,777964E+22	2,118342E+23
-2942	6,702482E+22	6,702629E+22	3,889097E+22	3,888995E+22	1,340511E+23	7,778093E+22	2,118320E+23
-2941	6,702722E+22	6,702664E+22	3,889118E+22	3,889239E+22	1,340539E+23	7,778357E+22	2,118374E+23
-2940	6,702611E+22	6,702515E+22	3,889149E+22	3,889191E+22	1,340513E+23	7,778339E+22	2,118346E+23
-2939	6,702373E+22	6,702594E+22	3,889282E+22	3,889232E+22	1,340497E+23	7,778513E+22	2,118348E+23
-2938	6,702722E+22	6,702605E+22	3,889244E+22	3,889339E+22	1,340533E+23	7,778583E+22	2,118391E+23
-2937	6,702525E+22	6,702430E+22	3,889296E+22	3,889192E+22	1,340496E+23	7,778489E+22	2,118344E+23
-2936	6,702463E+22	6,702569E+22	3,889344E+22	3,889286E+22	1,340503E+23	7,778629E+22	2,118366E+23
-2935	6,702647E+22	6,702561E+22	3,889229E+22	3,889300E+22	1,340521E+23	7,778529E+22	2,118374E+23
-2934	6,702334E+22	6,702543E+22	3,889234E+22	3,889157E+22	1,340488E+23	7,778390E+22	2,118327E+23
-2933	6,702564E+22	6,702618E+22	3,889185E+22	3,889257E+22	1,340518E+23	7,778441E+22	2,118362E+23
-2932	6,702656E+22	6,702494E+22	3,889081E+22	3,889097E+22	1,340515E+23	7,778179E+22	2,118333E+23
-2931	6,702457E+22	6,702593E+22	3,889106E+22	3,888979E+22	1,340505E+23	7,778086E+22	2,118314E+23
-2930	6,702811E+22	6,702695E+22	3,889001E+22	3,889084E+22	1,340551E+23	7,778085E+22	2,118359E+23
-2929	6,702679E+22	6,702580E+22	3,888951E+22	3,888929E+22	1,340526E+23	7,777880E+22	2,118314E+23
-2928	6,702514E+22	6,702739E+22	3,889014E+22	3,888978E+22	1,340525E+23	7,777992E+22	2,118324E+23
-2927	6,702759E+22	6,702727E+22	3,888962E+22	3,889058E+22	1,340549E+23	7,778020E+22	2,118350E+23
-2926	6,702513E+22	6,702607E+22	3,889039E+22	3,888933E+22	1,340512E+23	7,777972E+22	2,118309E+23
-2925	6,702613E+22	6,702644E+22	3,889137E+22	3,889116E+22	1,340526E+23	7,778254E+22	2,118351E+23
-2924	6,702708E+22	6,702513E+22	3,889103E+22	3,889170E+22	1,340522E+23	7,778272E+22	2,118349E+23
-2923	6,702382E+22	6,702539E+22	3,889215E+22	3,889151E+22	1,340492E+23	7,778365E+22	2,118329E+23
-2922	6,702610E+22	6,702604E+22	3,889245E+22	3,889378E+22	1,340521E+23	7,778623E+22	2,118384E+23
-2921	6,702574E+22	6,702411E+22	3,889256E+22	3,889299E+22	1,340499E+23	7,778555E+22	2,118354E+23
-2920	6,702351E+22	6,702504E+22	3,889407E+22	3,889302E+22	1,340486E+23	7,778709E+22	2,118356E+23
-2919	6,702623E+22	6,702516E+22	3,889393E+22	3,889448E+22	1,340514E+23	7,778842E+22	2,118398E+23
-2918	6,702400E+22	6,702414E+22	3,889404E+22	3,889303E+22	1,340481E+23	7,778706E+22	2,118352E+23
-2917	6,702344E+22	6,702535E+22	3,889451E+22	3,889421E+22	1,340488E+23	7,778872E+22	2,118375E+23
-2916	6,702528E+22	6,702445E+22	3,889318E+22	3,889445E+22	1,340497E+23	7,778763E+22	2,118374E+23
-2915	6,702274E+22	6,702432E+22	3,889330E+22	3,889234E+22	1,340471E+23	7,778564E+22	2,118327E+23
-2914	6,702538E+22	6,702532E+22	3,889294E+22	3,889324E+22	1,340507E+23	7,778618E+22	2,118369E+23
-2913	6,702674E+22	6,702397E+22	3,889151E+22	3,889176E+22	1,340507E+23	7,778327E+22	2,118340E+23
-2912	6,702418E+22	6,702559E+22	3,889174E+22	3,889062E+22	1,340498E+23	7,778236E+22	2,118321E+23
-2911	6,702676E+22	6,702665E+22	3,889101E+22	3,889210E+22	1,340534E+23	7,778311E+22	2,118365E+23
-2910	6,702549E+22	6,702562E+22	3,889050E+22	3,889024E+22	1,340511E+23	7,778074E+22	2,118319E+23
-2909	6,702435E+22	6,702668E+22	3,889159E+22	3,889080E+22	1,340510E+23	7,778239E+22	2,118334E+23
-2908	6,702689E+22	6,702567E+22	3,889106E+22	3,889186E+22	1,340526E+23	7,778292E+22	2,118355E+23
-2907	6,702450E+22	6,702480E+22	3,889179E+22	3,889050E+22	1,340493E+23	7,778229E+22	2,118316E+23
-2906	6,702525E+22	6,702581E+22	3,889269E+22	3,889270E+22	1,340511E+23	7,778538E+22	2,118364E+23
-2905	6,702647E+22	6,702423E+22	3,889189E+22	3,889329E+22	1,340507E+23	7,778518E+22	2,118359E+23
-2904	6,702308E+22	6,702479E+22	3,889321E+22	3,889270E+22	1,340479E+23	7,778592E+22	2,118338E+23
-2903	6,702506E+22	6,702530E+22	3,889399E+22	3,889498E+22	1,340504E+23	7,778897E+22	2,118393E+23

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	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2902	6,702493E+22	6,702357E+22	3,889403E+22	3,889384E+22	1,340485E+23	7,778788E+22	2,118364E+23
-2901	6,702278E+22	6,702441E+22	3,889566E+22	3,889423E+22	1,340472E+23	7,778989E+22	2,118371E+23
-2900	6,702482E+22	6,702402E+22	3,889514E+22	3,889614E+22	1,340488E+23	7,779128E+22	2,118401E+23
-2899	6,702265E+22	6,702320E+22	3,889505E+22	3,889440E+22	1,340458E+23	7,778946E+22	2,118353E+23
-2898	6,702243E+22	6,702448E+22	3,889551E+22	3,889537E+22	1,340469E+23	7,779088E+22	2,118378E+23
-2897	6,702522E+22	6,702313E+22	3,889382E+22	3,889528E+22	1,340484E+23	7,778910E+22	2,118375E+23
-2896	6,702301E+22	6,702346E+22	3,889401E+22	3,889276E+22	1,340465E+23	7,778677E+22	2,118332E+23
-2895	6,702491E+22	6,702487E+22	3,889389E+22	3,889400E+22	1,340498E+23	7,778788E+22	2,118377E+23
-2894	6,702589E+22	6,702428E+22	3,889228E+22	3,889250E+22	1,340502E+23	7,778478E+22	2,118350E+23
-2893	6,702326E+22	6,702567E+22	3,889284E+22	3,889171E+22	1,340489E+23	7,778454E+22	2,118335E+23
-2892	6,702533E+22	6,702577E+22	3,889225E+22	3,889339E+22	1,340511E+23	7,778564E+22	2,118367E+23
-2891	6,702459E+22	6,702455E+22	3,889195E+22	3,889124E+22	1,340491E+23	7,778319E+22	2,118323E+23
-2890	6,702370E+22	6,702541E+22	3,889311E+22	3,889192E+22	1,340491E+23	7,778502E+22	2,118341E+23
-2889	6,702654E+22	6,702420E+22	3,889205E+22	3,889333E+22	1,340507E+23	7,778539E+22	2,118361E+23
-2888	6,702390E+22	6,702393E+22	3,889260E+22	3,889193E+22	1,340478E+23	7,778452E+22	2,118324E+23
-2887	6,702392E+22	6,702515E+22	3,889373E+22	3,889433E+22	1,340491E+23	7,778806E+22	2,118371E+23
-2886	6,702541E+22	6,702394E+22	3,889301E+22	3,889439E+22	1,340494E+23	7,778740E+22	2,118368E+23
-2885	6,702258E+22	6,702416E+22	3,889480E+22	3,889372E+22	1,340467E+23	7,778852E+22	2,118353E+23
-2884	6,702417E+22	6,702405E+22	3,889564E+22	3,889618E+22	1,340482E+23	7,779182E+22	2,118400E+23
-2883	6,702400E+22	6,702269E+22	3,889557E+22	3,889502E+22	1,340467E+23	7,779059E+22	2,118373E+23
-2882	6,702154E+22	6,702378E+22	3,889703E+22	3,889571E+22	1,340453E+23	7,779274E+22	2,118381E+23
-2881	6,702392E+22	6,702295E+22	3,889595E+22	3,889768E+22	1,340469E+23	7,779363E+22	2,118405E+23
-2880	6,702206E+22	6,702225E+22	3,889586E+22	3,889540E+22	1,340443E+23	7,779126E+22	2,118356E+23
-2879	6,702184E+22	6,702356E+22	3,889658E+22	3,889627E+22	1,340454E+23	7,779284E+22	2,118382E+23
-2878	6,702501E+22	6,702265E+22	3,889476E+22	3,889575E+22	1,340477E+23	7,779052E+22	2,118382E+23
-2877	6,702279E+22	6,702325E+22	3,889506E+22	3,889360E+22	1,340460E+23	7,778866E+22	2,118347E+23
-2876	6,702371E+22	6,702437E+22	3,889479E+22	3,889524E+22	1,340481E+23	7,779003E+22	2,118381E+23
-2875	6,702456E+22	6,702383E+22	3,889323E+22	3,889354E+22	1,340484E+23	7,778678E+22	2,118352E+23
-2874	6,702216E+22	6,702494E+22	3,889408E+22	3,889278E+22	1,340471E+23	7,778685E+22	2,118340E+23
-2873	6,702488E+22	6,702426E+22	3,889322E+22	3,889439E+22	1,340491E+23	7,778761E+22	2,118368E+23
-2872	6,702435E+22	6,702326E+22	3,889297E+22	3,889213E+22	1,340476E+23	7,778510E+22	2,118327E+23
-2871	6,702293E+22	6,702456E+22	3,889419E+22	3,889330E+22	1,340475E+23	7,778749E+22	2,118350E+23
-2870	6,702563E+22	6,702396E+22	3,889292E+22	3,889459E+22	1,340496E+23	7,778751E+22	2,118371E+23
-2869	6,702318E+22	6,702373E+22	3,889374E+22	3,889335E+22	1,340469E+23	7,778709E+22	2,118340E+23
-2868	6,702274E+22	6,702427E+22	3,889513E+22	3,889568E+22	1,340470E+23	7,779080E+22	2,118378E+23
-2867	6,702461E+22	6,702306E+22	3,889470E+22	3,889537E+22	1,340477E+23	7,779007E+22	2,118377E+23
-2866	6,702189E+22	6,702316E+22	3,889669E+22	3,889492E+22	1,340451E+23	7,779161E+22	2,118367E+23
-2865	6,702333E+22	6,702277E+22	3,889694E+22	3,889772E+22	1,340461E+23	7,779466E+22	2,118408E+23
-2864	6,702295E+22	6,702178E+22	3,889660E+22	3,889654E+22	1,340447E+23	7,779315E+22	2,118379E+23
-2863	6,702013E+22	6,702286E+22	3,889804E+22	3,889730E+22	1,340430E+23	7,779534E+22	2,118383E+23
-2862	6,702310E+22	6,702227E+22	3,889683E+22	3,889860E+22	1,340454E+23	7,779542E+22	2,118408E+23
-2861	6,702208E+22	6,702154E+22	3,889692E+22	3,889616E+22	1,340436E+23	7,779308E+22	2,118367E+23
-2860	6,702135E+22	6,702260E+22	3,889762E+22	3,889708E+22	1,340440E+23	7,779470E+22	2,118387E+23
-2859	6,702440E+22	6,702239E+22	3,889577E+22	3,889653E+22	1,340468E+23	7,779230E+22	2,118391E+23
-2858	6,702182E+22	6,702308E+22	3,889610E+22	3,889465E+22	1,340449E+23	7,779075E+22	2,118356E+23
-2857	6,702265E+22	6,702363E+22	3,889555E+22	3,889638E+22	1,340463E+23	7,779193E+22	2,118382E+23
-2856	6,702381E+22	6,702295E+22	3,889416E+22	3,889441E+22	1,340468E+23	7,778856E+22	2,118353E+23
-2855	6,702133E+22	6,702375E+22	3,889527E+22	3,889381E+22	1,340451E+23	7,778908E+22	2,118342E+23
-2854	6,702441E+22	6,702335E+22	3,889428E+22	3,889528E+22	1,340478E+23	7,778955E+22	2,118373E+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							
-2853	6,702400E+22	6,702259E+22	3,889400E+22	3,889347E+22	1,340466E+23	7,778747E+22	2,118341E+23
-2852	6,702171E+22	6,702373E+22	3,889512E+22	3,889489E+22	1,340454E+23	7,779002E+22	2,118355E+23
-2851	6,702458E+22	6,702339E+22	3,889405E+22	3,889583E+22	1,340480E+23	7,778989E+22	2,118379E+23
-2850	6,702242E+22	6,702300E+22	3,889531E+22	3,889448E+22	1,340454E+23	7,778979E+22	2,118352E+23
-2849	6,702230E+22	6,702300E+22	3,889657E+22	3,889675E+22	1,340453E+23	7,779333E+22	2,118386E+23
-2848	6,702414E+22	6,702200E+22	3,889621E+22	3,889643E+22	1,340461E+23	7,779264E+22	2,118388E+23
-2847	6,702068E+22	6,702241E+22	3,889819E+22	3,889656E+22	1,340431E+23	7,779474E+22	2,118378E+23
-2846	6,702201E+22	6,702233E+22	3,889807E+22	3,889917E+22	1,340443E+23	7,779724E+22	2,118416E+23
-2845	6,702203E+22	6,702122E+22	3,889775E+22	3,889810E+22	1,340433E+23	7,779586E+22	2,118391E+23
-2844	6,701910E+22	6,702174E+22	3,889918E+22	3,889861E+22	1,340408E+23	7,779779E+22	2,118386E+23
-2843	6,702266E+22	6,702128E+22	3,889803E+22	3,889932E+22	1,340439E+23	7,779735E+22	2,118413E+23
-2842	6,702185E+22	6,702080E+22	3,889820E+22	3,889700E+22	1,340427E+23	7,779520E+22	2,118379E+23
-2841	6,702084E+22	6,702178E+22	3,889835E+22	3,889811E+22	1,340426E+23	7,779646E+22	2,118391E+23
-2840	6,702345E+22	6,702190E+22	3,889646E+22	3,889747E+22	1,340454E+23	7,779393E+22	2,118393E+23
-2839	6,702052E+22	6,702252E+22	3,889700E+22	3,889580E+22	1,340430E+23	7,779281E+22	2,118358E+23
-2838	6,702175E+22	6,702292E+22	3,889645E+22	3,889702E+22	1,340447E+23	7,779347E+22	2,118381E+23
-2837	6,702364E+22	6,702207E+22	3,889524E+22	3,889525E+22	1,340457E+23	7,779049E+22	2,118362E+23
-2836	6,702070E+22	6,702254E+22	3,889630E+22	3,889491E+22	1,340432E+23	7,779121E+22	2,118345E+23
-2835	6,702372E+22	6,702276E+22	3,889528E+22	3,889638E+22	1,340465E+23	7,779167E+22	2,118381E+23
-2834	6,702324E+22	6,702224E+22	3,889515E+22	3,889484E+22	1,340455E+23	7,778999E+22	2,118355E+23
-2833	6,702090E+22	6,702291E+22	3,889613E+22	3,889621E+22	1,340438E+23	7,779234E+22	2,118361E+23
-2832	6,702396E+22	6,702257E+22	3,889543E+22	3,889681E+22	1,340465E+23	7,779224E+22	2,118388E+23
-2831	6,702161E+22	6,702203E+22	3,889703E+22	3,889573E+22	1,340436E+23	7,779276E+22	2,118364E+23
-2830	6,702141E+22	6,702222E+22	3,889814E+22	3,889794E+22	1,340436E+23	7,779608E+22	2,118397E+23
-2829	6,702322E+22	6,702139E+22	3,889759E+22	3,889820E+22	1,340446E+23	7,779579E+22	2,118404E+23
-2828	6,701894E+22	6,702128E+22	3,889935E+22	3,889845E+22	1,340402E+23	7,779781E+22	2,118380E+23
-2827	6,702079E+22	6,702135E+22	3,889923E+22	3,890055E+22	1,340421E+23	7,779979E+22	2,118419E+23
-2826	6,702153E+22	6,702009E+22	3,889906E+22	3,889915E+22	1,340416E+23	7,779822E+22	2,118398E+23
-2825	6,701897E+22	6,702037E+22	3,890013E+22	3,889944E+22	1,340393E+23	7,779957E+22	2,118389E+23
-2824	6,702257E+22	6,702050E+22	3,889900E+22	3,889998E+22	1,340431E+23	7,779899E+22	2,118421E+23
-2823	6,702096E+22	6,702055E+22	3,889918E+22	3,889807E+22	1,340415E+23	7,779724E+22	2,118388E+23
-2822	6,701973E+22	6,702176E+22	3,889916E+22	3,889894E+22	1,340415E+23	7,779810E+22	2,118396E+23
-2821	6,702261E+22	6,702163E+22	3,889741E+22	3,889848E+22	1,340442E+23	7,779589E+22	2,118401E+23
-2820	6,701936E+22	6,702139E+22	3,889814E+22	3,889681E+22	1,340408E+23	7,779495E+22	2,118357E+23
-2819	6,702118E+22	6,702181E+22	3,889768E+22	3,889777E+22	1,340430E+23	7,779545E+22	2,118384E+23
-2818	6,702328E+22	6,702109E+22	3,889652E+22	3,889636E+22	1,340444E+23	7,779288E+22	2,118372E+23
-2817	6,702010E+22	6,702157E+22	3,889699E+22	3,889631E+22	1,340417E+23	7,779330E+22	2,118350E+23
-2816	6,702297E+22	6,702210E+22	3,889605E+22	3,889760E+22	1,340451E+23	7,779365E+22	2,118387E+23
-2815	6,702224E+22	6,702171E+22	3,889628E+22	3,889616E+22	1,340439E+23	7,779244E+22	2,118364E+23
-2814	6,702024E+22	6,702229E+22	3,889744E+22	3,889699E+22	1,340425E+23	7,779443E+22	2,118370E+23
-2813	6,702357E+22	6,702191E+22	3,889700E+22	3,889791E+22	1,340455E+23	7,779491E+22	2,118404E+23
-2812	6,702046E+22	6,702101E+22	3,889864E+22	3,889727E+22	1,340415E+23	7,779591E+22	2,118374E+23
-2811	6,702004E+22	6,702147E+22	3,889957E+22	3,889945E+22	1,340415E+23	7,779901E+22	2,118405E+23
-2810	6,702197E+22	6,702061E+22	3,889903E+22	3,889993E+22	1,340426E+23	7,779896E+22	2,118415E+23
-2809	6,701806E+22	6,701993E+22	3,890035E+22	3,889996E+22	1,340380E+23	7,780031E+22	2,118383E+23
-2808	6,702038E+22	6,702003E+22	3,890040E+22	3,890147E+22	1,340404E+23	7,780187E+22	2,118423E+23
-2807	6,702118E+22	6,701915E+22	3,890038E+22	3,890015E+22	1,340403E+23	7,780053E+22	2,118409E+23
-2806	6,701857E+22	6,701986E+22	3,890119E+22	3,890017E+22	1,340384E+23	7,780136E+22	2,118398E+23
-2805	6,702186E+22	6,702044E+22	3,889993E+22	3,890113E+22	1,340423E+23	7,780106E+22	2,118434E+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							
-2804	6,701938E+22	6,702000E+22	3,890011E+22	3,889936E+22	1,340394E+23	7,779947E+22	2,118389E+23
-2803	6,701843E+22	6,702111E+22	3,890022E+22	3,889979E+22	1,340395E+23	7,780001E+22	2,118395E+23
-2802	6,702195E+22	6,702067E+22	3,889869E+22	3,889934E+22	1,340426E+23	7,779803E+22	2,118407E+23
-2801	6,701908E+22	6,701992E+22	3,889900E+22	3,889774E+22	1,340390E+23	7,779674E+22	2,118357E+23
-2800	6,702098E+22	6,702077E+22	3,889855E+22	3,889868E+22	1,340417E+23	7,779724E+22	2,118390E+23
-2799	6,702253E+22	6,702070E+22	3,889738E+22	3,889770E+22	1,340432E+23	7,779507E+22	2,118383E+23
-2798	6,701929E+22	6,702142E+22	3,889778E+22	3,889734E+22	1,340407E+23	7,779512E+22	2,118358E+23
-2797	6,702239E+22	6,702194E+22	3,889713E+22	3,889871E+22	1,340443E+23	7,779585E+22	2,118402E+23
-2796	6,702114E+22	6,702076E+22	3,889776E+22	3,889728E+22	1,340419E+23	7,779503E+22	2,118369E+23
-2795	6,701939E+22	6,702134E+22	3,889918E+22	3,889799E+22	1,340407E+23	7,779717E+22	2,118379E+23
-2794	6,702266E+22	6,702091E+22	3,889876E+22	3,889940E+22	1,340436E+23	7,779816E+22	2,118417E+23
-2793	6,701915E+22	6,701967E+22	3,889978E+22	3,889912E+22	1,340388E+23	7,779889E+22	2,118377E+23
-2792	6,701895E+22	6,702020E+22	3,890068E+22	3,890102E+22	1,340391E+23	7,780170E+22	2,118408E+23
-2791	6,702098E+22	6,701949E+22	3,890026E+22	3,890139E+22	1,340405E+23	7,780165E+22	2,118421E+23
-2790	6,701776E+22	6,701897E+22	3,890147E+22	3,890074E+22	1,340367E+23	7,780221E+22	2,118389E+23
-2789	6,702042E+22	6,701946E+22	3,890157E+22	3,890235E+22	1,340399E+23	7,780392E+22	2,118438E+23
-2788	6,702022E+22	6,701863E+22	3,890161E+22	3,890130E+22	1,340389E+23	7,780290E+22	2,118418E+23
-2787	6,701735E+22	6,701978E+22	3,890238E+22	3,890120E+22	1,340371E+23	7,780358E+22	2,118407E+23
-2786	6,702058E+22	6,702015E+22	3,890125E+22	3,890234E+22	1,340407E+23	7,780359E+22	2,118443E+23
-2785	6,701828E+22	6,701892E+22	3,890108E+22	3,890053E+22	1,340372E+23	7,780161E+22	2,118388E+23
-2784	6,701791E+22	6,701971E+22	3,890130E+22	3,890056E+22	1,340376E+23	7,780186E+22	2,118395E+23
-2783	6,702151E+22	6,701958E+22	3,889980E+22	3,890040E+22	1,340411E+23	7,780020E+22	2,118413E+23
-2782	6,701881E+22	6,701922E+22	3,889970E+22	3,889866E+22	1,340380E+23	7,779835E+22	2,118364E+23
-2781	6,702048E+22	6,702058E+22	3,889911E+22	3,889991E+22	1,340411E+23	7,779902E+22	2,118401E+23
-2780	6,702132E+22	6,702022E+22	3,889823E+22	3,889897E+22	1,340415E+23	7,779720E+22	2,118387E+23
-2779	6,701838E+22	6,702087E+22	3,889897E+22	3,889807E+22	1,340392E+23	7,779704E+22	2,118363E+23
-2778	6,702173E+22	6,702116E+22	3,889880E+22	3,889953E+22	1,340429E+23	7,779833E+22	2,118412E+23
-2777	6,702050E+22	6,701947E+22	3,889914E+22	3,889848E+22	1,340400E+23	7,779762E+22	2,118376E+23
-2776	6,701854E+22	6,702014E+22	3,890059E+22	3,889933E+22	1,340387E+23	7,779992E+22	2,118386E+23
-2775	6,702130E+22	6,702020E+22	3,890009E+22	3,890123E+22	1,340415E+23	7,780131E+22	2,118428E+23
-2774	6,701815E+22	6,701884E+22	3,890084E+22	3,890058E+22	1,340370E+23	7,780142E+22	2,118384E+23
-2773	6,701839E+22	6,701946E+22	3,890180E+22	3,890238E+22	1,340379E+23	7,780418E+22	2,118420E+23
-2772	6,702018E+22	6,701839E+22	3,890170E+22	3,890259E+22	1,340386E+23	7,780429E+22	2,118429E+23
-2771	6,701722E+22	6,701825E+22	3,890299E+22	3,890165E+22	1,340355E+23	7,780463E+22	2,118401E+23
-2770	6,701961E+22	6,701908E+22	3,890309E+22	3,890360E+22	1,340387E+23	7,780669E+22	2,118454E+23
-2769	6,701890E+22	6,701791E+22	3,890257E+22	3,890280E+22	1,340368E+23	7,780537E+22	2,118422E+23
-2768	6,701619E+22	6,701881E+22	3,890342E+22	3,890239E+22	1,340350E+23	7,780581E+22	2,118408E+23
-2767	6,701950E+22	6,701919E+22	3,890237E+22	3,890342E+22	1,340387E+23	7,780580E+22	2,118445E+23
-2766	6,701797E+22	6,701778E+22	3,890198E+22	3,890119E+22	1,340358E+23	7,780317E+22	2,118389E+23
-2765	6,701803E+22	6,701897E+22	3,890205E+22	3,890143E+22	1,340370E+23	7,780348E+22	2,118405E+23
-2764	6,702071E+22	6,701890E+22	3,890060E+22	3,890148E+22	1,340396E+23	7,780208E+22	2,118417E+23
-2763	6,701796E+22	6,701912E+22	3,890051E+22	3,889957E+22	1,340371E+23	7,780007E+22	2,118372E+23
-2762	6,701967E+22	6,702040E+22	3,890023E+22	3,890089E+22	1,340401E+23	7,780111E+22	2,118412E+23
-2761	6,702038E+22	6,701932E+22	3,889930E+22	3,889996E+22	1,340397E+23	7,779926E+22	2,118390E+23
-2760	6,701786E+22	6,701962E+22	3,890047E+22	3,889891E+22	1,340375E+23	7,779938E+22	2,118369E+23
-2759	6,702083E+22	6,702014E+22	3,890042E+22	3,890081E+22	1,340410E+23	7,780124E+22	2,118422E+23
-2758	6,701959E+22	6,701858E+22	3,890033E+22	3,889996E+22	1,340382E+23	7,780029E+22	2,118385E+23
-2757	6,701756E+22	6,701948E+22	3,890152E+22	3,890113E+22	1,340370E+23	7,780265E+22	2,118397E+23
-2756	6,701978E+22	6,701914E+22	3,890126E+22	3,890296E+22	1,340389E+23	7,780422E+22	2,118431E+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							
-2755	6,701735E+22	6,701794E+22	3,890217E+22	3,890168E+22	1,340353E+23	7,780385E+22	2,118391E+23
-2754	6,701806E+22	6,701861E+22	3,890341E+22	3,890340E+22	1,340367E+23	7,780681E+22	2,118435E+23
-2753	6,701964E+22	6,701739E+22	3,890302E+22	3,890381E+22	1,340370E+23	7,780683E+22	2,118439E+23
-2752	6,701650E+22	6,701750E+22	3,890433E+22	3,890283E+22	1,340340E+23	7,780717E+22	2,118412E+23
-2751	6,701822E+22	6,701879E+22	3,890440E+22	3,890504E+22	1,340370E+23	7,780944E+22	2,118465E+23
-2750	6,701789E+22	6,701730E+22	3,890357E+22	3,890395E+22	1,340352E+23	7,780752E+22	2,118427E+23
-2749	6,701555E+22	6,701798E+22	3,890434E+22	3,890340E+22	1,340335E+23	7,780773E+22	2,118413E+23
-2748	6,701867E+22	6,701794E+22	3,890353E+22	3,890439E+22	1,340366E+23	7,780792E+22	2,118445E+23
-2747	6,701760E+22	6,701686E+22	3,890299E+22	3,890192E+22	1,340345E+23	7,780491E+22	2,118394E+23
-2746	6,701745E+22	6,701852E+22	3,890297E+22	3,890249E+22	1,340360E+23	7,780546E+22	2,118414E+23
-2745	6,701973E+22	6,701827E+22	3,890116E+22	3,890273E+22	1,340380E+23	7,780389E+22	2,118419E+23
-2744	6,701724E+22	6,701828E+22	3,890139E+22	3,890043E+22	1,340355E+23	7,780182E+22	2,118373E+23
-2743	6,701880E+22	6,701978E+22	3,890148E+22	3,890170E+22	1,340386E+23	7,780318E+22	2,118418E+23
-2742	6,702004E+22	6,701840E+22	3,890047E+22	3,890070E+22	1,340384E+23	7,780117E+22	2,118396E+23
-2741	6,701746E+22	6,701890E+22	3,890161E+22	3,890013E+22	1,340364E+23	7,780174E+22	2,118381E+23
-2740	6,701938E+22	6,701936E+22	3,890172E+22	3,890247E+22	1,340387E+23	7,780418E+22	2,118429E+23
-2739	6,701829E+22	6,701802E+22	3,890157E+22	3,890150E+22	1,340363E+23	7,780307E+22	2,118394E+23
-2738	6,701660E+22	6,701880E+22	3,890291E+22	3,890267E+22	1,340354E+23	7,780559E+22	2,118410E+23
-2737	6,701896E+22	6,701782E+22	3,890254E+22	3,890432E+22	1,340368E+23	7,780686E+22	2,118436E+23
-2736	6,701716E+22	6,701654E+22	3,890374E+22	3,890272E+22	1,340337E+23	7,780647E+22	2,118402E+23
-2735	6,701741E+22	6,701786E+22	3,890502E+22	3,890465E+22	1,340353E+23	7,780967E+22	2,118449E+23
-2734	6,701877E+22	6,701685E+22	3,890418E+22	3,890516E+22	1,340356E+23	7,780935E+22	2,118450E+23
-2733	6,701551E+22	6,701712E+22	3,890531E+22	3,890435E+22	1,340326E+23	7,780966E+22	2,118423E+23
-2732	6,701656E+22	6,701779E+22	3,890561E+22	3,890632E+22	1,340344E+23	7,781193E+22	2,118463E+23
-2731	6,701697E+22	6,701632E+22	3,890478E+22	3,890473E+22	1,340333E+23	7,780952E+22	2,118428E+23
-2730	6,701529E+22	6,701697E+22	3,890555E+22	3,890422E+22	1,340323E+23	7,780977E+22	2,118420E+23
-2729	6,701811E+22	6,701678E+22	3,890434E+22	3,890543E+22	1,340349E+23	7,780977E+22	2,118447E+23
-2728	6,701717E+22	6,701615E+22	3,890377E+22	3,890292E+22	1,340333E+23	7,780668E+22	2,118400E+23
-2727	6,701652E+22	6,701836E+22	3,890381E+22	3,890355E+22	1,340349E+23	7,780736E+22	2,118423E+23
-2726	6,701907E+22	6,701790E+22	3,890192E+22	3,890354E+22	1,340370E+23	7,780546E+22	2,118424E+23
-2725	6,701688E+22	6,701778E+22	3,890234E+22	3,890126E+22	1,340347E+23	7,780359E+22	2,118382E+23
-2724	6,701777E+22	6,701877E+22	3,890293E+22	3,890267E+22	1,340365E+23	7,780560E+22	2,118421E+23
-2723	6,701916E+22	6,701767E+22	3,890188E+22	3,890184E+22	1,340368E+23	7,780372E+22	2,118405E+23
-2722	6,701642E+22	6,701824E+22	3,890290E+22	3,890177E+22	1,340347E+23	7,780467E+22	2,118393E+23
-2721	6,701801E+22	6,701818E+22	3,890271E+22	3,890427E+22	1,340362E+23	7,780697E+22	2,118432E+23
-2720	6,701762E+22	6,701660E+22	3,890278E+22	3,890284E+22	1,340342E+23	7,780562E+22	2,118398E+23
-2719	6,701603E+22	6,701781E+22	3,890436E+22	3,890379E+22	1,340338E+23	7,780815E+22	2,118420E+23
-2718	6,701892E+22	6,701687E+22	3,890383E+22	3,890530E+22	1,340358E+23	7,780913E+22	2,118449E+23
-2717	6,701686E+22	6,701605E+22	3,890494E+22	3,890395E+22	1,340329E+23	7,780889E+22	2,118418E+23
-2716	6,701585E+22	6,701745E+22	3,890647E+22	3,890613E+22	1,340333E+23	7,781260E+22	2,118459E+23
-2715	6,701733E+22	6,701648E+22	3,890555E+22	3,890647E+22	1,340338E+23	7,781202E+22	2,118458E+23
-2714	6,701428E+22	6,701638E+22	3,890674E+22	3,890567E+22	1,340307E+23	7,781242E+22	2,118431E+23
-2713	6,701548E+22	6,701631E+22	3,890680E+22	3,890751E+22	1,340318E+23	7,781431E+22	2,118461E+23
-2712	6,701673E+22	6,701467E+22	3,890600E+22	3,890567E+22	1,340314E+23	7,781167E+22	2,118431E+23
-2711	6,701476E+22	6,701619E+22	3,890654E+22	3,890532E+22	1,340309E+23	7,781186E+22	2,118428E+23
-2710	6,701762E+22	6,701628E+22	3,890481E+22	3,890654E+22	1,340339E+23	7,781135E+22	2,118453E+23
-2709	6,701663E+22	6,701595E+22	3,890418E+22	3,890397E+22	1,340326E+23	7,780815E+22	2,118407E+23
-2708	6,701536E+22	6,701781E+22	3,890480E+22	3,890435E+22	1,340332E+23	7,780916E+22	2,118423E+23
-2707	6,701840E+22	6,701734E+22	3,890317E+22	3,890401E+22	1,340357E+23	7,780718E+22	2,118429E+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							
-2706	6,701646E+22	6,701709E+22	3,890378E+22	3,890216E+22	1,340335E+23	7,780594E+22	2,118395E+23
-2705	6,701669E+22	6,701768E+22	3,890412E+22	3,890400E+22	1,340344E+23	7,780812E+22	2,118425E+23
-2704	6,701828E+22	6,701662E+22	3,890308E+22	3,890334E+22	1,340349E+23	7,780642E+22	2,118413E+23
-2703	6,701535E+22	6,701756E+22	3,890409E+22	3,890332E+22	1,340329E+23	7,780740E+22	2,118403E+23
-2702	6,701741E+22	6,701717E+22	3,890373E+22	3,890552E+22	1,340346E+23	7,780925E+22	2,118438E+23
-2701	6,701753E+22	6,701574E+22	3,890393E+22	3,890396E+22	1,340333E+23	7,780789E+22	2,118412E+23
-2700	6,701526E+22	6,701676E+22	3,890598E+22	3,890489E+22	1,340320E+23	7,781087E+22	2,118429E+23
-2699	6,701793E+22	6,701641E+22	3,890541E+22	3,890650E+22	1,340343E+23	7,781191E+22	2,118463E+23
-2698	6,701561E+22	6,701576E+22	3,890643E+22	3,890563E+22	1,340314E+23	7,781207E+22	2,118434E+23
-2697	6,701400E+22	6,701638E+22	3,890772E+22	3,890782E+22	1,340304E+23	7,781554E+22	2,118459E+23
-2696	6,701631E+22	6,701500E+22	3,890692E+22	3,890775E+22	1,340313E+23	7,781467E+22	2,118460E+23
-2695	6,701362E+22	6,701510E+22	3,890806E+22	3,890671E+22	1,340287E+23	7,781477E+22	2,118435E+23
-2694	6,701541E+22	6,701503E+22	3,890769E+22	3,890844E+22	1,340304E+23	7,781613E+22	2,118466E+23
-2693	6,701667E+22	6,701416E+22	3,890660E+22	3,890671E+22	1,340308E+23	7,781331E+22	2,118441E+23
-2692	6,701372E+22	6,701594E+22	3,890737E+22	3,890639E+22	1,340297E+23	7,781375E+22	2,118434E+23
-2691	6,701669E+22	6,701635E+22	3,890572E+22	3,890731E+22	1,340330E+23	7,781303E+22	2,118461E+23
-2690	6,701590E+22	6,701577E+22	3,890535E+22	3,890478E+22	1,340317E+23	7,781013E+22	2,118418E+23
-2689	6,701439E+22	6,701672E+22	3,890607E+22	3,890517E+22	1,340311E+23	7,781124E+22	2,118423E+23
-2688	6,701796E+22	6,701596E+22	3,890460E+22	3,890492E+22	1,340339E+23	7,780952E+22	2,118434E+23
-2687	6,701551E+22	6,701626E+22	3,890506E+22	3,890353E+22	1,340318E+23	7,780859E+22	2,118404E+23
-2686	6,701585E+22	6,701676E+22	3,890489E+22	3,890558E+22	1,340326E+23	7,781047E+22	2,118431E+23
-2685	6,701760E+22	6,701579E+22	3,890375E+22	3,890478E+22	1,340334E+23	7,780853E+22	2,118419E+23
-2684	6,701433E+22	6,701657E+22	3,890526E+22	3,890447E+22	1,340309E+23	7,780973E+22	2,118406E+23
-2683	6,701699E+22	6,701641E+22	3,890509E+22	3,890630E+22	1,340334E+23	7,781139E+22	2,118448E+23
-2682	6,701710E+22	6,701522E+22	3,890549E+22	3,890511E+22	1,340323E+23	7,781060E+22	2,118429E+23
-2681	6,701396E+22	6,701599E+22	3,890746E+22	3,890640E+22	1,340299E+23	7,781386E+22	2,118438E+23
-2680	6,701670E+22	6,701553E+22	3,890697E+22	3,890808E+22	1,340322E+23	7,781505E+22	2,118473E+23
-2679	6,701413E+22	6,701506E+22	3,890798E+22	3,890725E+22	1,340292E+23	7,781523E+22	2,118444E+23
-2678	6,701312E+22	6,701508E+22	3,890890E+22	3,890915E+22	1,340282E+23	7,781804E+22	2,118462E+23
-2677	6,701604E+22	6,701373E+22	3,890797E+22	3,890886E+22	1,340298E+23	7,781684E+22	2,118466E+23
-2676	6,701299E+22	6,701393E+22	3,890929E+22	3,890780E+22	1,340269E+23	7,781709E+22	2,118440E+23
-2675	6,701480E+22	6,701460E+22	3,890866E+22	3,890942E+22	1,340294E+23	7,781808E+22	2,118475E+23
-2674	6,701590E+22	6,701417E+22	3,890748E+22	3,890793E+22	1,340301E+23	7,781541E+22	2,118455E+23
-2673	6,701245E+22	6,701527E+22	3,890826E+22	3,890740E+22	1,340277E+23	7,781566E+22	2,118434E+23
-2672	6,701604E+22	6,701536E+22	3,890696E+22	3,890795E+22	1,340314E+23	7,781491E+22	2,118463E+23
-2671	6,701533E+22	6,701500E+22	3,890671E+22	3,890549E+22	1,340303E+23	7,781220E+22	2,118425E+23
-2670	6,701393E+22	6,701562E+22	3,890705E+22	3,890612E+22	1,340295E+23	7,781317E+22	2,118427E+23
-2669	6,701737E+22	6,701535E+22	3,890535E+22	3,890622E+22	1,340327E+23	7,781158E+22	2,118443E+23
-2668	6,701424E+22	6,701556E+22	3,890601E+22	3,890497E+22	1,340298E+23	7,781098E+22	2,118408E+23
-2667	6,701484E+22	6,701623E+22	3,890588E+22	3,890672E+22	1,340311E+23	7,781259E+22	2,118437E+23
-2666	6,701704E+22	6,701529E+22	3,890499E+22	3,890594E+22	1,340323E+23	7,781093E+22	2,118433E+23
-2665	6,701355E+22	6,701533E+22	3,890669E+22	3,890554E+22	1,340289E+23	7,781222E+22	2,118411E+23
-2664	6,701652E+22	6,701525E+22	3,890677E+22	3,890744E+22	1,340318E+23	7,781421E+22	2,118460E+23
-2663	6,701595E+22	6,701470E+22	3,890709E+22	3,890668E+22	1,340307E+23	7,781377E+22	2,118444E+23
-2662	6,701269E+22	6,701509E+22	3,890864E+22	3,890814E+22	1,340278E+23	7,781678E+22	2,118446E+23
-2661	6,701562E+22	6,701458E+22	3,890807E+22	3,890961E+22	1,340302E+23	7,781768E+22	2,118479E+23
-2660	6,701296E+22	6,701373E+22	3,890943E+22	3,890851E+22	1,340267E+23	7,781794E+22	2,118446E+23
-2659	6,701266E+22	6,701400E+22	3,891023E+22	3,891003E+22	1,340267E+23	7,782027E+22	2,118469E+23
-2658	6,701575E+22	6,701314E+22	3,890919E+22	3,891000E+22	1,340289E+23	7,781920E+22	2,118481E+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							
-2657	6,701201E+22	6,701327E+22	3,891030E+22	3,890907E+22	1,340253E+23	7,781937E+22	2,118447E+23
-2656	6,701404E+22	6,701408E+22	3,890973E+22	3,891053E+22	1,340281E+23	7,782025E+22	2,118484E+23
-2655	6,701481E+22	6,701397E+22	3,890866E+22	3,890892E+22	1,340288E+23	7,781758E+22	2,118464E+23
-2654	6,701185E+22	6,701441E+22	3,890924E+22	3,890824E+22	1,340263E+23	7,781748E+22	2,118437E+23
-2653	6,701568E+22	6,701434E+22	3,890793E+22	3,890865E+22	1,340300E+23	7,781659E+22	2,118466E+23
-2652	6,701435E+22	6,701397E+22	3,890792E+22	3,890657E+22	1,340283E+23	7,781449E+22	2,118428E+23
-2651	6,701297E+22	6,701504E+22	3,890792E+22	3,890734E+22	1,340280E+23	7,781525E+22	2,118433E+23
-2650	6,701633E+22	6,701496E+22	3,890615E+22	3,890773E+22	1,340313E+23	7,781388E+22	2,118452E+23
-2649	6,701307E+22	6,701447E+22	3,890690E+22	3,890626E+22	1,340275E+23	7,781315E+22	2,118407E+23
-2648	6,701453E+22	6,701496E+22	3,890712E+22	3,890756E+22	1,340295E+23	7,781468E+22	2,118442E+23
-2647	6,701666E+22	6,701453E+22	3,890650E+22	3,890684E+22	1,340312E+23	7,781333E+22	2,118445E+23
-2646	6,701316E+22	6,701444E+22	3,890797E+22	3,890674E+22	1,340276E+23	7,781470E+22	2,118423E+23
-2645	6,701563E+22	6,701479E+22	3,890800E+22	3,890886E+22	1,340304E+23	7,781686E+22	2,118473E+23
-2644	6,701433E+22	6,701412E+22	3,890864E+22	3,890838E+22	1,340284E+23	7,781701E+22	2,118455E+23
-2643	6,701136E+22	6,701436E+22	3,891011E+22	3,890954E+22	1,340257E+23	7,781965E+22	2,118454E+23
-2642	6,701476E+22	6,701372E+22	3,890959E+22	3,891102E+22	1,340285E+23	7,782061E+22	2,118491E+23
-2641	6,701215E+22	6,701212E+22	3,891090E+22	3,890981E+22	1,340243E+23	7,782070E+22	2,118450E+23
-2640	6,701227E+22	6,701272E+22	3,891162E+22	3,891128E+22	1,340250E+23	7,782290E+22	2,118479E+23
-2639	6,701487E+22	6,701282E+22	3,891038E+22	3,891142E+22	1,340277E+23	7,782179E+22	2,118495E+23
-2638	6,701114E+22	6,701263E+22	3,891101E+22	3,891037E+22	1,340238E+23	7,782138E+22	2,118451E+23
-2637	6,701330E+22	6,701350E+22	3,891051E+22	3,891138E+22	1,340268E+23	7,782188E+22	2,118487E+23
-2636	6,701392E+22	6,701310E+22	3,890984E+22	3,890962E+22	1,340270E+23	7,781946E+22	2,118465E+23
-2635	6,701127E+22	6,701358E+22	3,891035E+22	3,890882E+22	1,340248E+23	7,781917E+22	2,118440E+23
-2634	6,701500E+22	6,701394E+22	3,890894E+22	3,890973E+22	1,340289E+23	7,781867E+22	2,118476E+23
-2633	6,701312E+22	6,701307E+22	3,890880E+22	3,890793E+22	1,340262E+23	7,781672E+22	2,118429E+23
-2632	6,701219E+22	6,701416E+22	3,890884E+22	3,890858E+22	1,340264E+23	7,781742E+22	2,118438E+23
-2631	6,701553E+22	6,701440E+22	3,890728E+22	3,890881E+22	1,340299E+23	7,781609E+22	2,118460E+23
-2630	6,701283E+22	6,701337E+22	3,890788E+22	3,890720E+22	1,340262E+23	7,781509E+22	2,118413E+23
-2629	6,701443E+22	6,701403E+22	3,890831E+22	3,890837E+22	1,340285E+23	7,781668E+22	2,118451E+23
-2628	6,701571E+22	6,701384E+22	3,890804E+22	3,890813E+22	1,340296E+23	7,781617E+22	2,118457E+23
-2627	6,701191E+22	6,701406E+22	3,890934E+22	3,890826E+22	1,340260E+23	7,781760E+22	2,118436E+23
-2626	6,701413E+22	6,701442E+22	3,890937E+22	3,891061E+22	1,340285E+23	7,781998E+22	2,118485E+23
-2625	6,701276E+22	6,701273E+22	3,891013E+22	3,891002E+22	1,340255E+23	7,782016E+22	2,118456E+23
-2624	6,701078E+22	6,701272E+22	3,891168E+22	3,891080E+22	1,340235E+23	7,782248E+22	2,118460E+23
-2623	6,701417E+22	6,701261E+22	3,891114E+22	3,891225E+22	1,340268E+23	7,782338E+22	2,118502E+23
-2622	6,701183E+22	6,701108E+22	3,891189E+22	3,891121E+22	1,340229E+23	7,782310E+22	2,118460E+23
-2621	6,701172E+22	6,701220E+22	3,891242E+22	3,891248E+22	1,340239E+23	7,782490E+22	2,118488E+23
-2620	6,701359E+22	6,701250E+22	3,891151E+22	3,891263E+22	1,340261E+23	7,782414E+22	2,118502E+23
-2619	6,701020E+22	6,701229E+22	3,891211E+22	3,891118E+22	1,340225E+23	7,782329E+22	2,118458E+23
-2618	6,701252E+22	6,701300E+22	3,891173E+22	3,891214E+22	1,340255E+23	7,782387E+22	2,118494E+23
-2617	6,701299E+22	6,701177E+22	3,891113E+22	3,891057E+22	1,340248E+23	7,782170E+22	2,118465E+23
-2616	6,701066E+22	6,701236E+22	3,891147E+22	3,890992E+22	1,340230E+23	7,782139E+22	2,118444E+23
-2615	6,701390E+22	6,701339E+22	3,890989E+22	3,891108E+22	1,340273E+23	7,782098E+22	2,118483E+23
-2614	6,701244E+22	6,701207E+22	3,890933E+22	3,890927E+22	1,340245E+23	7,781859E+22	2,118431E+23
-2613	6,701188E+22	6,701325E+22	3,890952E+22	3,890938E+22	1,340251E+23	7,781890E+22	2,118440E+23
-2612	6,701505E+22	6,701362E+22	3,890852E+22	3,890957E+22	1,340287E+23	7,781808E+22	2,118468E+23
-2611	6,701252E+22	6,701286E+22	3,890915E+22	3,890795E+22	1,340254E+23	7,781710E+22	2,118425E+23
-2610	6,701358E+22	6,701400E+22	3,890967E+22	3,890964E+22	1,340276E+23	7,781931E+22	2,118469E+23
-2609	6,701410E+22	6,701315E+22	3,890950E+22	3,890984E+22	1,340273E+23	7,781934E+22	2,118466E+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							
-2608	6,701060E+22	6,701306E+22	3,891091E+22	3,890995E+22	1,340237E+23	7,782085E+22	2,118445E+23
-2607	6,701284E+22	6,701351E+22	3,891105E+22	3,891217E+22	1,340264E+23	7,782322E+22	2,118496E+23
-2606	6,701224E+22	6,701097E+22	3,891142E+22	3,891145E+22	1,340232E+23	7,782287E+22	2,118461E+23
-2605	6,701061E+22	6,701126E+22	3,891287E+22	3,891197E+22	1,340219E+23	7,782484E+22	2,118467E+23
-2604	6,701339E+22	6,701177E+22	3,891242E+22	3,891367E+22	1,340252E+23	7,782609E+22	2,118513E+23
-2603	6,701088E+22	6,701077E+22	3,891284E+22	3,891251E+22	1,340216E+23	7,782535E+22	2,118470E+23
-2602	6,701063E+22	6,701217E+22	3,891342E+22	3,891368E+22	1,340228E+23	7,782710E+22	2,118499E+23
-2601	6,701236E+22	6,701148E+22	3,891279E+22	3,891360E+22	1,340238E+23	7,782639E+22	2,118502E+23
-2600	6,700968E+22	6,701107E+22	3,891350E+22	3,891190E+22	1,340208E+23	7,782540E+22	2,118462E+23
-2599	6,701174E+22	6,701221E+22	3,891310E+22	3,891300E+22	1,340240E+23	7,782609E+22	2,118500E+23
-2598	6,701235E+22	6,701072E+22	3,891189E+22	3,891185E+22	1,340231E+23	7,782374E+22	2,118468E+23
-2597	6,701007E+22	6,701163E+22	3,891204E+22	3,891109E+22	1,340217E+23	7,782312E+22	2,118448E+23
-2596	6,701292E+22	6,701283E+22	3,891078E+22	3,891227E+22	1,340258E+23	7,782304E+22	2,118488E+23
-2595	6,701196E+22	6,701161E+22	3,891019E+22	3,891006E+22	1,340236E+23	7,782025E+22	2,118438E+23
-2594	6,701158E+22	6,701289E+22	3,891063E+22	3,891011E+22	1,340245E+23	7,782074E+22	2,118452E+23
-2593	6,701425E+22	6,701263E+22	3,890997E+22	3,891063E+22	1,340269E+23	7,782060E+22	2,118475E+23
-2592	6,701169E+22	6,701210E+22	3,891061E+22	3,890936E+22	1,340238E+23	7,781998E+22	2,118438E+23
-2591	6,701190E+22	6,701355E+22	3,891116E+22	3,891128E+22	1,340255E+23	7,782244E+22	2,118479E+23
-2590	6,701287E+22	6,701185E+22	3,891064E+22	3,891163E+22	1,340247E+23	7,782227E+22	2,118470E+23
-2589	6,701000E+22	6,701143E+22	3,891208E+22	3,891117E+22	1,340214E+23	7,782326E+22	2,118447E+23
-2588	6,701215E+22	6,701205E+22	3,891255E+22	3,891337E+22	1,340242E+23	7,782592E+22	2,118501E+23
-2587	6,701196E+22	6,701007E+22	3,891263E+22	3,891258E+22	1,340220E+23	7,782521E+22	2,118472E+23
-2586	6,700998E+22	6,701110E+22	3,891397E+22	3,891330E+22	1,340211E+23	7,782726E+22	2,118483E+23
-2585	6,701206E+22	6,701123E+22	3,891374E+22	3,891515E+22	1,340233E+23	7,782888E+22	2,118522E+23
-2584	6,700985E+22	6,701020E+22	3,891426E+22	3,891374E+22	1,340201E+23	7,782799E+22	2,118480E+23
-2583	6,700940E+22	6,701165E+22	3,891504E+22	3,891464E+22	1,340210E+23	7,782967E+22	2,118507E+23
-2582	6,701177E+22	6,701006E+22	3,891403E+22	3,891465E+22	1,340218E+23	7,782868E+22	2,118505E+23
-2581	6,700931E+22	6,700968E+22	3,891457E+22	3,891287E+22	1,340190E+23	7,782744E+22	2,118464E+23
-2580	6,701068E+22	6,701141E+22	3,891412E+22	3,891435E+22	1,340221E+23	7,782847E+22	2,118506E+23
-2579	6,701146E+22	6,701026E+22	3,891245E+22	3,891310E+22	1,340217E+23	7,782555E+22	2,118473E+23
-2578	6,700939E+22	6,701143E+22	3,891261E+22	3,891214E+22	1,340208E+23	7,782476E+22	2,118456E+23
-2577	6,701223E+22	6,701185E+22	3,891181E+22	3,891308E+22	1,340241E+23	7,782489E+22	2,118490E+23
-2576	6,701178E+22	6,701074E+22	3,891143E+22	3,891070E+22	1,340225E+23	7,782213E+22	2,118447E+23
-2575	6,701090E+22	6,701254E+22	3,891212E+22	3,891097E+22	1,340234E+23	7,782309E+22	2,118465E+23
-2574	6,701336E+22	6,701176E+22	3,891107E+22	3,891202E+22	1,340251E+23	7,782309E+22	2,118482E+23
-2573	6,701065E+22	6,701121E+22	3,891175E+22	3,891079E+22	1,340219E+23	7,782255E+22	2,118444E+23
-2572	6,701048E+22	6,701265E+22	3,891260E+22	3,891283E+22	1,340231E+23	7,782543E+22	2,118486E+23
-2571	6,701204E+22	6,701075E+22	3,891191E+22	3,891288E+22	1,340228E+23	7,782480E+22	2,118476E+23
-2570	6,700963E+22	6,701050E+22	3,891337E+22	3,891238E+22	1,340201E+23	7,782575E+22	2,118459E+23
-2569	6,701141E+22	6,701068E+22	3,891405E+22	3,891479E+22	1,340221E+23	7,782884E+22	2,118509E+23
-2568	6,701117E+22	6,700939E+22	3,891399E+22	3,891410E+22	1,340206E+23	7,782809E+22	2,118486E+23
-2567	6,700859E+22	6,701091E+22	3,891541E+22	3,891476E+22	1,340195E+23	7,783017E+22	2,118497E+23
-2566	6,701096E+22	6,701021E+22	3,891494E+22	3,891655E+22	1,340212E+23	7,783149E+22	2,118527E+23
-2565	6,700924E+22	6,700896E+22	3,891557E+22	3,891465E+22	1,340182E+23	7,783022E+22	2,118484E+23
-2564	6,700851E+22	6,701055E+22	3,891652E+22	3,891562E+22	1,340191E+23	7,783213E+22	2,118512E+23
-2563	6,701114E+22	6,700928E+22	3,891502E+22	3,891572E+22	1,340204E+23	7,783074E+22	2,118512E+23
-2562	6,700860E+22	6,700940E+22	3,891526E+22	3,891412E+22	1,340180E+23	7,782938E+22	2,118474E+23
-2561	6,700954E+22	6,701061E+22	3,891501E+22	3,891569E+22	1,340201E+23	7,783070E+22	2,118508E+23
-2560	6,701086E+22	6,700971E+22	3,891340E+22	3,891409E+22	1,340206E+23	7,782749E+22	2,118481E+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	6,700874E+22	6,701097E+22	3,891384E+22	3,891275E+22	1,340197E+23	7,782658E+22	2,118463E+23
-2558	6,701197E+22	6,701067E+22	3,891290E+22	3,891387E+22	1,340226E+23	7,782676E+22	2,118494E+23
-2557	6,701150E+22	6,700968E+22	3,891257E+22	3,891156E+22	1,340212E+23	7,782413E+22	2,118453E+23
-2556	6,700949E+22	6,701195E+22	3,891341E+22	3,891237E+22	1,340214E+23	7,782578E+22	2,118472E+23
-2555	6,701204E+22	6,701121E+22	3,891205E+22	3,891350E+22	1,340233E+23	7,782556E+22	2,118488E+23
-2554	6,700965E+22	6,701049E+22	3,891280E+22	3,891218E+22	1,340201E+23	7,782498E+22	2,118451E+23
-2553	6,700954E+22	6,701106E+22	3,891408E+22	3,891412E+22	1,340206E+23	7,782820E+22	2,118488E+23
-2552	6,701168E+22	6,700954E+22	3,891340E+22	3,891405E+22	1,340212E+23	7,782745E+22	2,118487E+23
-2551	6,700888E+22	6,700998E+22	3,891492E+22	3,891366E+22	1,340189E+23	7,782858E+22	2,118474E+23
-2550	6,701055E+22	6,700990E+22	3,891522E+22	3,891645E+22	1,340204E+23	7,783167E+22	2,118521E+23
-2549	6,701026E+22	6,700869E+22	3,891528E+22	3,891552E+22	1,340189E+23	7,783080E+22	2,118498E+23
-2548	6,700722E+22	6,701033E+22	3,891703E+22	3,891612E+22	1,340176E+23	7,783315E+22	2,118507E+23
-2547	6,701010E+22	6,700934E+22	3,891631E+22	3,891757E+22	1,340194E+23	7,783388E+22	2,118533E+23
-2546	6,700872E+22	6,700812E+22	3,891685E+22	3,891573E+22	1,340168E+23	7,783259E+22	2,118494E+23
-2545	6,700751E+22	6,700922E+22	3,891784E+22	3,891699E+22	1,340167E+23	7,783483E+22	2,118516E+23
-2544	6,701011E+22	6,700858E+22	3,891595E+22	3,891710E+22	1,340187E+23	7,783305E+22	2,118517E+23
-2543	6,700753E+22	6,700907E+22	3,891617E+22	3,891531E+22	1,340166E+23	7,783148E+22	2,118481E+23
-2542	6,700903E+22	6,700941E+22	3,891567E+22	3,891665E+22	1,340184E+23	7,783231E+22	2,118507E+23
-2541	6,701079E+22	6,700856E+22	3,891432E+22	3,891451E+22	1,340194E+23	7,782883E+22	2,118482E+23
-2540	6,700828E+22	6,701032E+22	3,891509E+22	3,891337E+22	1,340186E+23	7,782845E+22	2,118471E+23
-2539	6,701129E+22	6,701029E+22	3,891387E+22	3,891471E+22	1,340216E+23	7,782858E+22	2,118502E+23
-2538	6,701050E+22	6,700966E+22	3,891350E+22	3,891287E+22	1,340202E+23	7,782637E+22	2,118465E+23
-2537	6,700793E+22	6,701102E+22	3,891472E+22	3,891396E+22	1,340189E+23	7,782868E+22	2,118476E+23
-2536	6,701086E+22	6,701034E+22	3,891341E+22	3,891490E+22	1,340212E+23	7,782830E+22	2,118495E+23
-2535	6,700884E+22	6,700954E+22	3,891436E+22	3,891337E+22	1,340184E+23	7,782773E+22	2,118461E+23
-2534	6,700921E+22	6,700936E+22	3,891538E+22	3,891551E+22	1,340186E+23	7,783089E+22	2,118495E+23
-2533	6,701132E+22	6,700835E+22	3,891471E+22	3,891542E+22	1,340197E+23	7,783014E+22	2,118498E+23
-2532	6,700763E+22	6,700953E+22	3,891632E+22	3,891531E+22	1,340172E+23	7,783163E+22	2,118488E+23
-2531	6,700936E+22	6,700948E+22	3,891639E+22	3,891791E+22	1,340188E+23	7,783430E+22	2,118531E+23
-2530	6,700938E+22	6,700819E+22	3,891656E+22	3,891676E+22	1,340176E+23	7,783332E+22	2,118509E+23
-2529	6,700614E+22	6,700890E+22	3,891873E+22	3,891730E+22	1,340150E+23	7,783603E+22	2,118511E+23
-2528	6,700937E+22	6,700833E+22	3,891782E+22	3,891867E+22	1,340177E+23	7,783649E+22	2,118542E+23
-2527	6,700776E+22	6,700746E+22	3,891818E+22	3,891693E+22	1,340152E+23	7,783512E+22	2,118503E+23
-2526	6,700661E+22	6,700811E+22	3,891863E+22	3,891847E+22	1,340147E+23	7,783710E+22	2,118518E+23
-2525	6,700954E+22	6,700764E+22	3,891677E+22	3,891818E+22	1,340172E+23	7,783494E+22	2,118521E+23
-2524	6,700669E+22	6,700850E+22	3,891721E+22	3,891617E+22	1,340152E+23	7,783338E+22	2,118486E+23
-2523	6,700873E+22	6,700881E+22	3,891654E+22	3,891718E+22	1,340175E+23	7,783372E+22	2,118513E+23
-2522	6,701060E+22	6,700816E+22	3,891527E+22	3,891519E+22	1,340188E+23	7,783046E+22	2,118492E+23
-2521	6,700716E+22	6,700949E+22	3,891636E+22	3,891460E+22	1,340166E+23	7,783096E+22	2,118476E+23
-2520	6,700983E+22	6,700996E+22	3,891497E+22	3,891609E+22	1,340198E+23	7,783106E+22	2,118509E+23
-2519	6,700903E+22	6,700917E+22	3,891476E+22	3,891430E+22	1,340182E+23	7,782905E+22	2,118473E+23
-2518	6,700711E+22	6,700940E+22	3,891580E+22	3,891538E+22	1,340165E+23	7,783117E+22	2,118477E+23
-2517	6,701067E+22	6,700868E+22	3,891469E+22	3,891590E+22	1,340193E+23	7,783059E+22	2,118499E+23
-2516	6,700839E+22	6,700858E+22	3,891577E+22	3,891456E+22	1,340170E+23	7,783033E+22	2,118473E+23
-2515	6,700872E+22	6,700884E+22	3,891642E+22	3,891678E+22	1,340176E+23	7,783320E+22	2,118508E+23
-2514	6,701051E+22	6,700836E+22	3,891582E+22	3,891691E+22	1,340189E+23	7,783273E+22	2,118516E+23
-2513	6,700622E+22	6,700882E+22	3,891798E+22	3,891693E+22	1,340150E+23	7,783491E+22	2,118499E+23
-2512	6,700799E+22	6,700884E+22	3,891809E+22	3,891912E+22	1,340168E+23	7,783721E+22	2,118540E+23
-2511	6,700836E+22	6,700731E+22	3,891842E+22	3,891793E+22	1,340157E+23	7,783635E+22	2,118520E+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	6,700548E+22	6,700702E+22	3,892011E+22	3,891873E+22	1,340125E+23	7,783884E+22	2,118513E+23
-2509	6,700858E+22	6,700689E+22	3,891897E+22	3,892005E+22	1,340155E+23	7,783902E+22	2,118545E+23
-2508	6,700657E+22	6,700681E+22	3,891913E+22	3,891846E+22	1,340134E+23	7,783759E+22	2,118510E+23
-2507	6,700589E+22	6,700745E+22	3,891917E+22	3,891957E+22	1,340133E+23	7,783874E+22	2,118521E+23
-2506	6,700924E+22	6,700725E+22	3,891746E+22	3,891888E+22	1,340165E+23	7,783634E+22	2,118528E+23
-2505	6,700619E+22	6,700754E+22	3,891842E+22	3,891684E+22	1,340137E+23	7,783526E+22	2,118490E+23
-2504	6,700803E+22	6,700847E+22	3,891772E+22	3,891781E+22	1,340165E+23	7,783552E+22	2,118520E+23
-2503	6,700954E+22	6,700809E+22	3,891651E+22	3,891624E+22	1,340176E+23	7,783275E+22	2,118504E+23
-2502	6,700599E+22	6,700845E+22	3,891732E+22	3,891614E+22	1,340144E+23	7,783346E+22	2,118479E+23
-2501	6,700884E+22	6,700882E+22	3,891610E+22	3,891738E+22	1,340177E+23	7,783349E+22	2,118511E+23
-2500	6,700811E+22	6,700817E+22	3,891606E+22	3,891553E+22	1,340163E+23	7,783159E+22	2,118479E+23
-2499	6,700693E+22	6,700819E+22	3,891683E+22	3,891638E+22	1,340151E+23	7,783321E+22	2,118483E+23
-2498	6,701063E+22	6,700792E+22	3,891577E+22	3,891704E+22	1,340186E+23	7,783281E+22	2,118514E+23
-2497	6,700739E+22	6,700775E+22	3,891717E+22	3,891613E+22	1,340151E+23	7,783330E+22	2,118484E+23
-2496	6,700733E+22	6,700872E+22	3,891776E+22	3,891827E+22	1,340161E+23	7,783602E+22	2,118521E+23
-2495	6,700912E+22	6,700796E+22	3,891744E+22	3,891831E+22	1,340171E+23	7,783575E+22	2,118528E+23
-2494	6,700517E+22	6,700719E+22	3,891954E+22	3,891836E+22	1,340124E+23	7,783791E+22	2,118503E+23
-2493	6,700733E+22	6,700719E+22	3,891975E+22	3,892023E+22	1,340145E+23	7,783998E+22	2,118545E+23
-2492	6,700739E+22	6,700620E+22	3,891995E+22	3,891933E+22	1,340136E+23	7,783928E+22	2,118529E+23
-2491	6,700472E+22	6,700619E+22	3,892095E+22	3,892019E+22	1,340109E+23	7,784114E+22	2,118520E+23
-2490	6,700789E+22	6,700651E+22	3,891966E+22	3,892144E+22	1,340144E+23	7,784110E+22	2,118555E+23
-2489	6,700556E+22	6,700605E+22	3,892021E+22	3,891973E+22	1,340116E+23	7,783995E+22	2,118516E+23
-2488	6,700515E+22	6,700713E+22	3,892026E+22	3,892022E+22	1,340123E+23	7,784048E+22	2,118528E+23
-2487	6,700876E+22	6,700683E+22	3,891885E+22	3,891947E+22	1,340156E+23	7,783832E+22	2,118539E+23
-2486	6,700566E+22	6,700631E+22	3,891958E+22	3,891789E+22	1,340120E+23	7,783747E+22	2,118494E+23
-2485	6,700705E+22	6,700756E+22	3,891882E+22	3,891891E+22	1,340146E+23	7,783773E+22	2,118523E+23
-2484	6,700810E+22	6,700757E+22	3,891757E+22	3,891770E+22	1,340157E+23	7,783527E+22	2,118509E+23
-2483	6,700522E+22	6,700742E+22	3,891801E+22	3,891735E+22	1,340126E+23	7,783537E+22	2,118480E+23
-2482	6,700858E+22	6,700786E+22	3,891697E+22	3,891833E+22	1,340164E+23	7,783530E+22	2,118517E+23
-2481	6,700777E+22	6,700689E+22	3,891737E+22	3,891661E+22	1,340147E+23	7,783398E+22	2,118486E+23
-2480	6,700634E+22	6,700775E+22	3,891801E+22	3,891733E+22	1,340141E+23	7,783533E+22	2,118494E+23
-2479	6,700966E+22	6,700791E+22	3,891717E+22	3,891836E+22	1,340176E+23	7,783553E+22	2,118531E+23
-2478	6,700624E+22	6,700682E+22	3,891848E+22	3,891783E+22	1,340131E+23	7,783632E+22	2,118494E+23
-2477	6,700603E+22	6,700768E+22	3,891939E+22	3,891961E+22	1,340137E+23	7,783900E+22	2,118527E+23
-2476	6,700786E+22	6,700701E+22	3,891924E+22	3,891973E+22	1,340149E+23	7,783897E+22	2,118538E+23
-2475	6,700463E+22	6,700565E+22	3,892092E+22	3,891969E+22	1,340103E+23	7,784061E+22	2,118509E+23
-2474	6,700678E+22	6,700610E+22	3,892094E+22	3,892167E+22	1,340129E+23	7,784261E+22	2,118555E+23
-2473	6,700620E+22	6,700512E+22	3,892117E+22	3,892111E+22	1,340113E+23	7,784228E+22	2,118536E+23
-2472	6,700348E+22	6,700585E+22	3,892185E+22	3,892155E+22	1,340093E+23	7,784340E+22	2,118527E+23
-2471	6,700706E+22	6,700613E+22	3,892084E+22	3,892248E+22	1,340132E+23	7,784332E+22	2,118565E+23
-2470	6,700515E+22	6,700472E+22	3,892133E+22	3,892062E+22	1,340099E+23	7,784195E+22	2,118518E+23
-2469	6,700488E+22	6,700604E+22	3,892158E+22	3,892072E+22	1,340109E+23	7,784230E+22	2,118532E+23
-2468	6,700794E+22	6,700638E+22	3,892012E+22	3,892037E+22	1,340143E+23	7,784049E+22	2,118548E+23
-2467	6,700485E+22	6,700575E+22	3,892034E+22	3,891909E+22	1,340106E+23	7,783943E+22	2,118500E+23
-2466	6,700613E+22	6,700716E+22	3,891958E+22	3,892016E+22	1,340133E+23	7,783974E+22	2,118530E+23
-2465	6,700689E+22	6,700655E+22	3,891874E+22	3,891904E+22	1,340134E+23	7,783778E+22	2,118512E+23
-2464	6,700450E+22	6,700675E+22	3,891909E+22	3,891822E+22	1,340112E+23	7,783731E+22	2,118486E+23
-2463	6,700831E+22	6,700702E+22	3,891830E+22	3,891922E+22	1,340153E+23	7,783752E+22	2,118528E+23
-2462	6,700724E+22	6,700556E+22	3,891851E+22	3,891799E+22	1,340128E+23	7,783650E+22	2,118493E+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							
-2461	6,700539E+22	6,700700E+22	3,891924E+22	3,891866E+22	1,340124E+23	7,783790E+22	2,118503E+23
-2460	6,700816E+22	6,700751E+22	3,891857E+22	3,891992E+22	1,340157E+23	7,783849E+22	2,118542E+23
-2459	6,700531E+22	6,700580E+22	3,891971E+22	3,891925E+22	1,340111E+23	7,783897E+22	2,118501E+23
-2458	6,700539E+22	6,700657E+22	3,892079E+22	3,892077E+22	1,340120E+23	7,784156E+22	2,118535E+23
-2457	6,700695E+22	6,700555E+22	3,892095E+22	3,892118E+22	1,340125E+23	7,784213E+22	2,118546E+23
-2456	6,700366E+22	6,700497E+22	3,892223E+22	3,892103E+22	1,340086E+23	7,784325E+22	2,118519E+23
-2455	6,700579E+22	6,700566E+22	3,892225E+22	3,892319E+22	1,340114E+23	7,784545E+22	2,118569E+23
-2454	6,700525E+22	6,700403E+22	3,892227E+22	3,892275E+22	1,340093E+23	7,784502E+22	2,118543E+23
-2453	6,700274E+22	6,700493E+22	3,892314E+22	3,892251E+22	1,340077E+23	7,784565E+22	2,118533E+23
-2452	6,700636E+22	6,700552E+22	3,892230E+22	3,892333E+22	1,340119E+23	7,784563E+22	2,118575E+23
-2451	6,700499E+22	6,700371E+22	3,892241E+22	3,892145E+22	1,340087E+23	7,784386E+22	2,118526E+23
-2450	6,700425E+22	6,700547E+22	3,892255E+22	3,892169E+22	1,340097E+23	7,784424E+22	2,118540E+23
-2449	6,700651E+22	6,700574E+22	3,892120E+22	3,892187E+22	1,340122E+23	7,784307E+22	2,118553E+23
-2448	6,700344E+22	6,700530E+22	3,892112E+22	3,892025E+22	1,340087E+23	7,784137E+22	2,118501E+23
-2447	6,700525E+22	6,700641E+22	3,892066E+22	3,892118E+22	1,340117E+23	7,784184E+22	2,118535E+23
-2446	6,700654E+22	6,700490E+22	3,891975E+22	3,892008E+22	1,340114E+23	7,783983E+22	2,118513E+23
-2445	6,700429E+22	6,700551E+22	3,892022E+22	3,891896E+22	1,340098E+23	7,783918E+22	2,118490E+23
-2444	6,700759E+22	6,700665E+22	3,891950E+22	3,892036E+22	1,340142E+23	7,783987E+22	2,118541E+23
-2443	6,700657E+22	6,700505E+22	3,891938E+22	3,891937E+22	1,340116E+23	7,783875E+22	2,118504E+23
-2442	6,700442E+22	6,700662E+22	3,892040E+22	3,891997E+22	1,340110E+23	7,784037E+22	2,118514E+23
-2441	6,700677E+22	6,700659E+22	3,892028E+22	3,892139E+22	1,340134E+23	7,784167E+22	2,118550E+23
-2440	6,700423E+22	6,700494E+22	3,892137E+22	3,892040E+22	1,340092E+23	7,784177E+22	2,118509E+23
-2439	6,700467E+22	6,700547E+22	3,892260E+22	3,892214E+22	1,340101E+23	7,784474E+22	2,118549E+23
-2438	6,700599E+22	6,700393E+22	3,892236E+22	3,892304E+22	1,340099E+23	7,784539E+22	2,118553E+23
-2437	6,700260E+22	6,700392E+22	3,892346E+22	3,892265E+22	1,340065E+23	7,784611E+22	2,118526E+23
-2436	6,700464E+22	6,700503E+22	3,892350E+22	3,892469E+22	1,340097E+23	7,784820E+22	2,118579E+23
-2435	6,700483E+22	6,700304E+22	3,892326E+22	3,892387E+22	1,340079E+23	7,784713E+22	2,118550E+23
-2434	6,700258E+22	6,700419E+22	3,892430E+22	3,892320E+22	1,340068E+23	7,784750E+22	2,118543E+23
-2433	6,700552E+22	6,700468E+22	3,892375E+22	3,892428E+22	1,340102E+23	7,784803E+22	2,118582E+23
-2432	6,700383E+22	6,700361E+22	3,892349E+22	3,892242E+22	1,340074E+23	7,784591E+22	2,118533E+23
-2431	6,700304E+22	6,700519E+22	3,892363E+22	3,892295E+22	1,340082E+23	7,784658E+22	2,118548E+23
-2430	6,700518E+22	6,700451E+22	3,892212E+22	3,892334E+22	1,340097E+23	7,784546E+22	2,118551E+23
-2429	6,700270E+22	6,700413E+22	3,892215E+22	3,892118E+22	1,340068E+23	7,784333E+22	2,118502E+23
-2428	6,700483E+22	6,700538E+22	3,892184E+22	3,892202E+22	1,340102E+23	7,784386E+22	2,118541E+23
-2427	6,700665E+22	6,700374E+22	3,892058E+22	3,892103E+22	1,340104E+23	7,784161E+22	2,118520E+23
-2426	6,700394E+22	6,700504E+22	3,892107E+22	3,891998E+22	1,340090E+23	7,784105E+22	2,118500E+23
-2425	6,700621E+22	6,700625E+22	3,892072E+22	3,892184E+22	1,340125E+23	7,784256E+22	2,118550E+23
-2424	6,700517E+22	6,700487E+22	3,892059E+22	3,892059E+22	1,340100E+23	7,784119E+22	2,118512E+23
-2423	6,700340E+22	6,700585E+22	3,892208E+22	3,892118E+22	1,340092E+23	7,784326E+22	2,118525E+23
-2422	6,700587E+22	6,700486E+22	3,892195E+22	3,892283E+22	1,340107E+23	7,784478E+22	2,118555E+23
-2421	6,700354E+22	6,700348E+22	3,892299E+22	3,892172E+22	1,340070E+23	7,784471E+22	2,118517E+23
-2420	6,700363E+22	6,700467E+22	3,892409E+22	3,892382E+22	1,340083E+23	7,784792E+22	2,118562E+23
-2419	6,700526E+22	6,700301E+22	3,892333E+22	3,892481E+22	1,340083E+23	7,784814E+22	2,118564E+23
-2418	6,700185E+22	6,700332E+22	3,892452E+22	3,892399E+22	1,340052E+23	7,784850E+22	2,118537E+23
-2417	6,700363E+22	6,700431E+22	3,892500E+22	3,892595E+22	1,340079E+23	7,785095E+22	2,118589E+23
-2416	6,700410E+22	6,700251E+22	3,892462E+22	3,892461E+22	1,340066E+23	7,784923E+22	2,118558E+23
-2415	6,700190E+22	6,700354E+22	3,892581E+22	3,892418E+22	1,340054E+23	7,784999E+22	2,118554E+23
-2414	6,700423E+22	6,700355E+22	3,892491E+22	3,892576E+22	1,340078E+23	7,785067E+22	2,118584E+23
-2413	6,700246E+22	6,700267E+22	3,892448E+22	3,892374E+22	1,340051E+23	7,784822E+22	2,118533E+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							
-2412	6,700183E+22	6,700434E+22	3,892465E+22	3,892420E+22	1,340062E+23	7,784884E+22	2,118550E+23
-2411	6,700494E+22	6,700312E+22	3,892280E+22	3,892429E+22	1,340081E+23	7,784709E+22	2,118551E+23
-2410	6,700287E+22	6,700310E+22	3,892292E+22	3,892173E+22	1,340060E+23	7,784466E+22	2,118506E+23
-2409	6,700441E+22	6,700470E+22	3,892292E+22	3,892292E+22	1,340091E+23	7,784584E+22	2,118549E+23
-2408	6,700579E+22	6,700389E+22	3,892151E+22	3,892192E+22	1,340097E+23	7,784343E+22	2,118531E+23
-2407	6,700292E+22	6,700508E+22	3,892237E+22	3,892125E+22	1,340080E+23	7,784361E+22	2,118516E+23
-2406	6,700471E+22	6,700531E+22	3,892218E+22	3,892333E+22	1,340100E+23	7,784551E+22	2,118555E+23
-2405	6,700406E+22	6,700376E+22	3,892229E+22	3,892183E+22	1,340078E+23	7,784413E+22	2,118519E+23
-2404	6,700252E+22	6,700457E+22	3,892390E+22	3,892257E+22	1,340071E+23	7,784646E+22	2,118536E+23
-2403	6,700536E+22	6,700327E+22	3,892324E+22	3,892450E+22	1,340086E+23	7,784774E+22	2,118564E+23
-2402	6,700288E+22	6,700253E+22	3,892406E+22	3,892338E+22	1,340054E+23	7,784745E+22	2,118529E+23
-2401	6,700228E+22	6,700385E+22	3,892528E+22	3,892564E+22	1,340061E+23	7,785092E+22	2,118570E+23
-2400	6,700412E+22	6,700264E+22	3,892448E+22	3,892603E+22	1,340068E+23	7,785050E+22	2,118573E+23
-2399	6,700134E+22	6,700266E+22	3,892603E+22	3,892497E+22	1,340040E+23	7,785099E+22	2,118550E+23
-2398	6,700280E+22	6,700296E+22	3,892654E+22	3,892698E+22	1,340058E+23	7,785352E+22	2,118593E+23
-2397	6,700328E+22	6,700166E+22	3,892608E+22	3,892561E+22	1,340049E+23	7,785168E+22	2,118566E+23
-2396	6,700066E+22	6,700297E+22	3,892712E+22	3,892552E+22	1,340036E+23	7,785263E+22	2,118563E+23
-2395	6,700323E+22	6,700258E+22	3,892568E+22	3,892721E+22	1,340058E+23	7,785289E+22	2,118587E+23
-2394	6,700178E+22	6,700179E+22	3,892526E+22	3,892478E+22	1,340036E+23	7,785003E+22	2,118536E+23
-2393	6,700112E+22	6,700333E+22	3,892571E+22	3,892519E+22	1,340044E+23	7,785089E+22	2,118553E+23
-2392	6,700466E+22	6,700253E+22	3,892376E+22	3,892487E+22	1,340072E+23	7,784863E+22	2,118558E+23
-2391	6,700268E+22	6,700269E+22	3,892404E+22	3,892262E+22	1,340054E+23	7,784666E+22	2,118520E+23
-2390	6,700327E+22	6,700404E+22	3,892395E+22	3,892427E+22	1,340073E+23	7,784822E+22	2,118555E+23
-2389	6,700450E+22	6,700343E+22	3,892265E+22	3,892318E+22	1,340079E+23	7,784583E+22	2,118538E+23
-2388	6,700163E+22	6,700437E+22	3,892386E+22	3,892260E+22	1,340060E+23	7,784645E+22	2,118525E+23
-2387	6,700404E+22	6,700385E+22	3,892347E+22	3,892463E+22	1,340079E+23	7,784810E+22	2,118560E+23
-2386	6,700366E+22	6,700238E+22	3,892363E+22	3,892298E+22	1,340060E+23	7,784661E+22	2,118526E+23
-2385	6,700162E+22	6,700346E+22	3,892531E+22	3,892418E+22	1,340051E+23	7,784950E+22	2,118546E+23
-2384	6,700433E+22	6,700280E+22	3,892431E+22	3,892595E+22	1,340071E+23	7,785027E+22	2,118574E+23
-2383	6,700198E+22	6,700210E+22	3,892533E+22	3,892495E+22	1,340041E+23	7,785028E+22	2,118544E+23
-2382	6,700108E+22	6,700284E+22	3,892669E+22	3,892711E+22	1,340039E+23	7,785381E+22	2,118577E+23
-2381	6,700331E+22	6,700170E+22	3,892613E+22	3,892702E+22	1,340050E+23	7,785315E+22	2,118582E+23
-2380	6,700063E+22	6,700171E+22	3,892787E+22	3,892607E+22	1,340023E+23	7,785394E+22	2,118563E+23
-2379	6,700206E+22	6,700173E+22	3,892782E+22	3,892834E+22	1,340038E+23	7,785616E+22	2,118599E+23
-2378	6,700224E+22	6,700085E+22	3,892708E+22	3,892701E+22	1,340031E+23	7,785408E+22	2,118572E+23
-2377	6,699920E+22	6,700212E+22	3,892812E+22	3,892710E+22	1,340013E+23	7,785521E+22	2,118565E+23
-2376	6,700223E+22	6,700191E+22	3,892650E+22	3,892815E+22	1,340041E+23	7,785465E+22	2,118588E+23
-2375	6,700166E+22	6,700101E+22	3,892628E+22	3,892556E+22	1,340027E+23	7,785184E+22	2,118545E+23
-2374	6,700072E+22	6,700218E+22	3,892673E+22	3,892602E+22	1,340029E+23	7,785275E+22	2,118557E+23
-2373	6,700413E+22	6,700211E+22	3,892482E+22	3,892569E+22	1,340062E+23	7,785051E+22	2,118567E+23
-2372	6,700174E+22	6,700257E+22	3,892522E+22	3,892382E+22	1,340043E+23	7,784904E+22	2,118534E+23
-2371	6,700219E+22	6,700337E+22	3,892491E+22	3,892560E+22	1,340056E+23	7,785051E+22	2,118561E+23
-2370	6,700365E+22	6,700265E+22	3,892383E+22	3,892431E+22	1,340063E+23	7,784814E+22	2,118545E+23
-2369	6,700066E+22	6,700309E+22	3,892535E+22	3,892388E+22	1,340038E+23	7,784922E+22	2,118530E+23
-2368	6,700331E+22	6,700279E+22	3,892482E+22	3,892570E+22	1,340061E+23	7,785052E+22	2,118566E+23
-2367	6,700317E+22	6,700148E+22	3,892494E+22	3,892451E+22	1,340047E+23	7,784945E+22	2,118541E+23
-2366	6,700029E+22	6,700233E+22	3,892645E+22	3,892600E+22	1,340026E+23	7,785245E+22	2,118551E+23
-2365	6,700315E+22	6,700208E+22	3,892558E+22	3,892745E+22	1,340052E+23	7,785302E+22	2,118582E+23
-2364	6,700111E+22	6,700128E+22	3,892693E+22	3,892625E+22	1,340024E+23	7,785317E+22	2,118556E+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							
-2363	6,700061E+22	6,700154E+22	3,892812E+22	3,892822E+22	1,340021E+23	7,785634E+22	2,118585E+23
-2362	6,700291E+22	6,700068E+22	3,892761E+22	3,892801E+22	1,340036E+23	7,785562E+22	2,118592E+23
-2361	6,699944E+22	6,700094E+22	3,892936E+22	3,892758E+22	1,340004E+23	7,785694E+22	2,118573E+23
-2360	6,700064E+22	6,700140E+22	3,892891E+22	3,892969E+22	1,340020E+23	7,785860E+22	2,118606E+23
-2359	6,700122E+22	6,700031E+22	3,892817E+22	3,892848E+22	1,340015E+23	7,785665E+22	2,118582E+23
-2358	6,699807E+22	6,700091E+22	3,892918E+22	3,892840E+22	1,339990E+23	7,785758E+22	2,118566E+23
-2357	6,700181E+22	6,700087E+22	3,892765E+22	3,892892E+22	1,340027E+23	7,785656E+22	2,118592E+23
-2356	6,700146E+22	6,700018E+22	3,892755E+22	3,892642E+22	1,340016E+23	7,785397E+22	2,118556E+23
-2355	6,700037E+22	6,700135E+22	3,892753E+22	3,892711E+22	1,340017E+23	7,785464E+22	2,118564E+23
-2354	6,700329E+22	6,700166E+22	3,892560E+22	3,892673E+22	1,340049E+23	7,785233E+22	2,118573E+23
-2353	6,700038E+22	6,700201E+22	3,892631E+22	3,892517E+22	1,340024E+23	7,785148E+22	2,118539E+23
-2352	6,700111E+22	6,700265E+22	3,892601E+22	3,892643E+22	1,340038E+23	7,785244E+22	2,118562E+23
-2351	6,700319E+22	6,700160E+22	3,892518E+22	3,892533E+22	1,340048E+23	7,785051E+22	2,118553E+23
-2350	6,699987E+22	6,700163E+22	3,892668E+22	3,892520E+22	1,340015E+23	7,785187E+22	2,118534E+23
-2349	6,700248E+22	6,700190E+22	3,892610E+22	3,892705E+22	1,340044E+23	7,785314E+22	2,118575E+23
-2348	6,700220E+22	6,700093E+22	3,892631E+22	3,892615E+22	1,340031E+23	7,785246E+22	2,118556E+23
-2347	6,699941E+22	6,700139E+22	3,892757E+22	3,892757E+22	1,340008E+23	7,785515E+22	2,118559E+23
-2346	6,700244E+22	6,700122E+22	3,892701E+22	3,892862E+22	1,340037E+23	7,785563E+22	2,118593E+23
-2345	6,700025E+22	6,700032E+22	3,892870E+22	3,892758E+22	1,340006E+23	7,785628E+22	2,118569E+23
-2344	6,699970E+22	6,700076E+22	3,892971E+22	3,892931E+22	1,340005E+23	7,785902E+22	2,118595E+23
-2343	6,700200E+22	6,700007E+22	3,892905E+22	3,892963E+22	1,340021E+23	7,785868E+22	2,118607E+23
-2342	6,699775E+22	6,699984E+22	3,893054E+22	3,892942E+22	1,339976E+23	7,785996E+22	2,118576E+23
-2341	6,699931E+22	6,700045E+22	3,893006E+22	3,893107E+22	1,339998E+23	7,786113E+22	2,118609E+23
-2340	6,700060E+22	6,699926E+22	3,892945E+22	3,892959E+22	1,339999E+23	7,785904E+22	2,118589E+23
-2339	6,699799E+22	6,699951E+22	3,893006E+22	3,892923E+22	1,339975E+23	7,785929E+22	2,118568E+23
-2338	6,700185E+22	6,700005E+22	3,892857E+22	3,892956E+22	1,340019E+23	7,785813E+22	2,118600E+23
-2337	6,700073E+22	6,699984E+22	3,892850E+22	3,892745E+22	1,340006E+23	7,785595E+22	2,118565E+23
-2336	6,699921E+22	6,700135E+22	3,892836E+22	3,892793E+22	1,340006E+23	7,785629E+22	2,118568E+23
-2335	6,700237E+22	6,700145E+22	3,892667E+22	3,892783E+22	1,340038E+23	7,785450E+22	2,118583E+23
-2334	6,699907E+22	6,700084E+22	3,892761E+22	3,892637E+22	1,339999E+23	7,785397E+22	2,118539E+23
-2333	6,700030E+22	6,700146E+22	3,892749E+22	3,892740E+22	1,340018E+23	7,785489E+22	2,118566E+23
-2332	6,700264E+22	6,700042E+22	3,892673E+22	3,892667E+22	1,340031E+23	7,785340E+22	2,118565E+23
-2331	6,699916E+22	6,700039E+22	3,892761E+22	3,892685E+22	1,339995E+23	7,785446E+22	2,118540E+23
-2330	6,700165E+22	6,700107E+22	3,892706E+22	3,892857E+22	1,340027E+23	7,785562E+22	2,118583E+23
-2329	6,700106E+22	6,700022E+22	3,892758E+22	3,892774E+22	1,340013E+23	7,785532E+22	2,118566E+23
-2328	6,699860E+22	6,700073E+22	3,892898E+22	3,892853E+22	1,339993E+23	7,785751E+22	2,118568E+23
-2327	6,700203E+22	6,700047E+22	3,892868E+22	3,892975E+22	1,340025E+23	7,785843E+22	2,118609E+23
-2326	6,699910E+22	6,699921E+22	3,893042E+22	3,892910E+22	1,339983E+23	7,785951E+22	2,118578E+23
-2325	6,699834E+22	6,700007E+22	3,893126E+22	3,893081E+22	1,339984E+23	7,786207E+22	2,118605E+23
-2324	6,700063E+22	6,699935E+22	3,893056E+22	3,893137E+22	1,340000E+23	7,786193E+22	2,118619E+23
-2323	6,699683E+22	6,699854E+22	3,893155E+22	3,893099E+22	1,339954E+23	7,786254E+22	2,118579E+23
-2322	6,699890E+22	6,699911E+22	3,893114E+22	3,893199E+22	1,339980E+23	7,786313E+22	2,118611E+23
-2321	6,700024E+22	6,699823E+22	3,893067E+22	3,893054E+22	1,339985E+23	7,786121E+22	2,118597E+23
-2320	6,699770E+22	6,699893E+22	3,893100E+22	3,892984E+22	1,339966E+23	7,786084E+22	2,118575E+23
-2319	6,700121E+22	6,699991E+22	3,892946E+22	3,893060E+22	1,340011E+23	7,786006E+22	2,118612E+23
-2318	6,699917E+22	6,699934E+22	3,892945E+22	3,892878E+22	1,339985E+23	7,785823E+22	2,118567E+23
-2317	6,699784E+22	6,700072E+22	3,892951E+22	3,892890E+22	1,339986E+23	7,785841E+22	2,118570E+23
-2316	6,700148E+22	6,700047E+22	3,892813E+22	3,892884E+22	1,340020E+23	7,785697E+22	2,118589E+23
-2315	6,699868E+22	6,699925E+22	3,892869E+22	3,892748E+22	1,339979E+23	7,785618E+22	2,118541E+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							
-2314	6,699995E+22	6,700021E+22	3,892860E+22	3,892852E+22	1,340002E+23	7,785712E+22	2,118573E+23
-2313	6,700174E+22	6,699981E+22	3,892783E+22	3,892828E+22	1,340016E+23	7,785610E+22	2,118577E+23
-2312	6,699821E+22	6,700006E+22	3,892857E+22	3,892811E+22	1,339983E+23	7,785668E+22	2,118549E+23
-2311	6,700094E+22	6,700076E+22	3,892832E+22	3,892992E+22	1,340017E+23	7,785824E+22	2,118599E+23
-2310	6,699994E+22	6,699923E+22	3,892922E+22	3,892907E+22	1,339992E+23	7,785830E+22	2,118575E+23
-2309	6,699772E+22	6,699977E+22	3,893090E+22	3,892964E+22	1,339975E+23	7,786054E+22	2,118580E+23
-2308	6,700110E+22	6,699954E+22	3,893067E+22	3,893129E+22	1,340006E+23	7,786195E+22	2,118626E+23
-2307	6,699782E+22	6,699789E+22	3,893171E+22	3,893098E+22	1,339957E+23	7,786268E+22	2,118584E+23
-2306	6,699713E+22	6,699886E+22	3,893243E+22	3,893246E+22	1,339960E+23	7,786489E+22	2,118609E+23
-2305	6,699952E+22	6,699817E+22	3,893174E+22	3,893287E+22	1,339977E+23	7,786461E+22	2,118623E+23
-2304	6,699636E+22	6,699748E+22	3,893253E+22	3,893172E+22	1,339938E+23	7,786426E+22	2,118581E+23
-2303	6,699897E+22	6,699843E+22	3,893217E+22	3,893278E+22	1,339974E+23	7,786496E+22	2,118624E+23
-2302	6,699942E+22	6,699758E+22	3,893176E+22	3,893156E+22	1,339970E+23	7,786332E+22	2,118603E+23
-2301	6,699658E+22	6,699887E+22	3,893211E+22	3,893079E+22	1,339955E+23	7,786289E+22	2,118583E+23
-2300	6,699993E+22	6,699971E+22	3,893076E+22	3,893177E+22	1,339996E+23	7,786253E+22	2,118622E+23
-2299	6,699803E+22	6,699831E+22	3,893046E+22	3,893003E+22	1,339963E+23	7,786049E+22	2,118568E+23
-2298	6,699719E+22	6,699937E+22	3,893071E+22	3,892983E+22	1,339966E+23	7,786054E+22	2,118571E+23
-2297	6,700085E+22	6,699923E+22	3,892942E+22	3,893005E+22	1,340001E+23	7,785946E+22	2,118595E+23
-2296	6,699824E+22	6,699834E+22	3,892961E+22	3,892858E+22	1,339966E+23	7,785819E+22	2,118548E+23
-2295	6,699940E+22	6,699977E+22	3,892941E+22	3,892999E+22	1,339992E+23	7,785940E+22	2,118586E+23
-2294	6,700040E+22	6,699913E+22	3,892891E+22	3,892987E+22	1,339995E+23	7,785877E+22	2,118583E+23
-2293	6,699720E+22	6,699947E+22	3,893000E+22	3,892919E+22	1,339967E+23	7,785919E+22	2,118559E+23
-2292	6,700018E+22	6,699993E+22	3,893022E+22	3,893099E+22	1,340001E+23	7,786121E+22	2,118613E+23
-2291	6,699932E+22	6,699790E+22	3,893084E+22	3,893043E+22	1,339972E+23	7,786127E+22	2,118585E+23
-2290	6,699688E+22	6,699851E+22	3,893250E+22	3,893104E+22	1,339954E+23	7,786354E+22	2,118589E+23
-2289	6,699956E+22	6,699875E+22	3,893214E+22	3,893316E+22	1,339983E+23	7,786530E+22	2,118636E+23
-2288	6,699664E+22	6,699706E+22	3,893282E+22	3,893249E+22	1,339937E+23	7,786531E+22	2,118590E+23
-2287	6,699639E+22	6,699800E+22	3,893355E+22	3,893386E+22	1,339944E+23	7,786741E+22	2,118618E+23
-2286	6,699862E+22	6,699701E+22	3,893309E+22	3,893411E+22	1,339956E+23	7,786719E+22	2,118628E+23
-2285	6,699591E+22	6,699669E+22	3,893391E+22	3,893254E+22	1,339926E+23	7,786645E+22	2,118591E+23
-2284	6,699831E+22	6,699799E+22	3,893359E+22	3,893387E+22	1,339963E+23	7,786746E+22	2,118638E+23
-2283	6,699830E+22	6,699693E+22	3,893262E+22	3,893294E+22	1,339952E+23	7,786556E+22	2,118608E+23
-2282	6,699544E+22	6,699803E+22	3,893309E+22	3,893192E+22	1,339935E+23	7,786501E+22	2,118585E+23
-2281	6,699872E+22	6,699885E+22	3,893192E+22	3,893289E+22	1,339976E+23	7,786481E+22	2,118624E+23
-2280	6,699757E+22	6,699717E+22	3,893144E+22	3,893072E+22	1,339947E+23	7,786217E+22	2,118569E+23
-2279	6,699715E+22	6,699846E+22	3,893166E+22	3,893081E+22	1,339956E+23	7,786246E+22	2,118581E+23
-2278	6,699999E+22	6,699838E+22	3,893045E+22	3,893136E+22	1,339984E+23	7,786181E+22	2,118602E+23
-2277	6,699730E+22	6,699809E+22	3,893064E+22	3,892977E+22	1,339954E+23	7,786041E+22	2,118558E+23
-2276	6,699851E+22	6,699951E+22	3,893077E+22	3,893130E+22	1,339980E+23	7,786207E+22	2,118601E+23
-2275	6,699945E+22	6,699814E+22	3,893018E+22	3,893115E+22	1,339976E+23	7,786132E+22	2,118589E+23
-2274	6,699659E+22	6,699819E+22	3,893170E+22	3,893025E+22	1,339948E+23	7,786195E+22	2,118567E+23
-2273	6,699922E+22	6,699880E+22	3,893204E+22	3,893238E+22	1,339980E+23	7,786442E+22	2,118624E+23
-2272	6,699826E+22	6,699688E+22	3,893223E+22	3,893195E+22	1,339951E+23	7,786418E+22	2,118593E+23
-2271	6,699574E+22	6,699778E+22	3,893362E+22	3,893296E+22	1,339935E+23	7,786658E+22	2,118601E+23
-2270	6,699785E+22	6,699759E+22	3,893339E+22	3,893503E+22	1,339954E+23	7,786842E+22	2,118639E+23
-2269	6,699567E+22	6,699606E+22	3,893415E+22	3,893370E+22	1,339917E+23	7,786785E+22	2,118596E+23
-2268	6,699604E+22	6,699701E+22	3,893509E+22	3,893488E+22	1,339931E+23	7,786997E+22	2,118630E+23
-2267	6,699821E+22	6,699588E+22	3,893428E+22	3,893521E+22	1,339941E+23	7,786949E+22	2,118636E+23
-2266	6,699536E+22	6,699596E+22	3,893513E+22	3,893357E+22	1,339913E+23	7,786870E+22	2,118600E+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							
-2265	6,699699E+22	6,699773E+22	3,893477E+22	3,893515E+22	1,339947E+23	7,786992E+22	2,118646E+23
-2264	6,699724E+22	6,699645E+22	3,893355E+22	3,893397E+22	1,339937E+23	7,786752E+22	2,118612E+23
-2263	6,699476E+22	6,699729E+22	3,893406E+22	3,893295E+22	1,339921E+23	7,786701E+22	2,118591E+23
-2262	6,699773E+22	6,699761E+22	3,893318E+22	3,893395E+22	1,339953E+23	7,786714E+22	2,118625E+23
-2261	6,699711E+22	6,699622E+22	3,893267E+22	3,893163E+22	1,339933E+23	7,786430E+22	2,118576E+23
-2260	6,699653E+22	6,699782E+22	3,893282E+22	3,893207E+22	1,339944E+23	7,786489E+22	2,118592E+23
-2259	6,699900E+22	6,699760E+22	3,893122E+22	3,893289E+22	1,339966E+23	7,786412E+22	2,118607E+23
-2258	6,699654E+22	6,699713E+22	3,893167E+22	3,893092E+22	1,339937E+23	7,786259E+22	2,118563E+23
-2257	6,699747E+22	6,699873E+22	3,893218E+22	3,893236E+22	1,339962E+23	7,786454E+22	2,118607E+23
-2256	6,699898E+22	6,699718E+22	3,893153E+22	3,893205E+22	1,339962E+23	7,786358E+22	2,118597E+23
-2255	6,699609E+22	6,699733E+22	3,893310E+22	3,893160E+22	1,339934E+23	7,786470E+22	2,118581E+23
-2254	6,699760E+22	6,699794E+22	3,893358E+22	3,893417E+22	1,339955E+23	7,786776E+22	2,118633E+23
-2253	6,699681E+22	6,699625E+22	3,893367E+22	3,893365E+22	1,339931E+23	7,786731E+22	2,118604E+23
-2252	6,699459E+22	6,699695E+22	3,893516E+22	3,893465E+22	1,339915E+23	7,786980E+22	2,118613E+23
-2251	6,699698E+22	6,699617E+22	3,893468E+22	3,893651E+22	1,339931E+23	7,787120E+22	2,118643E+23
-2250	6,699547E+22	6,699458E+22	3,893564E+22	3,893473E+22	1,339901E+23	7,787037E+22	2,118604E+23
-2249	6,699548E+22	6,699620E+22	3,893659E+22	3,893603E+22	1,339917E+23	7,787262E+22	2,118643E+23
-2248	6,699749E+22	6,699537E+22	3,893532E+22	3,893636E+22	1,339929E+23	7,787168E+22	2,118645E+23
-2247	6,699440E+22	6,699569E+22	3,893601E+22	3,893498E+22	1,339901E+23	7,787099E+22	2,118611E+23
-2246	6,699531E+22	6,699695E+22	3,893594E+22	3,893643E+22	1,339923E+23	7,787238E+22	2,118646E+23
-2245	6,699622E+22	6,699560E+22	3,893479E+22	3,893480E+22	1,339918E+23	7,786959E+22	2,118614E+23
-2244	6,699443E+22	6,699626E+22	3,893539E+22	3,893385E+22	1,339907E+23	7,786924E+22	2,118599E+23
-2243	6,699722E+22	6,699627E+22	3,893408E+22	3,893507E+22	1,339935E+23	7,786915E+22	2,118626E+23
-2242	6,699663E+22	6,699532E+22	3,893356E+22	3,893276E+22	1,339920E+23	7,786632E+22	2,118583E+23
-2241	6,699556E+22	6,699749E+22	3,893374E+22	3,893334E+22	1,339930E+23	7,786708E+22	2,118601E+23
-2240	6,699820E+22	6,699708E+22	3,893209E+22	3,893390E+22	1,339953E+23	7,786600E+22	2,118613E+23
-2239	6,699604E+22	6,699657E+22	3,893280E+22	3,893200E+22	1,339926E+23	7,786480E+22	2,118574E+23
-2238	6,699634E+22	6,699765E+22	3,893385E+22	3,893352E+22	1,339940E+23	7,786737E+22	2,118614E+23
-2237	6,699802E+22	6,699634E+22	3,893322E+22	3,893334E+22	1,339944E+23	7,786655E+22	2,118609E+23
-2236	6,699496E+22	6,699652E+22	3,893471E+22	3,893340E+22	1,339915E+23	7,786811E+22	2,118596E+23
-2235	6,699605E+22	6,699664E+22	3,893479E+22	3,893617E+22	1,339927E+23	7,787095E+22	2,118636E+23
-2234	6,699592E+22	6,699474E+22	3,893503E+22	3,893520E+22	1,339907E+23	7,787023E+22	2,118609E+23
-2233	6,699388E+22	6,699576E+22	3,893662E+22	3,893590E+22	1,339896E+23	7,787252E+22	2,118622E+23
-2232	6,699687E+22	6,699507E+22	3,893596E+22	3,893747E+22	1,339919E+23	7,787343E+22	2,118654E+23
-2231	6,699531E+22	6,699407E+22	3,893680E+22	3,893589E+22	1,339894E+23	7,787270E+22	2,118621E+23
-2230	6,699403E+22	6,699586E+22	3,893798E+22	3,893741E+22	1,339899E+23	7,787539E+22	2,118653E+23
-2229	6,699611E+22	6,699525E+22	3,893665E+22	3,893760E+22	1,339914E+23	7,787426E+22	2,118656E+23
-2228	6,699317E+22	6,699509E+22	3,893745E+22	3,893624E+22	1,339883E+23	7,787369E+22	2,118620E+23
-2227	6,699416E+22	6,699556E+22	3,893713E+22	3,893762E+22	1,339897E+23	7,787475E+22	2,118645E+23
-2226	6,699594E+22	6,699391E+22	3,893601E+22	3,893571E+22	1,339898E+23	7,787173E+22	2,118616E+23
-2225	6,699384E+22	6,699524E+22	3,893641E+22	3,893497E+22	1,339891E+23	7,787138E+22	2,118605E+23
-2224	6,699670E+22	6,699564E+22	3,893462E+22	3,893624E+22	1,339923E+23	7,787086E+22	2,118632E+23
-2223	6,699605E+22	6,699500E+22	3,893405E+22	3,893400E+22	1,339911E+23	7,786804E+22	2,118591E+23
-2222	6,699429E+22	6,699689E+22	3,893484E+22	3,893438E+22	1,339912E+23	7,786922E+22	2,118604E+23
-2221	6,699746E+22	6,699648E+22	3,893351E+22	3,893458E+22	1,339939E+23	7,786809E+22	2,118620E+23
-2220	6,699553E+22	6,699576E+22	3,893452E+22	3,893305E+22	1,339913E+23	7,786756E+22	2,118589E+23
-2219	6,699520E+22	6,699645E+22	3,893531E+22	3,893503E+22	1,339917E+23	7,787034E+22	2,118620E+23
-2218	6,699696E+22	6,699518E+22	3,893467E+22	3,893501E+22	1,339921E+23	7,786968E+22	2,118618E+23
-2217	6,699365E+22	6,699567E+22	3,893610E+22	3,893519E+22	1,339893E+23	7,787129E+22	2,118606E+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							
-2216	6,699528E+22	6,699548E+22	3,893595E+22	3,893762E+22	1,339908E+23	7,787357E+22	2,118643E+23
-2215	6,699566E+22	6,699377E+22	3,893626E+22	3,893652E+22	1,339894E+23	7,787278E+22	2,118622E+23
-2214	6,699311E+22	6,699472E+22	3,893828E+22	3,893714E+22	1,339878E+23	7,787541E+22	2,118632E+23
-2213	6,699601E+22	6,699460E+22	3,893756E+22	3,893866E+22	1,339906E+23	7,787622E+22	2,118668E+23
-2212	6,699417E+22	6,699384E+22	3,893832E+22	3,893750E+22	1,339880E+23	7,787582E+22	2,118638E+23
-2211	6,699228E+22	6,699487E+22	3,893914E+22	3,893899E+22	1,339872E+23	7,787813E+22	2,118653E+23
-2210	6,699499E+22	6,699384E+22	3,893795E+22	3,893878E+22	1,339888E+23	7,787673E+22	2,118656E+23
-2209	6,699241E+22	6,699380E+22	3,893870E+22	3,893724E+22	1,339862E+23	7,787594E+22	2,118622E+23
-2208	6,699398E+22	6,699416E+22	3,893799E+22	3,893846E+22	1,339881E+23	7,787645E+22	2,118646E+23
-2207	6,699583E+22	6,699328E+22	3,893662E+22	3,893679E+22	1,339891E+23	7,787341E+22	2,118625E+23
-2206	6,699280E+22	6,699487E+22	3,893723E+22	3,893613E+22	1,339877E+23	7,787337E+22	2,118610E+23
-2205	6,699575E+22	6,699560E+22	3,893558E+22	3,893714E+22	1,339913E+23	7,787272E+22	2,118641E+23
-2204	6,699531E+22	6,699476E+22	3,893534E+22	3,893498E+22	1,339901E+23	7,787032E+22	2,118604E+23
-2203	6,699327E+22	6,699576E+22	3,893626E+22	3,893535E+22	1,339890E+23	7,787161E+22	2,118606E+23
-2202	6,699693E+22	6,699506E+22	3,893520E+22	3,893563E+22	1,339920E+23	7,787083E+22	2,118628E+23
-2201	6,699449E+22	6,699477E+22	3,893609E+22	3,893459E+22	1,339893E+23	7,787068E+22	2,118599E+23
-2200	6,699411E+22	6,699542E+22	3,893638E+22	3,893681E+22	1,339895E+23	7,787319E+22	2,118627E+23
-2199	6,699604E+22	6,699430E+22	3,893561E+22	3,893680E+22	1,339903E+23	7,787241E+22	2,118628E+23
-2198	6,699241E+22	6,699456E+22	3,893747E+22	3,893668E+22	1,339870E+23	7,787415E+22	2,118611E+23
-2197	6,699478E+22	6,699464E+22	3,893748E+22	3,893866E+22	1,339894E+23	7,787614E+22	2,118656E+23
-2196	6,699530E+22	6,699308E+22	3,893793E+22	3,893773E+22	1,339884E+23	7,787566E+22	2,118640E+23
-2195	6,699193E+22	6,699388E+22	3,893977E+22	3,893860E+22	1,339858E+23	7,787837E+22	2,118642E+23
-2194	6,699487E+22	6,699376E+22	3,893907E+22	3,894011E+22	1,339886E+23	7,787919E+22	2,118678E+23
-2193	6,699263E+22	6,699315E+22	3,893978E+22	3,893900E+22	1,339858E+23	7,787878E+22	2,118646E+23
-2192	6,699127E+22	6,699369E+22	3,894025E+22	3,894022E+22	1,339850E+23	7,788047E+22	2,118654E+23
-2191	6,699459E+22	6,699262E+22	3,893892E+22	3,893984E+22	1,339872E+23	7,787876E+22	2,118660E+23
-2190	6,699174E+22	6,699258E+22	3,893987E+22	3,893829E+22	1,339843E+23	7,787816E+22	2,118625E+23
-2189	6,699344E+22	6,699362E+22	3,893894E+22	3,893942E+22	1,339871E+23	7,787836E+22	2,118654E+23
-2188	6,699508E+22	6,699316E+22	3,893752E+22	3,893804E+22	1,339882E+23	7,787555E+22	2,118638E+23
-2187	6,699155E+22	6,699419E+22	3,893811E+22	3,893728E+22	1,339857E+23	7,787538E+22	2,118611E+23
-2186	6,699505E+22	6,699457E+22	3,893686E+22	3,893790E+22	1,339896E+23	7,787475E+22	2,118644E+23
-2185	6,699464E+22	6,699391E+22	3,893683E+22	3,893582E+22	1,339885E+23	7,787265E+22	2,118612E+23
-2184	6,699277E+22	6,699460E+22	3,893748E+22	3,893642E+22	1,339874E+23	7,787390E+22	2,118613E+23
-2183	6,699617E+22	6,699439E+22	3,893626E+22	3,893715E+22	1,339906E+23	7,787340E+22	2,118640E+23
-2182	6,699301E+22	6,699405E+22	3,893736E+22	3,893638E+22	1,339871E+23	7,787374E+22	2,118608E+23
-2181	6,699290E+22	6,699475E+22	3,893767E+22	3,893828E+22	1,339876E+23	7,787596E+22	2,118636E+23
-2180	6,699530E+22	6,699360E+22	3,893711E+22	3,893828E+22	1,339889E+23	7,787540E+22	2,118643E+23
-2179	6,699162E+22	6,699311E+22	3,893899E+22	3,893795E+22	1,339847E+23	7,787694E+22	2,118617E+23
-2178	6,699430E+22	6,699327E+22	3,893923E+22	3,893985E+22	1,339876E+23	7,787908E+22	2,118667E+23
-2177	6,699423E+22	6,699248E+22	3,893956E+22	3,893928E+22	1,339867E+23	7,787884E+22	2,118655E+23
-2176	6,699065E+22	6,699302E+22	3,894094E+22	3,894026E+22	1,339837E+23	7,788120E+22	2,118649E+23
-2175	6,699368E+22	6,699293E+22	3,894016E+22	3,894162E+22	1,339866E+23	7,788178E+22	2,118684E+23
-2174	6,699135E+22	6,699190E+22	3,894118E+22	3,894025E+22	1,339832E+23	7,788143E+22	2,118647E+23
-2173	6,699070E+22	6,699257E+22	3,894156E+22	3,894104E+22	1,339833E+23	7,788260E+22	2,118659E+23
-2172	6,699430E+22	6,699193E+22	3,894012E+22	3,894092E+22	1,339862E+23	7,788104E+22	2,118673E+23
-2171	6,699082E+22	6,699180E+22	3,894078E+22	3,893949E+22	1,339826E+23	7,788027E+22	2,118629E+23
-2170	6,699272E+22	6,699303E+22	3,893994E+22	3,894052E+22	1,339858E+23	7,788046E+22	2,118662E+23
-2169	6,699404E+22	6,699291E+22	3,893866E+22	3,893907E+22	1,339870E+23	7,787772E+22	2,118647E+23
-2168	6,699089E+22	6,699337E+22	3,893915E+22	3,893819E+22	1,339843E+23	7,787733E+22	2,118616E+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							
-2167	6,699462E+22	6,699369E+22	3,893801E+22	3,893877E+22	1,339883E+23	7,787679E+22	2,118651E+23
-2166	6,699361E+22	6,699289E+22	3,893831E+22	3,893710E+22	1,339865E+23	7,787540E+22	2,118619E+23
-2165	6,699172E+22	6,699397E+22	3,893872E+22	3,893788E+22	1,339857E+23	7,787659E+22	2,118623E+23
-2164	6,699498E+22	6,699383E+22	3,893738E+22	3,893891E+22	1,339888E+23	7,787629E+22	2,118651E+23
-2163	6,699163E+22	6,699275E+22	3,893848E+22	3,893797E+22	1,339844E+23	7,787645E+22	2,118608E+23
-2162	6,699245E+22	6,699323E+22	3,893910E+22	3,893940E+22	1,339857E+23	7,787850E+22	2,118642E+23
-2161	6,699480E+22	6,699256E+22	3,893874E+22	3,893935E+22	1,339874E+23	7,787809E+22	2,118654E+23
-2160	6,699121E+22	6,699211E+22	3,894037E+22	3,893922E+22	1,339833E+23	7,787959E+22	2,118629E+23
-2159	6,699343E+22	6,699279E+22	3,894051E+22	3,894130E+22	1,339862E+23	7,788182E+22	2,118680E+23
-2158	6,699255E+22	6,699195E+22	3,894113E+22	3,894098E+22	1,339845E+23	7,788211E+22	2,118666E+23
-2157	6,698925E+22	6,699236E+22	3,894244E+22	3,894165E+22	1,339816E+23	7,788408E+22	2,118657E+23
-2156	6,699266E+22	6,699209E+22	3,894167E+22	3,894298E+22	1,339847E+23	7,788465E+22	2,118694E+23
-2155	6,699046E+22	6,699029E+22	3,894257E+22	3,894150E+22	1,339808E+23	7,788407E+22	2,118648E+23
-2154	6,699037E+22	6,699113E+22	3,894286E+22	3,894218E+22	1,339815E+23	7,788504E+22	2,118665E+23
-2153	6,699346E+22	6,699145E+22	3,894120E+22	3,894225E+22	1,339849E+23	7,788346E+22	2,118684E+23
-2152	6,699004E+22	6,699118E+22	3,894140E+22	3,894077E+22	1,339812E+23	7,788217E+22	2,118634E+23
-2151	6,699199E+22	6,699255E+22	3,894067E+22	3,894145E+22	1,339845E+23	7,788212E+22	2,118667E+23
-2150	6,699314E+22	6,699217E+22	3,893990E+22	3,893990E+22	1,339853E+23	7,787980E+22	2,118651E+23
-2149	6,699030E+22	6,699255E+22	3,894044E+22	3,893886E+22	1,339829E+23	7,787930E+22	2,118621E+23
-2148	6,699387E+22	6,699319E+22	3,893931E+22	3,893997E+22	1,339871E+23	7,787928E+22	2,118663E+23
-2147	6,699229E+22	6,699185E+22	3,893942E+22	3,893863E+22	1,339841E+23	7,787805E+22	2,118622E+23
-2146	6,699071E+22	6,699282E+22	3,893990E+22	3,893935E+22	1,339835E+23	7,787926E+22	2,118628E+23
-2145	6,699395E+22	6,699304E+22	3,893872E+22	3,894031E+22	1,339870E+23	7,787903E+22	2,118660E+23
-2144	6,699120E+22	6,699145E+22	3,893964E+22	3,893918E+22	1,339827E+23	7,787881E+22	2,118615E+23
-2143	6,699225E+22	6,699218E+22	3,894043E+22	3,894045E+22	1,339844E+23	7,788088E+22	2,118653E+23
-2142	6,699387E+22	6,699177E+22	3,894044E+22	3,894078E+22	1,339856E+23	7,788122E+22	2,118669E+23
-2141	6,698994E+22	6,699171E+22	3,894191E+22	3,894079E+22	1,339817E+23	7,788270E+22	2,118644E+23
-2140	6,699185E+22	6,699248E+22	3,894201E+22	3,894311E+22	1,339843E+23	7,788512E+22	2,118695E+23
-2139	6,699084E+22	6,699059E+22	3,894264E+22	3,894264E+22	1,339814E+23	7,788529E+22	2,118667E+23
-2138	6,698854E+22	6,699066E+22	3,894402E+22	3,894289E+22	1,339792E+23	7,788691E+22	2,118661E+23
-2137	6,699205E+22	6,699087E+22	3,894317E+22	3,894414E+22	1,339829E+23	7,788731E+22	2,118702E+23
-2136	6,699015E+22	6,698917E+22	3,894350E+22	3,894280E+22	1,339793E+23	7,788630E+22	2,118656E+23
-2135	6,698990E+22	6,699069E+22	3,894358E+22	3,894338E+22	1,339806E+23	7,788696E+22	2,118675E+23
-2134	6,699227E+22	6,699120E+22	3,894225E+22	3,894346E+22	1,339835E+23	7,788571E+22	2,118692E+23
-2133	6,698918E+22	6,699096E+22	3,894248E+22	3,894160E+22	1,339801E+23	7,788408E+22	2,118642E+23
-2132	6,699125E+22	6,699210E+22	3,894191E+22	3,894221E+22	1,339834E+23	7,788411E+22	2,118675E+23
-2131	6,699216E+22	6,699085E+22	3,894126E+22	3,894086E+22	1,339830E+23	7,788211E+22	2,118651E+23
-2130	6,698969E+22	6,699122E+22	3,894175E+22	3,894005E+22	1,339809E+23	7,788180E+22	2,118627E+23
-2129	6,699258E+22	6,699247E+22	3,894048E+22	3,894148E+22	1,339851E+23	7,788196E+22	2,118670E+23
-2128	6,699135E+22	6,699074E+22	3,894016E+22	3,894025E+22	1,339821E+23	7,788041E+22	2,118625E+23
-2127	6,699019E+22	6,699174E+22	3,894075E+22	3,894051E+22	1,339819E+23	7,788126E+22	2,118632E+23
-2126	6,699330E+22	6,699202E+22	3,894013E+22	3,894137E+22	1,339853E+23	7,788150E+22	2,118668E+23
-2125	6,699087E+22	6,699076E+22	3,894109E+22	3,894012E+22	1,339816E+23	7,788121E+22	2,118628E+23
-2124	6,699139E+22	6,699200E+22	3,894196E+22	3,894183E+22	1,339834E+23	7,788380E+22	2,118672E+23
-2123	6,699222E+22	6,699107E+22	3,894203E+22	3,894257E+22	1,339833E+23	7,788460E+22	2,118679E+23
-2122	6,698857E+22	6,699066E+22	3,894362E+22	3,894253E+22	1,339792E+23	7,788615E+22	2,118654E+23
-2121	6,699034E+22	6,699153E+22	3,894378E+22	3,894472E+22	1,339819E+23	7,788850E+22	2,118704E+23
-2120	6,699019E+22	6,698890E+22	3,894398E+22	3,894413E+22	1,339791E+23	7,788812E+22	2,118672E+23
-2119	6,698832E+22	6,698918E+22	3,894521E+22	3,894410E+22	1,339775E+23	7,788931E+22	2,118668E+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							
-2118	6,699135E+22	6,698999E+22	3,894445E+22	3,894556E+22	1,339813E+23	7,789001E+22	2,118713E+23
-2117	6,698933E+22	6,698883E+22	3,894438E+22	3,894402E+22	1,339782E+23	7,788840E+22	2,118666E+23
-2116	6,698889E+22	6,699066E+22	3,894449E+22	3,894452E+22	1,339795E+23	7,788901E+22	2,118686E+23
-2115	6,699111E+22	6,699024E+22	3,894340E+22	3,894436E+22	1,339813E+23	7,788776E+22	2,118691E+23
-2114	6,698864E+22	6,698968E+22	3,894386E+22	3,894226E+22	1,339783E+23	7,788611E+22	2,118644E+23
-2113	6,699041E+22	6,699129E+22	3,894335E+22	3,894305E+22	1,339817E+23	7,788640E+22	2,118681E+23
-2112	6,699145E+22	6,698974E+22	3,894216E+22	3,894218E+22	1,339812E+23	7,788434E+22	2,118655E+23
-2111	6,698893E+22	6,699043E+22	3,894250E+22	3,894141E+22	1,339794E+23	7,788391E+22	2,118633E+23
-2110	6,699144E+22	6,699176E+22	3,894156E+22	3,894293E+22	1,339832E+23	7,788449E+22	2,118677E+23
-2109	6,699068E+22	6,699011E+22	3,894123E+22	3,894133E+22	1,339808E+23	7,788256E+22	2,118633E+23
-2108	6,698977E+22	6,699124E+22	3,894204E+22	3,894153E+22	1,339810E+23	7,788357E+22	2,118646E+23
-2107	6,699248E+22	6,699087E+22	3,894174E+22	3,894261E+22	1,339834E+23	7,788435E+22	2,118677E+23
-2106	6,699006E+22	6,698984E+22	3,894278E+22	3,894165E+22	1,339799E+23	7,788443E+22	2,118643E+23
-2105	6,698971E+22	6,699154E+22	3,894366E+22	3,894359E+22	1,339813E+23	7,788724E+22	2,118685E+23
-2104	6,699084E+22	6,698983E+22	3,894336E+22	3,894449E+22	1,339807E+23	7,788784E+22	2,118685E+23
-2103	6,698780E+22	6,698914E+22	3,894496E+22	3,894397E+22	1,339769E+23	7,788894E+22	2,118659E+23
-2102	6,698951E+22	6,699003E+22	3,894539E+22	3,894602E+22	1,339795E+23	7,789141E+22	2,118709E+23
-2101	6,698986E+22	6,698790E+22	3,894526E+22	3,894527E+22	1,339778E+23	7,789053E+22	2,118683E+23
-2100	6,698777E+22	6,698888E+22	3,894623E+22	3,894537E+22	1,339767E+23	7,789160E+22	2,118683E+23
-2099	6,699005E+22	6,698937E+22	3,894558E+22	3,894693E+22	1,339794E+23	7,789252E+22	2,118719E+23
-2098	6,698842E+22	6,698826E+22	3,894563E+22	3,894514E+22	1,339767E+23	7,789077E+22	2,118674E+23
-2097	6,698767E+22	6,699017E+22	3,894595E+22	3,894536E+22	1,339778E+23	7,789132E+22	2,118692E+23
-2096	6,699048E+22	6,698895E+22	3,894457E+22	3,894532E+22	1,339794E+23	7,788990E+22	2,118693E+23
-2095	6,698827E+22	6,698835E+22	3,894496E+22	3,894322E+22	1,339766E+23	7,788818E+22	2,118648E+23
-2094	6,698927E+22	6,699041E+22	3,894450E+22	3,894446E+22	1,339797E+23	7,788896E+22	2,118686E+23
-2093	6,699042E+22	6,698922E+22	3,894290E+22	3,894360E+22	1,339796E+23	7,788650E+22	2,118661E+23
-2092	6,698807E+22	6,699004E+22	3,894322E+22	3,894271E+22	1,339781E+23	7,788593E+22	2,118640E+23
-2091	6,699059E+22	6,699058E+22	3,894272E+22	3,894402E+22	1,339812E+23	7,788674E+22	2,118679E+23
-2090	6,699049E+22	6,698898E+22	3,894265E+22	3,894219E+22	1,339795E+23	7,788484E+22	2,118643E+23
-2089	6,698904E+22	6,699069E+22	3,894374E+22	3,894256E+22	1,339797E+23	7,788630E+22	2,118660E+23
-2088	6,699158E+22	6,699002E+22	3,894310E+22	3,894419E+22	1,339816E+23	7,788729E+22	2,118689E+23
-2087	6,698893E+22	6,698901E+22	3,894418E+22	3,894330E+22	1,339779E+23	7,788749E+22	2,118654E+23
-2086	6,698813E+22	6,699066E+22	3,894536E+22	3,894537E+22	1,339788E+23	7,789073E+22	2,118695E+23
-2085	6,698982E+22	6,698868E+22	3,894482E+22	3,894589E+22	1,339785E+23	7,789071E+22	2,118692E+23
-2084	6,698724E+22	6,698806E+22	3,894636E+22	3,894528E+22	1,339753E+23	7,789164E+22	2,118669E+23
-2083	6,698876E+22	6,698849E+22	3,894690E+22	3,894745E+22	1,339773E+23	7,789435E+22	2,118716E+23
-2082	6,698911E+22	6,698701E+22	3,894658E+22	3,894674E+22	1,339761E+23	7,789332E+22	2,118694E+23
-2081	6,698641E+22	6,698870E+22	3,894755E+22	3,894677E+22	1,339751E+23	7,789432E+22	2,118694E+23
-2080	6,698901E+22	6,698844E+22	3,894661E+22	3,894825E+22	1,339774E+23	7,789486E+22	2,118723E+23
-2079	6,698782E+22	6,698715E+22	3,894680E+22	3,894597E+22	1,339750E+23	7,789277E+22	2,118677E+23
-2078	6,698682E+22	6,698915E+22	3,894738E+22	3,894624E+22	1,339760E+23	7,789362E+22	2,118696E+23
-2077	6,698981E+22	6,698819E+22	3,894561E+22	3,894628E+22	1,339780E+23	7,789189E+22	2,118699E+23
-2076	6,698749E+22	6,698806E+22	3,894575E+22	3,894451E+22	1,339755E+23	7,789026E+22	2,118658E+23
-2075	6,698802E+22	6,698950E+22	3,894548E+22	3,894590E+22	1,339775E+23	7,789138E+22	2,118689E+23
-2074	6,698970E+22	6,698845E+22	3,894398E+22	3,894479E+22	1,339781E+23	7,788877E+22	2,118669E+23
-2073	6,698733E+22	6,698948E+22	3,894457E+22	3,894358E+22	1,339768E+23	7,788815E+22	2,118650E+23
-2072	6,699029E+22	6,698933E+22	3,894397E+22	3,894505E+22	1,339796E+23	7,788902E+22	2,118686E+23
-2071	6,699023E+22	6,698793E+22	3,894404E+22	3,894331E+22	1,339782E+23	7,788735E+22	2,118655E+23
-2070	6,698766E+22	6,699004E+22	3,894532E+22	3,894416E+22	1,339777E+23	7,788947E+22	2,118672E+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							
-2069	6,699011E+22	6,698947E+22	3,894438E+22	3,894586E+22	1,339796E+23	7,789024E+22	2,118698E+23
-2068	6,698775E+22	6,698821E+22	3,894546E+22	3,894491E+22	1,339760E+23	7,789037E+22	2,118663E+23
-2067	6,698689E+22	6,698889E+22	3,894700E+22	3,894682E+22	1,339758E+23	7,789382E+22	2,118696E+23
-2066	6,698932E+22	6,698724E+22	3,894642E+22	3,894717E+22	1,339766E+23	7,789359E+22	2,118702E+23
-2065	6,698644E+22	6,698731E+22	3,894792E+22	3,894660E+22	1,339738E+23	7,789452E+22	2,118683E+23
-2064	6,698793E+22	6,698761E+22	3,894801E+22	3,894910E+22	1,339755E+23	7,789711E+22	2,118726E+23
-2063	6,698829E+22	6,698634E+22	3,894774E+22	3,894811E+22	1,339746E+23	7,789586E+22	2,118705E+23
-2062	6,698508E+22	6,698816E+22	3,894903E+22	3,894804E+22	1,339732E+23	7,789706E+22	2,118703E+23
-2061	6,698813E+22	6,698772E+22	3,894789E+22	3,894914E+22	1,339759E+23	7,789703E+22	2,118729E+23
-2060	6,698727E+22	6,698637E+22	3,894801E+22	3,894692E+22	1,339736E+23	7,789492E+22	2,118686E+23
-2059	6,698580E+22	6,698780E+22	3,894870E+22	3,894752E+22	1,339736E+23	7,789622E+22	2,118698E+23
-2058	6,698881E+22	6,698740E+22	3,894662E+22	3,894767E+22	1,339762E+23	7,789429E+22	2,118705E+23
-2057	6,698629E+22	6,698763E+22	3,894674E+22	3,894583E+22	1,339739E+23	7,789257E+22	2,118665E+23
-2056	6,698742E+22	6,698828E+22	3,894626E+22	3,894711E+22	1,339757E+23	7,789337E+22	2,118691E+23
-2055	6,698957E+22	6,698722E+22	3,894506E+22	3,894548E+22	1,339768E+23	7,789053E+22	2,118673E+23
-2054	6,698687E+22	6,698872E+22	3,894602E+22	3,894443E+22	1,339756E+23	7,789045E+22	2,118660E+23
-2053	6,698963E+22	6,698884E+22	3,894517E+22	3,894603E+22	1,339785E+23	7,789120E+22	2,118697E+23
-2052	6,698911E+22	6,698783E+22	3,894521E+22	3,894479E+22	1,339769E+23	7,789000E+22	2,118669E+23
-2051	6,698593E+22	6,698908E+22	3,894688E+22	3,894595E+22	1,339750E+23	7,789282E+22	2,118678E+23
-2050	6,698870E+22	6,698843E+22	3,894598E+22	3,894747E+22	1,339771E+23	7,789345E+22	2,118706E+23
-2049	6,698665E+22	6,698715E+22	3,894722E+22	3,894632E+22	1,339738E+23	7,789354E+22	2,118673E+23
-2048	6,698644E+22	6,698703E+22	3,894843E+22	3,894837E+22	1,339735E+23	7,789680E+22	2,118703E+23
-2047	6,698895E+22	6,698588E+22	3,894781E+22	3,894864E+22	1,339748E+23	7,789645E+22	2,118713E+23
-2046	6,698529E+22	6,698678E+22	3,894930E+22	3,894828E+22	1,339721E+23	7,789758E+22	2,118697E+23
-2045	6,698677E+22	6,698722E+22	3,894910E+22	3,895049E+22	1,339740E+23	7,789959E+22	2,118736E+23
-2044	6,698740E+22	6,698596E+22	3,894890E+22	3,894928E+22	1,339734E+23	7,789818E+22	2,118715E+23
-2043	6,698403E+22	6,698681E+22	3,895061E+22	3,894906E+22	1,339708E+23	7,789967E+22	2,118705E+23
-2042	6,698740E+22	6,698670E+22	3,894936E+22	3,895008E+22	1,339741E+23	7,789944E+22	2,118735E+23
-2041	6,698630E+22	6,698579E+22	3,894935E+22	3,894806E+22	1,339721E+23	7,789741E+22	2,118695E+23
-2040	6,698487E+22	6,698672E+22	3,894953E+22	3,894905E+22	1,339716E+23	7,789857E+22	2,118702E+23
-2039	6,698819E+22	6,698649E+22	3,894750E+22	3,894890E+22	1,339747E+23	7,789640E+22	2,118711E+23
-2038	6,698545E+22	6,698694E+22	3,894781E+22	3,894685E+22	1,339724E+23	7,789466E+22	2,118671E+23
-2037	6,698705E+22	6,698757E+22	3,894721E+22	3,894779E+22	1,339746E+23	7,789500E+22	2,118696E+23
-2036	6,698939E+22	6,698671E+22	3,894611E+22	3,894630E+22	1,339761E+23	7,789241E+22	2,118685E+23
-2035	6,698572E+22	6,698772E+22	3,894749E+22	3,894577E+22	1,339734E+23	7,789326E+22	2,118667E+23
-2034	6,698809E+22	6,698841E+22	3,894654E+22	3,894759E+22	1,339765E+23	7,789413E+22	2,118706E+23
-2033	6,698744E+22	6,698727E+22	3,894671E+22	3,894645E+22	1,339747E+23	7,789316E+22	2,118679E+23
-2032	6,698485E+22	6,698734E+22	3,894820E+22	3,894763E+22	1,339722E+23	7,789584E+22	2,118680E+23
-2031	6,698830E+22	6,698661E+22	3,894747E+22	3,894872E+22	1,339749E+23	7,789619E+22	2,118711E+23
-2030	6,698606E+22	6,698592E+22	3,894879E+22	3,894769E+22	1,339720E+23	7,789648E+22	2,118685E+23
-2029	6,698590E+22	6,698633E+22	3,894957E+22	3,894975E+22	1,339722E+23	7,789933E+22	2,118716E+23
-2028	6,698814E+22	6,698577E+22	3,894892E+22	3,895016E+22	1,339739E+23	7,789908E+22	2,118730E+23
-2027	6,698388E+22	6,698606E+22	3,895091E+22	3,894985E+22	1,339699E+23	7,790076E+22	2,118707E+23
-2026	6,698549E+22	6,698664E+22	3,895075E+22	3,895164E+22	1,339721E+23	7,790239E+22	2,118745E+23
-2025	6,698633E+22	6,698522E+22	3,895071E+22	3,895035E+22	1,339716E+23	7,790106E+22	2,118726E+23
-2024	6,698339E+22	6,698509E+22	3,895200E+22	3,895043E+22	1,339685E+23	7,790243E+22	2,118709E+23
-2023	6,698665E+22	6,698531E+22	3,895054E+22	3,895140E+22	1,339720E+23	7,790194E+22	2,118739E+23
-2022	6,698509E+22	6,698513E+22	3,895032E+22	3,894962E+22	1,339702E+23	7,789995E+22	2,118702E+23
-2021	6,698410E+22	6,698598E+22	3,895005E+22	3,895019E+22	1,339701E+23	7,790024E+22	2,118703E+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							
-2020	6,698777E+22	6,698594E+22	3,894816E+22	3,894971E+22	1,339737E+23	7,789787E+22	2,118716E+23
-2019	6,698493E+22	6,698588E+22	3,894904E+22	3,894761E+22	1,339708E+23	7,789665E+22	2,118675E+23
-2018	6,698641E+22	6,698707E+22	3,894849E+22	3,894849E+22	1,339735E+23	7,789698E+22	2,118705E+23
-2017	6,698829E+22	6,698661E+22	3,894753E+22	3,894745E+22	1,339749E+23	7,789499E+22	2,118699E+23
-2016	6,698449E+22	6,698668E+22	3,894869E+22	3,894748E+22	1,339712E+23	7,789617E+22	2,118673E+23
-2015	6,698690E+22	6,698723E+22	3,894795E+22	3,894911E+22	1,339741E+23	7,789705E+22	2,118712E+23
-2014	6,698628E+22	6,698617E+22	3,894828E+22	3,894797E+22	1,339725E+23	7,789625E+22	2,118687E+23
-2013	6,698442E+22	6,698594E+22	3,894945E+22	3,894887E+22	1,339704E+23	7,789832E+22	2,118687E+23
-2012	6,698811E+22	6,698564E+22	3,894872E+22	3,895006E+22	1,339738E+23	7,789879E+22	2,118725E+23
-2011	6,698510E+22	6,698488E+22	3,895031E+22	3,894937E+22	1,339700E+23	7,789968E+22	2,118697E+23
-2010	6,698454E+22	6,698610E+22	3,895098E+22	3,895133E+22	1,339706E+23	7,790230E+22	2,118729E+23
-2009	6,698673E+22	6,698550E+22	3,895058E+22	3,895163E+22	1,339722E+23	7,790221E+22	2,118744E+23
-2008	6,698283E+22	6,698457E+22	3,895247E+22	3,895129E+22	1,339674E+23	7,790377E+22	2,118712E+23
-2007	6,698484E+22	6,698511E+22	3,895241E+22	3,895269E+22	1,339699E+23	7,790510E+22	2,118750E+23
-2006	6,698541E+22	6,698410E+22	3,895220E+22	3,895162E+22	1,339695E+23	7,790382E+22	2,118733E+23
-2005	6,698257E+22	6,698420E+22	3,895281E+22	3,895177E+22	1,339668E+23	7,790458E+22	2,118713E+23
-2004	6,698591E+22	6,698490E+22	3,895114E+22	3,895276E+22	1,339708E+23	7,790390E+22	2,118747E+23
-2003	6,698402E+22	6,698423E+22	3,895133E+22	3,895089E+22	1,339682E+23	7,790221E+22	2,118705E+23
-2002	6,698335E+22	6,698556E+22	3,895108E+22	3,895092E+22	1,339689E+23	7,790200E+22	2,118709E+23
-2001	6,698728E+22	6,698547E+22	3,894953E+22	3,895035E+22	1,339728E+23	7,789988E+22	2,118726E+23
-2000	6,698447E+22	6,698459E+22	3,895027E+22	3,894872E+22	1,339691E+23	7,789899E+22	2,118681E+23
-1999	6,698549E+22	6,698614E+22	3,894978E+22	3,894969E+22	1,339716E+23	7,789947E+22	2,118711E+23
-1998	6,698674E+22	6,698605E+22	3,894882E+22	3,894908E+22	1,339728E+23	7,789790E+22	2,118707E+23
-1997	6,698346E+22	6,698560E+22	3,894967E+22	3,894895E+22	1,339691E+23	7,789862E+22	2,118677E+23
-1996	6,698635E+22	6,698611E+22	3,894906E+22	3,895033E+22	1,339725E+23	7,789939E+22	2,118718E+23
-1995	6,698568E+22	6,698464E+22	3,894984E+22	3,894929E+22	1,339703E+23	7,789914E+22	2,118695E+23
-1994	6,698379E+22	6,698527E+22	3,895086E+22	3,895007E+22	1,339691E+23	7,790093E+22	2,118700E+23
-1993	6,698708E+22	6,698551E+22	3,895030E+22	3,895159E+22	1,339726E+23	7,790188E+22	2,118745E+23
-1992	6,698398E+22	6,698400E+22	3,895175E+22	3,895125E+22	1,339680E+23	7,790300E+22	2,118710E+23
-1991	6,698331E+22	6,698510E+22	3,895267E+22	3,895274E+22	1,339684E+23	7,790541E+22	2,118738E+23
-1990	6,698543E+22	6,698462E+22	3,895240E+22	3,895305E+22	1,339700E+23	7,790545E+22	2,118755E+23
-1989	6,698225E+22	6,698308E+22	3,895383E+22	3,895252E+22	1,339653E+23	7,790635E+22	2,118717E+23
-1988	6,698419E+22	6,698398E+22	3,895357E+22	3,895399E+22	1,339682E+23	7,790756E+22	2,118757E+23
-1987	6,698418E+22	6,698300E+22	3,895338E+22	3,895330E+22	1,339672E+23	7,790668E+22	2,118739E+23
-1986	6,698134E+22	6,698377E+22	3,895363E+22	3,895309E+22	1,339651E+23	7,790672E+22	2,118718E+23
-1985	6,698501E+22	6,698449E+22	3,895221E+22	3,895380E+22	1,339695E+23	7,790601E+22	2,118755E+23
-1984	6,698367E+22	6,698287E+22	3,895233E+22	3,895178E+22	1,339665E+23	7,790412E+22	2,118707E+23
-1983	6,698316E+22	6,698442E+22	3,895235E+22	3,895141E+22	1,339676E+23	7,790376E+22	2,118713E+23
-1982	6,698653E+22	6,698501E+22	3,895085E+22	3,895126E+22	1,339715E+23	7,790211E+22	2,118737E+23
-1981	6,698362E+22	6,698402E+22	3,895116E+22	3,894997E+22	1,339676E+23	7,790113E+22	2,118688E+23
-1980	6,698439E+22	6,698574E+22	3,895073E+22	3,895109E+22	1,339701E+23	7,790183E+22	2,118720E+23
-1979	6,698535E+22	6,698496E+22	3,895024E+22	3,895066E+22	1,339703E+23	7,790089E+22	2,118712E+23
-1978	6,698251E+22	6,698474E+22	3,895101E+22	3,895013E+22	1,339673E+23	7,790114E+22	2,118684E+23
-1977	6,698589E+22	6,698514E+22	3,895068E+22	3,895155E+22	1,339710E+23	7,790222E+22	2,118733E+23
-1976	6,698514E+22	6,698310E+22	3,895123E+22	3,895094E+22	1,339682E+23	7,790217E+22	2,118704E+23
-1975	6,698289E+22	6,698438E+22	3,895230E+22	3,895165E+22	1,339673E+23	7,790394E+22	2,118712E+23
-1974	6,698560E+22	6,698501E+22	3,895180E+22	3,895330E+22	1,339706E+23	7,790510E+22	2,118757E+23
-1973	6,698292E+22	6,698295E+22	3,895305E+22	3,895273E+22	1,339659E+23	7,790577E+22	2,118716E+23
-1972	6,698256E+22	6,698404E+22	3,895409E+22	3,895390E+22	1,339666E+23	7,790800E+22	2,118746E+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 ^o	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1971	6,698443E+22	6,698309E+22	3,895413E+22	3,895441E+22	1,339675E+23	7,790854E+22	2,118761E+23
-1970	6,698122E+22	6,698233E+22	3,895516E+22	3,895380E+22	1,339636E+23	7,790896E+22	2,118725E+23
-1969	6,698312E+22	6,698350E+22	3,895485E+22	3,895545E+22	1,339666E+23	7,791029E+22	2,118769E+23
-1968	6,698321E+22	6,698185E+22	3,895439E+22	3,895490E+22	1,339651E+23	7,790929E+22	2,118744E+23
-1967	6,698067E+22	6,698283E+22	3,895478E+22	3,895405E+22	1,339635E+23	7,790882E+22	2,118723E+23
-1966	6,698433E+22	6,698385E+22	3,895353E+22	3,895461E+22	1,339682E+23	7,790814E+22	2,118763E+23
-1965	6,698353E+22	6,698189E+22	3,895335E+22	3,895255E+22	1,339654E+23	7,790590E+22	2,118713E+23
-1964	6,698263E+22	6,698386E+22	3,895335E+22	3,895234E+22	1,339665E+23	7,790570E+22	2,118722E+23
-1963	6,698505E+22	6,698437E+22	3,895210E+22	3,895280E+22	1,339694E+23	7,790489E+22	2,118743E+23
-1962	6,698210E+22	6,698365E+22	3,895220E+22	3,895137E+22	1,339658E+23	7,790357E+22	2,118693E+23
-1961	6,698324E+22	6,698498E+22	3,895210E+22	3,895240E+22	1,339682E+23	7,790450E+22	2,118727E+23
-1960	6,698482E+22	6,698321E+22	3,895153E+22	3,895204E+22	1,339680E+23	7,790358E+22	2,118716E+23
-1959	6,698226E+22	6,698324E+22	3,895238E+22	3,895114E+22	1,339655E+23	7,790352E+22	2,118690E+23
-1958	6,698511E+22	6,698450E+22	3,895208E+22	3,895292E+22	1,339696E+23	7,790500E+22	2,118746E+23
-1957	6,698444E+22	6,698245E+22	3,895225E+22	3,895249E+22	1,339669E+23	7,790474E+22	2,118716E+23
-1956	6,698182E+22	6,698392E+22	3,895356E+22	3,895309E+22	1,339657E+23	7,790664E+22	2,118724E+23
-1955	6,698411E+22	6,698410E+22	3,895363E+22	3,895486E+22	1,339682E+23	7,790849E+22	2,118767E+23
-1954	6,698175E+22	6,698210E+22	3,895478E+22	3,895394E+22	1,339638E+23	7,790872E+22	2,118726E+23
-1953	6,698169E+22	6,698296E+22	3,895596E+22	3,895526E+22	1,339646E+23	7,791122E+22	2,118759E+23
-1952	6,698346E+22	6,698142E+22	3,895556E+22	3,895622E+22	1,339649E+23	7,791178E+22	2,118767E+23
-1951	6,698017E+22	6,698119E+22	3,895634E+22	3,895538E+22	1,339614E+23	7,791172E+22	2,118731E+23
-1950	6,698194E+22	6,698283E+22	3,895599E+22	3,895694E+22	1,339648E+23	7,791292E+22	2,118777E+23
-1949	6,698278E+22	6,698081E+22	3,895521E+22	3,895594E+22	1,339636E+23	7,791115E+22	2,118747E+23
-1948	6,698052E+22	6,698209E+22	3,895576E+22	3,895465E+22	1,339626E+23	7,791041E+22	2,118730E+23
-1947	6,698363E+22	6,698303E+22	3,895492E+22	3,895547E+22	1,339667E+23	7,791038E+22	2,118771E+23
-1946	6,698245E+22	6,698183E+22	3,895447E+22	3,895351E+22	1,339643E+23	7,790798E+22	2,118723E+23
-1945	6,698136E+22	6,698373E+22	3,895461E+22	3,895370E+22	1,339651E+23	7,790832E+22	2,118734E+23
-1944	6,698364E+22	6,698316E+22	3,895323E+22	3,895443E+22	1,339668E+23	7,790767E+22	2,118745E+23
-1943	6,698123E+22	6,698236E+22	3,895347E+22	3,895257E+22	1,339636E+23	7,790604E+22	2,118696E+23
-1942	6,698266E+22	6,698372E+22	3,895347E+22	3,895351E+22	1,339664E+23	7,790698E+22	2,118734E+23
-1941	6,698474E+22	6,698174E+22	3,895256E+22	3,895321E+22	1,339665E+23	7,790576E+22	2,118722E+23
-1940	6,698186E+22	6,698257E+22	3,895340E+22	3,895239E+22	1,339644E+23	7,790578E+22	2,118702E+23
-1939	6,698369E+22	6,698392E+22	3,895348E+22	3,895459E+22	1,339676E+23	7,790807E+22	2,118757E+23
-1938	6,698293E+22	6,698223E+22	3,895364E+22	3,895392E+22	1,339652E+23	7,790757E+22	2,118727E+23
-1937	6,698066E+22	6,698317E+22	3,895541E+22	3,895443E+22	1,339638E+23	7,790985E+22	2,118737E+23
-1936	6,698308E+22	6,698232E+22	3,895544E+22	3,895636E+22	1,339654E+23	7,791181E+22	2,118772E+23
-1935	6,698100E+22	6,698057E+22	3,895653E+22	3,895528E+22	1,339616E+23	7,791181E+22	2,118734E+23
-1934	6,698053E+22	6,698204E+22	3,895749E+22	3,895692E+22	1,339626E+23	7,791442E+22	2,118770E+23
-1933	6,698261E+22	6,698046E+22	3,895650E+22	3,895796E+22	1,339631E+23	7,791446E+22	2,118775E+23
-1932	6,697944E+22	6,698058E+22	3,895727E+22	3,895669E+22	1,339600E+23	7,791396E+22	2,118740E+23
-1931	6,698096E+22	6,698207E+22	3,895735E+22	3,895814E+22	1,339630E+23	7,791549E+22	2,118785E+23
-1930	6,698214E+22	6,698042E+22	3,895647E+22	3,895665E+22	1,339626E+23	7,791312E+22	2,118757E+23
-1929	6,697994E+22	6,698155E+22	3,895726E+22	3,895554E+22	1,339615E+23	7,791280E+22	2,118743E+23
-1928	6,698249E+22	6,698200E+22	3,895615E+22	3,895689E+22	1,339645E+23	7,791304E+22	2,118775E+23
-1927	6,698116E+22	6,698093E+22	3,895556E+22	3,895484E+22	1,339621E+23	7,791040E+22	2,118725E+23
-1926	6,697996E+22	6,698283E+22	3,895575E+22	3,895508E+22	1,339628E+23	7,791083E+22	2,118736E+23
-1925	6,698318E+22	6,698167E+22	3,895404E+22	3,895557E+22	1,339649E+23	7,790962E+22	2,118745E+23
-1924	6,698119E+22	6,698112E+22	3,895437E+22	3,895334E+22	1,339623E+23	7,790771E+22	2,118700E+23
-1923	6,698213E+22	6,698277E+22	3,895474E+22	3,895464E+22	1,339649E+23	7,790938E+22	2,118743E+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							
-1922	6,698384E+22	6,698169E+22	3,895367E+22	3,895433E+22	1,339655E+23	7,790800E+22	2,118735E+23
-1921	6,698074E+22	6,698253E+22	3,895489E+22	3,895385E+22	1,339633E+23	7,790874E+22	2,118720E+23
-1920	6,698217E+22	6,698294E+22	3,895513E+22	3,895628E+22	1,339651E+23	7,791141E+22	2,118765E+23
-1919	6,698173E+22	6,698107E+22	3,895551E+22	3,895531E+22	1,339628E+23	7,791082E+22	2,118736E+23
-1918	6,697961E+22	6,698185E+22	3,895738E+22	3,895594E+22	1,339615E+23	7,791332E+22	2,118748E+23
-1917	6,698245E+22	6,698063E+22	3,895686E+22	3,895805E+22	1,339631E+23	7,791491E+22	2,118780E+23
-1916	6,698022E+22	6,697952E+22	3,895766E+22	3,895699E+22	1,339597E+23	7,791466E+22	2,118744E+23
-1915	6,697916E+22	6,698116E+22	3,895872E+22	3,895881E+22	1,339603E+23	7,791753E+22	2,118778E+23
-1914	6,698145E+22	6,698008E+22	3,895759E+22	3,895925E+22	1,339615E+23	7,791684E+22	2,118784E+23
-1913	6,697895E+22	6,698001E+22	3,895870E+22	3,895767E+22	1,339590E+23	7,791637E+22	2,118753E+23
-1912	6,698032E+22	6,698072E+22	3,895877E+22	3,895906E+22	1,339610E+23	7,791783E+22	2,118789E+23
-1911	6,698148E+22	6,697957E+22	3,895786E+22	3,895749E+22	1,339610E+23	7,791535E+22	2,118764E+23
-1910	6,697878E+22	6,698100E+22	3,895853E+22	3,895676E+22	1,339598E+23	7,791529E+22	2,118751E+23
-1909	6,698134E+22	6,698104E+22	3,895694E+22	3,895829E+22	1,339624E+23	7,791523E+22	2,118776E+23
-1908	6,698031E+22	6,698008E+22	3,895640E+22	3,895599E+22	1,339604E+23	7,791239E+22	2,118728E+23
-1907	6,697907E+22	6,698168E+22	3,895694E+22	3,895625E+22	1,339608E+23	7,791319E+22	2,118739E+23
-1906	6,698272E+22	6,698093E+22	3,895516E+22	3,895638E+22	1,339636E+23	7,791154E+22	2,118752E+23
-1905	6,698094E+22	6,698051E+22	3,895567E+22	3,895443E+22	1,339615E+23	7,791010E+22	2,118716E+23
-1904	6,698102E+22	6,698191E+22	3,895597E+22	3,895619E+22	1,339629E+23	7,791216E+22	2,118751E+23
-1903	6,698255E+22	6,698116E+22	3,895502E+22	3,895582E+22	1,339637E+23	7,791085E+22	2,118746E+23
-1902	6,697932E+22	6,698176E+22	3,895658E+22	3,895539E+22	1,339611E+23	7,791198E+22	2,118731E+23
-1901	6,698129E+22	6,698145E+22	3,895662E+22	3,895772E+22	1,339627E+23	7,791434E+22	2,118771E+23
-1900	6,698122E+22	6,697966E+22	3,895704E+22	3,895660E+22	1,339609E+23	7,791363E+22	2,118745E+23
-1899	6,697857E+22	6,698060E+22	3,895902E+22	3,895767E+22	1,339592E+23	7,791669E+22	2,118759E+23
-1898	6,698129E+22	6,698014E+22	3,895810E+22	3,895966E+22	1,339614E+23	7,791775E+22	2,118792E+23
-1897	6,697926E+22	6,697905E+22	3,895901E+22	3,895864E+22	1,339583E+23	7,791765E+22	2,118760E+23
-1896	6,697804E+22	6,698009E+22	3,896010E+22	3,896034E+22	1,339581E+23	7,792044E+22	2,118786E+23
-1895	6,698077E+22	6,697910E+22	3,895911E+22	3,896017E+22	1,339599E+23	7,791928E+22	2,118792E+23
-1894	6,697826E+22	6,697906E+22	3,896037E+22	3,895861E+22	1,339573E+23	7,791898E+22	2,118763E+23
-1893	6,697968E+22	6,697956E+22	3,895992E+22	3,896021E+22	1,339592E+23	7,792013E+22	2,118794E+23
-1892	6,698048E+22	6,697884E+22	3,895877E+22	3,895875E+22	1,339593E+23	7,791752E+22	2,118768E+23
-1891	6,697724E+22	6,698019E+22	3,895956E+22	3,895834E+22	1,339574E+23	7,791789E+22	2,118753E+23
-1890	6,698018E+22	6,698038E+22	3,895781E+22	3,895932E+22	1,339606E+23	7,791713E+22	2,118777E+23
-1889	6,697999E+22	6,697918E+22	3,895752E+22	3,895691E+22	1,339592E+23	7,791443E+22	2,118736E+23
-1888	6,697866E+22	6,698032E+22	3,895807E+22	3,895726E+22	1,339590E+23	7,791532E+22	2,118743E+23
-1887	6,698221E+22	6,698024E+22	3,895635E+22	3,895735E+22	1,339625E+23	7,791370E+22	2,118761E+23
-1886	6,697994E+22	6,698026E+22	3,895700E+22	3,895580E+22	1,339602E+23	7,791279E+22	2,118730E+23
-1885	6,697992E+22	6,698116E+22	3,895709E+22	3,895768E+22	1,339611E+23	7,791477E+22	2,118759E+23
-1884	6,698156E+22	6,698037E+22	3,895641E+22	3,895717E+22	1,339619E+23	7,791358E+22	2,118755E+23
-1883	6,697819E+22	6,698051E+22	3,895838E+22	3,895694E+22	1,339587E+23	7,791532E+22	2,118740E+23
-1882	6,698034E+22	6,698037E+22	3,895826E+22	3,895901E+22	1,339607E+23	7,791727E+22	2,118780E+23
-1881	6,698059E+22	6,697868E+22	3,895866E+22	3,895832E+22	1,339593E+23	7,791697E+22	2,118762E+23
-1880	6,697724E+22	6,697926E+22	3,896033E+22	3,895964E+22	1,339565E+23	7,791996E+22	2,118765E+23
-1879	6,698007E+22	6,697925E+22	3,895943E+22	3,896126E+22	1,339593E+23	7,792069E+22	2,118800E+23
-1878	6,697837E+22	6,697815E+22	3,896053E+22	3,895997E+22	1,339565E+23	7,792049E+22	2,118770E+23
-1877	6,697756E+22	6,697872E+22	3,896138E+22	3,896135E+22	1,339563E+23	7,792273E+22	2,118790E+23
-1876	6,698043E+22	6,697816E+22	3,896044E+22	3,896101E+22	1,339586E+23	7,792145E+22	2,118800E+23
-1875	6,697716E+22	6,697834E+22	3,896177E+22	3,895995E+22	1,339555E+23	7,792172E+22	2,118772E+23
-1874	6,697819E+22	6,697936E+22	3,896097E+22	3,896143E+22	1,339576E+23	7,792240E+22	2,118800E+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							
-1873	6,697937E+22	6,697840E+22	3,895988E+22	3,896018E+22	1,339578E+23	7,792006E+22	2,118778E+23
-1872	6,697605E+22	6,697891E+22	3,896064E+22	3,895969E+22	1,339550E+23	7,792034E+22	2,118753E+23
-1871	6,697968E+22	6,697924E+22	3,895900E+22	3,896021E+22	1,339589E+23	7,791921E+22	2,118781E+23
-1870	6,697975E+22	6,697817E+22	3,895884E+22	3,895786E+22	1,339579E+23	7,791669E+22	2,118746E+23
-1869	6,697832E+22	6,697932E+22	3,895895E+22	3,895844E+22	1,339576E+23	7,791738E+22	2,118750E+23
-1868	6,698143E+22	6,697979E+22	3,895727E+22	3,895858E+22	1,339612E+23	7,791585E+22	2,118771E+23
-1867	6,697852E+22	6,697971E+22	3,895831E+22	3,895740E+22	1,339582E+23	7,791571E+22	2,118739E+23
-1866	6,697866E+22	6,698056E+22	3,895849E+22	3,895880E+22	1,339592E+23	7,791730E+22	2,118765E+23
-1865	6,698092E+22	6,697931E+22	3,895807E+22	3,895841E+22	1,339602E+23	7,791648E+22	2,118767E+23
-1864	6,697728E+22	6,697885E+22	3,896001E+22	3,895848E+22	1,339561E+23	7,791849E+22	2,118746E+23
-1863	6,697943E+22	6,697923E+22	3,895976E+22	3,896052E+22	1,339587E+23	7,792027E+22	2,118789E+23
-1862	6,697940E+22	6,697789E+22	3,896014E+22	3,896008E+22	1,339573E+23	7,792022E+22	2,118775E+23
-1861	6,697629E+22	6,697821E+22	3,896145E+22	3,896133E+22	1,339545E+23	7,792278E+22	2,118773E+23
-1860	6,697934E+22	6,697833E+22	3,896078E+22	3,896248E+22	1,339577E+23	7,792327E+22	2,118809E+23
-1859	6,697750E+22	6,697721E+22	3,896222E+22	3,896127E+22	1,339547E+23	7,792348E+22	2,118782E+23
-1858	6,697672E+22	6,697803E+22	3,896287E+22	3,896229E+22	1,339548E+23	7,792517E+22	2,118799E+23
-1857	6,697956E+22	6,697761E+22	3,896184E+22	3,896243E+22	1,339572E+23	7,792427E+22	2,118814E+23
-1856	6,697553E+22	6,697731E+22	3,896292E+22	3,896169E+22	1,339528E+23	7,792461E+22	2,118774E+23
-1855	6,697680E+22	6,697842E+22	3,896207E+22	3,896277E+22	1,339552E+23	7,792484E+22	2,118801E+23
-1854	6,697856E+22	6,697731E+22	3,896113E+22	3,896131E+22	1,339559E+23	7,792244E+22	2,118783E+23
-1853	6,697595E+22	6,697738E+22	3,896148E+22	3,896057E+22	1,339533E+23	7,792205E+22	2,118754E+23
-1852	6,697973E+22	6,697827E+22	3,895994E+22	3,896092E+22	1,339580E+23	7,792086E+22	2,118789E+23
-1851	6,697907E+22	6,697777E+22	3,895991E+22	3,895906E+22	1,339568E+23	7,791898E+22	2,118758E+23
-1850	6,697715E+22	6,697934E+22	3,895996E+22	3,895945E+22	1,339565E+23	7,791940E+22	2,118759E+23
-1849	6,698045E+22	6,697962E+22	3,895861E+22	3,895989E+22	1,339601E+23	7,791850E+22	2,118786E+23
-1848	6,697716E+22	6,697848E+22	3,895988E+22	3,895882E+22	1,339556E+23	7,791870E+22	2,118743E+23
-1847	6,697762E+22	6,697925E+22	3,896024E+22	3,895999E+22	1,339569E+23	7,792023E+22	2,118771E+23
-1846	6,698015E+22	6,697797E+22	3,895987E+22	3,895994E+22	1,339581E+23	7,791981E+22	2,118779E+23
-1845	6,697644E+22	6,697733E+22	3,896116E+22	3,896031E+22	1,339538E+23	7,792147E+22	2,118752E+23
-1844	6,697846E+22	6,697826E+22	3,896086E+22	3,896226E+22	1,339567E+23	7,792312E+22	2,118798E+23
-1843	6,697818E+22	6,697706E+22	3,896149E+22	3,896186E+22	1,339552E+23	7,792336E+22	2,118786E+23
-1842	6,697539E+22	6,697753E+22	3,896285E+22	3,896237E+22	1,339529E+23	7,792523E+22	2,118781E+23
-1841	6,697896E+22	6,697760E+22	3,896243E+22	3,896357E+22	1,339566E+23	7,792600E+22	2,118826E+23
-1840	6,697645E+22	6,697607E+22	3,896387E+22	3,896263E+22	1,339525E+23	7,792651E+22	2,118790E+23
-1839	6,697542E+22	6,697740E+22	3,896437E+22	3,896363E+22	1,339528E+23	7,792801E+22	2,118808E+23
-1838	6,697814E+22	6,697695E+22	3,896327E+22	3,896400E+22	1,339551E+23	7,792728E+22	2,118824E+23
-1837	6,697452E+22	6,697602E+22	3,896387E+22	3,896318E+22	1,339505E+23	7,792705E+22	2,118776E+23
-1836	6,697633E+22	6,697716E+22	3,896310E+22	3,896374E+22	1,339535E+23	7,792685E+22	2,118803E+23
-1835	6,697815E+22	6,697626E+22	3,896233E+22	3,896235E+22	1,339544E+23	7,792469E+22	2,118791E+23
-1834	6,697569E+22	6,697682E+22	3,896246E+22	3,896128E+22	1,339525E+23	7,792374E+22	2,118762E+23
-1833	6,697921E+22	6,697806E+22	3,896092E+22	3,896203E+22	1,339573E+23	7,792295E+22	2,118802E+23
-1832	6,697758E+22	6,697721E+22	3,896099E+22	3,896053E+22	1,339548E+23	7,792152E+22	2,118763E+23
-1831	6,697577E+22	6,697867E+22	3,896127E+22	3,896058E+22	1,339544E+23	7,792185E+22	2,118763E+23
-1830	6,697932E+22	6,697854E+22	3,896028E+22	3,896106E+22	1,339579E+23	7,792134E+22	2,118792E+23
-1829	6,697656E+22	6,697677E+22	3,896120E+22	3,896015E+22	1,339533E+23	7,792135E+22	2,118747E+23
-1828	6,697710E+22	6,697781E+22	3,896159E+22	3,896133E+22	1,339549E+23	7,792292E+22	2,118778E+23
-1827	6,697904E+22	6,697713E+22	3,896121E+22	3,896181E+22	1,339562E+23	7,792301E+22	2,118792E+23
-1826	6,697533E+22	6,697686E+22	3,896227E+22	3,896181E+22	1,339522E+23	7,792408E+22	2,118763E+23
-1825	6,697766E+22	6,697779E+22	3,896223E+22	3,896380E+22	1,339555E+23	7,792603E+22	2,118815E+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							
-1824	6,697706E+22	6,697600E+22	3,896318E+22	3,896332E+22	1,339531E+23	7,792650E+22	2,118796E+23
-1823	6,697455E+22	6,697653E+22	3,896475E+22	3,896345E+22	1,339511E+23	7,792820E+22	2,118793E+23
-1822	6,697802E+22	6,697665E+22	3,896441E+22	3,896496E+22	1,339547E+23	7,792937E+22	2,118840E+23
-1821	6,697527E+22	6,697483E+22	3,896515E+22	3,896439E+22	1,339501E+23	7,792954E+22	2,118796E+23
-1820	6,697413E+22	6,697630E+22	3,896553E+22	3,896522E+22	1,339504E+23	7,793075E+22	2,118812E+23
-1819	6,697691E+22	6,697591E+22	3,896445E+22	3,896558E+22	1,339528E+23	7,793003E+22	2,118829E+23
-1818	6,697396E+22	6,697499E+22	3,896481E+22	3,896396E+22	1,339490E+23	7,792877E+22	2,118777E+23
-1817	6,697644E+22	6,697639E+22	3,896413E+22	3,896455E+22	1,339528E+23	7,792868E+22	2,118815E+23
-1816	6,697750E+22	6,697543E+22	3,896340E+22	3,896335E+22	1,339529E+23	7,792674E+22	2,118797E+23
-1815	6,697462E+22	6,697665E+22	3,896356E+22	3,896222E+22	1,339513E+23	7,792578E+22	2,118771E+23
-1814	6,697790E+22	6,697788E+22	3,896228E+22	3,896324E+22	1,339558E+23	7,792553E+22	2,118813E+23
-1813	6,697638E+22	6,697616E+22	3,896213E+22	3,896189E+22	1,339525E+23	7,792402E+22	2,118766E+23
-1812	6,697493E+22	6,697735E+22	3,896268E+22	3,896171E+22	1,339523E+23	7,792439E+22	2,118767E+23
-1811	6,697848E+22	6,697721E+22	3,896182E+22	3,896250E+22	1,339557E+23	7,792432E+22	2,118800E+23
-1810	6,697593E+22	6,697569E+22	3,896240E+22	3,896146E+22	1,339516E+23	7,792386E+22	2,118755E+23
-1809	6,697645E+22	6,697716E+22	3,896268E+22	3,896305E+22	1,339536E+23	7,792573E+22	2,118793E+23
-1808	6,697760E+22	6,697624E+22	3,896246E+22	3,896365E+22	1,339538E+23	7,792611E+22	2,118799E+23
-1807	6,697423E+22	6,697615E+22	3,896380E+22	3,896311E+22	1,339504E+23	7,792691E+22	2,118773E+23
-1806	6,697686E+22	6,697687E+22	3,896419E+22	3,896495E+22	1,339537E+23	7,792913E+22	2,118829E+23
-1805	6,697644E+22	6,697461E+22	3,896483E+22	3,896466E+22	1,339511E+23	7,792949E+22	2,118805E+23
-1804	6,697375E+22	6,697539E+22	3,896640E+22	3,896482E+22	1,339491E+23	7,793123E+22	2,118804E+23
-1803	6,697644E+22	6,697596E+22	3,896593E+22	3,896680E+22	1,339524E+23	7,793273E+22	2,118851E+23
-1802	6,697399E+22	6,697415E+22	3,896628E+22	3,896590E+22	1,339481E+23	7,793218E+22	2,118803E+23
-1801	6,697337E+22	6,697542E+22	3,896661E+22	3,896661E+22	1,339488E+23	7,793323E+22	2,118820E+23
-1800	6,697595E+22	6,697466E+22	3,896570E+22	3,896679E+22	1,339506E+23	7,793250E+22	2,118831E+23
-1799	6,697360E+22	6,697408E+22	3,896605E+22	3,896471E+22	1,339477E+23	7,793076E+22	2,118784E+23
-1798	6,697584E+22	6,697577E+22	3,896545E+22	3,896553E+22	1,339516E+23	7,793098E+22	2,118826E+23
-1797	6,697650E+22	6,697476E+22	3,896421E+22	3,896470E+22	1,339513E+23	7,792891E+22	2,118802E+23
-1796	6,697350E+22	6,697588E+22	3,896458E+22	3,896341E+22	1,339494E+23	7,792799E+22	2,118774E+23
-1795	6,697653E+22	6,697705E+22	3,896359E+22	3,896451E+22	1,339536E+23	7,792810E+22	2,118817E+23
-1794	6,697572E+22	6,697504E+22	3,896331E+22	3,896276E+22	1,339508E+23	7,792608E+22	2,118768E+23
-1793	6,697470E+22	6,697624E+22	3,896391E+22	3,896288E+22	1,339509E+23	7,792678E+22	2,118777E+23
-1792	6,697747E+22	6,697611E+22	3,896313E+22	3,896405E+22	1,339536E+23	7,792718E+22	2,118808E+23
-1791	6,697487E+22	6,697517E+22	3,896365E+22	3,896288E+22	1,339500E+23	7,792653E+22	2,118766E+23
-1790	6,697538E+22	6,697666E+22	3,896423E+22	3,896458E+22	1,339520E+23	7,792882E+22	2,118809E+23
-1789	6,697663E+22	6,697517E+22	3,896389E+22	3,896518E+22	1,339518E+23	7,792907E+22	2,118809E+23
-1788	6,697356E+22	6,697491E+22	3,896564E+22	3,896434E+22	1,339485E+23	7,792998E+22	2,118785E+23
-1787	6,697587E+22	6,697583E+22	3,896617E+22	3,896646E+22	1,339517E+23	7,793263E+22	2,118843E+23
-1786	6,697540E+22	6,697366E+22	3,896635E+22	3,896617E+22	1,339491E+23	7,793252E+22	2,118816E+23
-1785	6,697258E+22	6,697468E+22	3,896764E+22	3,896673E+22	1,339473E+23	7,793437E+22	2,118816E+23
-1784	6,697468E+22	6,697478E+22	3,896717E+22	3,896865E+22	1,339495E+23	7,793582E+22	2,118853E+23
-1783	6,697288E+22	6,697305E+22	3,896753E+22	3,896707E+22	1,339459E+23	7,793461E+22	2,118805E+23
-1782	6,697294E+22	6,697435E+22	3,896804E+22	3,896755E+22	1,339473E+23	7,793560E+22	2,118829E+23
-1781	6,697566E+22	6,697339E+22	3,896674E+22	3,896778E+22	1,339491E+23	7,793452E+22	2,118836E+23
-1780	6,697316E+22	6,697335E+22	3,896714E+22	3,896564E+22	1,339465E+23	7,793278E+22	2,118793E+23
-1779	6,697461E+22	6,697557E+22	3,896656E+22	3,896676E+22	1,339502E+23	7,793332E+22	2,118835E+23
-1778	6,697539E+22	6,697439E+22	3,896515E+22	3,896571E+22	1,339498E+23	7,793086E+22	2,118806E+23
-1777	6,697276E+22	6,697521E+22	3,896568E+22	3,896456E+22	1,339480E+23	7,793023E+22	2,118782E+23
-1776	6,697537E+22	6,697577E+22	3,896501E+22	3,896571E+22	1,339511E+23	7,793072E+22	2,118819E+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							
-1775	6,697508E+22	6,697395E+22	3,896475E+22	3,896385E+22	1,339490E+23	7,792860E+22	2,118776E+23
-1774	6,697399E+22	6,697535E+22	3,896533E+22	3,896433E+22	1,339493E+23	7,792966E+22	2,118790E+23
-1773	6,697639E+22	6,697510E+22	3,896412E+22	3,896586E+22	1,339515E+23	7,792998E+22	2,118815E+23
-1772	6,697400E+22	6,697417E+22	3,896489E+22	3,896438E+22	1,339482E+23	7,792928E+22	2,118775E+23
-1771	6,697426E+22	6,697581E+22	3,896582E+22	3,896596E+22	1,339501E+23	7,793179E+22	2,118819E+23
-1770	6,697609E+22	6,697421E+22	3,896543E+22	3,896625E+22	1,339503E+23	7,793168E+22	2,118820E+23
-1769	6,697310E+22	6,697396E+22	3,896721E+22	3,896574E+22	1,339471E+23	7,793295E+22	2,118800E+23
-1768	6,697417E+22	6,697488E+22	3,896784E+22	3,896824E+22	1,339491E+23	7,793608E+22	2,118851E+23
-1767	6,697385E+22	6,697301E+22	3,896784E+22	3,896786E+22	1,339469E+23	7,793570E+22	2,118826E+23
-1766	6,697127E+22	6,697372E+22	3,896919E+22	3,896839E+22	1,339450E+23	7,793759E+22	2,118826E+23
-1765	6,697371E+22	6,697330E+22	3,896840E+22	3,897014E+22	1,339470E+23	7,793854E+22	2,118856E+23
-1764	6,697268E+22	6,697156E+22	3,896888E+22	3,896806E+22	1,339442E+23	7,793694E+22	2,118812E+23
-1763	6,697247E+22	6,697344E+22	3,896939E+22	3,896861E+22	1,339459E+23	7,793800E+22	2,118839E+23
-1762	6,697509E+22	6,697291E+22	3,896767E+22	3,896878E+22	1,339480E+23	7,793645E+22	2,118845E+23
-1761	6,697230E+22	6,697314E+22	3,896797E+22	3,896695E+22	1,339454E+23	7,793491E+22	2,118804E+23
-1760	6,697290E+22	6,697490E+22	3,896774E+22	3,896805E+22	1,339478E+23	7,793579E+22	2,118836E+23
-1759	6,697430E+22	6,697356E+22	3,896647E+22	3,896659E+22	1,339479E+23	7,793305E+22	2,118809E+23
-1758	6,697223E+22	6,697407E+22	3,896720E+22	3,896555E+22	1,339463E+23	7,793275E+22	2,118790E+23
-1757	6,697478E+22	6,697433E+22	3,896614E+22	3,896702E+22	1,339491E+23	7,793317E+22	2,118823E+23
-1756	6,697449E+22	6,697293E+22	3,896589E+22	3,896525E+22	1,339474E+23	7,793114E+22	2,118786E+23
-1755	6,697290E+22	6,697492E+22	3,896649E+22	3,896596E+22	1,339478E+23	7,793245E+22	2,118803E+23
-1754	6,697553E+22	6,697446E+22	3,896520E+22	3,896715E+22	1,339500E+23	7,793234E+22	2,118823E+23
-1753	6,697344E+22	6,697351E+22	3,896623E+22	3,896570E+22	1,339469E+23	7,793194E+22	2,118789E+23
-1752	6,697311E+22	6,697466E+22	3,896764E+22	3,896727E+22	1,339478E+23	7,793491E+22	2,118827E+23
-1751	6,697506E+22	6,697325E+22	3,896728E+22	3,896757E+22	1,339483E+23	7,793485E+22	2,118831E+23
-1750	6,697187E+22	6,697309E+22	3,896901E+22	3,896756E+22	1,339450E+23	7,793657E+22	2,118815E+23
-1749	6,697252E+22	6,697355E+22	3,896913E+22	3,897029E+22	1,339461E+23	7,793942E+22	2,118855E+23
-1748	6,697278E+22	6,697151E+22	3,896923E+22	3,896949E+22	1,339443E+23	7,793872E+22	2,118830E+23
-1747	6,697045E+22	6,697246E+22	3,897059E+22	3,896971E+22	1,339429E+23	7,794031E+22	2,118832E+23
-1746	6,697358E+22	6,697211E+22	3,896954E+22	3,897102E+22	1,339457E+23	7,794057E+22	2,118863E+23
-1745	6,697264E+22	6,697098E+22	3,896991E+22	3,896910E+22	1,339436E+23	7,793901E+22	2,118826E+23
-1744	6,697117E+22	6,697308E+22	3,897061E+22	3,896982E+22	1,339443E+23	7,794043E+22	2,118847E+23
-1743	6,697374E+22	6,697288E+22	3,896889E+22	3,896988E+22	1,339466E+23	7,793877E+22	2,118854E+23
-1742	6,697109E+22	6,697265E+22	3,896941E+22	3,896817E+22	1,339437E+23	7,793758E+22	2,118813E+23
-1741	6,697167E+22	6,697359E+22	3,896899E+22	3,896930E+22	1,339453E+23	7,793829E+22	2,118835E+23
-1740	6,697388E+22	6,697197E+22	3,896785E+22	3,896768E+22	1,339459E+23	7,793553E+22	2,118814E+23
-1739	6,697159E+22	6,697289E+22	3,896842E+22	3,896688E+22	1,339445E+23	7,793530E+22	2,118798E+23
-1738	6,697421E+22	6,697349E+22	3,896692E+22	3,896840E+22	1,339477E+23	7,793532E+22	2,118830E+23
-1737	6,697388E+22	6,697241E+22	3,896656E+22	3,896674E+22	1,339463E+23	7,793330E+22	2,118796E+23
-1736	6,697149E+22	6,697413E+22	3,896774E+22	3,896726E+22	1,339456E+23	7,793500E+22	2,118806E+23
-1735	6,697466E+22	6,697378E+22	3,896677E+22	3,896805E+22	1,339484E+23	7,793482E+22	2,118833E+23
-1734	6,697282E+22	6,697254E+22	3,896816E+22	3,896687E+22	1,339454E+23	7,793503E+22	2,118804E+23
-1733	6,697191E+22	6,697338E+22	3,896932E+22	3,896887E+22	1,339453E+23	7,793818E+22	2,118835E+23
-1732	6,697390E+22	6,697205E+22	3,896892E+22	3,896933E+22	1,339460E+23	7,793826E+22	2,118842E+23
-1731	6,697037E+22	6,697215E+22	3,897054E+22	3,896948E+22	1,339425E+23	7,794002E+22	2,118825E+23
-1730	6,697158E+22	6,697235E+22	3,897037E+22	3,897183E+22	1,339439E+23	7,794220E+22	2,118861E+23
-1729	6,697240E+22	6,697047E+22	3,897043E+22	3,897086E+22	1,339429E+23	7,794129E+22	2,118842E+23
-1728	6,696967E+22	6,697137E+22	3,897213E+22	3,897092E+22	1,339410E+23	7,794305E+22	2,118841E+23
-1727	6,697289E+22	6,697158E+22	3,897101E+22	3,897206E+22	1,339445E+23	7,794307E+22	2,118875E+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							
-1726	6,697162E+22	6,697076E+22	3,897133E+22	3,897053E+22	1,339424E+23	7,794185E+22	2,118842E+23
-1725	6,696955E+22	6,697230E+22	3,897171E+22	3,897134E+22	1,339419E+23	7,794305E+22	2,118849E+23
-1724	6,697261E+22	6,697168E+22	3,897019E+22	3,897105E+22	1,339443E+23	7,794124E+22	2,118855E+23
-1723	6,697026E+22	6,697145E+22	3,897074E+22	3,896926E+22	1,339417E+23	7,794000E+22	2,118817E+23
-1722	6,697143E+22	6,697213E+22	3,896995E+22	3,897018E+22	1,339436E+23	7,794013E+22	2,118837E+23
-1721	6,697368E+22	6,697115E+22	3,896862E+22	3,896886E+22	1,339448E+23	7,793748E+22	2,118823E+23
-1720	6,697048E+22	6,697234E+22	3,896935E+22	3,896822E+22	1,339428E+23	7,793756E+22	2,118804E+23
-1719	6,697314E+22	6,697325E+22	3,896798E+22	3,896950E+22	1,339464E+23	7,793748E+22	2,118839E+23
-1718	6,697303E+22	6,697204E+22	3,896802E+22	3,896795E+22	1,339451E+23	7,793597E+22	2,118810E+23
-1717	6,697043E+22	6,697294E+22	3,896930E+22	3,896846E+22	1,339434E+23	7,793776E+22	2,118811E+23
-1716	6,697403E+22	6,697234E+22	3,896868E+22	3,896926E+22	1,339464E+23	7,793793E+22	2,118843E+23
-1715	6,697173E+22	6,697147E+22	3,896998E+22	3,896857E+22	1,339432E+23	7,793855E+22	2,118817E+23
-1714	6,697066E+22	6,697227E+22	3,897061E+22	3,897076E+22	1,339429E+23	7,794136E+22	2,118843E+23
-1713	6,697277E+22	6,697113E+22	3,897002E+22	3,897132E+22	1,339439E+23	7,794134E+22	2,118852E+23
-1712	6,696898E+22	6,697089E+22	3,897196E+22	3,897112E+22	1,339399E+23	7,794308E+22	2,118829E+23
-1711	6,697095E+22	6,697134E+22	3,897189E+22	3,897291E+22	1,339423E+23	7,794481E+22	2,118871E+23
-1710	6,697210E+22	6,696969E+22	3,897208E+22	3,897203E+22	1,339418E+23	7,794411E+22	2,118859E+23
-1709	6,696866E+22	6,697053E+22	3,897352E+22	3,897230E+22	1,339392E+23	7,794582E+22	2,118850E+23
-1708	6,697187E+22	6,697092E+22	3,897246E+22	3,897343E+22	1,339428E+23	7,794589E+22	2,118887E+23
-1707	6,697016E+22	6,697020E+22	3,897272E+22	3,897195E+22	1,339404E+23	7,794466E+22	2,118850E+23
-1706	6,696850E+22	6,697124E+22	3,897280E+22	3,897249E+22	1,339397E+23	7,794529E+22	2,118850E+23
-1705	6,697214E+22	6,697051E+22	3,897115E+22	3,897209E+22	1,339427E+23	7,794324E+22	2,118859E+23
-1704	6,696945E+22	6,697009E+22	3,897194E+22	3,897032E+22	1,339395E+23	7,794226E+22	2,118818E+23
-1703	6,697083E+22	6,697141E+22	3,897101E+22	3,897120E+22	1,339422E+23	7,794221E+22	2,118844E+23
-1702	6,697288E+22	6,697082E+22	3,896964E+22	3,897024E+22	1,339437E+23	7,793988E+22	2,118836E+23
-1701	6,696918E+22	6,697157E+22	3,897031E+22	3,896960E+22	1,339407E+23	7,793991E+22	2,118807E+23
-1700	6,697238E+22	6,697217E+22	3,896940E+22	3,897051E+22	1,339446E+23	7,793991E+22	2,118845E+23
-1699	6,697224E+22	6,697109E+22	3,896969E+22	3,896902E+22	1,339433E+23	7,793871E+22	2,118820E+23
-1698	6,696986E+22	6,697172E+22	3,897078E+22	3,896967E+22	1,339416E+23	7,794044E+22	2,118820E+23
-1697	6,697315E+22	6,697156E+22	3,896999E+22	3,897090E+22	1,339447E+23	7,794089E+22	2,118856E+23
-1696	6,697002E+22	6,697066E+22	3,897149E+22	3,897053E+22	1,339407E+23	7,794202E+22	2,118827E+23
-1695	6,696927E+22	6,697149E+22	3,897210E+22	3,897242E+22	1,339408E+23	7,794452E+22	2,118853E+23
-1694	6,697182E+22	6,697028E+22	3,897168E+22	3,897297E+22	1,339421E+23	7,794465E+22	2,118868E+23
-1693	6,696814E+22	6,696945E+22	3,897352E+22	3,897257E+22	1,339376E+23	7,794608E+22	2,118837E+23
-1692	6,697058E+22	6,696993E+22	3,897364E+22	3,897413E+22	1,339405E+23	7,794777E+22	2,118883E+23
-1691	6,697122E+22	6,696907E+22	3,897368E+22	3,897351E+22	1,339403E+23	7,794719E+22	2,118875E+23
-1690	6,696755E+22	6,696975E+22	3,897460E+22	3,897377E+22	1,339373E+23	7,794837E+22	2,118857E+23
-1689	6,697064E+22	6,697022E+22	3,897344E+22	3,897481E+22	1,339409E+23	7,794825E+22	2,118891E+23
-1688	6,696878E+22	6,696908E+22	3,897402E+22	3,897312E+22	1,339379E+23	7,794714E+22	2,118850E+23
-1687	6,696780E+22	6,697008E+22	3,897406E+22	3,897325E+22	1,339379E+23	7,794732E+22	2,118852E+23
-1686	6,697175E+22	6,696969E+22	3,897238E+22	3,897315E+22	1,339414E+23	7,794553E+22	2,118870E+23
-1685	6,696856E+22	6,696917E+22	3,897285E+22	3,897158E+22	1,339377E+23	7,794443E+22	2,118822E+23
-1684	6,697009E+22	6,697070E+22	3,897205E+22	3,897242E+22	1,339408E+23	7,794446E+22	2,118853E+23
-1683	6,697183E+22	6,697047E+22	3,897085E+22	3,897147E+22	1,339423E+23	7,794232E+22	2,118846E+23
-1682	6,696844E+22	6,697069E+22	3,897147E+22	3,897066E+22	1,339391E+23	7,794213E+22	2,118813E+23
-1681	6,697184E+22	6,697129E+22	3,897073E+22	3,897157E+22	1,339431E+23	7,794231E+22	2,118854E+23
-1680	6,697115E+22	6,696998E+22	3,897140E+22	3,897043E+22	1,339411E+23	7,794183E+22	2,118830E+23
-1679	6,696866E+22	6,697094E+22	3,897233E+22	3,897127E+22	1,339396E+23	7,794359E+22	2,118832E+23
-1678	6,697178E+22	6,697094E+22	3,897143E+22	3,897291E+22	1,339427E+23	7,794435E+22	2,118871E+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	6,696845E+22	6,696928E+22	3,897284E+22	3,897244E+22	1,339377E+23	7,794528E+22	2,118830E+23
-1676	6,696867E+22	6,696988E+22	3,897373E+22	3,897384E+22	1,339385E+23	7,794756E+22	2,118861E+23
-1675	6,697131E+22	6,696904E+22	3,897340E+22	3,897418E+22	1,339403E+23	7,794758E+22	2,118879E+23
-1674	6,696780E+22	6,696830E+22	3,897491E+22	3,897380E+22	1,339361E+23	7,794870E+22	2,118848E+23
-1673	6,696985E+22	6,696943E+22	3,897484E+22	3,897549E+22	1,339393E+23	7,795033E+22	2,118896E+23
-1672	6,696952E+22	6,696858E+22	3,897513E+22	3,897506E+22	1,339381E+23	7,795019E+22	2,118883E+23
-1671	6,696609E+22	6,696923E+22	3,897601E+22	3,897504E+22	1,339353E+23	7,795105E+22	2,118864E+23
-1670	6,696951E+22	6,696946E+22	3,897490E+22	3,897607E+22	1,339390E+23	7,795098E+22	2,118900E+23
-1669	6,696779E+22	6,696752E+22	3,897535E+22	3,897434E+22	1,339353E+23	7,794969E+22	2,118850E+23
-1668	6,696749E+22	6,696855E+22	3,897537E+22	3,897438E+22	1,339360E+23	7,794975E+22	2,118858E+23
-1667	6,697093E+22	6,696903E+22	3,897348E+22	3,897450E+22	1,339400E+23	7,794798E+22	2,118879E+23
-1666	6,696781E+22	6,696849E+22	3,897347E+22	3,897294E+22	1,339363E+23	7,794641E+22	2,118827E+23
-1665	6,696935E+22	6,697017E+22	3,897278E+22	3,897349E+22	1,339395E+23	7,794627E+22	2,118858E+23
-1664	6,697082E+22	6,696970E+22	3,897218E+22	3,897244E+22	1,339405E+23	7,794462E+22	2,118851E+23
-1663	6,696782E+22	6,696986E+22	3,897298E+22	3,897147E+22	1,339377E+23	7,794445E+22	2,118821E+23
-1662	6,697098E+22	6,697071E+22	3,897236E+22	3,897291E+22	1,339417E+23	7,794527E+22	2,118870E+23
-1661	6,696971E+22	6,696896E+22	3,897284E+22	3,897224E+22	1,339387E+23	7,794508E+22	2,118838E+23
-1660	6,696750E+22	6,696968E+22	3,897383E+22	3,897303E+22	1,339372E+23	7,794687E+22	2,118840E+23
-1659	6,697056E+22	6,696997E+22	3,897302E+22	3,897462E+22	1,339405E+23	7,794764E+22	2,118882E+23
-1658	6,696792E+22	6,696780E+22	3,897411E+22	3,897385E+22	1,339357E+23	7,794796E+22	2,118837E+23
-1657	6,696836E+22	6,696866E+22	3,897508E+22	3,897502E+22	1,339370E+23	7,795010E+22	2,118871E+23
-1656	6,697040E+22	6,696816E+22	3,897510E+22	3,897562E+22	1,339386E+23	7,795072E+22	2,118893E+23
-1655	6,696661E+22	6,696786E+22	3,897643E+22	3,897527E+22	1,339345E+23	7,795170E+22	2,118862E+23
-1654	6,696825E+22	6,696920E+22	3,897632E+22	3,897721E+22	1,339375E+23	7,795353E+22	2,118910E+23
-1653	6,696779E+22	6,696736E+22	3,897654E+22	3,897667E+22	1,339352E+23	7,795322E+22	2,118884E+23
-1652	6,696529E+22	6,696755E+22	3,897755E+22	3,897621E+22	1,339328E+23	7,795376E+22	2,118866E+23
-1651	6,696885E+22	6,696820E+22	3,897635E+22	3,897716E+22	1,339370E+23	7,795350E+22	2,118906E+23
-1650	6,696750E+22	6,696627E+22	3,897621E+22	3,897553E+22	1,339338E+23	7,795174E+22	2,118855E+23
-1649	6,696702E+22	6,696803E+22	3,897602E+22	3,897557E+22	1,339350E+23	7,795158E+22	2,118866E+23
-1648	6,696979E+22	6,696871E+22	3,897448E+22	3,897574E+22	1,339385E+23	7,795022E+22	2,118887E+23
-1647	6,696691E+22	6,696823E+22	3,897460E+22	3,897384E+22	1,339351E+23	7,794844E+22	2,118836E+23
-1646	6,696857E+22	6,696980E+22	3,897418E+22	3,897441E+22	1,339384E+23	7,794859E+22	2,118870E+23
-1645	6,696982E+22	6,696843E+22	3,897374E+22	3,897358E+22	1,339383E+23	7,794732E+22	2,118856E+23
-1644	6,696721E+22	6,696847E+22	3,897465E+22	3,897286E+22	1,339357E+23	7,794751E+22	2,118832E+23
-1643	6,696961E+22	6,696983E+22	3,897385E+22	3,897463E+22	1,339394E+23	7,794847E+22	2,118879E+23
-1642	6,696853E+22	6,696770E+22	3,897386E+22	3,897411E+22	1,339362E+23	7,794797E+22	2,118842E+23
-1641	6,696675E+22	6,696845E+22	3,897486E+22	3,897452E+22	1,339352E+23	7,794938E+22	2,118846E+23
-1640	6,696968E+22	6,696870E+22	3,897456E+22	3,897592E+22	1,339384E+23	7,795048E+22	2,118889E+23
-1639	6,696749E+22	6,696694E+22	3,897567E+22	3,897492E+22	1,339344E+23	7,795060E+22	2,118850E+23
-1638	6,696757E+22	6,696836E+22	3,897669E+22	3,897643E+22	1,339359E+23	7,795312E+22	2,118891E+23
-1637	6,696879E+22	6,696749E+22	3,897670E+22	3,897738E+22	1,339363E+23	7,795409E+22	2,118904E+23
-1636	6,696527E+22	6,696691E+22	3,897815E+22	3,897696E+22	1,339322E+23	7,795511E+22	2,118873E+23
-1635	6,696665E+22	6,696831E+22	3,897807E+22	3,897872E+22	1,339350E+23	7,795679E+22	2,118917E+23
-1634	6,696702E+22	6,696577E+22	3,897783E+22	3,897807E+22	1,339328E+23	7,795589E+22	2,118887E+23
-1633	6,696504E+22	6,696603E+22	3,897864E+22	3,897733E+22	1,339311E+23	7,795596E+22	2,118870E+23
-1632	6,696816E+22	6,696718E+22	3,897755E+22	3,897847E+22	1,339353E+23	7,795602E+22	2,118914E+23
-1631	6,696677E+22	6,696593E+22	3,897705E+22	3,897671E+22	1,339327E+23	7,795376E+22	2,118865E+23
-1630	6,696604E+22	6,696804E+22	3,897690E+22	3,897678E+22	1,339341E+23	7,795368E+22	2,118878E+23
-1629	6,696863E+22	6,696789E+22	3,897565E+22	3,897679E+22	1,339365E+23	7,795244E+22	2,118890E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1628	6,696643E+22	6,696696E+22	3,897609E+22	3,897462E+22	1,339334E+23	7,795071E+22	2,118841E+23
-1627	6,696769E+22	6,696891E+22	3,897582E+22	3,897534E+22	1,339366E+23	7,795116E+22	2,118878E+23
-1626	6,696908E+22	6,696723E+22	3,897486E+22	3,897499E+22	1,339363E+23	7,794985E+22	2,118862E+23
-1625	6,696622E+22	6,696752E+22	3,897561E+22	3,897442E+22	1,339337E+23	7,795004E+22	2,118838E+23
-1624	6,696819E+22	6,696898E+22	3,897515E+22	3,897636E+22	1,339372E+23	7,795151E+22	2,118887E+23
-1623	6,696761E+22	6,696687E+22	3,897513E+22	3,897547E+22	1,339345E+23	7,795060E+22	2,118851E+23
-1622	6,696614E+22	6,696777E+22	3,897632E+22	3,897581E+22	1,339339E+23	7,795214E+22	2,118860E+23
-1621	6,696885E+22	6,696741E+22	3,897628E+22	3,897734E+22	1,339363E+23	7,795362E+22	2,118899E+23
-1620	6,696678E+22	6,696585E+22	3,897750E+22	3,897649E+22	1,339326E+23	7,795399E+22	2,118866E+23
-1619	6,696595E+22	6,696788E+22	3,897846E+22	3,897818E+22	1,339338E+23	7,795664E+22	2,118905E+23
-1618	6,696736E+22	6,696632E+22	3,897803E+22	3,897924E+22	1,339337E+23	7,795727E+22	2,118909E+23
-1617	6,696432E+22	6,696547E+22	3,897948E+22	3,897840E+22	1,339298E+23	7,795787E+22	2,118877E+23
-1616	6,696571E+22	6,696681E+22	3,897964E+22	3,897998E+22	1,339325E+23	7,795962E+22	2,118921E+23
-1615	6,696660E+22	6,696470E+22	3,897909E+22	3,897912E+22	1,339313E+23	7,795821E+22	2,118895E+23
-1614	6,696454E+22	6,696572E+22	3,897965E+22	3,897858E+22	1,339303E+23	7,795823E+22	2,118885E+23
-1613	6,696696E+22	6,696657E+22	3,897860E+22	3,897984E+22	1,339335E+23	7,795844E+22	2,118920E+23
-1612	6,696598E+22	6,696537E+22	3,897827E+22	3,897785E+22	1,339314E+23	7,795612E+22	2,118875E+23
-1611	6,696492E+22	6,696755E+22	3,897832E+22	3,897762E+22	1,339325E+23	7,795595E+22	2,118884E+23
-1610	6,696793E+22	6,696666E+22	3,897684E+22	3,897775E+22	1,339346E+23	7,795459E+22	2,118892E+23
-1609	6,696601E+22	6,696567E+22	3,897730E+22	3,897566E+22	1,339317E+23	7,795297E+22	2,118846E+23
-1608	6,696644E+22	6,696790E+22	3,897719E+22	3,897686E+22	1,339343E+23	7,795405E+22	2,118884E+23
-1607	6,696784E+22	6,696661E+22	3,897587E+22	3,897662E+22	1,339345E+23	7,795249E+22	2,118869E+23
-1606	6,696516E+22	6,696698E+22	3,897657E+22	3,897604E+22	1,339321E+23	7,795261E+22	2,118848E+23
-1605	6,696713E+22	6,696760E+22	3,897650E+22	3,897776E+22	1,339347E+23	7,795426E+22	2,118890E+23
-1604	6,696736E+22	6,696552E+22	3,897675E+22	3,897658E+22	1,339329E+23	7,795333E+22	2,118862E+23
-1603	6,696541E+22	6,696701E+22	3,897816E+22	3,897696E+22	1,339324E+23	7,795513E+22	2,118875E+23
-1602	6,696797E+22	6,696650E+22	3,897776E+22	3,897897E+22	1,339345E+23	7,795672E+22	2,118912E+23
-1601	6,696564E+22	6,696507E+22	3,897897E+22	3,897818E+22	1,339307E+23	7,795715E+22	2,118879E+23
-1600	6,696421E+22	6,696704E+22	3,898023E+22	3,897997E+22	1,339313E+23	7,796020E+22	2,118915E+23
-1599	6,696619E+22	6,696531E+22	3,897956E+22	3,898068E+22	1,339315E+23	7,796025E+22	2,118918E+23
-1598	6,696363E+22	6,696445E+22	3,898091E+22	3,897976E+22	1,339281E+23	7,796066E+22	2,118887E+23
-1597	6,696496E+22	6,696527E+22	3,898115E+22	3,898141E+22	1,339302E+23	7,796256E+22	2,118928E+23
-1596	6,696605E+22	6,696366E+22	3,898037E+22	3,898050E+22	1,339297E+23	7,796087E+22	2,118906E+23
-1595	6,696328E+22	6,696545E+22	3,898083E+22	3,897991E+22	1,339287E+23	7,796074E+22	2,118895E+23
-1594	6,696601E+22	6,696569E+22	3,897944E+22	3,898110E+22	1,339317E+23	7,796054E+22	2,118922E+23
-1593	6,696535E+22	6,696429E+22	3,897930E+22	3,897865E+22	1,339296E+23	7,795796E+22	2,118876E+23
-1592	6,696402E+22	6,696655E+22	3,897975E+22	3,897848E+22	1,339306E+23	7,795823E+22	2,118888E+23
-1591	6,696722E+22	6,696586E+22	3,897801E+22	3,897869E+22	1,339331E+23	7,795670E+22	2,118898E+23
-1590	6,696510E+22	6,696530E+22	3,897831E+22	3,897708E+22	1,339304E+23	7,795539E+22	2,118858E+23
-1589	6,696502E+22	6,696690E+22	3,897837E+22	3,897852E+22	1,339319E+23	7,795690E+22	2,118888E+23
-1588	6,696694E+22	6,696561E+22	3,897718E+22	3,897808E+22	1,339325E+23	7,795527E+22	2,118878E+23
-1587	6,696425E+22	6,696622E+22	3,897810E+22	3,897721E+22	1,339305E+23	7,795531E+22	2,118858E+23
-1586	6,696676E+22	6,696616E+22	3,897787E+22	3,897900E+22	1,339329E+23	7,795687E+22	2,118898E+23
-1585	6,696707E+22	6,696433E+22	3,897829E+22	3,897785E+22	1,339314E+23	7,795614E+22	2,118875E+23
-1584	6,696409E+22	6,696631E+22	3,897994E+22	3,897867E+22	1,339304E+23	7,795861E+22	2,118890E+23
-1583	6,696640E+22	6,696602E+22	3,897925E+22	3,898075E+22	1,339324E+23	7,796000E+22	2,118924E+23
-1582	6,696428E+22	6,696444E+22	3,898044E+22	3,897999E+22	1,339287E+23	7,796044E+22	2,118892E+23
-1581	6,696280E+22	6,696532E+22	3,898197E+22	3,898156E+22	1,339281E+23	7,796353E+22	2,118917E+23
-1580	6,696562E+22	6,696375E+22	3,898125E+22	3,898200E+22	1,339294E+23	7,796325E+22	2,118926E+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							
-1579	6,696291E+22	6,696350E+22	3,898241E+22	3,898099E+22	1,339264E+23	7,796340E+22	2,118898E+23
-1578	6,696417E+22	6,696424E+22	3,898212E+22	3,898292E+22	1,339284E+23	7,796505E+22	2,118935E+23
-1577	6,696527E+22	6,696305E+22	3,898134E+22	3,898179E+22	1,339283E+23	7,796313E+22	2,118914E+23
-1576	6,696201E+22	6,696495E+22	3,898214E+22	3,898107E+22	1,339270E+23	7,796321E+22	2,118902E+23
-1575	6,696510E+22	6,696511E+22	3,898065E+22	3,898190E+22	1,339302E+23	7,796255E+22	2,118928E+23
-1574	6,696480E+22	6,696363E+22	3,898051E+22	3,897957E+22	1,339284E+23	7,796009E+22	2,118885E+23
-1573	6,696299E+22	6,696519E+22	3,898118E+22	3,897975E+22	1,339282E+23	7,796093E+22	2,118891E+23
-1572	6,696622E+22	6,696497E+22	3,897922E+22	3,898017E+22	1,339312E+23	7,795939E+22	2,118906E+23
-1571	6,696375E+22	6,696474E+22	3,897946E+22	3,897858E+22	1,339285E+23	7,795804E+22	2,118865E+23
-1570	6,696421E+22	6,696554E+22	3,897931E+22	3,898000E+22	1,339298E+23	7,795931E+22	2,118891E+23
-1569	6,696668E+22	6,696423E+22	3,897839E+22	3,897908E+22	1,339309E+23	7,795747E+22	2,118884E+23
-1568	6,696368E+22	6,696524E+22	3,897972E+22	3,897829E+22	1,339289E+23	7,795801E+22	2,118869E+23
-1567	6,696610E+22	6,696561E+22	3,897932E+22	3,898018E+22	1,339317E+23	7,795950E+22	2,118912E+23
-1566	6,696594E+22	6,696423E+22	3,897970E+22	3,897952E+22	1,339302E+23	7,795922E+22	2,118894E+23
-1565	6,696229E+22	6,696540E+22	3,898172E+22	3,898064E+22	1,339277E+23	7,796236E+22	2,118901E+23
-1564	6,696493E+22	6,696491E+22	3,898104E+22	3,898246E+22	1,339298E+23	7,796350E+22	2,118933E+23
-1563	6,696296E+22	6,696327E+22	3,898231E+22	3,898148E+22	1,339262E+23	7,796379E+22	2,118900E+23
-1562	6,696225E+22	6,696336E+22	3,898340E+22	3,898313E+22	1,339256E+23	7,796653E+22	2,118921E+23
-1561	6,696524E+22	6,696220E+22	3,898258E+22	3,898342E+22	1,339274E+23	7,796599E+22	2,118934E+23
-1560	6,696182E+22	6,696287E+22	3,898368E+22	3,898259E+22	1,339247E+23	7,796627E+22	2,118910E+23
-1559	6,696310E+22	6,696388E+22	3,898305E+22	3,898422E+22	1,339270E+23	7,796727E+22	2,118943E+23
-1558	6,696439E+22	6,696276E+22	3,898235E+22	3,898288E+22	1,339272E+23	7,796523E+22	2,118924E+23
-1557	6,696100E+22	6,696371E+22	3,898363E+22	3,898201E+22	1,339247E+23	7,796564E+22	2,118903E+23
-1556	6,696441E+22	6,696405E+22	3,898215E+22	3,898271E+22	1,339285E+23	7,796486E+22	2,118933E+23
-1555	6,696380E+22	6,696301E+22	3,898195E+22	3,898067E+22	1,339268E+23	7,796262E+22	2,118894E+23
-1554	6,696200E+22	6,696403E+22	3,898210E+22	3,898133E+22	1,339260E+23	7,796343E+22	2,118895E+23
-1553	6,696539E+22	6,696396E+22	3,898022E+22	3,898158E+22	1,339294E+23	7,796180E+22	2,118912E+23
-1552	6,696276E+22	6,696397E+22	3,898070E+22	3,897990E+22	1,339267E+23	7,796060E+22	2,118873E+23
-1551	6,696368E+22	6,696476E+22	3,898046E+22	3,898098E+22	1,339284E+23	7,796144E+22	2,118899E+23
-1550	6,696643E+22	6,696368E+22	3,897969E+22	3,898021E+22	1,339301E+23	7,795990E+22	2,118900E+23
-1549	6,696262E+22	6,696413E+22	3,898145E+22	3,897981E+22	1,339268E+23	7,796126E+22	2,118880E+23
-1548	6,696461E+22	6,696506E+22	3,898099E+22	3,898189E+22	1,339297E+23	7,796287E+22	2,118925E+23
-1547	6,696418E+22	6,696364E+22	3,898140E+22	3,898132E+22	1,339278E+23	7,796273E+22	2,118905E+23
-1546	6,696096E+22	6,696359E+22	3,898319E+22	3,898247E+22	1,339246E+23	7,796566E+22	2,118902E+23
-1545	6,696428E+22	6,696304E+22	3,898263E+22	3,898384E+22	1,339273E+23	7,796647E+22	2,118938E+23
-1544	6,696228E+22	6,696185E+22	3,898393E+22	3,898289E+22	1,339241E+23	7,796682E+22	2,118910E+23
-1543	6,696168E+22	6,696252E+22	3,898457E+22	3,898448E+22	1,339242E+23	7,796905E+22	2,118932E+23
-1542	6,696447E+22	6,696208E+22	3,898360E+22	3,898491E+22	1,339266E+23	7,796851E+22	2,118951E+23
-1541	6,696047E+22	6,696219E+22	3,898513E+22	3,898406E+22	1,339227E+23	7,796919E+22	2,118918E+23
-1540	6,696194E+22	6,696336E+22	3,898457E+22	3,898526E+22	1,339253E+23	7,796983E+22	2,118951E+23
-1539	6,696333E+22	6,696213E+22	3,898401E+22	3,898378E+22	1,339255E+23	7,796779E+22	2,118933E+23
-1538	6,696035E+22	6,696206E+22	3,898496E+22	3,898325E+22	1,339224E+23	7,796821E+22	2,118906E+23
-1537	6,696369E+22	6,696270E+22	3,898336E+22	3,898399E+22	1,339264E+23	7,796734E+22	2,118937E+23
-1536	6,696251E+22	6,696229E+22	3,898303E+22	3,898231E+22	1,339248E+23	7,796534E+22	2,118901E+23
-1535	6,696108E+22	6,696331E+22	3,898278E+22	3,898272E+22	1,339244E+23	7,796551E+22	2,118899E+23
-1534	6,696484E+22	6,696333E+22	3,898104E+22	3,898270E+22	1,339282E+23	7,796374E+22	2,118919E+23
-1533	6,696219E+22	6,696275E+22	3,898209E+22	3,898091E+22	1,339249E+23	7,796300E+22	2,118879E+23
-1532	6,696317E+22	6,696398E+22	3,898192E+22	3,898183E+22	1,339272E+23	7,796375E+22	2,118909E+23
-1531	6,696529E+22	6,696339E+22	3,898132E+22	3,898146E+22	1,339287E+23	7,796279E+22	2,118915E+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							
-1530	6,696131E+22	6,696307E+22	3,898287E+22	3,898167E+22	1,339244E+23	7,796454E+22	2,118889E+23
-1529	6,696322E+22	6,696383E+22	3,898260E+22	3,898358E+22	1,339270E+23	7,796618E+22	2,118932E+23
-1528	6,696275E+22	6,696247E+22	3,898318E+22	3,898306E+22	1,339252E+23	7,796624E+22	2,118915E+23
-1527	6,696030E+22	6,696209E+22	3,898461E+22	3,898387E+22	1,339224E+23	7,796848E+22	2,118909E+23
-1526	6,696395E+22	6,696191E+22	3,898399E+22	3,898529E+22	1,339259E+23	7,796928E+22	2,118951E+23
-1525	6,696138E+22	6,696067E+22	3,898549E+22	3,898459E+22	1,339220E+23	7,797008E+22	2,118921E+23
-1524	6,696045E+22	6,696216E+22	3,898592E+22	3,898602E+22	1,339226E+23	7,797194E+22	2,118946E+23
-1523	6,696307E+22	6,696187E+22	3,898513E+22	3,898630E+22	1,339249E+23	7,797144E+22	2,118964E+23
-1522	6,695948E+22	6,696081E+22	3,898652E+22	3,898540E+22	1,339203E+23	7,797192E+22	2,118922E+23
-1521	6,696126E+22	6,696192E+22	3,898612E+22	3,898617E+22	1,339232E+23	7,797229E+22	2,118955E+23
-1520	6,696244E+22	6,696112E+22	3,898548E+22	3,898496E+22	1,339236E+23	7,797045E+22	2,118940E+23
-1519	6,695952E+22	6,696122E+22	3,898584E+22	3,898456E+22	1,339207E+23	7,797040E+22	2,118911E+23
-1518	6,696287E+22	6,696235E+22	3,898407E+22	3,898545E+22	1,339252E+23	7,796952E+22	2,118947E+23
-1517	6,696141E+22	6,696130E+22	3,898411E+22	3,898372E+22	1,339227E+23	7,796783E+22	2,118905E+23
-1516	6,696028E+22	6,696269E+22	3,898391E+22	3,898363E+22	1,339230E+23	7,796755E+22	2,118905E+23
-1515	6,696430E+22	6,696273E+22	3,898248E+22	3,898349E+22	1,339270E+23	7,796597E+22	2,118930E+23
-1514	6,696174E+22	6,696128E+22	3,898343E+22	3,898213E+22	1,339230E+23	7,796556E+22	2,118886E+23
-1513	6,696226E+22	6,696299E+22	3,898342E+22	3,898315E+22	1,339252E+23	7,796657E+22	2,118918E+23
-1512	6,696367E+22	6,696280E+22	3,898283E+22	3,898327E+22	1,339265E+23	7,796611E+22	2,118926E+23
-1511	6,696002E+22	6,696199E+22	3,898411E+22	3,898338E+22	1,339220E+23	7,796749E+22	2,118895E+23
-1510	6,696236E+22	6,696268E+22	3,898394E+22	3,898507E+22	1,339250E+23	7,796901E+22	2,118941E+23
-1509	6,696193E+22	6,696074E+22	3,898493E+22	3,898455E+22	1,339227E+23	7,796949E+22	2,118922E+23
-1508	6,695965E+22	6,696114E+22	3,898616E+22	3,898520E+22	1,339208E+23	7,797135E+22	2,118921E+23
-1507	6,696294E+22	6,696156E+22	3,898558E+22	3,898681E+22	1,339245E+23	7,797239E+22	2,118969E+23
-1506	6,696028E+22	6,695974E+22	3,898685E+22	3,898643E+22	1,339200E+23	7,797328E+22	2,118933E+23
-1505	6,695932E+22	6,696127E+22	3,898750E+22	3,898739E+22	1,339206E+23	7,797489E+22	2,118955E+23
-1504	6,696177E+22	6,696112E+22	3,898685E+22	3,898765E+22	1,339229E+23	7,797450E+22	2,118974E+23
-1503	6,695885E+22	6,695956E+22	3,898786E+22	3,898656E+22	1,339184E+23	7,797441E+22	2,118928E+23
-1502	6,696064E+22	6,696088E+22	3,898728E+22	3,898738E+22	1,339215E+23	7,797465E+22	2,118962E+23
-1501	6,696126E+22	6,695998E+22	3,898672E+22	3,898657E+22	1,339212E+23	7,797330E+22	2,118945E+23
-1500	6,695836E+22	6,696066E+22	3,898667E+22	3,898590E+22	1,339190E+23	7,797257E+22	2,118916E+23
-1499	6,696182E+22	6,696180E+22	3,898512E+22	3,898657E+22	1,339236E+23	7,797169E+22	2,118953E+23
-1498	6,696097E+22	6,695986E+22	3,898511E+22	3,898476E+22	1,339208E+23	7,796987E+22	2,118907E+23
-1497	6,696008E+22	6,696140E+22	3,898523E+22	3,898425E+22	1,339215E+23	7,796947E+22	2,118910E+23
-1496	6,696355E+22	6,696214E+22	3,898396E+22	3,898452E+22	1,339257E+23	7,796848E+22	2,118942E+23
-1495	6,696085E+22	6,696070E+22	3,898455E+22	3,898352E+22	1,339216E+23	7,796807E+22	2,118896E+23
-1494	6,696098E+22	6,696260E+22	3,898462E+22	3,898476E+22	1,339236E+23	7,796938E+22	2,118930E+23
-1493	6,696208E+22	6,696168E+22	3,898452E+22	3,898509E+22	1,339238E+23	7,796961E+22	2,118934E+23
-1492	6,695886E+22	6,696095E+22	3,898571E+22	3,898480E+22	1,339198E+23	7,797051E+22	2,118903E+23
-1491	6,696162E+22	6,696155E+22	3,898575E+22	3,898648E+22	1,339232E+23	7,797223E+22	2,118954E+23
-1490	6,696138E+22	6,695899E+22	3,898646E+22	3,898634E+22	1,339204E+23	7,797280E+22	2,118932E+23
-1489	6,695879E+22	6,696009E+22	3,898767E+22	3,898687E+22	1,339189E+23	7,797453E+22	2,118934E+23
-1488	6,696150E+22	6,696113E+22	3,898711E+22	3,898864E+22	1,339226E+23	7,797575E+22	2,118984E+23
-1487	6,695922E+22	6,695884E+22	3,898812E+22	3,898793E+22	1,339181E+23	7,797605E+22	2,118941E+23
-1486	6,695857E+22	6,696039E+22	3,898888E+22	3,898851E+22	1,339190E+23	7,797740E+22	2,118964E+23
-1485	6,696085E+22	6,695963E+22	3,898854E+22	3,898883E+22	1,339205E+23	7,797737E+22	2,118979E+23
-1484	6,695787E+22	6,695873E+22	3,898917E+22	3,898766E+22	1,339166E+23	7,797684E+22	2,118934E+23
-1483	6,695951E+22	6,696041E+22	3,898851E+22	3,898872E+22	1,339199E+23	7,797723E+22	2,118971E+23
-1482	6,696020E+22	6,695876E+22	3,898765E+22	3,898816E+22	1,339190E+23	7,797580E+22	2,118948E+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							
-1481	6,695763E+22	6,695965E+22	3,898775E+22	3,898693E+22	1,339173E+23	7,797468E+22	2,118920E+23
-1480	6,696111E+22	6,696108E+22	3,898639E+22	3,898749E+22	1,339222E+23	7,797388E+22	2,118961E+23
-1479	6,696080E+22	6,695884E+22	3,898615E+22	3,898561E+22	1,339196E+23	7,797175E+22	2,118914E+23
-1478	6,695962E+22	6,696082E+22	3,898636E+22	3,898527E+22	1,339204E+23	7,797163E+22	2,118921E+23
-1477	6,696208E+22	6,696143E+22	3,898542E+22	3,898614E+22	1,339235E+23	7,797156E+22	2,118951E+23
-1476	6,695922E+22	6,696029E+22	3,898586E+22	3,898514E+22	1,339195E+23	7,797099E+22	2,118905E+23
-1475	6,695957E+22	6,696175E+22	3,898623E+22	3,898632E+22	1,339213E+23	7,797254E+22	2,118939E+23
-1474	6,696124E+22	6,695975E+22	3,898604E+22	3,898673E+22	1,339210E+23	7,797277E+22	2,118938E+23
-1473	6,695849E+22	6,695925E+22	3,898730E+22	3,898607E+22	1,339177E+23	7,797337E+22	2,118911E+23
-1472	6,696081E+22	6,696066E+22	3,898735E+22	3,898807E+22	1,339215E+23	7,797542E+22	2,118969E+23
-1471	6,696066E+22	6,695831E+22	3,898763E+22	3,898806E+22	1,339190E+23	7,797569E+22	2,118947E+23
-1470	6,695777E+22	6,695965E+22	3,898896E+22	3,898840E+22	1,339174E+23	7,797737E+22	2,118948E+23
-1469	6,696001E+22	6,696023E+22	3,898895E+22	3,899020E+22	1,339202E+23	7,797915E+22	2,118994E+23
-1468	6,695807E+22	6,695804E+22	3,898981E+22	3,898906E+22	1,339161E+23	7,797887E+22	2,118950E+23
-1467	6,695757E+22	6,695931E+22	3,899070E+22	3,898969E+22	1,339169E+23	7,798039E+22	2,118973E+23
-1466	6,695987E+22	6,695798E+22	3,898992E+22	3,899049E+22	1,339178E+23	7,798042E+22	2,118983E+23
-1465	6,695684E+22	6,695754E+22	3,899030E+22	3,898917E+22	1,339144E+23	7,797947E+22	2,118938E+23
-1464	6,695825E+22	6,695971E+22	3,898958E+22	3,899024E+22	1,339180E+23	7,797981E+22	2,118978E+23
-1463	6,695969E+22	6,695773E+22	3,898839E+22	3,898927E+22	1,339174E+23	7,797766E+22	2,118951E+23
-1462	6,695744E+22	6,695887E+22	3,898866E+22	3,898760E+22	1,339163E+23	7,797626E+22	2,118926E+23
-1461	6,696049E+22	6,696019E+22	3,898779E+22	3,898837E+22	1,339207E+23	7,797616E+22	2,118968E+23
-1460	6,695983E+22	6,695867E+22	3,898738E+22	3,898657E+22	1,339185E+23	7,797395E+22	2,118924E+23
-1459	6,695825E+22	6,696068E+22	3,898781E+22	3,898669E+22	1,339189E+23	7,797450E+22	2,118934E+23
-1458	6,696057E+22	6,696024E+22	3,898679E+22	3,898797E+22	1,339208E+23	7,797476E+22	2,118956E+23
-1457	6,695812E+22	6,695894E+22	3,898741E+22	3,898662E+22	1,339171E+23	7,797403E+22	2,118911E+23
-1456	6,695871E+22	6,696044E+22	3,898790E+22	3,898778E+22	1,339192E+23	7,797568E+22	2,118948E+23
-1455	6,696101E+22	6,695814E+22	3,898733E+22	3,898818E+22	1,339191E+23	7,797550E+22	2,118946E+23
-1454	6,695811E+22	6,695839E+22	3,898852E+22	3,898755E+22	1,339165E+23	7,797607E+22	2,118926E+23
-1453	6,695950E+22	6,695992E+22	3,898886E+22	3,898987E+22	1,339194E+23	7,797873E+22	2,118982E+23
-1452	6,695910E+22	6,695802E+22	3,898908E+22	3,898958E+22	1,339171E+23	7,797866E+22	2,118958E+23
-1451	6,695650E+22	6,695899E+22	3,899081E+22	3,898977E+22	1,339155E+23	7,798058E+22	2,118961E+23
-1450	6,695892E+22	6,695845E+22	3,899074E+22	3,899163E+22	1,339174E+23	7,798237E+22	2,118997E+23
-1449	6,695730E+22	6,695650E+22	3,899154E+22	3,899031E+22	1,339138E+23	7,798185E+22	2,118956E+23
-1448	6,695641E+22	6,695834E+22	3,899219E+22	3,899125E+22	1,339148E+23	7,798344E+22	2,118982E+23
-1447	6,695893E+22	6,695702E+22	3,899077E+22	3,899215E+22	1,339159E+23	7,798292E+22	2,118989E+23
-1446	6,695610E+22	6,695694E+22	3,899109E+22	3,899047E+22	1,339130E+23	7,798156E+22	2,118946E+23
-1445	6,695729E+22	6,695885E+22	3,899081E+22	3,899141E+22	1,339161E+23	7,798223E+22	2,118984E+23
-1444	6,695906E+22	6,695730E+22	3,898957E+22	3,898996E+22	1,339164E+23	7,797953E+22	2,118959E+23
-1443	6,695694E+22	6,695831E+22	3,899014E+22	3,898843E+22	1,339152E+23	7,797858E+22	2,118938E+23
-1442	6,695942E+22	6,695909E+22	3,898914E+22	3,898977E+22	1,339185E+23	7,797891E+22	2,118974E+23
-1441	6,695856E+22	6,695784E+22	3,898868E+22	3,898807E+22	1,339164E+23	7,797674E+22	2,118931E+23
-1440	6,695668E+22	6,695982E+22	3,898921E+22	3,898834E+22	1,339165E+23	7,797756E+22	2,118941E+23
-1439	6,695983E+22	6,695875E+22	3,898790E+22	3,898944E+22	1,339186E+23	7,797734E+22	2,118959E+23
-1438	6,695791E+22	6,695750E+22	3,898856E+22	3,898770E+22	1,339154E+23	7,797626E+22	2,118917E+23
-1437	6,695808E+22	6,695913E+22	3,898943E+22	3,898914E+22	1,339172E+23	7,797857E+22	2,118958E+23
-1436	6,696010E+22	6,695782E+22	3,898863E+22	3,898950E+22	1,339179E+23	7,797813E+22	2,118961E+23
-1435	6,695687E+22	6,695820E+22	3,899013E+22	3,898914E+22	1,339151E+23	7,797927E+22	2,118943E+23
-1434	6,695793E+22	6,695892E+22	3,899058E+22	3,899168E+22	1,339168E+23	7,798226E+22	2,118991E+23
-1433	6,695787E+22	6,695689E+22	3,899100E+22	3,899103E+22	1,339148E+23	7,798203E+22	2,118968E+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							
-1432	6,695531E+22	6,695774E+22	3,899282E+22	3,899128E+22	1,339130E+23	7,798410E+22	2,118971E+23
-1431	6,695822E+22	6,695680E+22	3,899218E+22	3,899323E+22	1,339150E+23	7,798541E+22	2,119004E+23
-1430	6,695651E+22	6,695540E+22	3,899267E+22	3,899192E+22	1,339119E+23	7,798459E+22	2,118965E+23
-1429	6,695504E+22	6,695741E+22	3,899337E+22	3,899309E+22	1,339125E+23	7,798646E+22	2,118989E+23
-1428	6,695777E+22	6,695658E+22	3,899173E+22	3,899339E+22	1,339144E+23	7,798513E+22	2,118995E+23
-1427	6,695554E+22	6,695635E+22	3,899236E+22	3,899138E+22	1,339119E+23	7,798375E+22	2,118956E+23
-1426	6,695678E+22	6,695752E+22	3,899212E+22	3,899229E+22	1,339143E+23	7,798441E+22	2,118987E+23
-1425	6,695855E+22	6,695644E+22	3,899096E+22	3,899075E+22	1,339150E+23	7,798171E+22	2,118967E+23
-1424	6,695584E+22	6,695787E+22	3,899155E+22	3,898972E+22	1,339137E+23	7,798126E+22	2,118950E+23
-1423	6,695822E+22	6,695823E+22	3,899011E+22	3,899127E+22	1,339164E+23	7,798138E+22	2,118978E+23
-1422	6,695756E+22	6,695701E+22	3,898973E+22	3,898944E+22	1,339146E+23	7,797917E+22	2,118937E+23
-1421	6,695563E+22	6,695850E+22	3,899062E+22	3,898976E+22	1,339141E+23	7,798037E+22	2,118945E+23
-1420	6,695910E+22	6,695776E+22	3,898921E+22	3,899049E+22	1,339169E+23	7,797970E+22	2,118966E+23
-1419	6,695751E+22	6,695667E+22	3,899006E+22	3,898899E+22	1,339142E+23	7,797905E+22	2,118932E+23
-1418	6,695701E+22	6,695799E+22	3,899083E+22	3,899088E+22	1,339150E+23	7,798171E+22	2,118967E+23
-1417	6,695879E+22	6,695718E+22	3,899015E+22	3,899119E+22	1,339160E+23	7,798134E+22	2,118973E+23
-1416	6,695538E+22	6,695744E+22	3,899193E+22	3,899086E+22	1,339128E+23	7,798279E+22	2,118956E+23
-1415	6,695690E+22	6,695745E+22	3,899217E+22	3,899319E+22	1,339144E+23	7,798535E+22	2,118997E+23
-1414	6,695727E+22	6,695550E+22	3,899258E+22	3,899233E+22	1,339128E+23	7,798491E+22	2,118977E+23
-1413	6,695425E+22	6,695634E+22	3,899452E+22	3,899293E+22	1,339106E+23	7,798745E+22	2,118980E+23
-1412	6,695696E+22	6,695624E+22	3,899343E+22	3,899476E+22	1,339132E+23	7,798819E+22	2,119014E+23
-1411	6,695550E+22	6,695492E+22	3,899394E+22	3,899352E+22	1,339104E+23	7,798746E+22	2,118979E+23
-1410	6,695393E+22	6,695627E+22	3,899464E+22	3,899460E+22	1,339102E+23	7,798924E+22	2,118994E+23
-1409	6,695716E+22	6,695567E+22	3,899315E+22	3,899434E+22	1,339128E+23	7,798749E+22	2,119003E+23
-1408	6,695494E+22	6,695548E+22	3,899394E+22	3,899228E+22	1,339104E+23	7,798622E+22	2,118966E+23
-1407	6,695630E+22	6,695644E+22	3,899328E+22	3,899335E+22	1,339127E+23	7,798663E+22	2,118994E+23
-1406	6,695771E+22	6,695577E+22	3,899191E+22	3,899196E+22	1,339135E+23	7,798388E+22	2,118974E+23
-1405	6,695422E+22	6,695705E+22	3,899271E+22	3,899137E+22	1,339113E+23	7,798408E+22	2,118953E+23
-1404	6,695681E+22	6,695759E+22	3,899113E+22	3,899251E+22	1,339144E+23	7,798364E+22	2,118980E+23
-1403	6,695693E+22	6,695596E+22	3,899104E+22	3,899059E+22	1,339129E+23	7,798163E+22	2,118945E+23
-1402	6,695506E+22	6,695687E+22	3,899194E+22	3,899102E+22	1,339119E+23	7,798296E+22	2,118949E+23
-1401	6,695861E+22	6,695676E+22	3,899061E+22	3,899168E+22	1,339154E+23	7,798229E+22	2,118977E+23
-1400	6,695646E+22	6,695623E+22	3,899156E+22	3,899056E+22	1,339127E+23	7,798213E+22	2,118948E+23
-1399	6,695588E+22	6,695722E+22	3,899210E+22	3,899256E+22	1,339131E+23	7,798465E+22	2,118978E+23
-1398	6,695772E+22	6,695640E+22	3,899166E+22	3,899268E+22	1,339141E+23	7,798434E+22	2,118985E+23
-1397	6,695411E+22	6,695620E+22	3,899389E+22	3,899251E+22	1,339103E+23	7,798641E+22	2,118967E+23
-1396	6,695581E+22	6,695637E+22	3,899392E+22	3,899450E+22	1,339122E+23	7,798842E+22	2,119006E+23
-1395	6,695651E+22	6,695443E+22	3,899432E+22	3,899401E+22	1,339109E+23	7,798833E+22	2,118993E+23
-1394	6,695294E+22	6,695495E+22	3,899589E+22	3,899493E+22	1,339079E+23	7,799082E+22	2,118987E+23
-1393	6,695575E+22	6,695532E+22	3,899474E+22	3,899642E+22	1,339111E+23	7,799116E+22	2,119022E+23
-1392	6,695457E+22	6,695410E+22	3,899537E+22	3,899490E+22	1,339087E+23	7,799028E+22	2,118990E+23
-1391	6,695355E+22	6,695492E+22	3,899574E+22	3,899555E+22	1,339085E+23	7,799130E+22	2,118998E+23
-1390	6,695693E+22	6,695474E+22	3,899434E+22	3,899504E+22	1,339117E+23	7,798937E+22	2,119011E+23
-1389	6,695403E+22	6,695474E+22	3,899526E+22	3,899346E+22	1,339088E+23	7,798872E+22	2,118975E+23
-1388	6,695476E+22	6,695626E+22	3,899431E+22	3,899447E+22	1,339110E+23	7,798877E+22	2,118998E+23
-1387	6,695643E+22	6,695542E+22	3,899309E+22	3,899341E+22	1,339119E+23	7,798650E+22	2,118984E+23
-1386	6,695290E+22	6,695567E+22	3,899392E+22	3,899288E+22	1,339086E+23	7,798680E+22	2,118954E+23
-1385	6,695613E+22	6,695629E+22	3,899250E+22	3,899360E+22	1,339124E+23	7,798610E+22	2,118985E+23
-1384	6,695654E+22	6,695477E+22	3,899252E+22	3,899177E+22	1,339113E+23	7,798428E+22	2,118956E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1383	6,695470E+22	6,695561E+22	3,899300E+22	3,899238E+22	1,339103E+23	7,798538E+22	2,118957E+23
-1382	6,695785E+22	6,695619E+22	3,899170E+22	3,899313E+22	1,339140E+23	7,798482E+22	2,118989E+23
-1381	6,695500E+22	6,695558E+22	3,899305E+22	3,899235E+22	1,339106E+23	7,798541E+22	2,118960E+23
-1380	6,695443E+22	6,695662E+22	3,899368E+22	3,899385E+22	1,339111E+23	7,798753E+22	2,118986E+23
-1379	6,695692E+22	6,695536E+22	3,899353E+22	3,899406E+22	1,339123E+23	7,798759E+22	2,118999E+23
-1378	6,695309E+22	6,695443E+22	3,899575E+22	3,899417E+22	1,339075E+23	7,798992E+22	2,118974E+23
-1377	6,695482E+22	6,695517E+22	3,899564E+22	3,899613E+22	1,339100E+23	7,799177E+22	2,119018E+23
-1376	6,695523E+22	6,695360E+22	3,899590E+22	3,899587E+22	1,339088E+23	7,799177E+22	2,119006E+23
-1375	6,695197E+22	6,695386E+22	3,899699E+22	3,899668E+22	1,339058E+23	7,799367E+22	2,118995E+23
-1374	6,695510E+22	6,695439E+22	3,899594E+22	3,899762E+22	1,339095E+23	7,799356E+22	2,119031E+23
-1373	6,695372E+22	6,695313E+22	3,899688E+22	3,899609E+22	1,339068E+23	7,799297E+22	2,118998E+23
-1372	6,695278E+22	6,695432E+22	3,899708E+22	3,899632E+22	1,339071E+23	7,799340E+22	2,119005E+23
-1371	6,695615E+22	6,695423E+22	3,899567E+22	3,899625E+22	1,339104E+23	7,799191E+22	2,119023E+23
-1370	6,695246E+22	6,695376E+22	3,899643E+22	3,899512E+22	1,339062E+23	7,799156E+22	2,118978E+23
-1369	6,695332E+22	6,695538E+22	3,899547E+22	3,899586E+22	1,339087E+23	7,799133E+22	2,119000E+23
-1368	6,695541E+22	6,695431E+22	3,899442E+22	3,899468E+22	1,339097E+23	7,798910E+22	2,118988E+23
-1367	6,695268E+22	6,695403E+22	3,899485E+22	3,899393E+22	1,339067E+23	7,798878E+22	2,118955E+23
-1366	6,695614E+22	6,695510E+22	3,899354E+22	3,899447E+22	1,339112E+23	7,798801E+22	2,118992E+23
-1365	6,695584E+22	6,695415E+22	3,899375E+22	3,899314E+22	1,339100E+23	7,798689E+22	2,118969E+23
-1364	6,695350E+22	6,695557E+22	3,899415E+22	3,899358E+22	1,339091E+23	7,798773E+22	2,118968E+23
-1363	6,695672E+22	6,695599E+22	3,899324E+22	3,899464E+22	1,339127E+23	7,798788E+22	2,119006E+23
-1362	6,695355E+22	6,695440E+22	3,899487E+22	3,899404E+22	1,339079E+23	7,798892E+22	2,118969E+23
-1361	6,695326E+22	6,695533E+22	3,899568E+22	3,899526E+22	1,339086E+23	7,799095E+22	2,118995E+23
-1360	6,695600E+22	6,695399E+22	3,899558E+22	3,899575E+22	1,339100E+23	7,799133E+22	2,119013E+23
-1359	6,695226E+22	6,695273E+22	3,899706E+22	3,899608E+22	1,339050E+23	7,799314E+22	2,118981E+23
-1358	6,695378E+22	6,695406E+22	3,899681E+22	3,899794E+22	1,339078E+23	7,799475E+22	2,119026E+23
-1357	6,695396E+22	6,695268E+22	3,899720E+22	3,899772E+22	1,339066E+23	7,799492E+22	2,119016E+23
-1356	6,695098E+22	6,695313E+22	3,899823E+22	3,899771E+22	1,339041E+23	7,799594E+22	2,119000E+23
-1355	6,695471E+22	6,695366E+22	3,899744E+22	3,899859E+22	1,339084E+23	7,799603E+22	2,119044E+23
-1354	6,695284E+22	6,695197E+22	3,899840E+22	3,899726E+22	1,339048E+23	7,799567E+22	2,119005E+23
-1353	6,695160E+22	6,695370E+22	3,899852E+22	3,899747E+22	1,339053E+23	7,799599E+22	2,119013E+23
-1352	6,695472E+22	6,695369E+22	3,899707E+22	3,899771E+22	1,339084E+23	7,799478E+22	2,119032E+23
-1351	6,695137E+22	6,695250E+22	3,899738E+22	3,899661E+22	1,339039E+23	7,799399E+22	2,118979E+23
-1350	6,695271E+22	6,695412E+22	3,899654E+22	3,899694E+22	1,339068E+23	7,799348E+22	2,119003E+23
-1349	6,695487E+22	6,695310E+22	3,899570E+22	3,899585E+22	1,339080E+23	7,799154E+22	2,118995E+23
-1348	6,695230E+22	6,695329E+22	3,899592E+22	3,899476E+22	1,339056E+23	7,799069E+22	2,118963E+23
-1347	6,695565E+22	6,695477E+22	3,899470E+22	3,899576E+22	1,339104E+23	7,799046E+22	2,119009E+23
-1346	6,695437E+22	6,695352E+22	3,899504E+22	3,899486E+22	1,339079E+23	7,798990E+22	2,118978E+23
-1345	6,695206E+22	6,695496E+22	3,899575E+22	3,899503E+22	1,339070E+23	7,799078E+22	2,118978E+23
-1344	6,695544E+22	6,695491E+22	3,899518E+22	3,899605E+22	1,339104E+23	7,799123E+22	2,119016E+23
-1343	6,695281E+22	6,695260E+22	3,899647E+22	3,899556E+22	1,339054E+23	7,799203E+22	2,118974E+23
-1342	6,695266E+22	6,695374E+22	3,899723E+22	3,899672E+22	1,339064E+23	7,799395E+22	2,119004E+23
-1341	6,695470E+22	6,695292E+22	3,899708E+22	3,899771E+22	1,339076E+23	7,799479E+22	2,119024E+23
-1340	6,695098E+22	6,695219E+22	3,899822E+22	3,899769E+22	1,339032E+23	7,799592E+22	2,118991E+23
-1339	6,695292E+22	6,695347E+22	3,899817E+22	3,899954E+22	1,339064E+23	7,799772E+22	2,119041E+23
-1338	6,695285E+22	6,695158E+22	3,899882E+22	3,899918E+22	1,339044E+23	7,799800E+22	2,119024E+23
-1337	6,695024E+22	6,695218E+22	3,900000E+22	3,899869E+22	1,339024E+23	7,799869E+22	2,119011E+23
-1336	6,695386E+22	6,695276E+22	3,899931E+22	3,899977E+22	1,339066E+23	7,799908E+22	2,119057E+23
-1335	6,695180E+22	6,695082E+22	3,899959E+22	3,899883E+22	1,339026E+23	7,799842E+22	2,119010E+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							
-1334	6,695033E+22	6,695273E+22	3,899959E+22	3,899894E+22	1,339031E+23	7,799853E+22	2,119016E+23
-1333	6,695330E+22	6,695271E+22	3,899822E+22	3,899929E+22	1,339060E+23	7,799751E+22	2,119035E+23
-1332	6,695066E+22	6,695148E+22	3,899831E+22	3,899747E+22	1,339021E+23	7,799578E+22	2,118979E+23
-1331	6,695269E+22	6,695319E+22	3,899763E+22	3,899785E+22	1,339059E+23	7,799548E+22	2,119014E+23
-1330	6,695427E+22	6,695213E+22	3,899689E+22	3,899703E+22	1,339064E+23	7,799391E+22	2,119003E+23
-1329	6,695133E+22	6,695302E+22	3,899717E+22	3,899589E+22	1,339044E+23	7,799306E+22	2,118974E+23
-1328	6,695433E+22	6,695457E+22	3,899625E+22	3,899717E+22	1,339089E+23	7,799342E+22	2,119023E+23
-1327	6,695319E+22	6,695243E+22	3,899636E+22	3,899641E+22	1,339056E+23	7,799276E+22	2,118984E+23
-1326	6,695105E+22	6,695359E+22	3,899738E+22	3,899634E+22	1,339046E+23	7,799372E+22	2,118984E+23
-1325	6,695437E+22	6,695351E+22	3,899696E+22	3,899768E+22	1,339079E+23	7,799463E+22	2,119025E+23
-1324	6,695196E+22	6,695132E+22	3,899790E+22	3,899702E+22	1,339033E+23	7,799492E+22	2,118982E+23
-1323	6,695184E+22	6,695287E+22	3,899855E+22	3,899861E+22	1,339047E+23	7,799717E+22	2,119019E+23
-1322	6,695320E+22	6,695185E+22	3,899845E+22	3,899974E+22	1,339051E+23	7,799819E+22	2,119032E+23
-1321	6,694982E+22	6,695136E+22	3,899978E+22	3,899913E+22	1,339012E+23	7,799890E+22	2,119001E+23
-1320	6,695210E+22	6,695252E+22	3,900007E+22	3,900072E+22	1,339046E+23	7,800079E+22	2,119054E+23
-1319	6,695232E+22	6,695016E+22	3,900036E+22	3,900039E+22	1,339025E+23	7,800075E+22	2,119032E+23
-1318	6,694955E+22	6,695111E+22	3,900157E+22	3,899987E+22	1,339007E+23	7,800144E+22	2,119021E+23
-1317	6,695232E+22	6,695213E+22	3,900076E+22	3,900142E+22	1,339044E+23	7,800218E+22	2,119066E+23
-1316	6,695037E+22	6,695027E+22	3,900066E+22	3,900023E+22	1,339006E+23	7,800090E+22	2,119015E+23
-1315	6,694945E+22	6,695196E+22	3,900069E+22	3,900037E+22	1,339014E+23	7,800106E+22	2,119025E+23
-1314	6,695227E+22	6,695145E+22	3,899949E+22	3,900061E+22	1,339037E+23	7,800010E+22	2,119038E+23
-1313	6,695030E+22	6,695053E+22	3,899960E+22	3,899835E+22	1,339008E+23	7,799796E+22	2,118988E+23
-1312	6,695223E+22	6,695240E+22	3,899902E+22	3,899889E+22	1,339046E+23	7,799790E+22	2,119025E+23
-1311	6,695340E+22	6,695133E+22	3,899781E+22	3,899846E+22	1,339047E+23	7,799626E+22	2,119010E+23
-1310	6,695027E+22	6,695226E+22	3,899829E+22	3,899722E+22	1,339025E+23	7,799551E+22	2,118980E+23
-1309	6,695279E+22	6,695368E+22	3,899772E+22	3,899861E+22	1,339065E+23	7,799633E+22	2,119028E+23
-1308	6,695226E+22	6,695134E+22	3,899776E+22	3,899748E+22	1,339036E+23	7,799524E+22	2,118988E+23
-1307	6,695063E+22	6,695233E+22	3,899888E+22	3,899770E+22	1,339030E+23	7,799657E+22	2,118995E+23
-1306	6,695320E+22	6,695219E+22	3,899853E+22	3,899943E+22	1,339054E+23	7,799796E+22	2,119034E+23
-1305	6,695079E+22	6,695062E+22	3,899935E+22	3,899867E+22	1,339014E+23	7,799802E+22	2,118994E+23
-1304	6,695063E+22	6,695219E+22	3,900022E+22	3,900033E+22	1,339028E+23	7,800055E+22	2,119034E+23
-1303	6,695222E+22	6,695068E+22	3,899991E+22	3,900141E+22	1,339029E+23	7,800132E+22	2,119042E+23
-1302	6,694917E+22	6,695012E+22	3,900154E+22	3,900036E+22	1,338993E+23	7,800190E+22	2,119012E+23
-1301	6,695112E+22	6,695149E+22	3,900197E+22	3,900214E+22	1,339026E+23	7,800411E+22	2,119067E+23
-1300	6,695135E+22	6,694933E+22	3,900182E+22	3,900174E+22	1,339007E+23	7,800356E+22	2,119042E+23
-1299	6,694840E+22	6,695048E+22	3,900280E+22	3,900167E+22	1,338989E+23	7,800447E+22	2,119033E+23
-1298	6,695051E+22	6,695112E+22	3,900200E+22	3,900329E+22	1,339016E+23	7,800529E+22	2,119069E+23
-1297	6,694922E+22	6,694922E+22	3,900190E+22	3,900145E+22	1,338984E+23	7,800335E+22	2,119018E+23
-1296	6,694897E+22	6,695078E+22	3,900210E+22	3,900133E+22	1,338998E+23	7,800344E+22	2,119032E+23
-1295	6,695212E+22	6,694998E+22	3,900047E+22	3,900158E+22	1,339021E+23	7,800204E+22	2,119041E+23
-1294	6,694994E+22	6,694963E+22	3,900065E+22	3,899926E+22	1,338996E+23	7,799990E+22	2,118995E+23
-1293	6,695102E+22	6,695216E+22	3,900014E+22	3,900018E+22	1,339032E+23	7,800032E+22	2,119035E+23
-1292	6,695221E+22	6,695097E+22	3,899883E+22	3,899957E+22	1,339032E+23	7,799840E+22	2,119016E+23
-1291	6,694938E+22	6,695160E+22	3,899962E+22	3,899855E+22	1,339010E+23	7,799817E+22	2,118991E+23
-1290	6,695145E+22	6,695238E+22	3,899941E+22	3,900002E+22	1,339038E+23	7,799943E+22	2,119033E+23
-1289	6,695144E+22	6,695011E+22	3,899948E+22	3,899878E+22	1,339015E+23	7,799826E+22	2,118998E+23
-1288	6,694978E+22	6,695121E+22	3,900060E+22	3,899936E+22	1,339010E+23	7,799996E+22	2,119010E+23
-1287	6,695204E+22	6,695094E+22	3,899973E+22	3,900145E+22	1,339030E+23	7,800118E+22	2,119042E+23
-1286	6,694979E+22	6,694951E+22	3,900071E+22	3,900040E+22	1,338993E+23	7,800111E+22	2,119004E+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							
-1285	6,694946E+22	6,695124E+22	3,900186E+22	3,900191E+22	1,339007E+23	7,800377E+22	2,119045E+23
-1284	6,695156E+22	6,694970E+22	3,900147E+22	3,900253E+22	1,339013E+23	7,800401E+22	2,119053E+23
-1283	6,694876E+22	6,694925E+22	3,900317E+22	3,900175E+22	1,338980E+23	7,800492E+22	2,119029E+23
-1282	6,694950E+22	6,695060E+22	3,900369E+22	3,900384E+22	1,339001E+23	7,800753E+22	2,119076E+23
-1281	6,694983E+22	6,694881E+22	3,900334E+22	3,900336E+22	1,338986E+23	7,800670E+22	2,119053E+23
-1280	6,694708E+22	6,694954E+22	3,900433E+22	3,900324E+22	1,338966E+23	7,800757E+22	2,119042E+23
-1279	6,694949E+22	6,694959E+22	3,900315E+22	3,900472E+22	1,338991E+23	7,800787E+22	2,119069E+23
-1278	6,694900E+22	6,694772E+22	3,900311E+22	3,900240E+22	1,338967E+23	7,800550E+22	2,119022E+23
-1277	6,694851E+22	6,694972E+22	3,900332E+22	3,900235E+22	1,338982E+23	7,800567E+22	2,119039E+23
-1276	6,695159E+22	6,694946E+22	3,900134E+22	3,900253E+22	1,339010E+23	7,800387E+22	2,119049E+23
-1275	6,694917E+22	6,694942E+22	3,900149E+22	3,900059E+22	1,338986E+23	7,800209E+22	2,119007E+23
-1274	6,694927E+22	6,695153E+22	3,900141E+22	3,900158E+22	1,339008E+23	7,800299E+22	2,119038E+23
-1273	6,695102E+22	6,695019E+22	3,900030E+22	3,900061E+22	1,339012E+23	7,800092E+22	2,119021E+23
-1272	6,694865E+22	6,695032E+22	3,900137E+22	3,899971E+22	1,338990E+23	7,800108E+22	2,119001E+23
-1271	6,695072E+22	6,695074E+22	3,900079E+22	3,900152E+22	1,339015E+23	7,800231E+22	2,119038E+23
-1270	6,695072E+22	6,694886E+22	3,900084E+22	3,900037E+22	1,338996E+23	7,800121E+22	2,119008E+23
-1269	6,694849E+22	6,695054E+22	3,900194E+22	3,900124E+22	1,338990E+23	7,800318E+22	2,119022E+23
-1268	6,695104E+22	6,695022E+22	3,900096E+22	3,900300E+22	1,339013E+23	7,800395E+22	2,119052E+23
-1267	6,694915E+22	6,694879E+22	3,900220E+22	3,900194E+22	1,338979E+23	7,800413E+22	2,119021E+23
-1266	6,694830E+22	6,695015E+22	3,900379E+22	3,900337E+22	1,338984E+23	7,800716E+22	2,119056E+23
-1265	6,695064E+22	6,694873E+22	3,900341E+22	3,900384E+22	1,338994E+23	7,800725E+22	2,119066E+23
-1264	6,694758E+22	6,694835E+22	3,900506E+22	3,900348E+22	1,338959E+23	7,800854E+22	2,119045E+23
-1263	6,694790E+22	6,694929E+22	3,900496E+22	3,900578E+22	1,338972E+23	7,801074E+22	2,119079E+23
-1262	6,694861E+22	6,694732E+22	3,900465E+22	3,900493E+22	1,338959E+23	7,800958E+22	2,119055E+23
-1261	6,694612E+22	6,694825E+22	3,900562E+22	3,900456E+22	1,338944E+23	7,801017E+22	2,119045E+23
-1260	6,694930E+22	6,694831E+22	3,900416E+22	3,900552E+22	1,338976E+23	7,800968E+22	2,119073E+23
-1259	6,694902E+22	6,694705E+22	3,900405E+22	3,900336E+22	1,338961E+23	7,800741E+22	2,119035E+23
-1258	6,694736E+22	6,694933E+22	3,900446E+22	3,900352E+22	1,338967E+23	7,800798E+22	2,119047E+23
-1257	6,695029E+22	6,694946E+22	3,900254E+22	3,900360E+22	1,338997E+23	7,800614E+22	2,119059E+23
-1256	6,694794E+22	6,694899E+22	3,900303E+22	3,900187E+22	1,338969E+23	7,800490E+22	2,119018E+23
-1255	6,694796E+22	6,695023E+22	3,900279E+22	3,900293E+22	1,338982E+23	7,800572E+22	2,119039E+23
-1254	6,695040E+22	6,694859E+22	3,900189E+22	3,900186E+22	1,338990E+23	7,800374E+22	2,119027E+23
-1253	6,694789E+22	6,694898E+22	3,900285E+22	3,900125E+22	1,338969E+23	7,800410E+22	2,119010E+23
-1252	6,694998E+22	6,694970E+22	3,900184E+22	3,900313E+22	1,338997E+23	7,800497E+22	2,119047E+23
-1251	6,694999E+22	6,694826E+22	3,900179E+22	3,900221E+22	1,338983E+23	7,800400E+22	2,119023E+23
-1250	6,694702E+22	6,694967E+22	3,900337E+22	3,900289E+22	1,338967E+23	7,800626E+22	2,119029E+23
-1249	6,695014E+22	6,694948E+22	3,900270E+22	3,900414E+22	1,338996E+23	7,800684E+22	2,119065E+23
-1248	6,694858E+22	6,694772E+22	3,900424E+22	3,900316E+22	1,338963E+23	7,800740E+22	2,119037E+23
-1247	6,694713E+22	6,694876E+22	3,900554E+22	3,900492E+22	1,338959E+23	7,801045E+22	2,119063E+23
-1246	6,694944E+22	6,694760E+22	3,900509E+22	3,900553E+22	1,338970E+23	7,801062E+22	2,119077E+23
-1245	6,694594E+22	6,694738E+22	3,900658E+22	3,900538E+22	1,338933E+23	7,801195E+22	2,119053E+23
-1244	6,694675E+22	6,694812E+22	3,900615E+22	3,900730E+22	1,338949E+23	7,801345E+22	2,119083E+23
-1243	6,694815E+22	6,694627E+22	3,900576E+22	3,900629E+22	1,338944E+23	7,801205E+22	2,119065E+23
-1242	6,694534E+22	6,694710E+22	3,900700E+22	3,900571E+22	1,338924E+23	7,801271E+22	2,119051E+23
-1241	6,694877E+22	6,694773E+22	3,900548E+22	3,900645E+22	1,338965E+23	7,801194E+22	2,119084E+23
-1240	6,694816E+22	6,694675E+22	3,900537E+22	3,900464E+22	1,338949E+23	7,801001E+22	2,119049E+23
-1239	6,694585E+22	6,694862E+22	3,900550E+22	3,900499E+22	1,338945E+23	7,801049E+22	2,119050E+23
-1238	6,694914E+22	6,694836E+22	3,900385E+22	3,900479E+22	1,338975E+23	7,800864E+22	2,119061E+23
-1237	6,694692E+22	6,694778E+22	3,900448E+22	3,900309E+22	1,338947E+23	7,800756E+22	2,119023E+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							
-1236	6,694753E+22	6,694877E+22	3,900398E+22	3,900398E+22	1,338963E+23	7,800796E+22	2,119043E+23
-1235	6,695006E+22	6,694763E+22	3,900293E+22	3,900328E+22	1,338977E+23	7,800621E+22	2,119039E+23
-1234	6,694669E+22	6,694827E+22	3,900405E+22	3,900291E+22	1,338950E+23	7,800696E+22	2,119019E+23
-1233	6,694889E+22	6,694925E+22	3,900312E+22	3,900451E+22	1,338981E+23	7,800763E+22	2,119058E+23
-1232	6,694904E+22	6,694768E+22	3,900346E+22	3,900366E+22	1,338967E+23	7,800712E+22	2,119038E+23
-1231	6,694596E+22	6,694839E+22	3,900504E+22	3,900427E+22	1,338943E+23	7,800932E+22	2,119037E+23
-1230	6,694941E+22	6,694797E+22	3,900471E+22	3,900543E+22	1,338974E+23	7,801014E+22	2,119075E+23
-1229	6,694741E+22	6,694661E+22	3,900619E+22	3,900490E+22	1,338940E+23	7,801110E+22	2,119051E+23
-1228	6,694579E+22	6,694766E+22	3,900693E+22	3,900679E+22	1,338935E+23	7,801372E+22	2,119072E+23
-1227	6,694815E+22	6,694671E+22	3,900625E+22	3,900756E+22	1,338949E+23	7,801381E+22	2,119087E+23
-1226	6,694443E+22	6,694612E+22	3,900798E+22	3,900709E+22	1,338905E+23	7,801507E+22	2,119056E+23
-1225	6,694605E+22	6,694700E+22	3,900760E+22	3,900835E+22	1,338930E+23	7,801596E+22	2,119090E+23
-1224	6,694790E+22	6,694539E+22	3,900729E+22	3,900735E+22	1,338933E+23	7,801464E+22	2,119079E+23
-1223	6,694454E+22	6,694617E+22	3,900820E+22	3,900691E+22	1,338907E+23	7,801511E+22	2,119058E+23
-1222	6,694785E+22	6,694712E+22	3,900678E+22	3,900766E+22	1,338950E+23	7,801444E+22	2,119094E+23
-1221	6,694676E+22	6,694633E+22	3,900668E+22	3,900601E+22	1,338931E+23	7,801270E+22	2,119058E+23
-1220	6,694474E+22	6,694769E+22	3,900663E+22	3,900615E+22	1,338924E+23	7,801278E+22	2,119052E+23
-1219	6,694855E+22	6,694737E+22	3,900498E+22	3,900598E+22	1,338959E+23	7,801096E+22	2,119069E+23
-1218	6,694603E+22	6,694639E+22	3,900588E+22	3,900434E+22	1,338924E+23	7,801021E+22	2,119026E+23
-1217	6,694687E+22	6,694787E+22	3,900528E+22	3,900520E+22	1,338947E+23	7,801048E+22	2,119052E+23
-1216	6,694923E+22	6,694705E+22	3,900417E+22	3,900487E+22	1,338963E+23	7,800904E+22	2,119053E+23
-1215	6,694528E+22	6,694728E+22	3,900514E+22	3,900454E+22	1,338926E+23	7,800968E+22	2,119022E+23
-1214	6,694800E+22	6,694809E+22	3,900466E+22	3,900579E+22	1,338961E+23	7,801045E+22	2,119065E+23
-1213	6,694815E+22	6,694659E+22	3,900525E+22	3,900493E+22	1,338947E+23	7,801018E+22	2,119049E+23
-1212	6,694530E+22	6,694709E+22	3,900669E+22	3,900556E+22	1,338924E+23	7,801225E+22	2,119046E+23
-1211	6,694850E+22	6,694715E+22	3,900620E+22	3,900713E+22	1,338957E+23	7,801333E+22	2,119090E+23
-1210	6,694558E+22	6,694577E+22	3,900784E+22	3,900692E+22	1,338913E+23	7,801476E+22	2,119061E+23
-1209	6,694425E+22	6,694687E+22	3,900850E+22	3,900852E+22	1,338911E+23	7,801703E+22	2,119082E+23
-1208	6,694707E+22	6,694574E+22	3,900792E+22	3,900923E+22	1,338928E+23	7,801715E+22	2,119100E+23
-1207	6,694355E+22	6,694461E+22	3,900943E+22	3,900852E+22	1,338882E+23	7,801795E+22	2,119061E+23
-1206	6,694580E+22	6,694552E+22	3,900920E+22	3,900948E+22	1,338913E+23	7,801868E+22	2,119100E+23
-1205	6,694713E+22	6,694469E+22	3,900876E+22	3,900869E+22	1,338918E+23	7,801745E+22	2,119093E+23
-1204	6,694357E+22	6,694556E+22	3,900919E+22	3,900828E+22	1,338891E+23	7,801747E+22	2,119066E+23
-1203	6,694667E+22	6,694662E+22	3,900773E+22	3,900902E+22	1,338933E+23	7,801675E+22	2,119100E+23
-1202	6,694535E+22	6,694537E+22	3,900804E+22	3,900725E+22	1,338907E+23	7,801529E+22	2,119060E+23
-1201	6,694399E+22	6,694652E+22	3,900800E+22	3,900696E+22	1,338905E+23	7,801496E+22	2,119055E+23
-1200	6,694801E+22	6,694637E+22	3,900639E+22	3,900710E+22	1,338944E+23	7,801349E+22	2,119079E+23
-1199	6,694509E+22	6,694528E+22	3,900691E+22	3,900576E+22	1,338904E+23	7,801267E+22	2,119030E+23
-1198	6,694601E+22	6,694692E+22	3,900646E+22	3,900661E+22	1,338929E+23	7,801307E+22	2,119060E+23
-1197	6,694802E+22	6,694653E+22	3,900552E+22	3,900637E+22	1,338946E+23	7,801189E+22	2,119064E+23
-1196	6,694445E+22	6,694633E+22	3,900644E+22	3,900583E+22	1,338908E+23	7,801227E+22	2,119030E+23
-1195	6,694735E+22	6,694718E+22	3,900617E+22	3,900706E+22	1,338945E+23	7,801323E+22	2,119078E+23
-1194	6,694702E+22	6,694546E+22	3,900716E+22	3,900649E+22	1,338925E+23	7,801365E+22	2,119061E+23
-1193	6,694405E+22	6,694622E+22	3,900847E+22	3,900722E+22	1,338903E+23	7,801570E+22	2,119060E+23
-1192	6,694699E+22	6,694648E+22	3,900786E+22	3,900921E+22	1,338935E+23	7,801707E+22	2,119105E+23
-1191	6,694390E+22	6,694433E+22	3,900926E+22	3,900894E+22	1,338882E+23	7,801820E+22	2,119064E+23
-1190	6,694347E+22	6,694515E+22	3,901016E+22	3,901002E+22	1,338886E+23	7,802018E+22	2,119088E+23
-1189	6,694650E+22	6,694444E+22	3,900960E+22	3,901050E+22	1,338909E+23	7,802010E+22	2,119110E+23
-1188	6,694329E+22	6,694343E+22	3,901071E+22	3,900967E+22	1,338867E+23	7,802039E+22	2,119071E+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	6,694524E+22	6,694512E+22	3,901031E+22	3,901077E+22	1,338904E+23	7,802108E+22	2,119114E+23
-1186	6,694559E+22	6,694432E+22	3,901008E+22	3,901012E+22	1,338899E+23	7,802020E+22	2,119101E+23
-1185	6,694215E+22	6,694514E+22	3,901055E+22	3,900943E+22	1,338873E+23	7,801998E+22	2,119073E+23
-1184	6,694553E+22	6,694593E+22	3,900918E+22	3,901019E+22	1,338915E+23	7,801937E+22	2,119108E+23
-1183	6,694424E+22	6,694380E+22	3,900936E+22	3,900846E+22	1,338880E+23	7,801782E+22	2,119059E+23
-1182	6,694358E+22	6,694490E+22	3,900939E+22	3,900814E+22	1,338885E+23	7,801753E+22	2,119060E+23
-1181	6,694714E+22	6,694547E+22	3,900759E+22	3,900858E+22	1,338926E+23	7,801617E+22	2,119088E+23
-1180	6,694425E+22	6,694446E+22	3,900765E+22	3,900729E+22	1,338887E+23	7,801493E+22	2,119036E+23
-1179	6,694521E+22	6,694631E+22	3,900731E+22	3,900796E+22	1,338915E+23	7,801526E+22	2,119068E+23
-1178	6,694691E+22	6,694565E+22	3,900700E+22	3,900758E+22	1,338926E+23	7,801459E+22	2,119072E+23
-1177	6,694377E+22	6,694543E+22	3,900817E+22	3,900681E+22	1,338892E+23	7,801498E+22	2,119042E+23
-1176	6,694644E+22	6,694645E+22	3,900804E+22	3,900847E+22	1,338929E+23	7,801651E+22	2,119094E+23
-1175	6,694546E+22	6,694435E+22	3,900882E+22	3,900840E+22	1,338898E+23	7,801723E+22	2,119070E+23
-1174	6,694276E+22	6,694490E+22	3,901019E+22	3,900915E+22	1,338877E+23	7,801934E+22	2,119070E+23
-1173	6,694553E+22	6,694539E+22	3,900960E+22	3,901110E+22	1,338909E+23	7,802070E+22	2,119116E+23
-1172	6,694322E+22	6,694285E+22	3,901064E+22	3,901052E+22	1,338861E+23	7,802117E+22	2,119072E+23
-1171	6,694317E+22	6,694391E+22	3,901152E+22	3,901132E+22	1,338871E+23	7,802283E+22	2,119099E+23
-1170	6,694572E+22	6,694351E+22	3,901126E+22	3,901190E+22	1,338892E+23	7,802317E+22	2,119124E+23
-1169	6,694232E+22	6,694299E+22	3,901213E+22	3,901097E+22	1,338853E+23	7,802311E+22	2,119084E+23
-1168	6,694370E+22	6,694493E+22	3,901168E+22	3,901229E+22	1,338886E+23	7,802397E+22	2,119126E+23
-1167	6,694387E+22	6,694329E+22	3,901136E+22	3,901162E+22	1,338872E+23	7,802298E+22	2,119101E+23
-1166	6,694128E+22	6,694350E+22	3,901203E+22	3,901054E+22	1,338848E+23	7,802257E+22	2,119073E+23
-1165	6,694473E+22	6,694463E+22	3,901064E+22	3,901126E+22	1,338894E+23	7,802190E+22	2,119113E+23
-1164	6,694391E+22	6,694246E+22	3,901027E+22	3,900965E+22	1,338864E+23	7,801992E+22	2,119063E+23
-1163	6,694307E+22	6,694425E+22	3,901009E+22	3,900944E+22	1,338873E+23	7,801954E+22	2,119069E+23
-1162	6,694596E+22	6,694504E+22	3,900866E+22	3,901000E+22	1,338910E+23	7,801866E+22	2,119097E+23
-1161	6,694332E+22	6,694408E+22	3,900888E+22	3,900835E+22	1,338874E+23	7,801723E+22	2,119046E+23
-1160	6,694435E+22	6,694588E+22	3,900888E+22	3,900905E+22	1,338902E+23	7,801792E+22	2,119082E+23
-1159	6,694589E+22	6,694436E+22	3,900872E+22	3,900888E+22	1,338903E+23	7,801760E+22	2,119078E+23
-1158	6,694306E+22	6,694393E+22	3,901010E+22	3,900834E+22	1,338870E+23	7,801844E+22	2,119054E+23
-1157	6,694494E+22	6,694555E+22	3,900983E+22	3,901040E+22	1,338905E+23	7,802023E+22	2,119107E+23
-1156	6,694409E+22	6,694308E+22	3,901010E+22	3,901050E+22	1,338872E+23	7,802060E+22	2,119078E+23
-1155	6,694183E+22	6,694364E+22	3,901142E+22	3,901093E+22	1,338855E+23	7,802236E+22	2,119078E+23
-1154	6,694458E+22	6,694395E+22	3,901123E+22	3,901259E+22	1,338885E+23	7,802381E+22	2,119123E+23
-1153	6,694278E+22	6,694181E+22	3,901222E+22	3,901162E+22	1,338846E+23	7,802384E+22	2,119084E+23
-1152	6,694252E+22	6,694348E+22	3,901305E+22	3,901263E+22	1,338860E+23	7,802568E+22	2,119117E+23
-1151	6,694418E+22	6,694282E+22	3,901270E+22	3,901350E+22	1,338870E+23	7,802621E+22	2,119132E+23
-1150	6,694100E+22	6,694214E+22	3,901372E+22	3,901252E+22	1,338831E+23	7,802624E+22	2,119094E+23
-1149	6,694208E+22	6,694412E+22	3,901332E+22	3,901368E+22	1,338862E+23	7,802700E+22	2,119132E+23
-1148	6,694300E+22	6,694180E+22	3,901257E+22	3,901291E+22	1,338848E+23	7,802548E+22	2,119103E+23
-1147	6,694100E+22	6,694202E+22	3,901309E+22	3,901164E+22	1,338830E+23	7,802473E+22	2,119077E+23
-1146	6,694401E+22	6,694347E+22	3,901185E+22	3,901256E+22	1,338875E+23	7,802441E+22	2,119119E+23
-1145	6,694319E+22	6,694200E+22	3,901116E+22	3,901089E+22	1,338852E+23	7,802204E+22	2,119072E+23
-1144	6,694209E+22	6,694412E+22	3,901102E+22	3,901077E+22	1,338862E+23	7,802179E+22	2,119080E+23
-1143	6,694472E+22	6,694416E+22	3,900989E+22	3,901122E+22	1,338889E+23	7,802111E+22	2,119100E+23
-1142	6,694281E+22	6,694279E+22	3,901053E+22	3,900933E+22	1,338856E+23	7,801987E+22	2,119055E+23
-1141	6,694340E+22	6,694491E+22	3,901076E+22	3,901016E+22	1,338883E+23	7,802092E+22	2,119092E+23
-1140	6,694507E+22	6,694318E+22	3,901015E+22	3,901050E+22	1,338883E+23	7,802065E+22	2,119089E+23
-1139	6,694197E+22	6,694294E+22	3,901138E+22	3,901015E+22	1,338849E+23	7,802153E+22	2,119064E+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							
-1138	6,694330E+22	6,694459E+22	3,901140E+22	3,901238E+22	1,338879E+23	7,802378E+22	2,119117E+23
-1137	6,694302E+22	6,694209E+22	3,901156E+22	3,901207E+22	1,338851E+23	7,802362E+22	2,119087E+23
-1136	6,694104E+22	6,694274E+22	3,901298E+22	3,901238E+22	1,338838E+23	7,802536E+22	2,119091E+23
-1135	6,694372E+22	6,694257E+22	3,901294E+22	3,901407E+22	1,338863E+23	7,802701E+22	2,119133E+23
-1134	6,694218E+22	6,694060E+22	3,901401E+22	3,901312E+22	1,338828E+23	7,802713E+22	2,119099E+23
-1133	6,694099E+22	6,694301E+22	3,901475E+22	3,901426E+22	1,338840E+23	7,802901E+22	2,119130E+23
-1132	6,694282E+22	6,694182E+22	3,901392E+22	3,901522E+22	1,338846E+23	7,802914E+22	2,119138E+23
-1131	6,694000E+22	6,694087E+22	3,901496E+22	3,901386E+22	1,338809E+23	7,802882E+22	2,119097E+23
-1130	6,694104E+22	6,694272E+22	3,901483E+22	3,901486E+22	1,338838E+23	7,802968E+22	2,119134E+23
-1129	6,694252E+22	6,694068E+22	3,901379E+22	3,901384E+22	1,338832E+23	7,802764E+22	2,119108E+23
-1128	6,694047E+22	6,694157E+22	3,901408E+22	3,901285E+22	1,338820E+23	7,802693E+22	2,119090E+23
-1127	6,694287E+22	6,694277E+22	3,901284E+22	3,901397E+22	1,338856E+23	7,802681E+22	2,119124E+23
-1126	6,694239E+22	6,694133E+22	3,901238E+22	3,901212E+22	1,338837E+23	7,802451E+22	2,119082E+23
-1125	6,694096E+22	6,694367E+22	3,901252E+22	3,901180E+22	1,338846E+23	7,802433E+22	2,119090E+23
-1124	6,694401E+22	6,694299E+22	3,901123E+22	3,901234E+22	1,338870E+23	7,802358E+22	2,119106E+23
-1123	6,694236E+22	6,694155E+22	3,901200E+22	3,901058E+22	1,338839E+23	7,802258E+22	2,119065E+23
-1122	6,694212E+22	6,694380E+22	3,901240E+22	3,901183E+22	1,338859E+23	7,802423E+22	2,119102E+23
-1121	6,694364E+22	6,694243E+22	3,901145E+22	3,901230E+22	1,338861E+23	7,802374E+22	2,119098E+23
-1120	6,694069E+22	6,694225E+22	3,901257E+22	3,901203E+22	1,338829E+23	7,802461E+22	2,119075E+23
-1119	6,694201E+22	6,694298E+22	3,901289E+22	3,901404E+22	1,338850E+23	7,802693E+22	2,119119E+23
-1118	6,694263E+22	6,694052E+22	3,901330E+22	3,901337E+22	1,338831E+23	7,802667E+22	2,119098E+23
-1117	6,694033E+22	6,694179E+22	3,901485E+22	3,901362E+22	1,338821E+23	7,802847E+22	2,119106E+23
-1116	6,694290E+22	6,694160E+22	3,901441E+22	3,901566E+22	1,338845E+23	7,803007E+22	2,119146E+23
-1115	6,694111E+22	6,693993E+22	3,901543E+22	3,901475E+22	1,338810E+23	7,803018E+22	2,119112E+23
-1114	6,693923E+22	6,694225E+22	3,901646E+22	3,901593E+22	1,338815E+23	7,803239E+22	2,119139E+23
-1113	6,694155E+22	6,694094E+22	3,901542E+22	3,901653E+22	1,338825E+23	7,803195E+22	2,119144E+23
-1112	6,693924E+22	6,693988E+22	3,901633E+22	3,901513E+22	1,338791E+23	7,803146E+22	2,119106E+23
-1111	6,694020E+22	6,694114E+22	3,901626E+22	3,901621E+22	1,338813E+23	7,803247E+22	2,119138E+23
-1110	6,694203E+22	6,693959E+22	3,901507E+22	3,901522E+22	1,338816E+23	7,803029E+22	2,119119E+23
-1109	6,693926E+22	6,694126E+22	3,901522E+22	3,901424E+22	1,338805E+23	7,802946E+22	2,119100E+23
-1108	6,694196E+22	6,694198E+22	3,901369E+22	3,901535E+22	1,338839E+23	7,802905E+22	2,119130E+23
-1107	6,694184E+22	6,694029E+22	3,901346E+22	3,901307E+22	1,338821E+23	7,802652E+22	2,119086E+23
-1106	6,694006E+22	6,694262E+22	3,901409E+22	3,901276E+22	1,338827E+23	7,802685E+22	2,119095E+23
-1105	6,694328E+22	6,694214E+22	3,901261E+22	3,901334E+22	1,338854E+23	7,802595E+22	2,119114E+23
-1104	6,694129E+22	6,694104E+22	3,901325E+22	3,901214E+22	1,338823E+23	7,802539E+22	2,119077E+23
-1103	6,694046E+22	6,694272E+22	3,901382E+22	3,901372E+22	1,338832E+23	7,802754E+22	2,119107E+23
-1102	6,694253E+22	6,694122E+22	3,901300E+22	3,901402E+22	1,338837E+23	7,802702E+22	2,119108E+23
-1101	6,693957E+22	6,694128E+22	3,901428E+22	3,901347E+22	1,338808E+23	7,802775E+22	2,119086E+23
-1100	6,694157E+22	6,694141E+22	3,901436E+22	3,901549E+22	1,338830E+23	7,802986E+22	2,119128E+23
-1099	6,694235E+22	6,693922E+22	3,901490E+22	3,901475E+22	1,338816E+23	7,802964E+22	2,119112E+23
-1098	6,693909E+22	6,694106E+22	3,901665E+22	3,901533E+22	1,338802E+23	7,803198E+22	2,119121E+23
-1097	6,694135E+22	6,694116E+22	3,901590E+22	3,901735E+22	1,338825E+23	7,803325E+22	2,119158E+23
-1096	6,693964E+22	6,693940E+22	3,901688E+22	3,901650E+22	1,338790E+23	7,803338E+22	2,119124E+23
-1095	6,693774E+22	6,694064E+22	3,901814E+22	3,901747E+22	1,338784E+23	7,803561E+22	2,119140E+23
-1094	6,694090E+22	6,693934E+22	3,901707E+22	3,901779E+22	1,338802E+23	7,803486E+22	2,119151E+23
-1093	6,693852E+22	6,693891E+22	3,901780E+22	3,901634E+22	1,338774E+23	7,803414E+22	2,119116E+23
-1092	6,693954E+22	6,694005E+22	3,901716E+22	3,901768E+22	1,338796E+23	7,803485E+22	2,119144E+23
-1091	6,694134E+22	6,693898E+22	3,901596E+22	3,901652E+22	1,338803E+23	7,803248E+22	2,119128E+23
-1090	6,693810E+22	6,694072E+22	3,901644E+22	3,901540E+22	1,338788E+23	7,803185E+22	2,119107E+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	6,694100E+22	6,694138E+22	3,901490E+22	3,901615E+22	1,338824E+23	7,803105E+22	2,119134E+23
-1088	6,694122E+22	6,693967E+22	3,901474E+22	3,901406E+22	1,338809E+23	7,802880E+22	2,119097E+23
-1087	6,693896E+22	6,694118E+22	3,901568E+22	3,901411E+22	1,338801E+23	7,802979E+22	2,119099E+23
-1086	6,694218E+22	6,694112E+22	3,901410E+22	3,901496E+22	1,338833E+23	7,802906E+22	2,119124E+23
-1085	6,693977E+22	6,694036E+22	3,901466E+22	3,901388E+22	1,338801E+23	7,802854E+22	2,119087E+23
-1084	6,693942E+22	6,694120E+22	3,901499E+22	3,901549E+22	1,338806E+23	7,803048E+22	2,119111E+23
-1083	6,694209E+22	6,693970E+22	3,901439E+22	3,901533E+22	1,338818E+23	7,802973E+22	2,119115E+23
-1082	6,693891E+22	6,694007E+22	3,901603E+22	3,901474E+22	1,338790E+23	7,803077E+22	2,119098E+23
-1081	6,694088E+22	6,694073E+22	3,901594E+22	3,901676E+22	1,338816E+23	7,803270E+22	2,119143E+23
-1080	6,694124E+22	6,693908E+22	3,901639E+22	3,901646E+22	1,338803E+23	7,803285E+22	2,119132E+23
-1079	6,693722E+22	6,694020E+22	3,901848E+22	3,901729E+22	1,338774E+23	7,803577E+22	2,119132E+23
-1078	6,693984E+22	6,694017E+22	3,901778E+22	3,901908E+22	1,338800E+23	7,803686E+22	2,119169E+23
-1077	6,693822E+22	6,693833E+22	3,901879E+22	3,901800E+22	1,338765E+23	7,803679E+22	2,119133E+23
-1076	6,693714E+22	6,693876E+22	3,901958E+22	3,901903E+22	1,338759E+23	7,803861E+22	2,119145E+23
-1075	6,694062E+22	6,693775E+22	3,901833E+22	3,901913E+22	1,338784E+23	7,803746E+22	2,119158E+23
-1074	6,693752E+22	6,693816E+22	3,901896E+22	3,901784E+22	1,338757E+23	7,803679E+22	2,119125E+23
-1073	6,693856E+22	6,693970E+22	3,901794E+22	3,901890E+22	1,338783E+23	7,803684E+22	2,119151E+23
-1072	6,694044E+22	6,693869E+22	3,901685E+22	3,901758E+22	1,338791E+23	7,803443E+22	2,119136E+23
-1071	6,693706E+22	6,693955E+22	3,901789E+22	3,901634E+22	1,338766E+23	7,803423E+22	2,119108E+23
-1070	6,694033E+22	6,694029E+22	3,901648E+22	3,901696E+22	1,338806E+23	7,803344E+22	2,119141E+23
-1069	6,694016E+22	6,693900E+22	3,901634E+22	3,901522E+22	1,338792E+23	7,803155E+22	2,119107E+23
-1068	6,693788E+22	6,693998E+22	3,901680E+22	3,901584E+22	1,338779E+23	7,803264E+22	2,119105E+23
-1067	6,694114E+22	6,694000E+22	3,901529E+22	3,901661E+22	1,338811E+23	7,803190E+22	2,119130E+23
-1066	6,693858E+22	6,693940E+22	3,901609E+22	3,901548E+22	1,338780E+23	7,803156E+22	2,119095E+23
-1065	6,693875E+22	6,694021E+22	3,901630E+22	3,901670E+22	1,338790E+23	7,803300E+22	2,119120E+23
-1064	6,694170E+22	6,693897E+22	3,901585E+22	3,901668E+22	1,338807E+23	7,803253E+22	2,119132E+23
-1063	6,693789E+22	6,693889E+22	3,901790E+22	3,901641E+22	1,338768E+23	7,803431E+22	2,119111E+23
-1062	6,693946E+22	6,694011E+22	3,901778E+22	3,901856E+22	1,338796E+23	7,803634E+22	2,119159E+23
-1061	6,693944E+22	6,693861E+22	3,901824E+22	3,901837E+22	1,338781E+23	7,803661E+22	2,119147E+23
-1060	6,693587E+22	6,693846E+22	3,902004E+22	3,901918E+22	1,338743E+23	7,803922E+22	2,119135E+23
-1059	6,693908E+22	6,693832E+22	3,901941E+22	3,902048E+22	1,338774E+23	7,803988E+22	2,119173E+23
-1058	6,693752E+22	6,693680E+22	3,902036E+22	3,901935E+22	1,338743E+23	7,803970E+22	2,119140E+23
-1057	6,693652E+22	6,693775E+22	3,902066E+22	3,902025E+22	1,338743E+23	7,804091E+22	2,119152E+23
-1056	6,693985E+22	6,693758E+22	3,901921E+22	3,902054E+22	1,338774E+23	7,803975E+22	2,119172E+23
-1055	6,693624E+22	6,693745E+22	3,902022E+22	3,901921E+22	1,338737E+23	7,803943E+22	2,119131E+23
-1054	6,693749E+22	6,693917E+22	3,901936E+22	3,901987E+22	1,338767E+23	7,803922E+22	2,119159E+23
-1053	6,693942E+22	6,693816E+22	3,901845E+22	3,901843E+22	1,338776E+23	7,803688E+22	2,119145E+23
-1052	6,693642E+22	6,693797E+22	3,901926E+22	3,901756E+22	1,338744E+23	7,803682E+22	2,119112E+23
-1051	6,693958E+22	6,693897E+22	3,901783E+22	3,901829E+22	1,338786E+23	7,803612E+22	2,119147E+23
-1050	6,693876E+22	6,693819E+22	3,901760E+22	3,901698E+22	1,338770E+23	7,803458E+22	2,119115E+23
-1049	6,693671E+22	6,693915E+22	3,901770E+22	3,901745E+22	1,338759E+23	7,803516E+22	2,119110E+23
-1048	6,694041E+22	6,693921E+22	3,901631E+22	3,901804E+22	1,338796E+23	7,803435E+22	2,119140E+23
-1047	6,693785E+22	6,693797E+22	3,901766E+22	3,901677E+22	1,338758E+23	7,803442E+22	2,119102E+23
-1046	6,693826E+22	6,693928E+22	3,901799E+22	3,901782E+22	1,338775E+23	7,803581E+22	2,119134E+23
-1045	6,694059E+22	6,693861E+22	3,901770E+22	3,901810E+22	1,338792E+23	7,803580E+22	2,119150E+23
-1044	6,693662E+22	6,693787E+22	3,901952E+22	3,901840E+22	1,338745E+23	7,803793E+22	2,119124E+23
-1043	6,693805E+22	6,693892E+22	3,901952E+22	3,902032E+22	1,338770E+23	7,803984E+22	2,119168E+23
-1042	6,693785E+22	6,693740E+22	3,902011E+22	3,902014E+22	1,338753E+23	7,804026E+22	2,119155E+23
-1041	6,693502E+22	6,693698E+22	3,902149E+22	3,902060E+22	1,338720E+23	7,804209E+22	2,119141E+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	6,693860E+22	6,693708E+22	3,902072E+22	3,902190E+22	1,338757E+23	7,804262E+22	2,119183E+23
-1039	6,693662E+22	6,693552E+22	3,902183E+22	3,902097E+22	1,338721E+23	7,804280E+22	2,119149E+23
-1038	6,693546E+22	6,693729E+22	3,902188E+22	3,902170E+22	1,338728E+23	7,804358E+22	2,119163E+23
-1037	6,693849E+22	6,693740E+22	3,902057E+22	3,902184E+22	1,338759E+23	7,804241E+22	2,119183E+23
-1036	6,693535E+22	6,693619E+22	3,902145E+22	3,902046E+22	1,338715E+23	7,804191E+22	2,119134E+23
-1035	6,693686E+22	6,693780E+22	3,902081E+22	3,902066E+22	1,338747E+23	7,804147E+22	2,119161E+23
-1034	6,693854E+22	6,693716E+22	3,901993E+22	3,901954E+22	1,338757E+23	7,803946E+22	2,119152E+23
-1033	6,693557E+22	6,693708E+22	3,902024E+22	3,901886E+22	1,338727E+23	7,803910E+22	2,119117E+23
-1032	6,693854E+22	6,693856E+22	3,901870E+22	3,901988E+22	1,338771E+23	7,803858E+22	2,119157E+23
-1031	6,693748E+22	6,693715E+22	3,901888E+22	3,901864E+22	1,338746E+23	7,803752E+22	2,119121E+23
-1030	6,693582E+22	6,693834E+22	3,901906E+22	3,901868E+22	1,338742E+23	7,803774E+22	2,119119E+23
-1029	6,693977E+22	6,693850E+22	3,901798E+22	3,901915E+22	1,338783E+23	7,803713E+22	2,119154E+23
-1028	6,693747E+22	6,693636E+22	3,901920E+22	3,901820E+22	1,338738E+23	7,803739E+22	2,119112E+23
-1027	6,693741E+22	6,693816E+22	3,901969E+22	3,901928E+22	1,338756E+23	7,803897E+22	2,119145E+23
-1026	6,693898E+22	6,693797E+22	3,901937E+22	3,902001E+22	1,338770E+23	7,803938E+22	2,119163E+23
-1025	6,693512E+22	6,693677E+22	3,902093E+22	3,902021E+22	1,338719E+23	7,804114E+22	2,119130E+23
-1024	6,693690E+22	6,693780E+22	3,902099E+22	3,902194E+22	1,338747E+23	7,804294E+22	2,119176E+23
-1023	6,693685E+22	6,693557E+22	3,902194E+22	3,902170E+22	1,338724E+23	7,804364E+22	2,119161E+23
-1022	6,693433E+22	6,693582E+22	3,902308E+22	3,902194E+22	1,338701E+23	7,804503E+22	2,119152E+23
-1021	6,693762E+22	6,693662E+22	3,902226E+22	3,902337E+22	1,338742E+23	7,804563E+22	2,119199E+23
-1020	6,693561E+22	6,693457E+22	3,902303E+22	3,902270E+22	1,338702E+23	7,804573E+22	2,119159E+23
-1019	6,693444E+22	6,693648E+22	3,902327E+22	3,902296E+22	1,338709E+23	7,804623E+22	2,119171E+23
-1018	6,693727E+22	6,693673E+22	3,902212E+22	3,902302E+22	1,338740E+23	7,804514E+22	2,119191E+23
-1017	6,693468E+22	6,693509E+22	3,902271E+22	3,902147E+22	1,338698E+23	7,804417E+22	2,119139E+23
-1016	6,693623E+22	6,693689E+22	3,902198E+22	3,902181E+22	1,338731E+23	7,804380E+22	2,119169E+23
-1015	6,693731E+22	6,693602E+22	3,902128E+22	3,902115E+22	1,338733E+23	7,804243E+22	2,119158E+23
-1014	6,693437E+22	6,693650E+22	3,902127E+22	3,902038E+22	1,338709E+23	7,804166E+22	2,119125E+23
-1013	6,693739E+22	6,693793E+22	3,901992E+22	3,902124E+22	1,338753E+23	7,804116E+22	2,119165E+23
-1012	6,693697E+22	6,693558E+22	3,902004E+22	3,901996E+22	1,338725E+23	7,804000E+22	2,119126E+23
-1011	6,693563E+22	6,693688E+22	3,902048E+22	3,901951E+22	1,338725E+23	7,804000E+22	2,119125E+23
-1010	6,693896E+22	6,693769E+22	3,901959E+22	3,902033E+22	1,338767E+23	7,803993E+22	2,119166E+23
-1009	6,693652E+22	6,693574E+22	3,902049E+22	3,901971E+22	1,338723E+23	7,804020E+22	2,119125E+23
-1008	6,693599E+22	6,693774E+22	3,902107E+22	3,902103E+22	1,338737E+23	7,804209E+22	2,119158E+23
-1007	6,693720E+22	6,693683E+22	3,902125E+22	3,902196E+22	1,338740E+23	7,804321E+22	2,119172E+23
-1006	6,693382E+22	6,693564E+22	3,902271E+22	3,902178E+22	1,338695E+23	7,804450E+22	2,119140E+23
-1005	6,693595E+22	6,693657E+22	3,902292E+22	3,902344E+22	1,338725E+23	7,804636E+22	2,119189E+23
-1004	6,693627E+22	6,693372E+22	3,902350E+22	3,902352E+22	1,338700E+23	7,804702E+22	2,119170E+23
-1003	6,693355E+22	6,693463E+22	3,902452E+22	3,902357E+22	1,338682E+23	7,804809E+22	2,119163E+23
-1002	6,693625E+22	6,693614E+22	3,902365E+22	3,902512E+22	1,338724E+23	7,804877E+22	2,119212E+23
-1001	6,693461E+22	6,693376E+22	3,902412E+22	3,902408E+22	1,338684E+23	7,804820E+22	2,119166E+23
-1000	6,693368E+22	6,693569E+22	3,902450E+22	3,902396E+22	1,338694E+23	7,804847E+22	2,119178E+23
-999	6,693638E+22	6,693541E+22	3,902376E+22	3,902410E+22	1,338718E+23	7,804786E+22	2,119196E+23
-998	6,693377E+22	6,693428E+22	3,902408E+22	3,902253E+22	1,338681E+23	7,804662E+22	2,119147E+23
-997	6,693506E+22	6,693646E+22	3,902333E+22	3,902319E+22	1,338715E+23	7,804652E+22	2,119180E+23
-996	6,693624E+22	6,693474E+22	3,902229E+22	3,902283E+22	1,338710E+23	7,804512E+22	2,119161E+23
-995	6,693354E+22	6,693533E+22	3,902243E+22	3,902159E+22	1,338689E+23	7,804402E+22	2,119129E+23
-994	6,693661E+22	6,693705E+22	3,902125E+22	3,902236E+22	1,338737E+23	7,804361E+22	2,119173E+23
-993	6,693667E+22	6,693442E+22	3,902117E+22	3,902098E+22	1,338711E+23	7,804214E+22	2,119132E+23
-992	6,693511E+22	6,693621E+22	3,902178E+22	3,902071E+22	1,338713E+23	7,804249E+22	2,119138E+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							
-991	6,693750E+22	6,693691E+22	3,902127E+22	3,902210E+22	1,338744E+23	7,804337E+22	2,119178E+23
-990	6,693479E+22	6,693529E+22	3,902206E+22	3,902152E+22	1,338701E+23	7,804358E+22	2,119137E+23
-989	6,693436E+22	6,693691E+22	3,902291E+22	3,902278E+22	1,338713E+23	7,804569E+22	2,119170E+23
-988	6,693616E+22	6,693480E+22	3,902295E+22	3,902377E+22	1,338710E+23	7,804672E+22	2,119177E+23
-987	6,693334E+22	6,693378E+22	3,902443E+22	3,902318E+22	1,338671E+23	7,804761E+22	2,119147E+23
-986	6,693512E+22	6,693545E+22	3,902456E+22	3,902506E+22	1,338706E+23	7,804962E+22	2,119202E+23
-985	6,693549E+22	6,693295E+22	3,902464E+22	3,902522E+22	1,338684E+23	7,804986E+22	2,119183E+23
-984	6,693258E+22	6,693430E+22	3,902570E+22	3,902510E+22	1,338669E+23	7,805080E+22	2,119177E+23
-983	6,693483E+22	6,693534E+22	3,902539E+22	3,902661E+22	1,338702E+23	7,805199E+22	2,119222E+23
-982	6,693355E+22	6,693314E+22	3,902575E+22	3,902515E+22	1,338667E+23	7,805090E+22	2,119176E+23
-981	6,693275E+22	6,693476E+22	3,902626E+22	3,902501E+22	1,338675E+23	7,805127E+22	2,119188E+23
-980	6,693547E+22	6,693380E+22	3,902513E+22	3,902564E+22	1,338693E+23	7,805077E+22	2,119200E+23
-979	6,693282E+22	6,693306E+22	3,902520E+22	3,902398E+22	1,338659E+23	7,804918E+22	2,119151E+23
-978	6,693366E+22	6,693563E+22	3,902439E+22	3,902476E+22	1,338693E+23	7,804915E+22	2,119184E+23
-977	6,693554E+22	6,693366E+22	3,902305E+22	3,902409E+22	1,338692E+23	7,804714E+22	2,119163E+23
-976	6,693326E+22	6,693442E+22	3,902335E+22	3,902243E+22	1,338677E+23	7,804578E+22	2,119135E+23
-975	6,693596E+22	6,693599E+22	3,902276E+22	3,902337E+22	1,338720E+23	7,804614E+22	2,119181E+23
-974	6,693578E+22	6,693411E+22	3,902257E+22	3,902208E+22	1,338699E+23	7,804465E+22	2,119145E+23
-973	6,693367E+22	6,693602E+22	3,902345E+22	3,902225E+22	1,338697E+23	7,804570E+22	2,119154E+23
-972	6,693588E+22	6,693571E+22	3,902288E+22	3,902408E+22	1,338716E+23	7,804697E+22	2,119186E+23
-971	6,693352E+22	6,693383E+22	3,902385E+22	3,902319E+22	1,338674E+23	7,804705E+22	2,119144E+23
-970	6,693323E+22	6,693546E+22	3,902479E+22	3,902445E+22	1,338687E+23	7,804924E+22	2,119179E+23
-969	6,693574E+22	6,693305E+22	3,902439E+22	3,902538E+22	1,338688E+23	7,804976E+22	2,119186E+23
-968	6,693288E+22	6,693274E+22	3,902574E+22	3,902478E+22	1,338656E+23	7,805052E+22	2,119161E+23
-967	6,693388E+22	6,693465E+22	3,902613E+22	3,902696E+22	1,338685E+23	7,805309E+22	2,119216E+23
-966	6,693404E+22	6,693269E+22	3,902608E+22	3,902677E+22	1,338667E+23	7,805285E+22	2,119196E+23
-965	6,693134E+22	6,693377E+22	3,902750E+22	3,902642E+22	1,338651E+23	7,805392E+22	2,119190E+23
-964	6,693385E+22	6,693365E+22	3,902707E+22	3,902789E+22	1,338675E+23	7,805497E+22	2,119225E+23
-963	6,693279E+22	6,693161E+22	3,902740E+22	3,902622E+22	1,338644E+23	7,805362E+22	2,119180E+23
-962	6,693157E+22	6,693381E+22	3,902769E+22	3,902644E+22	1,338654E+23	7,805413E+22	2,119195E+23
-961	6,693441E+22	6,693282E+22	3,902592E+22	3,902722E+22	1,338672E+23	7,805314E+22	2,119204E+23
-960	6,693195E+22	6,693245E+22	3,902594E+22	3,902534E+22	1,338644E+23	7,805129E+22	2,119157E+23
-959	6,693268E+22	6,693467E+22	3,902563E+22	3,902603E+22	1,338674E+23	7,805166E+22	2,119190E+23
-958	6,693489E+22	6,693312E+22	3,902428E+22	3,902491E+22	1,338680E+23	7,804919E+22	2,119172E+23
-957	6,693277E+22	6,693382E+22	3,902494E+22	3,902336E+22	1,338666E+23	7,804830E+22	2,119149E+23
-956	6,693498E+22	6,693479E+22	3,902426E+22	3,902485E+22	1,338698E+23	7,804911E+22	2,119189E+23
-955	6,693451E+22	6,693326E+22	3,902408E+22	3,902371E+22	1,338678E+23	7,804779E+22	2,119156E+23
-954	6,693198E+22	6,693513E+22	3,902507E+22	3,902409E+22	1,338671E+23	7,804917E+22	2,119163E+23
-953	6,693480E+22	6,693418E+22	3,902423E+22	3,902577E+22	1,338690E+23	7,805001E+22	2,119190E+23
-952	6,693306E+22	6,693236E+22	3,902524E+22	3,902457E+22	1,338654E+23	7,804981E+22	2,119152E+23
-951	6,693248E+22	6,693394E+22	3,902654E+22	3,902605E+22	1,338664E+23	7,805259E+22	2,119190E+23
-950	6,693483E+22	6,693259E+22	3,902588E+22	3,902691E+22	1,338674E+23	7,805279E+22	2,119202E+23
-949	6,693171E+22	6,693246E+22	3,902739E+22	3,902644E+22	1,338642E+23	7,805383E+22	2,119180E+23
-948	6,693240E+22	6,693362E+22	3,902780E+22	3,902876E+22	1,338660E+23	7,805656E+22	2,119226E+23
-947	6,693292E+22	6,693161E+22	3,902789E+22	3,902813E+22	1,338645E+23	7,805602E+22	2,119205E+23
-946	6,693010E+22	6,693256E+22	3,902938E+22	3,902777E+22	1,338627E+23	7,805715E+22	2,119198E+23
-945	6,693305E+22	6,693210E+22	3,902843E+22	3,902931E+22	1,338652E+23	7,805774E+22	2,119229E+23
-944	6,693200E+22	6,693055E+22	3,902845E+22	3,902771E+22	1,338625E+23	7,805616E+22	2,119187E+23
-943	6,693017E+22	6,693282E+22	3,902884E+22	3,902822E+22	1,338630E+23	7,805706E+22	2,119201E+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							
-942	6,693321E+22	6,693235E+22	3,902684E+22	3,902851E+22	1,338656E+23	7,805535E+22	2,119209E+23
-941	6,693133E+22	6,693177E+22	3,902716E+22	3,902630E+22	1,338631E+23	7,805346E+22	2,119166E+23
-940	6,693223E+22	6,693324E+22	3,902692E+22	3,902696E+22	1,338655E+23	7,805388E+22	2,119194E+23
-939	6,693449E+22	6,693212E+22	3,902572E+22	3,902572E+22	1,338666E+23	7,805144E+22	2,119181E+23
-938	6,693164E+22	6,693331E+22	3,902648E+22	3,902471E+22	1,338650E+23	7,805119E+22	2,119161E+23
-937	6,693367E+22	6,693399E+22	3,902545E+22	3,902648E+22	1,338677E+23	7,805193E+22	2,119196E+23
-936	6,693330E+22	6,693245E+22	3,902539E+22	3,902534E+22	1,338658E+23	7,805073E+22	2,119165E+23
-935	6,693070E+22	6,693377E+22	3,902682E+22	3,902584E+22	1,338645E+23	7,805265E+22	2,119171E+23
-934	6,693389E+22	6,693307E+22	3,902583E+22	3,902713E+22	1,338670E+23	7,805296E+22	2,119199E+23
-933	6,693253E+22	6,693134E+22	3,902698E+22	3,902609E+22	1,338639E+23	7,805307E+22	2,119169E+23
-932	6,693150E+22	6,693256E+22	3,902807E+22	3,902794E+22	1,338641E+23	7,805600E+22	2,119201E+23
-931	6,693352E+22	6,693178E+22	3,902745E+22	3,902868E+22	1,338653E+23	7,805613E+22	2,119214E+23
-930	6,693017E+22	6,693175E+22	3,902916E+22	3,902820E+22	1,338619E+23	7,805737E+22	2,119193E+23
-929	6,693132E+22	6,693220E+22	3,902933E+22	3,903020E+22	1,338635E+23	7,805952E+22	2,119230E+23
-928	6,693227E+22	6,693032E+22	3,902941E+22	3,902932E+22	1,338626E+23	7,805873E+22	2,119213E+23
-927	6,692908E+22	6,693118E+22	3,903104E+22	3,902928E+22	1,338603E+23	7,806032E+22	2,119206E+23
-926	6,693176E+22	6,693156E+22	3,902964E+22	3,903071E+22	1,338633E+23	7,806035E+22	2,119237E+23
-925	6,693092E+22	6,693011E+22	3,902967E+22	3,902923E+22	1,338610E+23	7,805890E+22	2,119199E+23
-924	6,692908E+22	6,693160E+22	3,903000E+22	3,902970E+22	1,338607E+23	7,805970E+22	2,119204E+23
-923	6,693262E+22	6,693135E+22	3,902817E+22	3,902945E+22	1,338640E+23	7,805763E+22	2,119216E+23
-922	6,693079E+22	6,693088E+22	3,902865E+22	3,902721E+22	1,338617E+23	7,805586E+22	2,119175E+23
-921	6,693177E+22	6,693214E+22	3,902808E+22	3,902802E+22	1,338639E+23	7,805610E+22	2,119200E+23
-920	6,693370E+22	6,693157E+22	3,902681E+22	3,902704E+22	1,338653E+23	7,805385E+22	2,119191E+23
-919	6,692999E+22	6,693253E+22	3,902789E+22	3,902656E+22	1,338625E+23	7,805446E+22	2,119170E+23
-918	6,693208E+22	6,693339E+22	3,902679E+22	3,902800E+22	1,338655E+23	7,805479E+22	2,119203E+23
-917	6,693246E+22	6,693129E+22	3,902698E+22	3,902674E+22	1,338637E+23	7,805372E+22	2,119175E+23
-916	6,692997E+22	6,693183E+22	3,902838E+22	3,902734E+22	1,338618E+23	7,805572E+22	2,119175E+23
-915	6,693336E+22	6,693177E+22	3,902740E+22	3,902853E+22	1,338651E+23	7,805593E+22	2,119210E+23
-914	6,693140E+22	6,693064E+22	3,902858E+22	3,902780E+22	1,338620E+23	7,805638E+22	2,119184E+23
-913	6,693030E+22	6,693174E+22	3,902938E+22	3,902972E+22	1,338620E+23	7,805911E+22	2,119211E+23
-912	6,693244E+22	6,693104E+22	3,902898E+22	3,903022E+22	1,338635E+23	7,805920E+22	2,119227E+23
-911	6,692885E+22	6,693055E+22	3,903115E+22	3,902985E+22	1,338594E+23	7,806100E+22	2,119204E+23
-910	6,693016E+22	6,693121E+22	3,903109E+22	3,903144E+22	1,338614E+23	7,806253E+22	2,119239E+23
-909	6,693145E+22	6,692925E+22	3,903114E+22	3,903084E+22	1,338607E+23	7,806198E+22	2,119227E+23
-908	6,692782E+22	6,692973E+22	3,903239E+22	3,903116E+22	1,338575E+23	7,806355E+22	2,119211E+23
-907	6,693059E+22	6,693057E+22	3,903085E+22	3,903229E+22	1,338612E+23	7,806314E+22	2,119243E+23
-906	6,692989E+22	6,692926E+22	3,903096E+22	3,903059E+22	1,338591E+23	7,806155E+22	2,119207E+23
-905	6,692871E+22	6,693029E+22	3,903099E+22	3,903067E+22	1,338590E+23	7,806166E+22	2,119207E+23
-904	6,693245E+22	6,693046E+22	3,902930E+22	3,903017E+22	1,338629E+23	7,805947E+22	2,119224E+23
-903	6,692999E+22	6,693018E+22	3,903007E+22	3,902843E+22	1,338602E+23	7,805851E+22	2,119187E+23
-902	6,693031E+22	6,693201E+22	3,902926E+22	3,902920E+22	1,338623E+23	7,805846E+22	2,119208E+23
-901	6,693233E+22	6,693125E+22	3,902820E+22	3,902860E+22	1,338636E+23	7,805681E+22	2,119204E+23
-900	6,692860E+22	6,693106E+22	3,902932E+22	3,902826E+22	1,338597E+23	7,805758E+22	2,119172E+23
-899	6,693114E+22	6,693189E+22	3,902838E+22	3,902932E+22	1,338630E+23	7,805770E+22	2,119207E+23
-898	6,693181E+22	6,692993E+22	3,902866E+22	3,902817E+22	1,338617E+23	7,805683E+22	2,119186E+23
-897	6,692953E+22	6,693033E+22	3,902960E+22	3,902891E+22	1,338599E+23	7,805851E+22	2,119184E+23
-896	6,693258E+22	6,693104E+22	3,902864E+22	3,903017E+22	1,338636E+23	7,805880E+22	2,119224E+23
-895	6,692996E+22	6,692995E+22	3,903018E+22	3,902974E+22	1,338599E+23	7,805992E+22	2,119198E+23
-894	6,692878E+22	6,693118E+22	3,903103E+22	3,903110E+22	1,338600E+23	7,806213E+22	2,119221E+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	6,693154E+22	6,693008E+22	3,903092E+22	3,903159E+22	1,338616E+23	7,806251E+22	2,119241E+23
-892	6,692782E+22	6,692873E+22	3,903304E+22	3,903142E+22	1,338566E+23	7,806446E+22	2,119210E+23
-891	6,692911E+22	6,692995E+22	3,903282E+22	3,903296E+22	1,338591E+23	7,806578E+22	2,119248E+23
-890	6,693011E+22	6,692842E+22	3,903266E+22	3,903263E+22	1,338585E+23	7,806529E+22	2,119238E+23
-889	6,692678E+22	6,692861E+22	3,903337E+22	3,903286E+22	1,338554E+23	7,806623E+22	2,119216E+23
-888	6,692997E+22	6,692971E+22	3,903193E+22	3,903352E+22	1,338597E+23	7,806544E+22	2,119251E+23
-887	6,692915E+22	6,692831E+22	3,903236E+22	3,903176E+22	1,338575E+23	7,806412E+22	2,119216E+23
-886	6,692805E+22	6,692976E+22	3,903227E+22	3,903139E+22	1,338578E+23	7,806366E+22	2,119215E+23
-885	6,693183E+22	6,692996E+22	3,903064E+22	3,903128E+22	1,338618E+23	7,806191E+22	2,119237E+23
-884	6,692848E+22	6,692915E+22	3,903133E+22	3,903009E+22	1,338576E+23	7,806142E+22	2,119190E+23
-883	6,692878E+22	6,693115E+22	3,903056E+22	3,903070E+22	1,338599E+23	7,806127E+22	2,119212E+23
-882	6,693104E+22	6,693005E+22	3,902970E+22	3,903006E+22	1,338611E+23	7,805976E+22	2,119208E+23
-881	6,692813E+22	6,692925E+22	3,903046E+22	3,902955E+22	1,338574E+23	7,806001E+22	2,119174E+23
-880	6,693104E+22	6,693047E+22	3,902961E+22	3,903043E+22	1,338615E+23	7,806004E+22	2,119216E+23
-879	6,693104E+22	6,692904E+22	3,903011E+22	3,902976E+22	1,338601E+23	7,805987E+22	2,119200E+23
-878	6,692827E+22	6,693019E+22	3,903092E+22	3,903032E+22	1,338585E+23	7,806124E+22	2,119197E+23
-877	6,693136E+22	6,693077E+22	3,903032E+22	3,903182E+22	1,338621E+23	7,806214E+22	2,119243E+23
-876	6,692846E+22	6,692874E+22	3,903213E+22	3,903154E+22	1,338572E+23	7,806367E+22	2,119209E+23
-875	6,692757E+22	6,692989E+22	3,903313E+22	3,903254E+22	1,338575E+23	7,806567E+22	2,119231E+23
-874	6,693045E+22	6,692870E+22	3,903303E+22	3,903326E+22	1,338591E+23	7,806630E+22	2,119254E+23
-873	6,692694E+22	6,692706E+22	3,903443E+22	3,903334E+22	1,338540E+23	7,806776E+22	2,119218E+23
-872	6,692805E+22	6,692887E+22	3,903400E+22	3,903479E+22	1,338569E+23	7,806879E+22	2,119257E+23
-871	6,692883E+22	6,692755E+22	3,903394E+22	3,903453E+22	1,338564E+23	7,806847E+22	2,119249E+23
-870	6,692585E+22	6,692789E+22	3,903447E+22	3,903388E+22	1,338537E+23	7,806835E+22	2,119221E+23
-869	6,692964E+22	6,692896E+22	3,903328E+22	3,903438E+22	1,338586E+23	7,806766E+22	2,119263E+23
-868	6,692848E+22	6,692712E+22	3,903374E+22	3,903278E+22	1,338556E+23	7,806652E+22	2,119221E+23
-867	6,692698E+22	6,692910E+22	3,903365E+22	3,903240E+22	1,338561E+23	7,806605E+22	2,119221E+23
-866	6,693031E+22	6,692953E+22	3,903207E+22	3,903269E+22	1,338598E+23	7,806476E+22	2,119246E+23
-865	6,692727E+22	6,692793E+22	3,903237E+22	3,903166E+22	1,338552E+23	7,806403E+22	2,119192E+23
-864	6,692795E+22	6,692987E+22	3,903179E+22	3,903197E+22	1,338578E+23	7,806376E+22	2,119216E+23
-863	6,693030E+22	6,692873E+22	3,903115E+22	3,903148E+22	1,338590E+23	7,806263E+22	2,119217E+23
-862	6,692760E+22	6,692832E+22	3,903168E+22	3,903060E+22	1,338559E+23	7,806229E+22	2,119182E+23
-861	6,693053E+22	6,692992E+22	3,903096E+22	3,903191E+22	1,338605E+23	7,806287E+22	2,119233E+23
-860	6,692962E+22	6,692823E+22	3,903155E+22	3,903166E+22	1,338578E+23	7,806320E+22	2,119211E+23
-859	6,692677E+22	6,692951E+22	3,903266E+22	3,903194E+22	1,338563E+23	7,806460E+22	2,119209E+23
-858	6,692996E+22	6,692975E+22	3,903241E+22	3,903338E+22	1,338597E+23	7,806579E+22	2,119255E+23
-857	6,692760E+22	6,692694E+22	3,903388E+22	3,903316E+22	1,338545E+23	7,806705E+22	2,119216E+23
-856	6,692688E+22	6,692834E+22	3,903483E+22	3,903410E+22	1,338552E+23	7,806893E+22	2,119242E+23
-855	6,692913E+22	6,692755E+22	3,903464E+22	3,903526E+22	1,338567E+23	7,806990E+22	2,119266E+23
-854	6,692560E+22	6,692649E+22	3,903560E+22	3,903497E+22	1,338521E+23	7,807057E+22	2,119227E+23
-853	6,692721E+22	6,692820E+22	3,903528E+22	3,903634E+22	1,338554E+23	7,807162E+22	2,119270E+23
-852	6,692774E+22	6,692634E+22	3,903539E+22	3,903591E+22	1,338541E+23	7,807130E+22	2,119254E+23
-851	6,692519E+22	6,692697E+22	3,903605E+22	3,903474E+22	1,338522E+23	7,807079E+22	2,119230E+23
-850	6,692886E+22	6,692806E+22	3,903500E+22	3,903537E+22	1,338569E+23	7,807037E+22	2,119273E+23
-849	6,692755E+22	6,692603E+22	3,903488E+22	3,903420E+22	1,338536E+23	7,806908E+22	2,119226E+23
-848	6,692576E+22	6,692826E+22	3,903473E+22	3,903384E+22	1,338540E+23	7,806857E+22	2,119226E+23
-847	6,692874E+22	6,692859E+22	3,903332E+22	3,903435E+22	1,338573E+23	7,806767E+22	2,119250E+23
-846	6,692635E+22	6,692692E+22	3,903344E+22	3,903271E+22	1,338533E+23	7,806615E+22	2,119194E+23
-845	6,692776E+22	6,692874E+22	3,903306E+22	3,903305E+22	1,338565E+23	7,806611E+22	2,119226E+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	6,692963E+22	6,692748E+22	3,903252E+22	3,903286E+22	1,338571E+23	7,806538E+22	2,119225E+23
-843	6,692666E+22	6,692783E+22	3,903309E+22	3,903193E+22	1,338545E+23	7,806502E+22	2,119195E+23
-842	6,692911E+22	6,692961E+22	3,903267E+22	3,903352E+22	1,338587E+23	7,806619E+22	2,119249E+23
-841	6,692839E+22	6,692720E+22	3,903307E+22	3,903344E+22	1,338556E+23	7,806651E+22	2,119221E+23
-840	6,692569E+22	6,692823E+22	3,903451E+22	3,903345E+22	1,338539E+23	7,806796E+22	2,119219E+23
-839	6,692877E+22	6,692839E+22	3,903444E+22	3,903516E+22	1,338572E+23	7,806960E+22	2,119268E+23
-838	6,692667E+22	6,692562E+22	3,903549E+22	3,903469E+22	1,338523E+23	7,807018E+22	2,119225E+23
-837	6,692596E+22	6,692732E+22	3,903629E+22	3,903601E+22	1,338533E+23	7,807230E+22	2,119256E+23
-836	6,692760E+22	6,692640E+22	3,903600E+22	3,903732E+22	1,338540E+23	7,807332E+22	2,119273E+23
-835	6,692441E+22	6,692556E+22	3,903702E+22	3,903640E+22	1,338500E+23	7,807342E+22	2,119234E+23
-834	6,692636E+22	6,692723E+22	3,903700E+22	3,903746E+22	1,338536E+23	7,807447E+22	2,119281E+23
-833	6,692733E+22	6,692494E+22	3,903674E+22	3,903697E+22	1,338523E+23	7,807371E+22	2,119260E+23
-832	6,692463E+22	6,692596E+22	3,903747E+22	3,903573E+22	1,338506E+23	7,807320E+22	2,119238E+23
-831	6,692741E+22	6,692754E+22	3,903638E+22	3,903688E+22	1,338550E+23	7,807326E+22	2,119282E+23
-830	6,692604E+22	6,692560E+22	3,903592E+22	3,903552E+22	1,338516E+23	7,807144E+22	2,119231E+23
-829	6,692475E+22	6,692751E+22	3,903589E+22	3,903530E+22	1,338523E+23	7,807119E+22	2,119235E+23
-828	6,692760E+22	6,692723E+22	3,903466E+22	3,903578E+22	1,338548E+23	7,807044E+22	2,119253E+23
-827	6,692584E+22	6,692579E+22	3,903482E+22	3,903375E+22	1,338516E+23	7,806857E+22	2,119202E+23
-826	6,692725E+22	6,692779E+22	3,903459E+22	3,903429E+22	1,338550E+23	7,806889E+22	2,119239E+23
-825	6,692881E+22	6,692652E+22	3,903363E+22	3,903451E+22	1,338553E+23	7,806814E+22	2,119235E+23
-824	6,692561E+22	6,692711E+22	3,903443E+22	3,903353E+22	1,338527E+23	7,806796E+22	2,119207E+23
-823	6,692755E+22	6,692871E+22	3,903436E+22	3,903521E+22	1,338563E+23	7,806957E+22	2,119258E+23
-822	6,692730E+22	6,692610E+22	3,903470E+22	3,903469E+22	1,338534E+23	7,806939E+22	2,119228E+23
-821	6,692516E+22	6,692687E+22	3,903623E+22	3,903492E+22	1,338520E+23	7,807115E+22	2,119232E+23
-820	6,692743E+22	6,692685E+22	3,903619E+22	3,903699E+22	1,338543E+23	7,807318E+22	2,119275E+23
-819	6,692536E+22	6,692478E+22	3,903706E+22	3,903643E+22	1,338501E+23	7,807349E+22	2,119236E+23
-818	6,692462E+22	6,692649E+22	3,903798E+22	3,903779E+22	1,338511E+23	7,807577E+22	2,119269E+23
-817	6,692658E+22	6,692514E+22	3,903740E+22	3,903902E+22	1,338517E+23	7,807642E+22	2,119281E+23
-816	6,692383E+22	6,692438E+22	3,903862E+22	3,903759E+22	1,338482E+23	7,807621E+22	2,119244E+23
-815	6,692546E+22	6,692624E+22	3,903874E+22	3,903874E+22	1,338517E+23	7,807748E+22	2,119292E+23
-814	6,692646E+22	6,692423E+22	3,903808E+22	3,903810E+22	1,338507E+23	7,807618E+22	2,119269E+23
-813	6,692359E+22	6,692541E+22	3,903865E+22	3,903732E+22	1,338490E+23	7,807598E+22	2,119250E+23
-812	6,692554E+22	6,692662E+22	3,903762E+22	3,903866E+22	1,338522E+23	7,807628E+22	2,119284E+23
-811	6,692481E+22	6,692460E+22	3,903718E+22	3,903680E+22	1,338494E+23	7,807398E+22	2,119234E+23
-810	6,692410E+22	6,692624E+22	3,903738E+22	3,903638E+22	1,338503E+23	7,807376E+22	2,119241E+23
-809	6,692742E+22	6,692565E+22	3,903576E+22	3,903693E+22	1,338531E+23	7,807269E+22	2,119258E+23
-808	6,692557E+22	6,692476E+22	3,903600E+22	3,903482E+22	1,338503E+23	7,807081E+22	2,119211E+23
-807	6,692609E+22	6,692745E+22	3,903589E+22	3,903578E+22	1,338535E+23	7,807167E+22	2,119252E+23
-806	6,692760E+22	6,692616E+22	3,903480E+22	3,903579E+22	1,338538E+23	7,807059E+22	2,119244E+23
-805	6,692458E+22	6,692638E+22	3,903598E+22	3,903503E+22	1,338510E+23	7,807101E+22	2,119220E+23
-804	6,692603E+22	6,692740E+22	3,903626E+22	3,903680E+22	1,338534E+23	7,807306E+22	2,119265E+23
-803	6,692629E+22	6,692475E+22	3,903662E+22	3,903614E+22	1,338510E+23	7,807276E+22	2,119238E+23
-802	6,692414E+22	6,692556E+22	3,903817E+22	3,903670E+22	1,338497E+23	7,807488E+22	2,119246E+23
-801	6,692623E+22	6,692543E+22	3,903751E+22	3,903913E+22	1,338517E+23	7,807664E+22	2,119283E+23
-800	6,692428E+22	6,692360E+22	3,903845E+22	3,903827E+22	1,338479E+23	7,807672E+22	2,119246E+23
-799	6,692342E+22	6,692550E+22	3,903956E+22	3,903946E+22	1,338489E+23	7,807902E+22	2,119279E+23
-798	6,692592E+22	6,692415E+22	3,903884E+22	3,904007E+22	1,338501E+23	7,807891E+22	2,119290E+23
-797	6,692350E+22	6,692352E+22	3,904013E+22	3,903880E+22	1,338470E+23	7,807893E+22	2,119260E+23
-796	6,692402E+22	6,692536E+22	3,904033E+22	3,904020E+22	1,338494E+23	7,808054E+22	2,119299E+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							
-795	6,692495E+22	6,692380E+22	3,903950E+22	3,903954E+22	1,338488E+23	7,807904E+22	2,119278E+23
-794	6,692220E+22	6,692461E+22	3,904017E+22	3,903886E+22	1,338468E+23	7,807903E+22	2,119258E+23
-793	6,692446E+22	6,692514E+22	3,903878E+22	3,904015E+22	1,338496E+23	7,807893E+22	2,119285E+23
-792	6,692451E+22	6,692314E+22	3,903845E+22	3,903787E+22	1,338477E+23	7,807633E+22	2,119240E+23
-791	6,692368E+22	6,692502E+22	3,903865E+22	3,903752E+22	1,338487E+23	7,807617E+22	2,119249E+23
-790	6,692692E+22	6,692494E+22	3,903673E+22	3,903796E+22	1,338519E+23	7,807469E+22	2,119265E+23
-789	6,692488E+22	6,692446E+22	3,903695E+22	3,903627E+22	1,338493E+23	7,807321E+22	2,119226E+23
-788	6,692427E+22	6,692675E+22	3,903728E+22	3,903735E+22	1,338510E+23	7,807463E+22	2,119257E+23
-787	6,692625E+22	6,692540E+22	3,903647E+22	3,903704E+22	1,338516E+23	7,807351E+22	2,119252E+23
-786	6,692366E+22	6,692504E+22	3,903799E+22	3,903638E+22	1,338487E+23	7,807438E+22	2,119231E+23
-785	6,692513E+22	6,692562E+22	3,903791E+22	3,903848E+22	1,338507E+23	7,807639E+22	2,119271E+23
-784	6,692545E+22	6,692337E+22	3,903821E+22	3,903791E+22	1,338488E+23	7,807612E+22	2,119249E+23
-783	6,692271E+22	6,692468E+22	3,903966E+22	3,903876E+22	1,338474E+23	7,807842E+22	2,119258E+23
-782	6,692509E+22	6,692463E+22	3,903881E+22	3,904080E+22	1,338497E+23	7,807961E+22	2,119293E+23
-781	6,692364E+22	6,692279E+22	3,903992E+22	3,903984E+22	1,338464E+23	7,807976E+22	2,119262E+23
-780	6,692227E+22	6,692440E+22	3,904140E+22	3,904088E+22	1,338467E+23	7,808228E+22	2,119289E+23
-779	6,692510E+22	6,692328E+22	3,904069E+22	3,904125E+22	1,338484E+23	7,808194E+22	2,119303E+23
-778	6,692240E+22	6,692269E+22	3,904200E+22	3,904035E+22	1,338451E+23	7,808235E+22	2,119274E+23
-777	6,692249E+22	6,692424E+22	3,904159E+22	3,904206E+22	1,338467E+23	7,808366E+22	2,119304E+23
-776	6,692373E+22	6,692249E+22	3,904077E+22	3,904108E+22	1,338462E+23	7,808185E+22	2,119281E+23
-775	6,692116E+22	6,692332E+22	3,904144E+22	3,904022E+22	1,338445E+23	7,808166E+22	2,119261E+23
-774	6,692422E+22	6,692378E+22	3,903973E+22	3,904095E+22	1,338480E+23	7,808068E+22	2,119287E+23
-773	6,692451E+22	6,692225E+22	3,903937E+22	3,903884E+22	1,338468E+23	7,807821E+22	2,119250E+23
-772	6,692257E+22	6,692451E+22	3,903978E+22	3,903875E+22	1,338471E+23	7,807854E+22	2,119256E+23
-771	6,692563E+22	6,692487E+22	3,903796E+22	3,903912E+22	1,338505E+23	7,807709E+22	2,119276E+23
-770	6,692356E+22	6,692401E+22	3,903863E+22	3,903768E+22	1,338476E+23	7,807630E+22	2,119239E+23
-769	6,692292E+22	6,692545E+22	3,903885E+22	3,903886E+22	1,338484E+23	7,807772E+22	2,119261E+23
-768	6,692544E+22	6,692379E+22	3,903827E+22	3,903846E+22	1,338492E+23	7,807673E+22	2,119260E+23
-767	6,692273E+22	6,692355E+22	3,903974E+22	3,903814E+22	1,338463E+23	7,807787E+22	2,119241E+23
-766	6,692423E+22	6,692436E+22	3,903920E+22	3,904022E+22	1,338486E+23	7,807942E+22	2,119280E+23
-765	6,692456E+22	6,692260E+22	3,903935E+22	3,903995E+22	1,338472E+23	7,807930E+22	2,119265E+23
-764	6,692118E+22	6,692369E+22	3,904115E+22	3,904062E+22	1,338449E+23	7,808177E+22	2,119266E+23
-763	6,692412E+22	6,692378E+22	3,904057E+22	3,904207E+22	1,338479E+23	7,808264E+22	2,119305E+23
-762	6,692307E+22	6,692176E+22	3,904199E+22	3,904108E+22	1,338448E+23	7,808307E+22	2,119279E+23
-761	6,692127E+22	6,692305E+22	3,904314E+22	3,904233E+22	1,338443E+23	7,808547E+22	2,119298E+23
-760	6,692402E+22	6,692229E+22	3,904237E+22	3,904282E+22	1,338463E+23	7,808519E+22	2,119315E+23
-759	6,692080E+22	6,692181E+22	3,904346E+22	3,904215E+22	1,338426E+23	7,808561E+22	2,119282E+23
-758	6,692119E+22	6,692312E+22	3,904272E+22	3,904348E+22	1,338443E+23	7,808621E+22	2,119305E+23
-757	6,692316E+22	6,692146E+22	3,904180E+22	3,904241E+22	1,338446E+23	7,808421E+22	2,119288E+23
-756	6,692031E+22	6,692206E+22	3,904270E+22	3,904137E+22	1,338424E+23	7,808406E+22	2,119264E+23
-755	6,692372E+22	6,692307E+22	3,904100E+22	3,904187E+22	1,338468E+23	7,808287E+22	2,119297E+23
-754	6,692377E+22	6,692185E+22	3,904071E+22	3,904011E+22	1,338456E+23	7,808082E+22	2,119264E+23
-753	6,692115E+22	6,692379E+22	3,904088E+22	3,904029E+22	1,338449E+23	7,808117E+22	2,119261E+23
-752	6,692446E+22	6,692388E+22	3,903940E+22	3,904045E+22	1,338483E+23	7,807985E+22	2,119282E+23
-751	6,692239E+22	6,692278E+22	3,904027E+22	3,903908E+22	1,338452E+23	7,807935E+22	2,119245E+23
-750	6,692226E+22	6,692394E+22	3,904029E+22	3,904006E+22	1,338462E+23	7,808035E+22	2,119265E+23
-749	6,692498E+22	6,692264E+22	3,903958E+22	3,904004E+22	1,338476E+23	7,807962E+22	2,119272E+23
-748	6,692134E+22	6,692261E+22	3,904116E+22	3,904000E+22	1,338440E+23	7,808116E+22	2,119251E+23
-747	6,692299E+22	6,692380E+22	3,904067E+22	3,904188E+22	1,338468E+23	7,808255E+22	2,119293E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-746	6,692349E+22	6,692191E+22	3,904118E+22	3,904162E+22	1,338454E+23	7,808281E+22	2,119282E+23
-745	6,692014E+22	6,692243E+22	3,904292E+22	3,904220E+22	1,338426E+23	7,808512E+22	2,119277E+23
-744	6,692348E+22	6,692232E+22	3,904259E+22	3,904339E+22	1,338458E+23	7,808598E+22	2,119318E+23
-743	6,692197E+22	6,692064E+22	3,904395E+22	3,904275E+22	1,338426E+23	7,808670E+22	2,119293E+23
-742	6,692000E+22	6,692201E+22	3,904449E+22	3,904402E+22	1,338420E+23	7,808851E+22	2,119305E+23
-741	6,692263E+22	6,692144E+22	3,904346E+22	3,904471E+22	1,338441E+23	7,808817E+22	2,119322E+23
-740	6,691913E+22	6,692062E+22	3,904476E+22	3,904384E+22	1,338397E+23	7,808860E+22	2,119283E+23
-739	6,692039E+22	6,692195E+22	3,904406E+22	3,904451E+22	1,338423E+23	7,808857E+22	2,119309E+23
-738	6,692287E+22	6,692043E+22	3,904326E+22	3,904340E+22	1,338433E+23	7,808667E+22	2,119300E+23
-737	6,691969E+22	6,692102E+22	3,904379E+22	3,904251E+22	1,338407E+23	7,808630E+22	2,119270E+23
-736	6,692292E+22	6,692243E+22	3,904223E+22	3,904303E+22	1,338454E+23	7,808526E+22	2,119306E+23
-735	6,692240E+22	6,692147E+22	3,904202E+22	3,904153E+22	1,338439E+23	7,808355E+22	2,119274E+23
-734	6,691999E+22	6,692289E+22	3,904210E+22	3,904149E+22	1,338429E+23	7,808359E+22	2,119265E+23
-733	6,692368E+22	6,692290E+22	3,904073E+22	3,904177E+22	1,338466E+23	7,808250E+22	2,119291E+23
-732	6,692133E+22	6,692136E+22	3,904191E+22	3,904055E+22	1,338427E+23	7,808246E+22	2,119251E+23
-731	6,692142E+22	6,692284E+22	3,904189E+22	3,904151E+22	1,338443E+23	7,808339E+22	2,119277E+23
-730	6,692400E+22	6,692191E+22	3,904114E+22	3,904193E+22	1,338459E+23	7,808307E+22	2,119290E+23
-729	6,691991E+22	6,692149E+22	3,904245E+22	3,904196E+22	1,338414E+23	7,808441E+22	2,119258E+23
-728	6,692206E+22	6,692257E+22	3,904236E+22	3,904345E+22	1,338446E+23	7,808581E+22	2,119304E+23
-727	6,692260E+22	6,692072E+22	3,904305E+22	3,904306E+22	1,338433E+23	7,808611E+22	2,119294E+23
-726	6,691943E+22	6,692106E+22	3,904460E+22	3,904347E+22	1,338405E+23	7,808807E+22	2,119286E+23
-725	6,692259E+22	6,692152E+22	3,904412E+22	3,904501E+22	1,338441E+23	7,808913E+22	2,119332E+23
-724	6,692010E+22	6,691981E+22	3,904558E+22	3,904468E+22	1,338399E+23	7,809025E+22	2,119302E+23
-723	6,691834E+22	6,692128E+22	3,904604E+22	3,904568E+22	1,338396E+23	7,809172E+22	2,119313E+23
-722	6,692145E+22	6,692049E+22	3,904509E+22	3,904631E+22	1,338419E+23	7,809140E+22	2,119333E+23
-721	6,691823E+22	6,691908E+22	3,904609E+22	3,904521E+22	1,338373E+23	7,809130E+22	2,119286E+23
-720	6,692022E+22	6,692045E+22	3,904552E+22	3,904556E+22	1,338407E+23	7,809108E+22	2,119317E+23
-719	6,692224E+22	6,691962E+22	3,904460E+22	3,904464E+22	1,338419E+23	7,808924E+22	2,119311E+23
-718	6,691883E+22	6,692042E+22	3,904471E+22	3,904377E+22	1,338393E+23	7,808847E+22	2,119277E+23
-717	6,692182E+22	6,692205E+22	3,904316E+22	3,904438E+22	1,338439E+23	7,808754E+22	2,119314E+23
-716	6,692087E+22	6,692059E+22	3,904345E+22	3,904287E+22	1,338415E+23	7,808631E+22	2,119278E+23
-715	6,691909E+22	6,692180E+22	3,904367E+22	3,904249E+22	1,338409E+23	7,808616E+22	2,119271E+23
-714	6,692298E+22	6,692181E+22	3,904243E+22	3,904308E+22	1,338448E+23	7,808550E+22	2,119303E+23
-713	6,692034E+22	6,692009E+22	3,904324E+22	3,904223E+22	1,338404E+23	7,808547E+22	2,119259E+23
-712	6,692053E+22	6,692168E+22	3,904329E+22	3,904319E+22	1,338422E+23	7,808648E+22	2,119287E+23
-711	6,692266E+22	6,692115E+22	3,904266E+22	3,904371E+22	1,338438E+23	7,808637E+22	2,119302E+23
-710	6,691901E+22	6,692042E+22	3,904384E+22	3,904342E+22	1,338394E+23	7,808726E+22	2,119267E+23
-709	6,692132E+22	6,692157E+22	3,904393E+22	3,904485E+22	1,338429E+23	7,808878E+22	2,119317E+23
-708	6,692140E+22	6,691957E+22	3,904503E+22	3,904466E+22	1,338410E+23	7,808969E+22	2,119307E+23
-707	6,691821E+22	6,692015E+22	3,904648E+22	3,904508E+22	1,338384E+23	7,809156E+22	2,119299E+23
-706	6,692101E+22	6,692083E+22	3,904588E+22	3,904702E+22	1,338418E+23	7,809290E+22	2,119347E+23
-705	6,691837E+22	6,691844E+22	3,904699E+22	3,904671E+22	1,338368E+23	7,809369E+22	2,119305E+23
-704	6,691745E+22	6,691953E+22	3,904762E+22	3,904717E+22	1,338370E+23	7,809479E+22	2,119318E+23
-703	6,692082E+22	6,691911E+22	3,904664E+22	3,904754E+22	1,338399E+23	7,809419E+22	2,119341E+23
-702	6,691807E+22	6,691779E+22	3,904720E+22	3,904620E+22	1,338359E+23	7,809340E+22	2,119293E+23
-701	6,691977E+22	6,691998E+22	3,904648E+22	3,904671E+22	1,338398E+23	7,809319E+22	2,119329E+23
-700	6,692080E+22	6,691937E+22	3,904583E+22	3,904601E+22	1,338402E+23	7,809184E+22	2,119320E+23
-699	6,691742E+22	6,692013E+22	3,904608E+22	3,904493E+22	1,338376E+23	7,809101E+22	2,119286E+23
-698	6,692059E+22	6,692149E+22	3,904478E+22	3,904565E+22	1,338421E+23	7,809043E+22	2,119325E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-697	6,691973E+22	6,691907E+22	3,904493E+22	3,904424E+22	1,338388E+23	7,808917E+22	2,119280E+23
-696	6,691858E+22	6,692008E+22	3,904530E+22	3,904385E+22	1,338387E+23	7,808915E+22	2,119278E+23
-695	6,692206E+22	6,692067E+22	3,904384E+22	3,904475E+22	1,338427E+23	7,808859E+22	2,119313E+23
-694	6,691934E+22	6,691903E+22	3,904415E+22	3,904395E+22	1,338384E+23	7,808810E+22	2,119265E+23
-693	6,691959E+22	6,692096E+22	3,904428E+22	3,904482E+22	1,338405E+23	7,808911E+22	2,119297E+23
-692	6,692142E+22	6,692014E+22	3,904427E+22	3,904517E+22	1,338416E+23	7,808944E+22	2,119310E+23
-691	6,691824E+22	6,691944E+22	3,904573E+22	3,904454E+22	1,338377E+23	7,809027E+22	2,119279E+23
-690	6,692043E+22	6,692076E+22	3,904598E+22	3,904628E+22	1,338412E+23	7,809226E+22	2,119334E+23
-689	6,691986E+22	6,691844E+22	3,904680E+22	3,904656E+22	1,338383E+23	7,809337E+22	2,119317E+23
-688	6,691684E+22	6,691888E+22	3,904828E+22	3,904701E+22	1,338357E+23	7,809529E+22	2,119310E+23
-687	6,691939E+22	6,691971E+22	3,904762E+22	3,904891E+22	1,338391E+23	7,809653E+22	2,119356E+23
-686	6,691753E+22	6,691694E+22	3,904831E+22	3,904825E+22	1,338345E+23	7,809657E+22	2,119310E+23
-685	6,691713E+22	6,691828E+22	3,904884E+22	3,904844E+22	1,338354E+23	7,809728E+22	2,119327E+23
-684	6,692008E+22	6,691810E+22	3,904815E+22	3,904885E+22	1,338382E+23	7,809700E+22	2,119352E+23
-683	6,691728E+22	6,691740E+22	3,904852E+22	3,904739E+22	1,338347E+23	7,809590E+22	2,119306E+23
-682	6,691842E+22	6,691989E+22	3,904780E+22	3,904814E+22	1,338383E+23	7,809594E+22	2,119343E+23
-681	6,691917E+22	6,691852E+22	3,904708E+22	3,904751E+22	1,338377E+23	7,809459E+22	2,119323E+23
-680	6,691658E+22	6,691855E+22	3,904760E+22	3,904608E+22	1,338351E+23	7,809368E+22	2,119288E+23
-679	6,691962E+22	6,692010E+22	3,904634E+22	3,904679E+22	1,338397E+23	7,809313E+22	2,119329E+23
-678	6,691928E+22	6,691760E+22	3,904598E+22	3,904551E+22	1,338369E+23	7,809149E+22	2,119284E+23
-677	6,691796E+22	6,691918E+22	3,904616E+22	3,904532E+22	1,338371E+23	7,809148E+22	2,119286E+23
-676	6,692071E+22	6,692004E+22	3,904507E+22	3,904641E+22	1,338407E+23	7,809149E+22	2,119322E+23
-675	6,691831E+22	6,691850E+22	3,904554E+22	3,904526E+22	1,338368E+23	7,809079E+22	2,119276E+23
-674	6,691864E+22	6,692040E+22	3,904604E+22	3,904613E+22	1,338390E+23	7,809217E+22	2,119312E+23
-673	6,692037E+22	6,691884E+22	3,904614E+22	3,904664E+22	1,338392E+23	7,809278E+22	2,119320E+23
-672	6,691752E+22	6,691786E+22	3,904786E+22	3,904614E+22	1,338354E+23	7,809399E+22	2,119294E+23
-671	6,691885E+22	6,691978E+22	3,904795E+22	3,904824E+22	1,338386E+23	7,809619E+22	2,119348E+23
-670	6,691839E+22	6,691717E+22	3,904818E+22	3,904868E+22	1,338356E+23	7,809686E+22	2,119324E+23
-669	6,691569E+22	6,691760E+22	3,904955E+22	3,904890E+22	1,338333E+23	7,809846E+22	2,119318E+23
-668	6,691828E+22	6,691828E+22	3,904924E+22	3,905050E+22	1,338366E+23	7,809974E+22	2,119363E+23
-667	6,691707E+22	6,691585E+22	3,904984E+22	3,904934E+22	1,338329E+23	7,809918E+22	2,119321E+23
-666	6,691664E+22	6,691780E+22	3,905034E+22	3,904968E+22	1,338344E+23	7,810001E+22	2,119345E+23
-665	6,691882E+22	6,691743E+22	3,904945E+22	3,905031E+22	1,338363E+23	7,809976E+22	2,119360E+23
-664	6,691610E+22	6,691665E+22	3,905000E+22	3,904879E+22	1,338328E+23	7,809879E+22	2,119315E+23
-663	6,691685E+22	6,691919E+22	3,904934E+22	3,904942E+22	1,338360E+23	7,809876E+22	2,119348E+23
-662	6,691819E+22	6,691710E+22	3,904827E+22	3,904872E+22	1,338353E+23	7,809698E+22	2,119323E+23
-661	6,691614E+22	6,691713E+22	3,904872E+22	3,904724E+22	1,338333E+23	7,809596E+22	2,119292E+23
-660	6,691880E+22	6,691880E+22	3,904768E+22	3,904818E+22	1,338376E+23	7,809586E+22	2,119335E+23
-659	6,691848E+22	6,691695E+22	3,904706E+22	3,904689E+22	1,338354E+23	7,809395E+22	2,119294E+23
-658	6,691692E+22	6,691892E+22	3,904724E+22	3,904688E+22	1,338358E+23	7,809412E+22	2,119300E+23
-657	6,691939E+22	6,691905E+22	3,904642E+22	3,904791E+22	1,338384E+23	7,809432E+22	2,119328E+23
-656	6,691773E+22	6,691714E+22	3,904735E+22	3,904647E+22	1,338349E+23	7,809382E+22	2,119287E+23
-655	6,691765E+22	6,691929E+22	3,904808E+22	3,904736E+22	1,338369E+23	7,809544E+22	2,119324E+23
-654	6,691948E+22	6,691758E+22	3,904776E+22	3,904829E+22	1,338371E+23	7,809605E+22	2,119331E+23
-653	6,691635E+22	6,691689E+22	3,904932E+22	3,904808E+22	1,338332E+23	7,809739E+22	2,119306E+23
-652	6,691698E+22	6,691880E+22	3,904967E+22	3,905037E+22	1,338358E+23	7,810004E+22	2,119358E+23
-651	6,691712E+22	6,691619E+22	3,904979E+22	3,905041E+22	1,338333E+23	7,810020E+22	2,119335E+23
-650	6,691485E+22	6,691662E+22	3,905117E+22	3,905045E+22	1,338315E+23	7,810162E+22	2,119331E+23
-649	6,691749E+22	6,691682E+22	3,905090E+22	3,905199E+22	1,338343E+23	7,810289E+22	2,119372E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-648	6,691671E+22	6,691454E+22	3,905150E+22	3,905069E+22	1,338313E+23	7,810219E+22	2,119335E+23
-647	6,691527E+22	6,691726E+22	3,905187E+22	3,905111E+22	1,338325E+23	7,810298E+22	2,119355E+23
-646	6,691752E+22	6,691661E+22	3,905050E+22	3,905185E+22	1,338341E+23	7,810234E+22	2,119365E+23
-645	6,691506E+22	6,691554E+22	3,905110E+22	3,905006E+22	1,338306E+23	7,810116E+22	2,119318E+23
-644	6,691566E+22	6,691786E+22	3,905083E+22	3,905057E+22	1,338335E+23	7,810140E+22	2,119349E+23
-643	6,691763E+22	6,691595E+22	3,904956E+22	3,904964E+22	1,338336E+23	7,809920E+22	2,119328E+23
-642	6,691556E+22	6,691649E+22	3,904985E+22	3,904851E+22	1,338321E+23	7,809835E+22	2,119304E+23
-641	6,691763E+22	6,691796E+22	3,904877E+22	3,904974E+22	1,338356E+23	7,809851E+22	2,119341E+23
-640	6,691762E+22	6,691613E+22	3,904839E+22	3,904832E+22	1,338337E+23	7,809671E+22	2,119305E+23
-639	6,691569E+22	6,691834E+22	3,904887E+22	3,904814E+22	1,338340E+23	7,809701E+22	2,119310E+23
-638	6,691863E+22	6,691786E+22	3,904788E+22	3,904921E+22	1,338365E+23	7,809709E+22	2,119336E+23
-637	6,691717E+22	6,691590E+22	3,904900E+22	3,904789E+22	1,338331E+23	7,809689E+22	2,119300E+23
-636	6,691630E+22	6,691818E+22	3,905000E+22	3,904919E+22	1,338345E+23	7,809919E+22	2,119337E+23
-635	6,691795E+22	6,691682E+22	3,904936E+22	3,905024E+22	1,338348E+23	7,809960E+22	2,119344E+23
-634	6,691492E+22	6,691618E+22	3,905079E+22	3,905019E+22	1,338311E+23	7,810098E+22	2,119321E+23
-633	6,691559E+22	6,691711E+22	3,905127E+22	3,905222E+22	1,338327E+23	7,810349E+22	2,119362E+23
-632	6,691664E+22	6,691445E+22	3,905158E+22	3,905180E+22	1,338311E+23	7,810338E+22	2,119345E+23
-631	6,691421E+22	6,691554E+22	3,905293E+22	3,905165E+22	1,338297E+23	7,810458E+22	2,119343E+23
-630	6,691679E+22	6,691575E+22	3,905220E+22	3,905341E+22	1,338325E+23	7,810561E+22	2,119382E+23
-629	6,691570E+22	6,691399E+22	3,905274E+22	3,905217E+22	1,338297E+23	7,810491E+22	2,119346E+23
-628	6,691355E+22	6,691665E+22	3,905341E+22	3,905262E+22	1,338302E+23	7,810603E+22	2,119362E+23
-627	6,691619E+22	6,691588E+22	3,905193E+22	3,905302E+22	1,338321E+23	7,810494E+22	2,119370E+23
-626	6,691422E+22	6,691465E+22	3,905247E+22	3,905128E+22	1,338289E+23	7,810375E+22	2,119326E+23
-625	6,691475E+22	6,691625E+22	3,905226E+22	3,905190E+22	1,338310E+23	7,810415E+22	2,119352E+23
-624	6,691714E+22	6,691470E+22	3,905091E+22	3,905104E+22	1,338318E+23	7,810195E+22	2,119338E+23
-623	6,691439E+22	6,691598E+22	3,905101E+22	3,904998E+22	1,338304E+23	7,810099E+22	2,119314E+23
-622	6,691665E+22	6,691707E+22	3,904966E+22	3,905128E+22	1,338337E+23	7,810094E+22	2,119347E+23
-621	6,691699E+22	6,691513E+22	3,904954E+22	3,904953E+22	1,338321E+23	7,809907E+22	2,119312E+23
-620	6,691470E+22	6,691725E+22	3,905061E+22	3,904932E+22	1,338319E+23	7,809993E+22	2,119319E+23
-619	6,691786E+22	6,691700E+22	3,904956E+22	3,905038E+22	1,338349E+23	7,809994E+22	2,119348E+23
-618	6,691611E+22	6,691529E+22	3,905058E+22	3,904960E+22	1,338314E+23	7,810019E+22	2,119316E+23
-617	6,691450E+22	6,691704E+22	3,905168E+22	3,905127E+22	1,338315E+23	7,810295E+22	2,119345E+23
-616	6,691670E+22	6,691547E+22	3,905110E+22	3,905215E+22	1,338322E+23	7,810325E+22	2,119354E+23
-615	6,691358E+22	6,691497E+22	3,905260E+22	3,905179E+22	1,338285E+23	7,810439E+22	2,119329E+23
-614	6,691501E+22	6,691544E+22	3,905277E+22	3,905376E+22	1,338305E+23	7,810653E+22	2,119370E+23
-613	6,691637E+22	6,691306E+22	3,905311E+22	3,905318E+22	1,338294E+23	7,810629E+22	2,119357E+23
-612	6,691308E+22	6,691474E+22	3,905466E+22	3,905326E+22	1,338278E+23	7,810792E+22	2,119357E+23
-611	6,691537E+22	6,691543E+22	3,905361E+22	3,905494E+22	1,338308E+23	7,810854E+22	2,119393E+23
-610	6,691423E+22	6,691363E+22	3,905409E+22	3,905380E+22	1,338279E+23	7,810789E+22	2,119358E+23
-609	6,691201E+22	6,691521E+22	3,905500E+22	3,905408E+22	1,338272E+23	7,810908E+22	2,119363E+23
-608	6,691548E+22	6,691428E+22	3,905353E+22	3,905417E+22	1,338298E+23	7,810770E+22	2,119375E+23
-607	6,691345E+22	6,691357E+22	3,905392E+22	3,905243E+22	1,338270E+23	7,810635E+22	2,119334E+23
-606	6,691413E+22	6,691506E+22	3,905315E+22	3,905336E+22	1,338292E+23	7,810652E+22	2,119357E+23
-605	6,691640E+22	6,691403E+22	3,905180E+22	3,905245E+22	1,338304E+23	7,810425E+22	2,119347E+23
-604	6,691319E+22	6,691546E+22	3,905230E+22	3,905134E+22	1,338286E+23	7,810364E+22	2,119323E+23
-603	6,691569E+22	6,691650E+22	3,905101E+22	3,905226E+22	1,338322E+23	7,810326E+22	2,119355E+23
-602	6,691636E+22	6,691454E+22	3,905106E+22	3,905071E+22	1,338309E+23	7,810177E+22	2,119327E+23
-601	6,691364E+22	6,691576E+22	3,905242E+22	3,905080E+22	1,338294E+23	7,810322E+22	2,119326E+23
-600	6,691669E+22	6,691580E+22	3,905135E+22	3,905211E+22	1,338325E+23	7,810346E+22	2,119359E+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							
-599	6,691442E+22	6,691452E+22	3,905222E+22	3,905154E+22	1,338289E+23	7,810376E+22	2,119327E+23
-598	6,691322E+22	6,691540E+22	3,905300E+22	3,905327E+22	1,338286E+23	7,810627E+22	2,119349E+23
-597	6,691600E+22	6,691385E+22	3,905260E+22	3,905372E+22	1,338298E+23	7,810632E+22	2,119362E+23
-596	6,691285E+22	6,691359E+22	3,905437E+22	3,905320E+22	1,338264E+23	7,810757E+22	2,119340E+23
-595	6,691438E+22	6,691461E+22	3,905435E+22	3,905502E+22	1,338290E+23	7,810937E+22	2,119384E+23
-594	6,691539E+22	6,691291E+22	3,905457E+22	3,905482E+22	1,338283E+23	7,810938E+22	2,119377E+23
-593	6,691128E+22	6,691397E+22	3,905637E+22	3,905507E+22	1,338253E+23	7,811144E+22	2,119367E+23
-592	6,691387E+22	6,691452E+22	3,905541E+22	3,905651E+22	1,338284E+23	7,811192E+22	2,119403E+23
-591	6,691278E+22	6,691264E+22	3,905589E+22	3,905516E+22	1,338254E+23	7,811105E+22	2,119365E+23
-590	6,691129E+22	6,691338E+22	3,905635E+22	3,905552E+22	1,338247E+23	7,811187E+22	2,119365E+23
-589	6,691516E+22	6,691274E+22	3,905475E+22	3,905549E+22	1,338279E+23	7,811024E+22	2,119381E+23
-588	6,691251E+22	6,691271E+22	3,905508E+22	3,905394E+22	1,338252E+23	7,810902E+22	2,119342E+23
-587	6,691321E+22	6,691469E+22	3,905399E+22	3,905468E+22	1,338279E+23	7,810867E+22	2,119366E+23
-586	6,691557E+22	6,691372E+22	3,905273E+22	3,905367E+22	1,338293E+23	7,810640E+22	2,119357E+23
-585	6,691213E+22	6,691427E+22	3,905382E+22	3,905242E+22	1,338264E+23	7,810624E+22	2,119326E+23
-584	6,691505E+22	6,691532E+22	3,905274E+22	3,905316E+22	1,338304E+23	7,810590E+22	2,119363E+23
-583	6,691521E+22	6,691370E+22	3,905285E+22	3,905196E+22	1,338289E+23	7,810481E+22	2,119337E+23
-582	6,691241E+22	6,691449E+22	3,905380E+22	3,905268E+22	1,338269E+23	7,810647E+22	2,119334E+23
-581	6,691541E+22	6,691463E+22	3,905275E+22	3,905400E+22	1,338300E+23	7,810675E+22	2,119368E+23
-580	6,691295E+22	6,691340E+22	3,905387E+22	3,905342E+22	1,338263E+23	7,810729E+22	2,119336E+23
-579	6,691236E+22	6,691426E+22	3,905449E+22	3,905473E+22	1,338266E+23	7,810922E+22	2,119358E+23
-578	6,691549E+22	6,691297E+22	3,905416E+22	3,905522E+22	1,338285E+23	7,810938E+22	2,119378E+23
-577	6,691190E+22	6,691232E+22	3,905628E+22	3,905489E+22	1,338242E+23	7,811117E+22	2,119354E+23
-576	6,691315E+22	6,691388E+22	3,905619E+22	3,905673E+22	1,338270E+23	7,811292E+22	2,119400E+23
-575	6,691360E+22	6,691251E+22	3,905637E+22	3,905661E+22	1,338261E+23	7,811298E+22	2,119391E+23
-574	6,690990E+22	6,691245E+22	3,905784E+22	3,905690E+22	1,338224E+23	7,811474E+22	2,119371E+23
-573	6,691298E+22	6,691282E+22	3,905696E+22	3,905785E+22	1,338258E+23	7,811481E+22	2,119406E+23
-572	6,691203E+22	6,691118E+22	3,905745E+22	3,905647E+22	1,338232E+23	7,811392E+22	2,119371E+23
-571	6,691076E+22	6,691230E+22	3,905742E+22	3,905668E+22	1,338231E+23	7,811410E+22	2,119372E+23
-570	6,691447E+22	6,691250E+22	3,905561E+22	3,905689E+22	1,338270E+23	7,811251E+22	2,119395E+23
-569	6,691133E+22	6,691197E+22	3,905623E+22	3,905532E+22	1,338233E+23	7,811154E+22	2,119348E+23
-568	6,691217E+22	6,691405E+22	3,905535E+22	3,905568E+22	1,338262E+23	7,811104E+22	2,119373E+23
-567	6,691449E+22	6,691321E+22	3,905434E+22	3,905458E+22	1,338277E+23	7,810892E+22	2,119366E+23
-566	6,691146E+22	6,691269E+22	3,905528E+22	3,905371E+22	1,338241E+23	7,810899E+22	2,119331E+23
-565	6,691422E+22	6,691397E+22	3,905431E+22	3,905458E+22	1,338282E+23	7,810889E+22	2,119371E+23
-564	6,691373E+22	6,691280E+22	3,905436E+22	3,905389E+22	1,338265E+23	7,810825E+22	2,119348E+23
-563	6,691103E+22	6,691355E+22	3,905496E+22	3,905452E+22	1,338246E+23	7,810948E+22	2,119341E+23
-562	6,691442E+22	6,691373E+22	3,905398E+22	3,905575E+22	1,338282E+23	7,810973E+22	2,119379E+23
-561	6,691205E+22	6,691175E+22	3,905557E+22	3,905494E+22	1,338238E+23	7,811052E+22	2,119343E+23
-560	6,691186E+22	6,691306E+22	3,905631E+22	3,905599E+22	1,338249E+23	7,811229E+22	2,119372E+23
-559	6,691449E+22	6,691243E+22	3,905607E+22	3,905667E+22	1,338269E+23	7,811274E+22	2,119397E+23
-558	6,691066E+22	6,691130E+22	3,905791E+22	3,905684E+22	1,338220E+23	7,811475E+22	2,119367E+23
-557	6,691172E+22	6,691289E+22	3,905794E+22	3,905848E+22	1,338246E+23	7,811642E+22	2,119410E+23
-556	6,691196E+22	6,691143E+22	3,905824E+22	3,905837E+22	1,338234E+23	7,811661E+22	2,119400E+23
-555	6,690898E+22	6,691109E+22	3,905933E+22	3,905828E+22	1,338201E+23	7,811762E+22	2,119377E+23
-554	6,691250E+22	6,691160E+22	3,905824E+22	3,905920E+22	1,338241E+23	7,811744E+22	2,119415E+23
-553	6,691116E+22	6,690978E+22	3,905885E+22	3,905798E+22	1,338209E+23	7,811683E+22	2,119378E+23
-552	6,690984E+22	6,691172E+22	3,905854E+22	3,905805E+22	1,338216E+23	7,811659E+22	2,119382E+23
-551	6,691312E+22	6,691226E+22	3,905683E+22	3,905816E+22	1,338254E+23	7,811499E+22	2,119404E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-550	6,691042E+22	6,691077E+22	3,905737E+22	3,905659E+22	1,338212E+23	7,811396E+22	2,119352E+23
-549	6,691155E+22	6,691274E+22	3,905679E+22	3,905652E+22	1,338243E+23	7,811331E+22	2,119376E+23
-548	6,691359E+22	6,691218E+22	3,905594E+22	3,905572E+22	1,338258E+23	7,811166E+22	2,119374E+23
-547	6,691057E+22	6,691177E+22	3,905649E+22	3,905509E+22	1,338223E+23	7,811158E+22	2,119339E+23
-546	6,691301E+22	6,691348E+22	3,905542E+22	3,905634E+22	1,338265E+23	7,811176E+22	2,119382E+23
-545	6,691221E+22	6,691166E+22	3,905587E+22	3,905579E+22	1,338239E+23	7,811166E+22	2,119355E+23
-544	6,691000E+22	6,691248E+22	3,905653E+22	3,905601E+22	1,338225E+23	7,811254E+22	2,119350E+23
-543	6,691358E+22	6,691280E+22	3,905582E+22	3,905708E+22	1,338264E+23	7,811290E+22	2,119393E+23
-542	6,691165E+22	6,691008E+22	3,905724E+22	3,905656E+22	1,338217E+23	7,811379E+22	2,119355E+23
-541	6,691110E+22	6,691188E+22	3,905812E+22	3,905756E+22	1,338230E+23	7,811568E+22	2,119387E+23
-540	6,691294E+22	6,691187E+22	3,905787E+22	3,905866E+22	1,338248E+23	7,811654E+22	2,119413E+23
-539	6,690916E+22	6,691035E+22	3,905939E+22	3,905868E+22	1,338195E+23	7,811807E+22	2,119376E+23
-538	6,691043E+22	6,691188E+22	3,905945E+22	3,906013E+22	1,338223E+23	7,811958E+22	2,119419E+23
-537	6,691088E+22	6,690961E+22	3,906002E+22	3,905986E+22	1,338205E+23	7,811988E+22	2,119404E+23
-536	6,690827E+22	6,690970E+22	3,906086E+22	3,905950E+22	1,338180E+23	7,812036E+22	2,119383E+23
-535	6,691153E+22	6,691101E+22	3,905966E+22	3,906054E+22	1,338225E+23	7,812021E+22	2,119427E+23
-534	6,691023E+22	6,690878E+22	3,905985E+22	3,905961E+22	1,338190E+23	7,811946E+22	2,119385E+23
-533	6,690888E+22	6,691093E+22	3,905975E+22	3,905926E+22	1,338198E+23	7,811901E+22	2,119388E+23
-532	6,691196E+22	6,691164E+22	3,905827E+22	3,905931E+22	1,338236E+23	7,811758E+22	2,119412E+23
-531	6,690974E+22	6,690976E+22	3,905861E+22	3,905757E+22	1,338195E+23	7,811618E+22	2,119357E+23
-530	6,691090E+22	6,691189E+22	3,905807E+22	3,905769E+22	1,338228E+23	7,811576E+22	2,119385E+23
-529	6,691235E+22	6,691095E+22	3,905747E+22	3,905736E+22	1,338233E+23	7,811483E+22	2,119381E+23
-528	6,690927E+22	6,691101E+22	3,905777E+22	3,905678E+22	1,338203E+23	7,811455E+22	2,119348E+23
-527	6,691163E+22	6,691274E+22	3,905686E+22	3,905796E+22	1,338244E+23	7,811482E+22	2,119392E+23
-526	6,691147E+22	6,690994E+22	3,905722E+22	3,905743E+22	1,338214E+23	7,811465E+22	2,119361E+23
-525	6,690970E+22	6,691091E+22	3,905815E+22	3,905717E+22	1,338206E+23	7,811533E+22	2,119359E+23
-524	6,691282E+22	6,691181E+22	3,905763E+22	3,905849E+22	1,338246E+23	7,811612E+22	2,119408E+23
-523	6,691075E+22	6,690940E+22	3,905874E+22	3,905819E+22	1,338202E+23	7,811693E+22	2,119371E+23
-522	6,690971E+22	6,691150E+22	3,905960E+22	3,905938E+22	1,338212E+23	7,811897E+22	2,119402E+23
-521	6,691103E+22	6,691074E+22	3,905983E+22	3,906062E+22	1,338218E+23	7,812045E+22	2,119422E+23
-520	6,690775E+22	6,690923E+22	3,906123E+22	3,906028E+22	1,338170E+23	7,812151E+22	2,119385E+23
-519	6,690927E+22	6,691062E+22	3,906135E+22	3,906158E+22	1,338199E+23	7,812293E+22	2,119428E+23
-518	6,691024E+22	6,690771E+22	3,906152E+22	3,906160E+22	1,338180E+23	7,812312E+22	2,119411E+23
-517	6,690762E+22	6,690843E+22	3,906217E+22	3,906103E+22	1,338161E+23	7,812320E+22	2,119393E+23
-516	6,691027E+22	6,691048E+22	3,906090E+22	3,906220E+22	1,338207E+23	7,812310E+22	2,119438E+23
-515	6,690929E+22	6,690810E+22	3,906078E+22	3,906091E+22	1,338174E+23	7,812169E+22	2,119391E+23
-514	6,690816E+22	6,691025E+22	3,906085E+22	3,906020E+22	1,338184E+23	7,812105E+22	2,119395E+23
-513	6,691108E+22	6,691039E+22	3,905987E+22	3,906029E+22	1,338215E+23	7,812016E+22	2,119416E+23
-512	6,690893E+22	6,690890E+22	3,906007E+22	3,905859E+22	1,338178E+23	7,811866E+22	2,119365E+23
-511	6,690958E+22	6,691141E+22	3,905957E+22	3,905909E+22	1,338210E+23	7,811867E+22	2,119397E+23
-510	6,691112E+22	6,690972E+22	3,905866E+22	3,905926E+22	1,338208E+23	7,811792E+22	2,119388E+23
-509	6,690828E+22	6,690976E+22	3,905913E+22	3,905829E+22	1,338180E+23	7,811742E+22	2,119355E+23
-508	6,691073E+22	6,691171E+22	3,905842E+22	3,905943E+22	1,338224E+23	7,811785E+22	2,119403E+23
-507	6,691113E+22	6,690865E+22	3,905853E+22	3,905870E+22	1,338198E+23	7,811722E+22	2,119370E+23
-506	6,690918E+22	6,691010E+22	3,905960E+22	3,905855E+22	1,338193E+23	7,811815E+22	2,119374E+23
-505	6,691144E+22	6,691092E+22	3,905945E+22	3,906033E+22	1,338224E+23	7,811978E+22	2,119421E+23
-504	6,690900E+22	6,690886E+22	3,906044E+22	3,906006E+22	1,338179E+23	7,812050E+22	2,119384E+23
-503	6,690787E+22	6,691073E+22	3,906154E+22	3,906120E+22	1,338186E+23	7,812274E+22	2,119413E+23
-502	6,690983E+22	6,690872E+22	3,906158E+22	3,906196E+22	1,338185E+23	7,812353E+22	2,119421E+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	6,690715E+22	6,690726E+22	3,906298E+22	3,906169E+22	1,338144E+23	7,812466E+22	2,119391E+23
-500	6,690847E+22	6,690934E+22	3,906296E+22	3,906314E+22	1,338178E+23	7,812611E+22	2,119439E+23
-499	6,690949E+22	6,690686E+22	3,906256E+22	3,906317E+22	1,338163E+23	7,812573E+22	2,119421E+23
-498	6,690670E+22	6,690815E+22	3,906316E+22	3,906247E+22	1,338148E+23	7,812564E+22	2,119405E+23
-497	6,690894E+22	6,690970E+22	3,906243E+22	3,906355E+22	1,338186E+23	7,812598E+22	2,119446E+23
-496	6,690826E+22	6,690752E+22	3,906229E+22	3,906186E+22	1,338158E+23	7,812415E+22	2,119399E+23
-495	6,690722E+22	6,690946E+22	3,906258E+22	3,906115E+22	1,338167E+23	7,812373E+22	2,119404E+23
-494	6,691018E+22	6,690883E+22	3,906132E+22	3,906179E+22	1,338190E+23	7,812311E+22	2,119421E+23
-493	6,690798E+22	6,690773E+22	3,906138E+22	3,906017E+22	1,338157E+23	7,812155E+22	2,119373E+23
-492	6,690812E+22	6,691053E+22	3,906082E+22	3,906089E+22	1,338187E+23	7,812172E+22	2,119404E+23
-491	6,691022E+22	6,690856E+22	3,905962E+22	3,906081E+22	1,338188E+23	7,812043E+22	2,119392E+23
-490	6,690789E+22	6,690870E+22	3,906017E+22	3,905942E+22	1,338166E+23	7,811959E+22	2,119362E+23
-489	6,691000E+22	6,691038E+22	3,906006E+22	3,906064E+22	1,338204E+23	7,812070E+22	2,119411E+23
-488	6,691026E+22	6,690815E+22	3,906011E+22	3,905995E+22	1,338184E+23	7,812006E+22	2,119385E+23
-487	6,690771E+22	6,690982E+22	3,906144E+22	3,906017E+22	1,338175E+23	7,812161E+22	2,119391E+23
-486	6,690972E+22	6,690976E+22	3,906123E+22	3,906242E+22	1,338195E+23	7,812364E+22	2,119431E+23
-485	6,690762E+22	6,690744E+22	3,906239E+22	3,906186E+22	1,338151E+23	7,812424E+22	2,119393E+23
-484	6,690653E+22	6,690924E+22	3,906353E+22	3,906297E+22	1,338158E+23	7,812651E+22	2,119423E+23
-483	6,690923E+22	6,690697E+22	3,906307E+22	3,906412E+22	1,338162E+23	7,812719E+22	2,119434E+23
-482	6,690669E+22	6,690610E+22	3,906424E+22	3,906326E+22	1,338128E+23	7,812750E+22	2,119403E+23
-481	6,690732E+22	6,690842E+22	3,906445E+22	3,906495E+22	1,338157E+23	7,812940E+22	2,119451E+23
-480	6,690818E+22	6,690661E+22	3,906382E+22	3,906465E+22	1,338148E+23	7,812847E+22	2,119433E+23
-479	6,690545E+22	6,690773E+22	3,906478E+22	3,906368E+22	1,338132E+23	7,812846E+22	2,119416E+23
-478	6,690802E+22	6,690821E+22	3,906400E+22	3,906476E+22	1,338162E+23	7,812876E+22	2,119450E+23
-477	6,690761E+22	6,690610E+22	3,906392E+22	3,906285E+22	1,338137E+23	7,812676E+22	2,119405E+23
-476	6,690612E+22	6,690853E+22	3,906408E+22	3,906256E+22	1,338146E+23	7,812664E+22	2,119413E+23
-475	6,690910E+22	6,690786E+22	3,906219E+22	3,906338E+22	1,338170E+23	7,812558E+22	2,119425E+23
-474	6,690695E+22	6,690704E+22	3,906220E+22	3,906168E+22	1,338140E+23	7,812387E+22	2,119379E+23
-473	6,690701E+22	6,690942E+22	3,906215E+22	3,906235E+22	1,338164E+23	7,812450E+22	2,119409E+23
-472	6,690944E+22	6,690778E+22	3,906095E+22	3,906184E+22	1,338172E+23	7,812279E+22	2,119400E+23
-471	6,690728E+22	6,690796E+22	3,906189E+22	3,906052E+22	1,338152E+23	7,812241E+22	2,119376E+23
-470	6,690911E+22	6,690904E+22	3,906172E+22	3,906225E+22	1,338181E+23	7,812397E+22	2,119421E+23
-469	6,690902E+22	6,690722E+22	3,906183E+22	3,906171E+22	1,338162E+23	7,812354E+22	2,119398E+23
-468	6,690593E+22	6,690894E+22	3,906327E+22	3,906219E+22	1,338149E+23	7,812546E+22	2,119403E+23
-467	6,690840E+22	6,690824E+22	3,906275E+22	3,906425E+22	1,338166E+23	7,812700E+22	2,119436E+23
-466	6,690692E+22	6,690593E+22	3,906392E+22	3,906338E+22	1,338128E+23	7,812730E+22	2,119401E+23
-465	6,690569E+22	6,690752E+22	3,906538E+22	3,906461E+22	1,338132E+23	7,812999E+22	2,119432E+23
-464	6,690828E+22	6,690627E+22	3,906460E+22	3,906565E+22	1,338146E+23	7,813024E+22	2,119448E+23
-463	6,690553E+22	6,690584E+22	3,906582E+22	3,906490E+22	1,338114E+23	7,813072E+22	2,119421E+23
-462	6,690593E+22	6,690744E+22	3,906598E+22	3,906672E+22	1,338134E+23	7,813270E+22	2,119461E+23
-461	6,690716E+22	6,690569E+22	3,906553E+22	3,906595E+22	1,338128E+23	7,813149E+22	2,119443E+23
-460	6,690433E+22	6,690665E+22	3,906655E+22	3,906493E+22	1,338110E+23	7,813148E+22	2,119425E+23
-459	6,690724E+22	6,690680E+22	3,906532E+22	3,906602E+22	1,338140E+23	7,813133E+22	2,119454E+23
-458	6,690690E+22	6,690508E+22	3,906495E+22	3,906423E+22	1,338120E+23	7,812918E+22	2,119412E+23
-457	6,690468E+22	6,690743E+22	3,906527E+22	3,906431E+22	1,338121E+23	7,812958E+22	2,119417E+23
-456	6,690776E+22	6,690734E+22	3,906317E+22	3,906480E+22	1,338151E+23	7,812798E+22	2,119431E+23
-455	6,690615E+22	6,690626E+22	3,906347E+22	3,906280E+22	1,338124E+23	7,812628E+22	2,119387E+23
-454	6,690650E+22	6,690782E+22	3,906353E+22	3,906348E+22	1,338143E+23	7,812701E+22	2,119413E+23
-453	6,690911E+22	6,690663E+22	3,906253E+22	3,906281E+22	1,338157E+23	7,812534E+22	2,119411E+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							
-452	6,690618E+22	6,690733E+22	3,906361E+22	3,906199E+22	1,338135E+23	7,812560E+22	2,119391E+23
-451	6,690771E+22	6,690827E+22	3,906311E+22	3,906401E+22	1,338160E+23	7,812712E+22	2,119431E+23
-450	6,690766E+22	6,690643E+22	3,906332E+22	3,906350E+22	1,338141E+23	7,812681E+22	2,119409E+23
-449	6,690441E+22	6,690750E+22	3,906523E+22	3,906410E+22	1,338119E+23	7,812933E+22	2,119412E+23
-448	6,690727E+22	6,690706E+22	3,906452E+22	3,906578E+22	1,338143E+23	7,813030E+22	2,119446E+23
-447	6,690620E+22	6,690476E+22	3,906578E+22	3,906501E+22	1,338110E+23	7,813079E+22	2,119418E+23
-446	6,690478E+22	6,690602E+22	3,906699E+22	3,906660E+22	1,338108E+23	7,813359E+22	2,119444E+23
-445	6,690715E+22	6,690540E+22	3,906616E+22	3,906746E+22	1,338126E+23	7,813362E+22	2,119462E+23
-444	6,690410E+22	6,690519E+22	3,906749E+22	3,906665E+22	1,338093E+23	7,813414E+22	2,119434E+23
-443	6,690496E+22	6,690614E+22	3,906733E+22	3,906803E+22	1,338111E+23	7,813536E+22	2,119465E+23
-442	6,690652E+22	6,690447E+22	3,906688E+22	3,906697E+22	1,338110E+23	7,813385E+22	2,119448E+23
-441	6,690336E+22	6,690530E+22	3,906813E+22	3,906624E+22	1,338087E+23	7,813437E+22	2,119430E+23
-440	6,690594E+22	6,690621E+22	3,906649E+22	3,906728E+22	1,338121E+23	7,813377E+22	2,119459E+23
-439	6,690567E+22	6,690465E+22	3,906618E+22	3,906572E+22	1,338103E+23	7,813189E+22	2,119422E+23
-438	6,690354E+22	6,690613E+22	3,906644E+22	3,906589E+22	1,338097E+23	7,813232E+22	2,119420E+23
-437	6,690711E+22	6,690619E+22	3,906456E+22	3,906589E+22	1,338133E+23	7,813045E+22	2,119438E+23
-436	6,690558E+22	6,690528E+22	3,906502E+22	3,906387E+22	1,338109E+23	7,812889E+22	2,119397E+23
-435	6,690605E+22	6,690661E+22	3,906479E+22	3,906463E+22	1,338127E+23	7,812942E+22	2,119421E+23
-434	6,690834E+22	6,690602E+22	3,906379E+22	3,906425E+22	1,338144E+23	7,812804E+22	2,119424E+23
-433	6,690451E+22	6,690652E+22	3,906525E+22	3,906399E+22	1,338110E+23	7,812924E+22	2,119403E+23
-432	6,690586E+22	6,690766E+22	3,906470E+22	3,906575E+22	1,338135E+23	7,813045E+22	2,119440E+23
-431	6,690650E+22	6,690531E+22	3,906518E+22	3,906517E+22	1,338118E+23	7,813036E+22	2,119422E+23
-430	6,690353E+22	6,690541E+22	3,906704E+22	3,906586E+22	1,338089E+23	7,813290E+22	2,119418E+23
-429	6,690672E+22	6,690555E+22	3,906631E+22	3,906737E+22	1,338123E+23	7,813368E+22	2,119460E+23
-428	6,690518E+22	6,690388E+22	3,906745E+22	3,906680E+22	1,338091E+23	7,813425E+22	2,119433E+23
-427	6,690362E+22	6,690515E+22	3,906826E+22	3,906839E+22	1,338088E+23	7,813664E+22	2,119454E+23
-426	6,690613E+22	6,690475E+22	3,906754E+22	3,906894E+22	1,338109E+23	7,813648E+22	2,119474E+23
-425	6,690277E+22	6,690404E+22	3,906934E+22	3,906814E+22	1,338068E+23	7,813747E+22	2,119443E+23
-424	6,690375E+22	6,690529E+22	3,906899E+22	3,906909E+22	1,338090E+23	7,813809E+22	2,119471E+23
-423	6,690569E+22	6,690350E+22	3,906854E+22	3,906828E+22	1,338092E+23	7,813682E+22	2,119460E+23
-422	6,690216E+22	6,690382E+22	3,906945E+22	3,906800E+22	1,338060E+23	7,813745E+22	2,119434E+23
-421	6,690478E+22	6,690522E+22	3,906767E+22	3,906885E+22	1,338100E+23	7,813652E+22	2,119465E+23
-420	6,690455E+22	6,690376E+22	3,906741E+22	3,906715E+22	1,338083E+23	7,813456E+22	2,119429E+23
-419	6,690309E+22	6,690478E+22	3,906739E+22	3,906696E+22	1,338079E+23	7,813435E+22	2,119422E+23
-418	6,690697E+22	6,690518E+22	3,906567E+22	3,906669E+22	1,338121E+23	7,813236E+22	2,119445E+23
-417	6,690482E+22	6,690441E+22	3,906653E+22	3,906514E+22	1,338092E+23	7,813167E+22	2,119409E+23
-416	6,690462E+22	6,690648E+22	3,906614E+22	3,906592E+22	1,338111E+23	7,813206E+22	2,119432E+23
-415	6,690683E+22	6,690575E+22	3,906541E+22	3,906598E+22	1,338126E+23	7,813138E+22	2,119440E+23
-414	6,690297E+22	6,690507E+22	3,906699E+22	3,906598E+22	1,338080E+23	7,813297E+22	2,119410E+23
-413	6,690478E+22	6,690607E+22	3,906659E+22	3,906735E+22	1,338108E+23	7,813393E+22	2,119448E+23
-412	6,690565E+22	6,690379E+22	3,906711E+22	3,906685E+22	1,338094E+23	7,813396E+22	2,119434E+23
-411	6,690307E+22	6,690367E+22	3,906839E+22	3,906757E+22	1,338067E+23	7,813596E+22	2,119427E+23
-410	6,690594E+22	6,690459E+22	3,906760E+22	3,906909E+22	1,338105E+23	7,813668E+22	2,119472E+23
-409	6,690374E+22	6,690315E+22	3,906903E+22	3,906878E+22	1,338069E+23	7,813781E+22	2,119447E+23
-408	6,690209E+22	6,690463E+22	3,906981E+22	3,906975E+22	1,338067E+23	7,813956E+22	2,119463E+23
-407	6,690515E+22	6,690390E+22	3,906941E+22	3,907021E+22	1,338090E+23	7,813962E+22	2,119487E+23
-406	6,690180E+22	6,690229E+22	3,907116E+22	3,906957E+22	1,338041E+23	7,814073E+22	2,119448E+23
-405	6,690274E+22	6,690402E+22	3,907068E+22	3,907045E+22	1,338068E+23	7,814113E+22	2,119479E+23
-404	6,690432E+22	6,690271E+22	3,907001E+22	3,906996E+22	1,338070E+23	7,813997E+22	2,119470E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-403	6,690107E+22	6,690268E+22	3,907033E+22	3,906964E+22	1,338038E+23	7,813998E+22	2,119437E+23
-402	6,690409E+22	6,690432E+22	3,906865E+22	3,907010E+22	1,338084E+23	7,813875E+22	2,119472E+23
-401	6,690381E+22	6,690275E+22	3,906875E+22	3,906837E+22	1,338066E+23	7,813712E+22	2,119437E+23
-400	6,690241E+22	6,690422E+22	3,906866E+22	3,906775E+22	1,338066E+23	7,813641E+22	2,119430E+23
-399	6,690639E+22	6,690472E+22	3,906715E+22	3,906787E+22	1,338111E+23	7,813502E+22	2,119461E+23
-398	6,690344E+22	6,690339E+22	3,906801E+22	3,906694E+22	1,338068E+23	7,813495E+22	2,119418E+23
-397	6,690308E+22	6,690566E+22	3,906774E+22	3,906764E+22	1,338087E+23	7,813537E+22	2,119441E+23
-396	6,690539E+22	6,690454E+22	3,906714E+22	3,906767E+22	1,338099E+23	7,813481E+22	2,119447E+23
-395	6,690225E+22	6,690309E+22	3,906836E+22	3,906750E+22	1,338053E+23	7,813585E+22	2,119412E+23
-394	6,690451E+22	6,690447E+22	3,906799E+22	3,906866E+22	1,338090E+23	7,813665E+22	2,119456E+23
-393	6,690479E+22	6,690260E+22	3,906870E+22	3,906858E+22	1,338074E+23	7,813728E+22	2,119447E+23
-392	6,690174E+22	6,690341E+22	3,906977E+22	3,906912E+22	1,338051E+23	7,813889E+22	2,119440E+23
-391	6,690469E+22	6,690432E+22	3,906929E+22	3,907081E+22	1,338090E+23	7,814010E+22	2,119491E+23
-390	6,690225E+22	6,690195E+22	3,907097E+22	3,907058E+22	1,338042E+23	7,814154E+22	2,119457E+23
-389	6,690092E+22	6,690343E+22	3,907187E+22	3,907112E+22	1,338043E+23	7,814299E+22	2,119473E+23
-388	6,690403E+22	6,690259E+22	3,907145E+22	3,907170E+22	1,338066E+23	7,814316E+22	2,119498E+23
-387	6,690094E+22	6,690065E+22	3,907249E+22	3,907131E+22	1,338016E+23	7,814380E+22	2,119454E+23
-386	6,690171E+22	6,690294E+22	3,907176E+22	3,907214E+22	1,338047E+23	7,814391E+22	2,119486E+23
-385	6,690294E+22	6,690181E+22	3,907118E+22	3,907182E+22	1,338047E+23	7,814300E+22	2,119477E+23
-384	6,690008E+22	6,690203E+22	3,907132E+22	3,907072E+22	1,338021E+23	7,814203E+22	2,119442E+23
-383	6,690375E+22	6,690355E+22	3,906995E+22	3,907100E+22	1,338073E+23	7,814095E+22	2,119483E+23
-382	6,690330E+22	6,690153E+22	3,907016E+22	3,906944E+22	1,338048E+23	7,813961E+22	2,119444E+23
-381	6,690158E+22	6,690348E+22	3,907014E+22	3,906878E+22	1,338051E+23	7,813892E+22	2,119440E+23
-380	6,690486E+22	6,690430E+22	3,906874E+22	3,906934E+22	1,338092E+23	7,813809E+22	2,119472E+23
-379	6,690215E+22	6,690220E+22	3,906922E+22	3,906865E+22	1,338043E+23	7,813787E+22	2,119422E+23
-378	6,690198E+22	6,690429E+22	3,906916E+22	3,906911E+22	1,338063E+23	7,813827E+22	2,119445E+23
-377	6,690433E+22	6,690309E+22	3,906883E+22	3,906935E+22	1,338074E+23	7,813818E+22	2,119456E+23
-376	6,690152E+22	6,690196E+22	3,906977E+22	3,906879E+22	1,338035E+23	7,813856E+22	2,119420E+23
-375	6,690391E+22	6,690366E+22	3,906954E+22	3,907033E+22	1,338076E+23	7,813987E+22	2,119474E+23
-374	6,690343E+22	6,690165E+22	3,907027E+22	3,907065E+22	1,338051E+23	7,814091E+22	2,119460E+23
-373	6,690025E+22	6,690270E+22	3,907157E+22	3,907086E+22	1,338029E+23	7,814243E+22	2,119454E+23
-372	6,690322E+22	6,690337E+22	3,907140E+22	3,907242E+22	1,338066E+23	7,814383E+22	2,119504E+23
-371	6,690137E+22	6,690019E+22	3,907270E+22	3,907213E+22	1,338016E+23	7,814483E+22	2,119464E+23
-370	6,690018E+22	6,690191E+22	3,907355E+22	3,907254E+22	1,338021E+23	7,814608E+22	2,119482E+23
-369	6,690271E+22	6,690146E+22	3,907303E+22	3,907358E+22	1,338042E+23	7,814661E+22	2,119508E+23
-368	6,689951E+22	6,690011E+22	3,907359E+22	3,907288E+22	1,337996E+23	7,814647E+22	2,119461E+23
-367	6,690082E+22	6,690235E+22	3,907299E+22	3,907370E+22	1,338032E+23	7,814669E+22	2,119499E+23
-366	6,690195E+22	6,690058E+22	3,907256E+22	3,907321E+22	1,338025E+23	7,814577E+22	2,119483E+23
-365	6,689955E+22	6,690111E+22	3,907283E+22	3,907158E+22	1,338007E+23	7,814440E+22	2,119451E+23
-364	6,690313E+22	6,690265E+22	3,907158E+22	3,907193E+22	1,338058E+23	7,814351E+22	2,119493E+23
-363	6,690247E+22	6,690038E+22	3,907130E+22	3,907079E+22	1,338029E+23	7,814210E+22	2,119450E+23
-362	6,690036E+22	6,690273E+22	3,907129E+22	3,907026E+22	1,338031E+23	7,814155E+22	2,119446E+23
-361	6,690312E+22	6,690337E+22	3,907013E+22	3,907114E+22	1,338065E+23	7,814128E+22	2,119478E+23
-360	6,690091E+22	6,690117E+22	3,907050E+22	3,906994E+22	1,338021E+23	7,814044E+22	2,119425E+23
-359	6,690156E+22	6,690299E+22	3,907066E+22	3,907044E+22	1,338045E+23	7,814110E+22	2,119456E+23
-358	6,690357E+22	6,690154E+22	3,907042E+22	3,907095E+22	1,338051E+23	7,814137E+22	2,119465E+23
-357	6,690061E+22	6,690122E+22	3,907135E+22	3,907031E+22	1,338018E+23	7,814166E+22	2,119435E+23
-356	6,690247E+22	6,690321E+22	3,907133E+22	3,907209E+22	1,338057E+23	7,814342E+22	2,119491E+23
-355	6,690216E+22	6,690058E+22	3,907185E+22	3,907252E+22	1,338027E+23	7,814437E+22	2,119471E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-354	6,689917E+22	6,690148E+22	3,907345E+22	3,907241E+22	1,338006E+23	7,814585E+22	2,119465E+23
-353	6,690190E+22	6,690202E+22	3,907348E+22	3,907417E+22	1,338039E+23	7,814765E+22	2,119516E+23
-352	6,690034E+22	6,689899E+22	3,907437E+22	3,907363E+22	1,337993E+23	7,814800E+22	2,119473E+23
-351	6,689925E+22	6,690087E+22	3,907507E+22	3,907440E+22	1,338001E+23	7,814947E+22	2,119496E+23
-350	6,690123E+22	6,690031E+22	3,907440E+22	3,907564E+22	1,338015E+23	7,815005E+22	2,119516E+23
-349	6,689843E+22	6,689915E+22	3,907489E+22	3,907430E+22	1,337976E+23	7,814919E+22	2,119468E+23
-348	6,689998E+22	6,690132E+22	3,907456E+22	3,907477E+22	1,338013E+23	7,814933E+22	2,119506E+23
-347	6,690165E+22	6,689917E+22	3,907372E+22	3,907416E+22	1,338008E+23	7,814788E+22	2,119487E+23
-346	6,689910E+22	6,690007E+22	3,907411E+22	3,907243E+22	1,337992E+23	7,814655E+22	2,119457E+23
-345	6,690170E+22	6,690216E+22	3,907298E+22	3,907335E+22	1,338039E+23	7,814633E+22	2,119502E+23
-344	6,690089E+22	6,690007E+22	3,907241E+22	3,907215E+22	1,338010E+23	7,814456E+22	2,119455E+23
-343	6,689916E+22	6,690199E+22	3,907264E+22	3,907185E+22	1,338011E+23	7,814449E+22	2,119456E+23
-342	6,690181E+22	6,690193E+22	3,907169E+22	3,907279E+22	1,338037E+23	7,814448E+22	2,119482E+23
-341	6,690023E+22	6,689985E+22	3,907208E+22	3,907121E+22	1,338001E+23	7,814330E+22	2,119434E+23
-340	6,690094E+22	6,690180E+22	3,907241E+22	3,907188E+22	1,338027E+23	7,814429E+22	2,119470E+23
-339	6,690280E+22	6,690032E+22	3,907169E+22	3,907277E+22	1,338031E+23	7,814447E+22	2,119476E+23
-338	6,689952E+22	6,690042E+22	3,907281E+22	3,907208E+22	1,337999E+23	7,814488E+22	2,119448E+23
-337	6,690085E+22	6,690237E+22	3,907315E+22	3,907396E+22	1,338032E+23	7,814711E+22	2,119503E+23
-336	6,690093E+22	6,689958E+22	3,907360E+22	3,907390E+22	1,338005E+23	7,814750E+22	2,119480E+23
-335	6,689855E+22	6,690020E+22	3,907534E+22	3,907394E+22	1,337987E+23	7,814929E+22	2,119480E+23
-334	6,690060E+22	6,690045E+22	3,907535E+22	3,907599E+22	1,338010E+23	7,815134E+22	2,119524E+23
-333	6,689904E+22	6,689808E+22	3,907599E+22	3,907536E+22	1,337971E+23	7,815135E+22	2,119485E+23
-332	6,689789E+22	6,690000E+22	3,907667E+22	3,907614E+22	1,337979E+23	7,815280E+22	2,119507E+23
-331	6,690018E+22	6,689894E+22	3,907562E+22	3,907726E+22	1,337991E+23	7,815289E+22	2,119520E+23
-330	6,689787E+22	6,689801E+22	3,907626E+22	3,907539E+22	1,337959E+23	7,815165E+22	2,119475E+23
-329	6,689917E+22	6,690032E+22	3,907608E+22	3,907591E+22	1,337995E+23	7,815199E+22	2,119515E+23
-328	6,690085E+22	6,689854E+22	3,907494E+22	3,907513E+22	1,337994E+23	7,815007E+22	2,119495E+23
-327	6,689818E+22	6,689958E+22	3,907531E+22	3,907392E+22	1,337978E+23	7,814923E+22	2,119470E+23
-326	6,689982E+22	6,690129E+22	3,907429E+22	3,907515E+22	1,338011E+23	7,814943E+22	2,119505E+23
-325	6,689953E+22	6,689911E+22	3,907380E+22	3,907357E+22	1,337986E+23	7,814737E+22	2,119460E+23
-324	6,689831E+22	6,690057E+22	3,907428E+22	3,907310E+22	1,337989E+23	7,814738E+22	2,119463E+23
-323	6,690148E+22	6,690011E+22	3,907295E+22	3,907413E+22	1,338016E+23	7,814708E+22	2,119487E+23
-322	6,689995E+22	6,689861E+22	3,907339E+22	3,907247E+22	1,337986E+23	7,814587E+22	2,119444E+23
-321	6,689973E+22	6,690125E+22	3,907385E+22	3,907360E+22	1,338010E+23	7,814745E+22	2,119484E+23
-320	6,690148E+22	6,690001E+22	3,907305E+22	3,907430E+22	1,338015E+23	7,814735E+22	2,119488E+23
-319	6,689844E+22	6,689972E+22	3,907458E+22	3,907379E+22	1,337982E+23	7,814836E+22	2,119465E+23
-318	6,689929E+22	6,690107E+22	3,907527E+22	3,907571E+22	1,338004E+23	7,815099E+22	2,119514E+23
-317	6,689991E+22	6,689821E+22	3,907567E+22	3,907541E+22	1,337981E+23	7,815108E+22	2,119492E+23
-316	6,689742E+22	6,689875E+22	3,907740E+22	3,907573E+22	1,337962E+23	7,815312E+22	2,119493E+23
-315	6,689936E+22	6,689896E+22	3,907669E+22	3,907811E+22	1,337983E+23	7,815480E+22	2,119531E+23
-314	6,689788E+22	6,689687E+22	3,907728E+22	3,907719E+22	1,337948E+23	7,815447E+22	2,119492E+23
-313	6,689662E+22	6,689897E+22	3,907811E+22	3,907781E+22	1,337956E+23	7,815591E+22	2,119515E+23
-312	6,689952E+22	6,689798E+22	3,907689E+22	3,907822E+22	1,337975E+23	7,815511E+22	2,119526E+23
-311	6,689764E+22	6,689716E+22	3,907764E+22	3,907642E+22	1,337948E+23	7,815406E+22	2,119489E+23
-310	6,689794E+22	6,689948E+22	3,907757E+22	3,907719E+22	1,337974E+23	7,815476E+22	2,119522E+23
-309	6,689945E+22	6,689818E+22	3,907631E+22	3,907641E+22	1,337976E+23	7,815272E+22	2,119504E+23
-308	6,689671E+22	6,689887E+22	3,907686E+22	3,907542E+22	1,337956E+23	7,815228E+22	2,119479E+23
-307	6,689864E+22	6,689981E+22	3,907552E+22	3,907670E+22	1,337984E+23	7,815221E+22	2,119507E+23
-306	6,689901E+22	6,689759E+22	3,907518E+22	3,907480E+22	1,337966E+23	7,814998E+22	2,119466E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-305	6,689774E+22	6,689925E+22	3,907570E+22	3,907449E+22	1,337970E+23	7,815019E+22	2,119472E+23
-304	6,690093E+22	6,689923E+22	3,907411E+22	3,907539E+22	1,338002E+23	7,814949E+22	2,119497E+23
-303	6,689930E+22	6,689822E+22	3,907458E+22	3,907417E+22	1,337975E+23	7,814876E+22	2,119463E+23
-302	6,689801E+22	6,690050E+22	3,907542E+22	3,907540E+22	1,337985E+23	7,815082E+22	2,119493E+23
-301	6,690007E+22	6,689923E+22	3,907490E+22	3,907575E+22	1,337993E+23	7,815066E+22	2,119500E+23
-300	6,689741E+22	6,689835E+22	3,907676E+22	3,907525E+22	1,337958E+23	7,815201E+22	2,119478E+23
-299	6,689824E+22	6,689915E+22	3,907706E+22	3,907743E+22	1,337974E+23	7,815448E+22	2,119519E+23
-298	6,689894E+22	6,689675E+22	3,907737E+22	3,907721E+22	1,337957E+23	7,815458E+22	2,119503E+23
-297	6,689589E+22	6,689774E+22	3,907891E+22	3,907783E+22	1,337936E+23	7,815674E+22	2,119504E+23
-296	6,689809E+22	6,689810E+22	3,907794E+22	3,907978E+22	1,337962E+23	7,815772E+22	2,119539E+23
-295	6,689725E+22	6,689605E+22	3,907864E+22	3,907872E+22	1,337933E+23	7,815736E+22	2,119507E+23
-294	6,689555E+22	6,689785E+22	3,907978E+22	3,907912E+22	1,337934E+23	7,815889E+22	2,119523E+23
-293	6,689883E+22	6,689717E+22	3,907857E+22	3,907923E+22	1,337960E+23	7,815780E+22	2,119538E+23
-292	6,689670E+22	6,689634E+22	3,907938E+22	3,907774E+22	1,337930E+23	7,815712E+22	2,119502E+23
-291	6,689648E+22	6,689843E+22	3,907877E+22	3,907889E+22	1,337949E+23	7,815766E+22	2,119526E+23
-290	6,689819E+22	6,689705E+22	3,907756E+22	3,907794E+22	1,337952E+23	7,815550E+22	2,119507E+23
-289	6,689551E+22	6,689759E+22	3,907819E+22	3,907691E+22	1,337931E+23	7,815510E+22	2,119482E+23
-288	6,689820E+22	6,689846E+22	3,907662E+22	3,907768E+22	1,337967E+23	7,815431E+22	2,119510E+23
-287	6,689900E+22	6,689654E+22	3,907628E+22	3,907597E+22	1,337955E+23	7,815225E+22	2,119478E+23
-286	6,689670E+22	6,689854E+22	3,907701E+22	3,907594E+22	1,337952E+23	7,815295E+22	2,119482E+23
-285	6,689971E+22	6,689903E+22	3,907548E+22	3,907675E+22	1,337987E+23	7,815222E+22	2,119510E+23
-284	6,689787E+22	6,689766E+22	3,907642E+22	3,907574E+22	1,337955E+23	7,815216E+22	2,119477E+23
-283	6,689656E+22	6,689920E+22	3,907716E+22	3,907707E+22	1,337958E+23	7,815422E+22	2,119500E+23
-282	6,689912E+22	6,689763E+22	3,907687E+22	3,907729E+22	1,337967E+23	7,815415E+22	2,119509E+23
-281	6,689629E+22	6,689677E+22	3,907872E+22	3,907713E+22	1,337931E+23	7,815585E+22	2,119489E+23
-280	6,689720E+22	6,689781E+22	3,907852E+22	3,907925E+22	1,337950E+23	7,815777E+22	2,119528E+23
-279	6,689795E+22	6,689587E+22	3,907863E+22	3,907933E+22	1,337938E+23	7,815796E+22	2,119518E+23
-278	6,689433E+22	6,689669E+22	3,908039E+22	3,907978E+22	1,337910E+23	7,816017E+22	2,119512E+23
-277	6,689714E+22	6,689718E+22	3,907959E+22	3,908105E+22	1,337943E+23	7,816064E+22	2,119550E+23
-276	6,689671E+22	6,689501E+22	3,908056E+22	3,907983E+22	1,337917E+23	7,816039E+22	2,119521E+23
-275	6,689478E+22	6,689653E+22	3,908132E+22	3,908036E+22	1,337913E+23	7,816168E+22	2,119530E+23
-274	6,689784E+22	6,689629E+22	3,908010E+22	3,908057E+22	1,337941E+23	7,816067E+22	2,119548E+23
-273	6,689508E+22	6,689568E+22	3,908079E+22	3,907947E+22	1,337908E+23	7,816026E+22	2,119510E+23
-272	6,689507E+22	6,689748E+22	3,907990E+22	3,908031E+22	1,337925E+23	7,816021E+22	2,119528E+23
-271	6,689753E+22	6,689607E+22	3,907869E+22	3,907937E+22	1,337936E+23	7,815806E+22	2,119517E+23
-270	6,689467E+22	6,689622E+22	3,907949E+22	3,907818E+22	1,337909E+23	7,815767E+22	2,119486E+23
-269	6,689772E+22	6,689753E+22	3,907796E+22	3,907871E+22	1,337952E+23	7,815666E+22	2,119519E+23
-268	6,689831E+22	6,689596E+22	3,907769E+22	3,907733E+22	1,337943E+23	7,815502E+22	2,119493E+23
-267	6,689532E+22	6,689767E+22	3,907817E+22	3,907761E+22	1,337930E+23	7,815578E+22	2,119488E+23
-266	6,689844E+22	6,689807E+22	3,907704E+22	3,907826E+22	1,337965E+23	7,815530E+22	2,119518E+23
-265	6,689657E+22	6,689641E+22	3,907824E+22	3,907735E+22	1,337930E+23	7,815559E+22	2,119486E+23
-264	6,689569E+22	6,689763E+22	3,907882E+22	3,907841E+22	1,337933E+23	7,815723E+22	2,119506E+23
-263	6,689852E+22	6,689637E+22	3,907842E+22	3,907900E+22	1,337949E+23	7,815742E+22	2,119523E+23
-262	6,689480E+22	6,689563E+22	3,908033E+22	3,907912E+22	1,337904E+23	7,815945E+22	2,119499E+23
-261	6,689584E+22	6,689710E+22	3,908010E+22	3,908103E+22	1,337929E+23	7,816113E+22	2,119541E+23
-260	6,689680E+22	6,689504E+22	3,908048E+22	3,908106E+22	1,337918E+23	7,816154E+22	2,119534E+23
-259	6,689328E+22	6,689536E+22	3,908206E+22	3,908137E+22	1,337886E+23	7,816343E+22	2,119521E+23
-258	6,689657E+22	6,689584E+22	3,908148E+22	3,908231E+22	1,337924E+23	7,816379E+22	2,119562E+23
-257	6,689571E+22	6,689396E+22	3,908241E+22	3,908137E+22	1,337897E+23	7,816377E+22	2,119534E+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	6,689360E+22	6,689568E+22	3,908264E+22	3,908189E+22	1,337893E+23	7,816453E+22	2,119538E+23
-255	6,689655E+22	6,689562E+22	3,908118E+22	3,908236E+22	1,337922E+23	7,816353E+22	2,119557E+23
-254	6,689337E+22	6,689457E+22	3,908209E+22	3,908116E+22	1,337879E+23	7,816325E+22	2,119512E+23
-253	6,689422E+22	6,689627E+22	3,908122E+22	3,908135E+22	1,337905E+23	7,816257E+22	2,119531E+23
-252	6,689712E+22	6,689484E+22	3,908016E+22	3,908038E+22	1,337920E+23	7,816053E+22	2,119525E+23
-251	6,689409E+22	6,689500E+22	3,908057E+22	3,907938E+22	1,337891E+23	7,815996E+22	2,119491E+23
-250	6,689698E+22	6,689676E+22	3,907919E+22	3,907994E+22	1,337937E+23	7,815914E+22	2,119529E+23
-249	6,689691E+22	6,689553E+22	3,907909E+22	3,907889E+22	1,337924E+23	7,815799E+22	2,119504E+23
-248	6,689408E+22	6,689683E+22	3,907956E+22	3,907894E+22	1,337909E+23	7,815850E+22	2,119494E+23
-247	6,689752E+22	6,689711E+22	3,907861E+22	3,907973E+22	1,337946E+23	7,815834E+22	2,119530E+23
-246	6,689533E+22	6,689498E+22	3,908014E+22	3,907901E+22	1,337903E+23	7,815915E+22	2,119495E+23
-245	6,689471E+22	6,689637E+22	3,908066E+22	3,908000E+22	1,337911E+23	7,816066E+22	2,119517E+23
-244	6,689736E+22	6,689542E+22	3,908020E+22	3,908101E+22	1,337928E+23	7,816122E+22	2,119540E+23
-243	6,689333E+22	6,689439E+22	3,908169E+22	3,908126E+22	1,337877E+23	7,816295E+22	2,119507E+23
-242	6,689482E+22	6,689579E+22	3,908180E+22	3,908275E+22	1,337906E+23	7,816455E+22	2,119552E+23
-241	6,689587E+22	6,689387E+22	3,908234E+22	3,908261E+22	1,337897E+23	7,816495E+22	2,119547E+23
-240	6,689266E+22	6,689406E+22	3,908369E+22	3,908257E+22	1,337867E+23	7,816626E+22	2,119530E+23
-239	6,689585E+22	6,689509E+22	3,908299E+22	3,908379E+22	1,337909E+23	7,816678E+22	2,119577E+23
-238	6,689400E+22	6,689322E+22	3,908394E+22	3,908312E+22	1,337872E+23	7,816705E+22	2,119543E+23
-237	6,689190E+22	6,689500E+22	3,908409E+22	3,908339E+22	1,337869E+23	7,816748E+22	2,119544E+23
-236	6,689525E+22	6,689473E+22	3,908272E+22	3,908385E+22	1,337900E+23	7,816657E+22	2,119565E+23
-235	6,689241E+22	6,689296E+22	3,908330E+22	3,908251E+22	1,337854E+23	7,816581E+22	2,119512E+23
-234	6,689399E+22	6,689470E+22	3,908262E+22	3,908242E+22	1,337887E+23	7,816504E+22	2,119537E+23
-233	6,689655E+22	6,689387E+22	3,908148E+22	3,908166E+22	1,337904E+23	7,816314E+22	2,119536E+23
-232	6,689328E+22	6,689433E+22	3,908152E+22	3,908067E+22	1,337876E+23	7,816220E+22	2,119498E+23
-231	6,689592E+22	6,689642E+22	3,908022E+22	3,908142E+22	1,337923E+23	7,816163E+22	2,119540E+23
-230	6,689532E+22	6,689467E+22	3,908065E+22	3,908039E+22	1,337900E+23	7,816104E+22	2,119510E+23
-229	6,689302E+22	6,689573E+22	3,908136E+22	3,908011E+22	1,337887E+23	7,816147E+22	2,119502E+23
-228	6,689665E+22	6,689589E+22	3,908057E+22	3,908117E+22	1,337925E+23	7,816174E+22	2,119543E+23
-227	6,689417E+22	6,689351E+22	3,908171E+22	3,908089E+22	1,337877E+23	7,816260E+22	2,119503E+23
-226	6,689365E+22	6,689511E+22	3,908229E+22	3,908194E+22	1,337888E+23	7,816423E+22	2,119530E+23
-225	6,689587E+22	6,689453E+22	3,908189E+22	3,908308E+22	1,337904E+23	7,816496E+22	2,119554E+23
-224	6,689238E+22	6,689329E+22	3,908319E+22	3,908292E+22	1,337857E+23	7,816611E+22	2,119518E+23
-223	6,689420E+22	6,689478E+22	3,908339E+22	3,908423E+22	1,337890E+23	7,816762E+22	2,119566E+23
-222	6,689474E+22	6,689274E+22	3,908428E+22	3,908416E+22	1,337875E+23	7,816844E+22	2,119559E+23
-221	6,689159E+22	6,689319E+22	3,908550E+22	3,908400E+22	1,337848E+23	7,816950E+22	2,119543E+23
-220	6,689427E+22	6,689442E+22	3,908469E+22	3,908557E+22	1,337887E+23	7,817026E+22	2,119589E+23
-219	6,689221E+22	6,689197E+22	3,908525E+22	3,908503E+22	1,337842E+23	7,817028E+22	2,119545E+23
-218	6,689093E+22	6,689332E+22	3,908557E+22	3,908483E+22	1,337842E+23	7,817039E+22	2,119546E+23
-217	6,689451E+22	6,689328E+22	3,908418E+22	3,908507E+22	1,337878E+23	7,816925E+22	2,119570E+23
-216	6,689228E+22	6,689161E+22	3,908431E+22	3,908344E+22	1,337839E+23	7,816775E+22	2,119516E+23
-215	6,689366E+22	6,689412E+22	3,908351E+22	3,908354E+22	1,337878E+23	7,816706E+22	2,119548E+23
-214	6,689517E+22	6,689360E+22	3,908268E+22	3,908305E+22	1,337888E+23	7,816574E+22	2,119545E+23
-213	6,689191E+22	6,689404E+22	3,908294E+22	3,908188E+22	1,337860E+23	7,816482E+22	2,119508E+23
-212	6,689456E+22	6,689585E+22	3,908201E+22	3,908276E+22	1,337904E+23	7,816476E+22	2,119552E+23
-211	6,689408E+22	6,689319E+22	3,908232E+22	3,908194E+22	1,337873E+23	7,816426E+22	2,119515E+23
-210	6,689235E+22	6,689392E+22	3,908323E+22	3,908168E+22	1,337863E+23	7,816491E+22	2,119512E+23
-209	6,689557E+22	6,689462E+22	3,908228E+22	3,908312E+22	1,337902E+23	7,816540E+22	2,119556E+23
-208	6,689311E+22	6,689230E+22	3,908287E+22	3,908286E+22	1,337854E+23	7,816573E+22	2,119511E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-207	6,689265E+22	6,689425E+22	3,908347E+22	3,908386E+22	1,337869E+23	7,816733E+22	2,119542E+23
-206	6,689462E+22	6,689339E+22	3,908356E+22	3,908473E+22	1,337880E+23	7,816829E+22	2,119563E+23
-205	6,689157E+22	6,689218E+22	3,908509E+22	3,908407E+22	1,337837E+23	7,816916E+22	2,119529E+23
-204	6,689333E+22	6,689393E+22	3,908544E+22	3,908557E+22	1,337873E+23	7,817101E+22	2,119583E+23
-203	6,689329E+22	6,689160E+22	3,908599E+22	3,908592E+22	1,337849E+23	7,817191E+22	2,119568E+23
-202	6,689018E+22	6,689202E+22	3,908726E+22	3,908581E+22	1,337822E+23	7,817307E+22	2,119553E+23
-201	6,689255E+22	6,689338E+22	3,908636E+22	3,908739E+22	1,337859E+23	7,817375E+22	2,119597E+23
-200	6,689125E+22	6,689051E+22	3,908650E+22	3,908650E+22	1,337818E+23	7,817300E+22	2,119548E+23
-199	6,689059E+22	6,689207E+22	3,908669E+22	3,908607E+22	1,337827E+23	7,817276E+22	2,119554E+23
-198	6,689382E+22	6,689217E+22	3,908556E+22	3,908631E+22	1,337860E+23	7,817187E+22	2,119579E+23
-197	6,689160E+22	6,689113E+22	3,908555E+22	3,908453E+22	1,337827E+23	7,817009E+22	2,119528E+23
-196	6,689244E+22	6,689403E+22	3,908479E+22	3,908493E+22	1,337865E+23	7,816972E+22	2,119562E+23
-195	6,689354E+22	6,689283E+22	3,908395E+22	3,908462E+22	1,337864E+23	7,816857E+22	2,119549E+23
-194	6,689098E+22	6,689261E+22	3,908463E+22	3,908321E+22	1,337836E+23	7,816784E+22	2,119514E+23
-193	6,689346E+22	6,689444E+22	3,908382E+22	3,908411E+22	1,337879E+23	7,816793E+22	2,119558E+23
-192	6,689352E+22	6,689165E+22	3,908368E+22	3,908342E+22	1,337852E+23	7,816709E+22	2,119523E+23
-191	6,689170E+22	6,689284E+22	3,908435E+22	3,908337E+22	1,337845E+23	7,816772E+22	2,119523E+23
-190	6,689407E+22	6,689378E+22	3,908371E+22	3,908502E+22	1,337878E+23	7,816873E+22	2,119566E+23
-189	6,689196E+22	6,689164E+22	3,908438E+22	3,908436E+22	1,337836E+23	7,816874E+22	2,119523E+23
-188	6,689161E+22	6,689352E+22	3,908531E+22	3,908531E+22	1,337851E+23	7,817062E+22	2,119557E+23
-187	6,689351E+22	6,689207E+22	3,908548E+22	3,908629E+22	1,337856E+23	7,817177E+22	2,119574E+23
-186	6,689089E+22	6,689062E+22	3,908725E+22	3,908565E+22	1,337815E+23	7,817290E+22	2,119544E+23
-185	6,689176E+22	6,689294E+22	3,908744E+22	3,908745E+22	1,337847E+23	7,817489E+22	2,119596E+23
-184	6,689181E+22	6,689045E+22	3,908734E+22	3,908793E+22	1,337823E+23	7,817527E+22	2,119575E+23
-183	6,688896E+22	6,689081E+22	3,908846E+22	3,908765E+22	1,337798E+23	7,817611E+22	2,119559E+23
-182	6,689132E+22	6,689196E+22	3,908788E+22	3,908893E+22	1,337833E+23	7,817681E+22	2,119601E+23
-181	6,689079E+22	6,688934E+22	3,908788E+22	3,908748E+22	1,337801E+23	7,817536E+22	2,119555E+23
-180	6,689015E+22	6,689144E+22	3,908805E+22	3,908718E+22	1,337816E+23	7,817523E+22	2,119568E+23
-179	6,689273E+22	6,689151E+22	3,908673E+22	3,908771E+22	1,337842E+23	7,817444E+22	2,119587E+23
-178	6,689053E+22	6,689046E+22	3,908697E+22	3,908592E+22	1,337810E+23	7,817289E+22	2,119539E+23
-177	6,689090E+22	6,689344E+22	3,908640E+22	3,908627E+22	1,337843E+23	7,817268E+22	2,119570E+23
-176	6,689258E+22	6,689150E+22	3,908527E+22	3,908589E+22	1,337841E+23	7,817116E+22	2,119552E+23
-175	6,689044E+22	6,689119E+22	3,908596E+22	3,908453E+22	1,337816E+23	7,817049E+22	2,119521E+23
-174	6,689251E+22	6,689301E+22	3,908536E+22	3,908566E+22	1,337855E+23	7,817102E+22	2,119565E+23
-173	6,689253E+22	6,689074E+22	3,908498E+22	3,908497E+22	1,337833E+23	7,816995E+22	2,119532E+23
-172	6,689049E+22	6,689237E+22	3,908564E+22	3,908517E+22	1,337829E+23	7,817082E+22	2,119537E+23
-171	6,689266E+22	6,689261E+22	3,908516E+22	3,908678E+22	1,337853E+23	7,817195E+22	2,119572E+23
-170	6,689129E+22	6,689017E+22	3,908633E+22	3,908577E+22	1,337815E+23	7,817209E+22	2,119536E+23
-169	6,689061E+22	6,689236E+22	3,908745E+22	3,908665E+22	1,337830E+23	7,817410E+22	2,119571E+23
-168	6,689263E+22	6,689079E+22	3,908719E+22	3,908791E+22	1,337834E+23	7,817510E+22	2,119585E+23
-167	6,688970E+22	6,688972E+22	3,908879E+22	3,908757E+22	1,337794E+23	7,817636E+22	2,119558E+23
-166	6,688977E+22	6,689199E+22	3,908917E+22	3,908953E+22	1,337818E+23	7,817870E+22	2,119605E+23
-165	6,689037E+22	6,688948E+22	3,908895E+22	3,908959E+22	1,337798E+23	7,817854E+22	2,119584E+23
-164	6,688805E+22	6,688980E+22	3,909001E+22	3,908915E+22	1,337779E+23	7,817917E+22	2,119570E+23
-163	6,689054E+22	6,689045E+22	3,908939E+22	3,909036E+22	1,337810E+23	7,817974E+22	2,119607E+23
-162	6,689057E+22	6,688806E+22	3,908944E+22	3,908876E+22	1,337786E+23	7,817820E+22	2,119568E+23
-161	6,688901E+22	6,689091E+22	3,908948E+22	3,908854E+22	1,337799E+23	7,817802E+22	2,119579E+23
-160	6,689158E+22	6,689084E+22	3,908773E+22	3,908917E+22	1,337824E+23	7,817690E+22	2,119593E+23
-159	6,688959E+22	6,688950E+22	3,908805E+22	3,908720E+22	1,337791E+23	7,817525E+22	2,119543E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-158	6,688958E+22	6,689213E+22	3,908795E+22	3,908747E+22	1,337817E+23	7,817542E+22	2,119571E+23
-157	6,689186E+22	6,689035E+22	3,908669E+22	3,908688E+22	1,337822E+23	7,817357E+22	2,119558E+23
-156	6,688973E+22	6,689033E+22	3,908727E+22	3,908592E+22	1,337801E+23	7,817319E+22	2,119533E+23
-155	6,689120E+22	6,689198E+22	3,908664E+22	3,908742E+22	1,337832E+23	7,817407E+22	2,119572E+23
-154	6,689157E+22	6,688975E+22	3,908647E+22	3,908666E+22	1,337813E+23	7,817313E+22	2,119544E+23
-153	6,688915E+22	6,689160E+22	3,908740E+22	3,908669E+22	1,337808E+23	7,817409E+22	2,119548E+23
-152	6,689186E+22	6,689137E+22	3,908675E+22	3,908826E+22	1,337832E+23	7,817502E+22	2,119582E+23
-151	6,689072E+22	6,688890E+22	3,908807E+22	3,908729E+22	1,337796E+23	7,817535E+22	2,119550E+23
-150	6,688924E+22	6,689121E+22	3,908948E+22	3,908849E+22	1,337804E+23	7,817798E+22	2,119584E+23
-149	6,689109E+22	6,689003E+22	3,908889E+22	3,908981E+22	1,337811E+23	7,817870E+22	2,119598E+23
-148	6,688810E+22	6,688899E+22	3,909035E+22	3,908969E+22	1,337771E+23	7,818005E+22	2,119571E+23
-147	6,688823E+22	6,689037E+22	3,909079E+22	3,909146E+22	1,337786E+23	7,818225E+22	2,119608E+23
-146	6,688983E+22	6,688769E+22	3,909072E+22	3,909103E+22	1,337775E+23	7,818174E+22	2,119593E+23
-145	6,688749E+22	6,688864E+22	3,909169E+22	3,909034E+22	1,337761E+23	7,818203E+22	2,119582E+23
-144	6,689010E+22	6,688933E+22	3,909053E+22	3,909163E+22	1,337794E+23	7,818216E+22	2,119616E+23
-143	6,688973E+22	6,688756E+22	3,909050E+22	3,909009E+22	1,337773E+23	7,818059E+22	2,119579E+23
-142	6,688738E+22	6,689041E+22	3,909087E+22	3,908991E+22	1,337778E+23	7,818078E+22	2,119586E+23
-141	6,689018E+22	6,689018E+22	3,908911E+22	3,909022E+22	1,337804E+23	7,817934E+22	2,119597E+23
-140	6,688860E+22	6,688869E+22	3,908950E+22	3,908843E+22	1,337773E+23	7,817793E+22	2,119552E+23
-139	6,688854E+22	6,689050E+22	3,908947E+22	3,908889E+22	1,337790E+23	7,817836E+22	2,119574E+23
-138	6,689126E+22	6,688892E+22	3,908823E+22	3,908842E+22	1,337802E+23	7,817665E+22	2,119568E+23
-137	6,688849E+22	6,688964E+22	3,908861E+22	3,908760E+22	1,337781E+23	7,817620E+22	2,119543E+23
-136	6,689015E+22	6,689094E+22	3,908766E+22	3,908918E+22	1,337811E+23	7,817685E+22	2,119579E+23
-135	6,689084E+22	6,688869E+22	3,908776E+22	3,908813E+22	1,337795E+23	7,817589E+22	2,119554E+23
-134	6,688812E+22	6,689040E+22	3,908927E+22	3,908804E+22	1,337785E+23	7,817731E+22	2,119558E+23
-133	6,689100E+22	6,689043E+22	3,908861E+22	3,908951E+22	1,337814E+23	7,817811E+22	2,119595E+23
-132	6,688962E+22	6,688829E+22	3,908986E+22	3,908907E+22	1,337779E+23	7,817893E+22	2,119568E+23
-131	6,688734E+22	6,689009E+22	3,909131E+22	3,909065E+22	1,337774E+23	7,818196E+22	2,119594E+23
-130	6,688969E+22	6,688874E+22	3,909080E+22	3,909184E+22	1,337784E+23	7,818264E+22	2,119611E+23
-129	6,688671E+22	6,688773E+22	3,909222E+22	3,909140E+22	1,337744E+23	7,818362E+22	2,119581E+23
-128	6,688763E+22	6,688866E+22	3,909226E+22	3,909302E+22	1,337763E+23	7,818527E+22	2,119616E+23
-127	6,688966E+22	6,688629E+22	3,909208E+22	3,909234E+22	1,337760E+23	7,818442E+22	2,119604E+23
-126	6,688648E+22	6,688775E+22	3,909321E+22	3,909177E+22	1,337742E+23	7,818498E+22	2,119592E+23
-125	6,688880E+22	6,688909E+22	3,909175E+22	3,909296E+22	1,337779E+23	7,818470E+22	2,119626E+23
-124	6,688831E+22	6,688732E+22	3,909171E+22	3,909156E+22	1,337756E+23	7,818327E+22	2,119589E+23
-123	6,688581E+22	6,688911E+22	3,909239E+22	3,909129E+22	1,337749E+23	7,818368E+22	2,119586E+23
-122	6,688943E+22	6,688864E+22	3,909076E+22	3,909135E+22	1,337781E+23	7,818211E+22	2,119602E+23
-121	6,688774E+22	6,688749E+22	3,909104E+22	3,908962E+22	1,337752E+23	7,818066E+22	2,119559E+23
-120	6,688788E+22	6,688919E+22	3,909049E+22	3,909045E+22	1,337771E+23	7,818094E+22	2,119580E+23
-119	6,689045E+22	6,688810E+22	3,908921E+22	3,909001E+22	1,337786E+23	7,817922E+22	2,119578E+23
-118	6,688717E+22	6,688896E+22	3,908998E+22	3,908917E+22	1,337761E+23	7,817915E+22	2,119553E+23
-117	6,688914E+22	6,689027E+22	3,908913E+22	3,909036E+22	1,337794E+23	7,817949E+22	2,119589E+23
-116	6,689010E+22	6,688804E+22	3,908945E+22	3,908950E+22	1,337781E+23	7,817895E+22	2,119571E+23
-115	6,688701E+22	6,688896E+22	3,909131E+22	3,908970E+22	1,337760E+23	7,818100E+22	2,119570E+23
-114	6,688985E+22	6,688918E+22	3,909068E+22	3,909136E+22	1,337790E+23	7,818204E+22	2,119611E+23
-113	6,688786E+22	6,688749E+22	3,909175E+22	3,909117E+22	1,337754E+23	7,818293E+22	2,119583E+23
-112	6,688598E+22	6,688842E+22	3,909275E+22	3,909278E+22	1,337744E+23	7,818553E+22	2,119599E+23
-111	6,688882E+22	6,688704E+22	3,909232E+22	3,909352E+22	1,337759E+23	7,818584E+22	2,119617E+23
-110	6,688590E+22	6,688626E+22	3,909391E+22	3,909283E+22	1,337722E+23	7,818674E+22	2,119589E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-109	6,688703E+22	6,688768E+22	3,909371E+22	3,909416E+22	1,337747E+23	7,818787E+22	2,119626E+23
-108	6,688876E+22	6,688612E+22	3,909341E+22	3,909382E+22	1,337749E+23	7,818723E+22	2,119621E+23
-107	6,688480E+22	6,688709E+22	3,909473E+22	3,909342E+22	1,337719E+23	7,818815E+22	2,119600E+23
-106	6,688736E+22	6,688828E+22	3,909345E+22	3,909436E+22	1,337756E+23	7,818781E+22	2,119635E+23
-105	6,688686E+22	6,688646E+22	3,909344E+22	3,909282E+22	1,337733E+23	7,818627E+22	2,119596E+23
-104	6,688505E+22	6,688735E+22	3,909372E+22	3,909267E+22	1,337724E+23	7,818638E+22	2,119588E+23
-103	6,688902E+22	6,688710E+22	3,909201E+22	3,909269E+22	1,337761E+23	7,818470E+22	2,119608E+23
-102	6,688679E+22	6,688647E+22	3,909225E+22	3,909120E+22	1,337733E+23	7,818346E+22	2,119567E+23
-101	6,688685E+22	6,688867E+22	3,909142E+22	3,909189E+22	1,337755E+23	7,818332E+22	2,119588E+23
-100	6,688952E+22	6,688776E+22	3,909028E+22	3,909148E+22	1,337773E+23	7,818176E+22	2,119590E+23
-99	6,688606E+22	6,688773E+22	3,909164E+22	3,909050E+22	1,337738E+23	7,818214E+22	2,119559E+23
-98	6,688852E+22	6,688905E+22	3,909111E+22	3,909148E+22	1,337776E+23	7,818260E+22	2,119602E+23
-97	6,688901E+22	6,688713E+22	3,909147E+22	3,909089E+22	1,337761E+23	7,818236E+22	2,119585E+23
-96	6,688575E+22	6,688763E+22	3,909292E+22	3,909169E+22	1,337734E+23	7,818461E+22	2,119580E+23
-95	6,688843E+22	6,688802E+22	3,909223E+22	3,909338E+22	1,337764E+23	7,818561E+22	2,119621E+23
-94	6,688614E+22	6,688621E+22	3,909350E+22	3,909318E+22	1,337724E+23	7,818668E+22	2,119590E+23
-93	6,688490E+22	6,688717E+22	3,909431E+22	3,909434E+22	1,337721E+23	7,818865E+22	2,119607E+23
-92	6,688824E+22	6,688604E+22	3,909386E+22	3,909506E+22	1,337743E+23	7,818892E+22	2,119632E+23
-91	6,688502E+22	6,688491E+22	3,909571E+22	3,909444E+22	1,337699E+23	7,819015E+22	2,119601E+23
-90	6,688604E+22	6,688691E+22	3,909543E+22	3,909572E+22	1,337729E+23	7,819115E+22	2,119641E+23
-89	6,688708E+22	6,688580E+22	3,909505E+22	3,909543E+22	1,337729E+23	7,819048E+22	2,119634E+23
-88	6,688348E+22	6,688576E+22	3,909607E+22	3,909508E+22	1,337692E+23	7,819115E+22	2,119604E+23
-87	6,688644E+22	6,688671E+22	3,909489E+22	3,909558E+22	1,337732E+23	7,819047E+22	2,119636E+23
-86	6,688600E+22	6,688499E+22	3,909496E+22	3,909405E+22	1,337710E+23	7,818901E+22	2,119600E+23
-85	6,688448E+22	6,688622E+22	3,909481E+22	3,909380E+22	1,337707E+23	7,818861E+22	2,119593E+23
-84	6,688824E+22	6,688674E+22	3,909294E+22	3,909417E+22	1,337750E+23	7,818711E+22	2,119621E+23
-83	6,688555E+22	6,688572E+22	3,909348E+22	3,909277E+22	1,337713E+23	7,818625E+22	2,119575E+23
-82	6,688588E+22	6,688792E+22	3,909293E+22	3,909311E+22	1,337738E+23	7,818604E+22	2,119598E+23
-81	6,688845E+22	6,688719E+22	3,909207E+22	3,909261E+22	1,337756E+23	7,818468E+22	2,119603E+23
-80	6,688543E+22	6,688615E+22	3,909326E+22	3,909194E+22	1,337716E+23	7,818520E+22	2,119568E+23
-79	6,688761E+22	6,688763E+22	3,909288E+22	3,909302E+22	1,337752E+23	7,818590E+22	2,119611E+23
-78	6,688740E+22	6,688617E+22	3,909321E+22	3,909295E+22	1,337736E+23	7,818616E+22	2,119597E+23
-77	6,688415E+22	6,688660E+22	3,909429E+22	3,909369E+22	1,337708E+23	7,818798E+22	2,119587E+23
-76	6,688715E+22	6,688703E+22	3,909365E+22	3,909535E+22	1,337742E+23	7,818900E+22	2,119632E+23
-75	6,688510E+22	6,688445E+22	3,909530E+22	3,909487E+22	1,337696E+23	7,819017E+22	2,119597E+23
-74	6,688442E+22	6,688576E+22	3,909618E+22	3,909566E+22	1,337702E+23	7,819184E+22	2,119620E+23
-73	6,688734E+22	6,688539E+22	3,909573E+22	3,909646E+22	1,337727E+23	7,819219E+22	2,119649E+23
-72	6,688394E+22	6,688392E+22	3,909719E+22	3,909623E+22	1,337679E+23	7,819342E+22	2,119613E+23
-71	6,688467E+22	6,688608E+22	3,909702E+22	3,909729E+22	1,337707E+23	7,819431E+22	2,119651E+23
-70	6,688547E+22	6,688487E+22	3,909676E+22	3,909700E+22	1,337703E+23	7,819377E+22	2,119641E+23
-69	6,688244E+22	6,688452E+22	3,909748E+22	3,909633E+22	1,337670E+23	7,819381E+22	2,119608E+23
-68	6,688583E+22	6,688564E+22	3,909616E+22	3,909691E+22	1,337715E+23	7,819307E+22	2,119645E+23
-67	6,688513E+22	6,688356E+22	3,909638E+22	3,909557E+22	1,337687E+23	7,819195E+22	2,119606E+23
-66	6,688369E+22	6,688551E+22	3,909601E+22	3,909526E+22	1,337692E+23	7,819127E+22	2,119605E+23
-65	6,688701E+22	6,688639E+22	3,909417E+22	3,909555E+22	1,337734E+23	7,818972E+22	2,119631E+23
-64	6,688468E+22	6,688447E+22	3,909464E+22	3,909417E+22	1,337692E+23	7,818880E+22	2,119580E+23
-63	6,688527E+22	6,688662E+22	3,909441E+22	3,909407E+22	1,337719E+23	7,818848E+22	2,119604E+23
-62	6,688748E+22	6,688604E+22	3,909378E+22	3,909384E+22	1,337735E+23	7,818762E+22	2,119611E+23
-61	6,688441E+22	6,688517E+22	3,909472E+22	3,909342E+22	1,337696E+23	7,818814E+22	2,119577E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-60	6,688621E+22	6,688709E+22	3,909423E+22	3,909495E+22	1,337733E+23	7,818918E+22	2,119625E+23
-59	6,688565E+22	6,688493E+22	3,909495E+22	3,909505E+22	1,337706E+23	7,818999E+22	2,119606E+23
-58	6,688299E+22	6,688533E+22	3,909607E+22	3,909540E+22	1,337683E+23	7,819147E+22	2,119598E+23
-57	6,688616E+22	6,688590E+22	3,909560E+22	3,909684E+22	1,337721E+23	7,819244E+22	2,119645E+23
-56	6,688469E+22	6,688269E+22	3,909699E+22	3,909655E+22	1,337674E+23	7,819354E+22	2,119609E+23
-55	6,688380E+22	6,688449E+22	3,909792E+22	3,909721E+22	1,337683E+23	7,819512E+22	2,119634E+23
-54	6,688585E+22	6,688481E+22	3,909745E+22	3,909834E+22	1,337707E+23	7,819579E+22	2,119665E+23
-53	6,688245E+22	6,688318E+22	3,909859E+22	3,909796E+22	1,337656E+23	7,819654E+22	2,119622E+23
-52	6,688331E+22	6,688526E+22	3,909846E+22	3,909886E+22	1,337686E+23	7,819732E+22	2,119659E+23
-51	6,688433E+22	6,688323E+22	3,909853E+22	3,909844E+22	1,337676E+23	7,819697E+22	2,119645E+23
-50	6,688183E+22	6,688309E+22	3,909902E+22	3,909749E+22	1,337649E+23	7,819651E+22	2,119614E+23
-49	6,688490E+22	6,688495E+22	3,909758E+22	3,909821E+22	1,337698E+23	7,819578E+22	2,119656E+23
-48	6,688429E+22	6,688252E+22	3,909730E+22	3,909719E+22	1,337668E+23	7,819448E+22	2,119613E+23
-47	6,688271E+22	6,688464E+22	3,909712E+22	3,909651E+22	1,337673E+23	7,819364E+22	2,119610E+23
-46	6,688581E+22	6,688573E+22	3,909559E+22	3,909676E+22	1,337715E+23	7,819236E+22	2,119639E+23
-45	6,688395E+22	6,688347E+22	3,909595E+22	3,909521E+22	1,337674E+23	7,819115E+22	2,119586E+23
-44	6,688453E+22	6,688577E+22	3,909586E+22	3,909533E+22	1,337703E+23	7,819119E+22	2,119615E+23
-43	6,688621E+22	6,688480E+22	3,909554E+22	3,909559E+22	1,337710E+23	7,819113E+22	2,119621E+23
-42	6,688303E+22	6,688428E+22	3,909629E+22	3,909528E+22	1,337673E+23	7,819157E+22	2,119589E+23
-41	6,688461E+22	6,688627E+22	3,909592E+22	3,909681E+22	1,337709E+23	7,819273E+22	2,119636E+23
-40	6,688471E+22	6,688307E+22	3,909646E+22	3,909693E+22	1,337678E+23	7,819338E+22	2,119612E+23
-39	6,688255E+22	6,688360E+22	3,909779E+22	3,909677E+22	1,337661E+23	7,819455E+22	2,119607E+23
-38	6,688542E+22	6,688473E+22	3,909744E+22	3,909835E+22	1,337702E+23	7,819579E+22	2,119659E+23
-37	6,688379E+22	6,688194E+22	3,909850E+22	3,909816E+22	1,337657E+23	7,819666E+22	2,119624E+23
-36	6,688243E+22	6,688427E+22	3,909939E+22	3,909901E+22	1,337667E+23	7,819840E+22	2,119651E+23
-35	6,688399E+22	6,688384E+22	3,909938E+22	3,910023E+22	1,337678E+23	7,819961E+22	2,119674E+23
-34	6,688109E+22	6,688215E+22	3,910045E+22	3,909949E+22	1,337632E+23	7,819994E+22	2,119632E+23
-33	6,688214E+22	6,688406E+22	3,910030E+22	3,910019E+22	1,337662E+23	7,820049E+22	2,119667E+23
-32	6,688366E+22	6,688130E+22	3,909992E+22	3,910005E+22	1,337650E+23	7,819998E+22	2,119649E+23
-31	6,688125E+22	6,688176E+22	3,910020E+22	3,909892E+22	1,337630E+23	7,819912E+22	2,119621E+23
-30	6,688369E+22	6,688428E+22	3,909866E+22	3,909980E+22	1,337680E+23	7,819847E+22	2,119664E+23
-29	6,688332E+22	6,688185E+22	3,909813E+22	3,909849E+22	1,337652E+23	7,819662E+22	2,119618E+23
-28	6,688199E+22	6,688399E+22	3,909819E+22	3,909752E+22	1,337660E+23	7,819570E+22	2,119617E+23
-27	6,688492E+22	6,688447E+22	3,909726E+22	3,909779E+22	1,337694E+23	7,819505E+22	2,119644E+23
-26	6,688320E+22	6,688255E+22	3,909759E+22	3,909630E+22	1,337658E+23	7,819389E+22	2,119596E+23
-25	6,688314E+22	6,688520E+22	3,909758E+22	3,909682E+22	1,337683E+23	7,819441E+22	2,119627E+23
-24	6,688479E+22	6,688353E+22	3,909696E+22	3,909765E+22	1,337683E+23	7,819461E+22	2,119629E+23
-23	6,688186E+22	6,688289E+22	3,909784E+22	3,909703E+22	1,337647E+23	7,819488E+22	2,119596E+23
-22	6,688344E+22	6,688500E+22	3,909767E+22	3,909853E+22	1,337684E+23	7,819620E+22	2,119646E+23
-21	6,688418E+22	6,688171E+22	3,909793E+22	3,909844E+22	1,337659E+23	7,819637E+22	2,119623E+23
-20	6,688200E+22	6,688271E+22	3,909934E+22	3,909834E+22	1,337647E+23	7,819769E+22	2,119624E+23
-19	6,688415E+22	6,688383E+22	3,909939E+22	3,910028E+22	1,337680E+23	7,819967E+22	2,119676E+23
-18	6,688224E+22	6,688142E+22	3,910026E+22	3,910004E+22	1,337637E+23	7,820030E+22	2,119640E+23
-17	6,688057E+22	6,688360E+22	3,910135E+22	3,910077E+22	1,337642E+23	7,820212E+22	2,119663E+23
-16	6,688276E+22	6,688195E+22	3,910106E+22	3,910198E+22	1,337647E+23	7,820304E+22	2,119678E+23
-15	6,688040E+22	6,688016E+22	3,910210E+22	3,910079E+22	1,337606E+23	7,820289E+22	2,119634E+23
-14	6,688127E+22	6,688270E+22	3,910182E+22	3,910164E+22	1,337640E+23	7,820346E+22	2,119674E+23
-13	6,688291E+22	6,688039E+22	3,910083E+22	3,910151E+22	1,337633E+23	7,820234E+22	2,119656E+23
-12	6,688033E+22	6,688148E+22	3,910104E+22	3,910031E+22	1,337618E+23	7,820135E+22	2,119632E+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							
-11	6,688244E+22	6,688353E+22	3,910007E+22	3,910111E+22	1,337660E+23	7,820118E+22	2,119672E+23
-10	6,688238E+22	6,688126E+22	3,909961E+22	3,909941E+22	1,337636E+23	7,819903E+22	2,119627E+23
-9	6,688104E+22	6,688329E+22	3,909996E+22	3,909846E+22	1,337643E+23	7,819842E+22	2,119628E+23
-8	6,688404E+22	6,688292E+22	3,909882E+22	3,909929E+22	1,337670E+23	7,819811E+22	2,119651E+23
-7	6,688217E+22	6,688132E+22	3,909910E+22	3,909798E+22	1,337635E+23	7,819707E+22	2,119606E+23
-6	6,688152E+22	6,688427E+22	3,909904E+22	3,909884E+22	1,337658E+23	7,819788E+22	2,119637E+23
-5	6,688360E+22	6,688229E+22	3,909813E+22	3,909948E+22	1,337659E+23	7,819761E+22	2,119635E+23
-4	6,688126E+22	6,688175E+22	3,909911E+22	3,909852E+22	1,337630E+23	7,819763E+22	2,119606E+23
-3	6,688273E+22	6,688347E+22	3,909950E+22	3,910000E+22	1,337662E+23	7,819950E+22	2,119657E+23
-2	6,688343E+22	6,688101E+22	3,909970E+22	3,909985E+22	1,337644E+23	7,819955E+22	2,119640E+23
-1	6,688065E+22	6,688236E+22	3,910126E+22	3,909999E+22	1,337630E+23	7,820124E+22	2,119642E+23
1	6,688242E+22	6,688267E+22	3,910118E+22	3,910233E+22	1,337651E+23	7,820351E+22	2,119686E+23
2	6,688078E+22	6,688010E+22	3,910220E+22	3,910179E+22	1,337609E+23	7,820399E+22	2,119649E+23
3	6,687910E+22	6,688212E+22	3,910330E+22	3,910248E+22	1,337612E+23	7,820578E+22	2,119670E+23
4	6,688198E+22	6,688025E+22	3,910251E+22	3,910353E+22	1,337622E+23	7,820604E+22	2,119683E+23
5	6,687993E+22	6,687897E+22	3,910327E+22	3,910228E+22	1,337589E+23	7,820556E+22	2,119645E+23
6	6,688021E+22	6,688166E+22	3,910320E+22	3,910333E+22	1,337619E+23	7,820654E+22	2,119684E+23
7	6,688174E+22	6,688013E+22	3,910197E+22	3,910291E+22	1,337619E+23	7,820488E+22	2,119667E+23
8	6,687914E+22	6,688110E+22	3,910249E+22	3,910144E+22	1,337602E+23	7,820393E+22	2,119642E+23
9	6,688156E+22	6,688212E+22	3,910155E+22	3,910227E+22	1,337637E+23	7,820382E+22	2,119675E+23
10	6,688180E+22	6,687989E+22	3,910122E+22	3,910037E+22	1,337617E+23	7,820160E+22	2,119633E+23
11	6,687988E+22	6,688230E+22	3,910157E+22	3,909990E+22	1,337622E+23	7,820147E+22	2,119637E+23
12	6,688280E+22	6,688203E+22	3,909991E+22	3,910102E+22	1,337648E+23	7,820093E+22	2,119658E+23
13	6,688095E+22	6,688063E+22	3,910015E+22	3,909977E+22	1,337616E+23	7,819991E+22	2,119615E+23
14	6,688026E+22	6,688301E+22	3,910066E+22	3,910061E+22	1,337633E+23	7,820126E+22	2,119645E+23
15	6,688281E+22	6,688129E+22	3,909969E+22	3,910080E+22	1,337641E+23	7,820049E+22	2,119646E+23
16	6,688056E+22	6,688083E+22	3,910097E+22	3,909981E+22	1,337614E+23	7,820079E+22	2,119622E+23
17	6,688191E+22	6,688202E+22	3,910125E+22	3,910172E+22	1,337639E+23	7,820297E+22	2,119669E+23
18	6,688223E+22	6,687999E+22	3,910150E+22	3,910165E+22	1,337622E+23	7,820315E+22	2,119654E+23
19	6,687878E+22	6,688153E+22	3,910316E+22	3,910205E+22	1,337603E+23	7,820521E+22	2,119655E+23
20	6,688094E+22	6,688126E+22	3,910276E+22	3,910417E+22	1,337622E+23	7,820692E+22	2,119691E+23
21	6,687990E+22	6,687863E+22	3,910376E+22	3,910333E+22	1,337585E+23	7,820709E+22	2,119656E+23
22	6,687821E+22	6,688034E+22	3,910513E+22	3,910406E+22	1,337586E+23	7,820920E+22	2,119677E+23
23	6,688108E+22	6,687940E+22	3,910396E+22	3,910496E+22	1,337605E+23	7,820892E+22	2,119694E+23
24	6,687880E+22	6,687868E+22	3,910470E+22	3,910379E+22	1,337575E+23	7,820849E+22	2,119660E+23
25	6,687897E+22	6,688066E+22	3,910451E+22	3,910497E+22	1,337596E+23	7,820948E+22	2,119691E+23
26	6,688077E+22	6,687922E+22	3,910350E+22	3,910409E+22	1,337600E+23	7,820759E+22	2,119676E+23
27	6,687808E+22	6,688015E+22	3,910416E+22	3,910262E+22	1,337582E+23	7,820678E+22	2,119650E+23
28	6,688077E+22	6,688083E+22	3,910287E+22	3,910346E+22	1,337616E+23	7,820633E+22	2,119679E+23
29	6,688109E+22	6,687898E+22	3,910240E+22	3,910182E+22	1,337601E+23	7,820422E+22	2,119643E+23
30	6,687849E+22	6,688115E+22	3,910296E+22	3,910177E+22	1,337596E+23	7,820473E+22	2,119644E+23
31	6,688136E+22	6,688140E+22	3,910111E+22	3,910267E+22	1,337628E+23	7,820378E+22	2,119665E+23
32	6,687999E+22	6,687971E+22	3,910157E+22	3,910114E+22	1,337597E+23	7,820271E+22	2,119624E+23
33	6,687962E+22	6,688114E+22	3,910216E+22	3,910197E+22	1,337608E+23	7,820413E+22	2,119649E+23
34	6,688242E+22	6,687992E+22	3,910141E+22	3,910197E+22	1,337623E+23	7,820338E+22	2,119657E+23
35	6,687948E+22	6,688002E+22	3,910281E+22	3,910140E+22	1,337595E+23	7,820421E+22	2,119637E+23
36	6,688045E+22	6,688126E+22	3,910278E+22	3,910356E+22	1,337617E+23	7,820634E+22	2,119680E+23
37	6,688077E+22	6,687929E+22	3,910310E+22	3,910354E+22	1,337601E+23	7,820664E+22	2,119667E+23
38	6,687712E+22	6,688009E+22	3,910525E+22	3,910402E+22	1,337572E+23	7,820927E+22	2,119665E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
39	6,687966E+22	6,688008E+22	3,910461E+22	3,910574E+22	1,337597E+23	7,821036E+22	2,119701E+23
40	6,687907E+22	6,687740E+22	3,910563E+22	3,910492E+22	1,337565E+23	7,821055E+22	2,119670E+23
41	6,687732E+22	6,687870E+22	3,910669E+22	3,910597E+22	1,337560E+23	7,821266E+22	2,119687E+23
42	6,688009E+22	6,687847E+22	3,910539E+22	3,910667E+22	1,337586E+23	7,821206E+22	2,119706E+23
43	6,687742E+22	6,687806E+22	3,910617E+22	3,910544E+22	1,337555E+23	7,821161E+22	2,119671E+23
44	6,687804E+22	6,687957E+22	3,910571E+22	3,910621E+22	1,337576E+23	7,821193E+22	2,119695E+23
45	6,688023E+22	6,687818E+22	3,910477E+22	3,910504E+22	1,337584E+23	7,820981E+22	2,119682E+23
46	6,687724E+22	6,687886E+22	3,910579E+22	3,910386E+22	1,337561E+23	7,820966E+22	2,119658E+23
47	6,687956E+22	6,688024E+22	3,910414E+22	3,910469E+22	1,337598E+23	7,820882E+22	2,119686E+23
48	6,687972E+22	6,687852E+22	3,910374E+22	3,910335E+22	1,337582E+23	7,820709E+22	2,119653E+23
49	6,687722E+22	6,687978E+22	3,910423E+22	3,910350E+22	1,337570E+23	7,820773E+22	2,119647E+23
50	6,688056E+22	6,688003E+22	3,910261E+22	3,910397E+22	1,337606E+23	7,820658E+22	2,119672E+23
51	6,687925E+22	6,687856E+22	3,910324E+22	3,910244E+22	1,337578E+23	7,820568E+22	2,119635E+23
52	6,687914E+22	6,687983E+22	3,910353E+22	3,910331E+22	1,337590E+23	7,820684E+22	2,119658E+23
53	6,688166E+22	6,687922E+22	3,910283E+22	3,910355E+22	1,337609E+23	7,820638E+22	2,119673E+23
54	6,687784E+22	6,687920E+22	3,910465E+22	3,910351E+22	1,337570E+23	7,820815E+22	2,119652E+23
55	6,687851E+22	6,688066E+22	3,910454E+22	3,910539E+22	1,337592E+23	7,820993E+22	2,119691E+23
56	6,687939E+22	6,687820E+22	3,910512E+22	3,910529E+22	1,337576E+23	7,821041E+22	2,119680E+23
57	6,687615E+22	6,687789E+22	3,910714E+22	3,910582E+22	1,337540E+23	7,821296E+22	2,119670E+23
58	6,687901E+22	6,687838E+22	3,910644E+22	3,910732E+22	1,337574E+23	7,821376E+22	2,119712E+23
59	6,687803E+22	6,687646E+22	3,910725E+22	3,910671E+22	1,337545E+23	7,821397E+22	2,119685E+23
60	6,687622E+22	6,687784E+22	3,910782E+22	3,910772E+22	1,337541E+23	7,821555E+22	2,119696E+23
61	6,687917E+22	6,687794E+22	3,910664E+22	3,910811E+22	1,337571E+23	7,821475E+22	2,119719E+23
62	6,687630E+22	6,687699E+22	3,910788E+22	3,910680E+22	1,337533E+23	7,821467E+22	2,119680E+23
63	6,687693E+22	6,687882E+22	3,910728E+22	3,910712E+22	1,337558E+23	7,821440E+22	2,119702E+23
64	6,687944E+22	6,687732E+22	3,910636E+22	3,910618E+22	1,337568E+23	7,821255E+22	2,119693E+23
65	6,687605E+22	6,687730E+22	3,910713E+22	3,910554E+22	1,337534E+23	7,821268E+22	2,119660E+23
66	6,687829E+22	6,687922E+22	3,910540E+22	3,910631E+22	1,337575E+23	7,821171E+22	2,119692E+23
67	6,687842E+22	6,687755E+22	3,910504E+22	3,910496E+22	1,337560E+23	7,821000E+22	2,119660E+23
68	6,687659E+22	6,687831E+22	3,910528E+22	3,910479E+22	1,337549E+23	7,821007E+22	2,119650E+23
69	6,688036E+22	6,687889E+22	3,910383E+22	3,910499E+22	1,337593E+23	7,820882E+22	2,119681E+23
70	6,687852E+22	6,687751E+22	3,910491E+22	3,910385E+22	1,337560E+23	7,820875E+22	2,119648E+23
71	6,687774E+22	6,687962E+22	3,910508E+22	3,910472E+22	1,337574E+23	7,820980E+22	2,119672E+23
72	6,688007E+22	6,687896E+22	3,910463E+22	3,910536E+22	1,337590E+23	7,820999E+22	2,119690E+23
73	6,687614E+22	6,687771E+22	3,910659E+22	3,910562E+22	1,337539E+23	7,821221E+22	2,119661E+23
74	6,687724E+22	6,687906E+22	3,910661E+22	3,910714E+22	1,337563E+23	7,821375E+22	2,119700E+23
75	6,687831E+22	6,687661E+22	3,910718E+22	3,910709E+22	1,337549E+23	7,821427E+22	2,119692E+23
76	6,687560E+22	6,687610E+22	3,910860E+22	3,910764E+22	1,337517E+23	7,821624E+22	2,119679E+23
77	6,687835E+22	6,687733E+22	3,910774E+22	3,910908E+22	1,337557E+23	7,821682E+22	2,119725E+23
78	6,687674E+22	6,687571E+22	3,910877E+22	3,910866E+22	1,337525E+23	7,821743E+22	2,119699E+23
79	6,687485E+22	6,687742E+22	3,910919E+22	3,910899E+22	1,337523E+23	7,821818E+22	2,119705E+23
80	6,687818E+22	6,687718E+22	3,910832E+22	3,910920E+22	1,337554E+23	7,821752E+22	2,119729E+23
81	6,687538E+22	6,687536E+22	3,910955E+22	3,910804E+22	1,337507E+23	7,821759E+22	2,119683E+23
82	6,687597E+22	6,687755E+22	3,910889E+22	3,910830E+22	1,337535E+23	7,821719E+22	2,119707E+23
83	6,687799E+22	6,687656E+22	3,910782E+22	3,910777E+22	1,337546E+23	7,821559E+22	2,119701E+23
84	6,687488E+22	6,687619E+22	3,910802E+22	3,910722E+22	1,337511E+23	7,821524E+22	2,119663E+23
85	6,687748E+22	6,687825E+22	3,910641E+22	3,910768E+22	1,337557E+23	7,821409E+22	2,119698E+23
86	6,687762E+22	6,687643E+22	3,910645E+22	3,910634E+22	1,337540E+23	7,821279E+22	2,119668E+23
87	6,687588E+22	6,687761E+22	3,910661E+22	3,910573E+22	1,337535E+23	7,821234E+22	2,119658E+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							
88	6,687975E+22	6,687833E+22	3,910546E+22	3,910627E+22	1,337581E+23	7,821173E+22	2,119698E+23
89	6,687724E+22	6,687640E+22	3,910656E+22	3,910575E+22	1,337536E+23	7,821231E+22	2,119659E+23
90	6,687611E+22	6,687875E+22	3,910689E+22	3,910658E+22	1,337549E+23	7,821347E+22	2,119683E+23
91	6,687840E+22	6,687783E+22	3,910660E+22	3,910729E+22	1,337562E+23	7,821389E+22	2,119701E+23
92	6,687522E+22	6,687572E+22	3,910820E+22	3,910738E+22	1,337509E+23	7,821558E+22	2,119665E+23
93	6,687683E+22	6,687736E+22	3,910823E+22	3,910865E+22	1,337542E+23	7,821688E+22	2,119711E+23
94	6,687749E+22	6,687521E+22	3,910889E+22	3,910892E+22	1,337527E+23	7,821781E+22	2,119705E+23
95	6,687429E+22	6,687570E+22	3,910997E+22	3,910922E+22	1,337500E+23	7,821919E+22	2,119692E+23
96	6,687712E+22	6,687708E+22	3,910931E+22	3,911075E+22	1,337542E+23	7,822006E+22	2,119743E+23
97	6,687530E+22	6,687451E+22	3,911053E+22	3,911033E+22	1,337498E+23	7,822086E+22	2,119707E+23
98	6,687371E+22	6,687630E+22	3,911111E+22	3,911020E+22	1,337500E+23	7,822131E+22	2,119713E+23
99	6,687707E+22	6,687602E+22	3,911022E+22	3,911051E+22	1,337531E+23	7,822073E+22	2,119738E+23
100	6,687453E+22	6,687379E+22	3,911083E+22	3,910962E+22	1,337483E+23	7,822045E+22	2,119688E+23
101	6,687497E+22	6,687655E+22	3,910995E+22	3,910992E+22	1,337515E+23	7,821987E+22	2,119714E+23
102	6,687656E+22	6,687563E+22	3,910899E+22	3,910963E+22	1,337522E+23	7,821862E+22	2,119708E+23
103	6,687378E+22	6,687551E+22	3,910900E+22	3,910840E+22	1,337493E+23	7,821740E+22	2,119667E+23
104	6,687710E+22	6,687735E+22	3,910773E+22	3,910868E+22	1,337544E+23	7,821641E+22	2,119709E+23
105	6,687712E+22	6,687502E+22	3,910793E+22	3,910751E+22	1,337521E+23	7,821545E+22	2,119676E+23
106	6,687513E+22	6,687681E+22	3,910824E+22	3,910688E+22	1,337519E+23	7,821512E+22	2,119671E+23
107	6,687820E+22	6,687791E+22	3,910723E+22	3,910790E+22	1,337561E+23	7,821513E+22	2,119712E+23
108	6,687583E+22	6,687532E+22	3,910804E+22	3,910768E+22	1,337512E+23	7,821572E+22	2,119669E+23
109	6,687491E+22	6,687741E+22	3,910856E+22	3,910829E+22	1,337523E+23	7,821685E+22	2,119692E+23
110	6,687716E+22	6,687629E+22	3,910854E+22	3,910918E+22	1,337534E+23	7,821772E+22	2,119712E+23
111	6,687435E+22	6,687445E+22	3,910976E+22	3,910883E+22	1,337488E+23	7,821860E+22	2,119674E+23
112	6,687613E+22	6,687629E+22	3,910987E+22	3,911039E+22	1,337524E+23	7,822026E+22	2,119727E+23
113	6,687616E+22	6,687411E+22	3,911046E+22	3,911102E+22	1,337503E+23	7,822148E+22	2,119718E+23
114	6,687288E+22	6,687496E+22	3,911166E+22	3,911095E+22	1,337478E+23	7,822260E+22	2,119704E+23
115	6,687564E+22	6,687620E+22	3,911130E+22	3,911229E+22	1,337518E+23	7,822359E+22	2,119754E+23
116	6,687447E+22	6,687289E+22	3,911212E+22	3,911173E+22	1,337474E+23	7,822385E+22	2,119712E+23
117	6,687303E+22	6,687487E+22	3,911267E+22	3,911141E+22	1,337479E+23	7,822408E+22	2,119720E+23
118	6,687580E+22	6,687493E+22	3,911174E+22	3,911218E+22	1,337507E+23	7,822392E+22	2,119746E+23
119	6,687308E+22	6,687328E+22	3,911185E+22	3,911107E+22	1,337464E+23	7,822292E+22	2,119693E+23
120	6,687394E+22	6,687593E+22	3,911113E+22	3,911144E+22	1,337499E+23	7,822258E+22	2,119724E+23
121	6,687555E+22	6,687433E+22	3,911033E+22	3,911109E+22	1,337499E+23	7,822142E+22	2,119713E+23
122	6,687323E+22	6,687447E+22	3,911049E+22	3,910936E+22	1,337477E+23	7,821985E+22	2,119675E+23
123	6,687647E+22	6,687645E+22	3,910943E+22	3,910974E+22	1,337529E+23	7,821918E+22	2,119721E+23
124	6,687642E+22	6,687385E+22	3,910922E+22	3,910899E+22	1,337503E+23	7,821821E+22	2,119685E+23
125	6,687399E+22	6,687609E+22	3,910962E+22	3,910852E+22	1,337501E+23	7,821814E+22	2,119682E+23
126	6,687641E+22	6,687700E+22	3,910885E+22	3,910987E+22	1,337534E+23	7,821872E+22	2,119721E+23
127	6,687432E+22	6,687425E+22	3,910955E+22	3,910920E+22	1,337486E+23	7,821875E+22	2,119673E+23
128	6,687419E+22	6,687601E+22	3,911029E+22	3,910983E+22	1,337502E+23	7,822013E+22	2,119703E+23
129	6,687624E+22	6,687445E+22	3,911030E+22	3,911096E+22	1,337507E+23	7,822127E+22	2,119720E+23
130	6,687339E+22	6,687345E+22	3,911146E+22	3,911050E+22	1,337468E+23	7,822196E+22	2,119688E+23
131	6,687469E+22	6,687573E+22	3,911168E+22	3,911224E+22	1,337504E+23	7,822392E+22	2,119743E+23
132	6,687490E+22	6,687305E+22	3,911200E+22	3,911290E+22	1,337480E+23	7,822491E+22	2,119729E+23
133	6,687186E+22	6,687386E+22	3,911345E+22	3,911242E+22	1,337457E+23	7,822587E+22	2,119716E+23
134	6,687435E+22	6,687494E+22	3,911329E+22	3,911387E+22	1,337493E+23	7,822716E+22	2,119765E+23
135	6,687340E+22	6,687183E+22	3,911371E+22	3,911304E+22	1,337452E+23	7,822675E+22	2,119720E+23
136	6,687213E+22	6,687387E+22	3,911413E+22	3,911308E+22	1,337460E+23	7,822721E+22	2,119732E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
137	6,687427E+22	6,687376E+22	3,911304E+22	3,911415E+22	1,337480E+23	7,822719E+22	2,119752E+23
138	6,687196E+22	6,687237E+22	3,911308E+22	3,911254E+22	1,337443E+23	7,822562E+22	2,119699E+23
139	6,687306E+22	6,687488E+22	3,911263E+22	3,911261E+22	1,337479E+23	7,822524E+22	2,119732E+23
140	6,687532E+22	6,687290E+22	3,911150E+22	3,911214E+22	1,337482E+23	7,822363E+22	2,119719E+23
141	6,687299E+22	6,687339E+22	3,911179E+22	3,911025E+22	1,337464E+23	7,822204E+22	2,119684E+23
142	6,687515E+22	6,687588E+22	3,911093E+22	3,911120E+22	1,337510E+23	7,822213E+22	2,119732E+23
143	6,687481E+22	6,687361E+22	3,911044E+22	3,911042E+22	1,337484E+23	7,822086E+22	2,119693E+23
144	6,687258E+22	6,687530E+22	3,911116E+22	3,911024E+22	1,337479E+23	7,822141E+22	2,119693E+23
145	6,687484E+22	6,687547E+22	3,911065E+22	3,911172E+22	1,337503E+23	7,822237E+22	2,119727E+23
146	6,687344E+22	6,687276E+22	3,911134E+22	3,911071E+22	1,337462E+23	7,822205E+22	2,119683E+23
147	6,687340E+22	6,687457E+22	3,911223E+22	3,911148E+22	1,337480E+23	7,822371E+22	2,119717E+23
148	6,687547E+22	6,687303E+22	3,911172E+22	3,911294E+22	1,337485E+23	7,822465E+22	2,119732E+23
149	6,687236E+22	6,687256E+22	3,911295E+22	3,911235E+22	1,337449E+23	7,822530E+22	2,119702E+23
150	6,687309E+22	6,687490E+22	3,911348E+22	3,911417E+22	1,337480E+23	7,822765E+22	2,119756E+23
151	6,687364E+22	6,687213E+22	3,911370E+22	3,911423E+22	1,337458E+23	7,822793E+22	2,119737E+23
152	6,687116E+22	6,687263E+22	3,911531E+22	3,911383E+22	1,337438E+23	7,822914E+22	2,119729E+23
153	6,687308E+22	6,687342E+22	3,911512E+22	3,911554E+22	1,337465E+23	7,823066E+22	2,119772E+23
154	6,687211E+22	6,687093E+22	3,911530E+22	3,911466E+22	1,337430E+23	7,822995E+22	2,119730E+23
155	6,687070E+22	6,687307E+22	3,911570E+22	3,911480E+22	1,337438E+23	7,823050E+22	2,119743E+23
156	6,687327E+22	6,687240E+22	3,911418E+22	3,911578E+22	1,337457E+23	7,822997E+22	2,119756E+23
157	6,687146E+22	6,687124E+22	3,911436E+22	3,911365E+22	1,337427E+23	7,822800E+22	2,119707E+23
158	6,687238E+22	6,687385E+22	3,911404E+22	3,911373E+22	1,337462E+23	7,822777E+22	2,119740E+23
159	6,687454E+22	6,687222E+22	3,911268E+22	3,911305E+22	1,337468E+23	7,822573E+22	2,119725E+23
160	6,687211E+22	6,687292E+22	3,911307E+22	3,911172E+22	1,337450E+23	7,822480E+22	2,119698E+23
161	6,687325E+22	6,687501E+22	3,911238E+22	3,911306E+22	1,337483E+23	7,822544E+22	2,119737E+23
162	6,687328E+22	6,687266E+22	3,911204E+22	3,911203E+22	1,337459E+23	7,822407E+22	2,119700E+23
163	6,687151E+22	6,687380E+22	3,911304E+22	3,911173E+22	1,337453E+23	7,822477E+22	2,119701E+23
164	6,687433E+22	6,687345E+22	3,911214E+22	3,911328E+22	1,337478E+23	7,822542E+22	2,119732E+23
165	6,687309E+22	6,687133E+22	3,911284E+22	3,911217E+22	1,337444E+23	7,822500E+22	2,119694E+23
166	6,687219E+22	6,687378E+22	3,911380E+22	3,911336E+22	1,337460E+23	7,822716E+22	2,119731E+23
167	6,687405E+22	6,687267E+22	3,911315E+22	3,911458E+22	1,337467E+23	7,822773E+22	2,119745E+23
168	6,687126E+22	6,687190E+22	3,911475E+22	3,911411E+22	1,337432E+23	7,822886E+22	2,119720E+23
169	6,687148E+22	6,687363E+22	3,911562E+22	3,911591E+22	1,337451E+23	7,823154E+22	2,119766E+23
170	6,687259E+22	6,687090E+22	3,911579E+22	3,911572E+22	1,337435E+23	7,823151E+22	2,119750E+23
171	6,687004E+22	6,687123E+22	3,911739E+22	3,911553E+22	1,337413E+23	7,823293E+22	2,119742E+23
172	6,687191E+22	6,687196E+22	3,911647E+22	3,911758E+22	1,337439E+23	7,823405E+22	2,119779E+23
173	6,687105E+22	6,686977E+22	3,911647E+22	3,911642E+22	1,337408E+23	7,823289E+22	2,119737E+23
174	6,686942E+22	6,687199E+22	3,911698E+22	3,911644E+22	1,337414E+23	7,823342E+22	2,119748E+23
175	6,687259E+22	6,687146E+22	3,911526E+22	3,911668E+22	1,337441E+23	7,823194E+22	2,119760E+23
176	6,687130E+22	6,687029E+22	3,911559E+22	3,911456E+22	1,337416E+23	7,823015E+22	2,119717E+23
177	6,687128E+22	6,687295E+22	3,911548E+22	3,911492E+22	1,337442E+23	7,823041E+22	2,119746E+23
178	6,687325E+22	6,687187E+22	3,911406E+22	3,911431E+22	1,337451E+23	7,822837E+22	2,119735E+23
179	6,687055E+22	6,687225E+22	3,911475E+22	3,911329E+22	1,337428E+23	7,822804E+22	2,119708E+23
180	6,687193E+22	6,687355E+22	3,911380E+22	3,911476E+22	1,337455E+23	7,822856E+22	2,119740E+23
181	6,687255E+22	6,687107E+22	3,911362E+22	3,911346E+22	1,337436E+23	7,822708E+22	2,119707E+23
182	6,687073E+22	6,687229E+22	3,911467E+22	3,911335E+22	1,337430E+23	7,822803E+22	2,119711E+23
183	6,687367E+22	6,687234E+22	3,911347E+22	3,911473E+22	1,337460E+23	7,822820E+22	2,119742E+23
184	6,687236E+22	6,687072E+22	3,911420E+22	3,911403E+22	1,337431E+23	7,822823E+22	2,119713E+23
185	6,687047E+22	6,687302E+22	3,911548E+22	3,911537E+22	1,337435E+23	7,823084E+22	2,119743E+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							
186	6,687261E+22	6,687193E+22	3,911510E+22	3,911620E+22	1,337445E+23	7,823130E+22	2,119758E+23
187	6,687014E+22	6,687063E+22	3,911708E+22	3,911568E+22	1,337408E+23	7,823276E+22	2,119735E+23
188	6,687049E+22	6,687172E+22	3,911749E+22	3,911761E+22	1,337422E+23	7,823510E+22	2,119773E+23
189	6,687165E+22	6,686944E+22	3,911753E+22	3,911743E+22	1,337411E+23	7,823496E+22	2,119761E+23
190	6,686853E+22	6,687018E+22	3,911885E+22	3,911755E+22	1,337387E+23	7,823640E+22	2,119751E+23
191	6,687051E+22	6,687106E+22	3,911758E+22	3,911915E+22	1,337416E+23	7,823674E+22	2,119783E+23
192	6,687035E+22	6,686895E+22	3,911768E+22	3,911787E+22	1,337393E+23	7,823555E+22	2,119749E+23
193	6,686843E+22	6,687084E+22	3,911845E+22	3,911766E+22	1,337393E+23	7,823611E+22	2,119754E+23
194	6,687200E+22	6,687066E+22	3,911681E+22	3,911756E+22	1,337427E+23	7,823437E+22	2,119770E+23
195	6,687051E+22	6,686952E+22	3,911728E+22	3,911575E+22	1,337400E+23	7,823302E+22	2,119730E+23
196	6,686994E+22	6,687194E+22	3,911670E+22	3,911654E+22	1,337419E+23	7,823324E+22	2,119751E+23
197	6,687195E+22	6,687091E+22	3,911538E+22	3,911588E+22	1,337429E+23	7,823126E+22	2,119741E+23
198	6,686918E+22	6,687095E+22	3,911621E+22	3,911495E+22	1,337401E+23	7,823116E+22	2,119713E+23
199	6,687118E+22	6,687211E+22	3,911509E+22	3,911593E+22	1,337433E+23	7,823102E+22	2,119743E+23
200	6,687238E+22	6,686985E+22	3,911492E+22	3,911484E+22	1,337422E+23	7,822977E+22	2,119720E+23
201	6,686964E+22	6,687130E+22	3,911616E+22	3,911503E+22	1,337409E+23	7,823119E+22	2,119721E+23
202	6,687245E+22	6,687201E+22	3,911503E+22	3,911635E+22	1,337445E+23	7,823138E+22	2,119758E+23
203	6,687094E+22	6,687012E+22	3,911620E+22	3,911579E+22	1,337411E+23	7,823199E+22	2,119731E+23
204	6,686908E+22	6,687172E+22	3,911736E+22	3,911718E+22	1,337408E+23	7,823454E+22	2,119753E+23
205	6,687168E+22	6,687040E+22	3,911714E+22	3,911777E+22	1,337421E+23	7,823490E+22	2,119770E+23
206	6,686892E+22	6,686901E+22	3,911910E+22	3,911755E+22	1,337379E+23	7,823665E+22	2,119746E+23
207	6,686932E+22	6,687040E+22	3,911899E+22	3,911935E+22	1,337397E+23	7,823834E+22	2,119781E+23
208	6,687058E+22	6,686848E+22	3,911878E+22	3,911947E+22	1,337391E+23	7,823825E+22	2,119773E+23
209	6,686692E+22	6,686909E+22	3,912023E+22	3,911948E+22	1,337360E+23	7,823971E+22	2,119757E+23
210	6,686959E+22	6,687011E+22	3,911907E+22	3,912038E+22	1,337397E+23	7,823945E+22	2,119791E+23
211	6,686985E+22	6,686788E+22	3,911943E+22	3,911885E+22	1,337377E+23	7,823828E+22	2,119760E+23
212	6,686787E+22	6,686954E+22	3,911983E+22	3,911873E+22	1,337374E+23	7,823857E+22	2,119760E+23
213	6,687118E+22	6,686983E+22	3,911823E+22	3,911872E+22	1,337410E+23	7,823695E+22	2,119780E+23
214	6,686889E+22	6,686896E+22	3,911867E+22	3,911742E+22	1,337378E+23	7,823609E+22	2,119739E+23
215	6,686839E+22	6,687111E+22	3,911788E+22	3,911797E+22	1,337395E+23	7,823585E+22	2,119754E+23
216	6,687103E+22	6,686990E+22	3,911668E+22	3,911743E+22	1,337409E+23	7,823411E+22	2,119750E+23
217	6,686815E+22	6,686953E+22	3,911770E+22	3,911647E+22	1,337377E+23	7,823417E+22	2,119719E+23
218	6,687062E+22	6,687099E+22	3,911663E+22	3,911722E+22	1,337416E+23	7,823385E+22	2,119755E+23
219	6,687171E+22	6,686906E+22	3,911660E+22	3,911645E+22	1,337408E+23	7,823304E+22	2,119738E+23
220	6,686842E+22	6,687031E+22	3,911748E+22	3,911691E+22	1,337387E+23	7,823440E+22	2,119731E+23
221	6,687118E+22	6,687106E+22	3,911672E+22	3,911806E+22	1,337422E+23	7,823478E+22	2,119770E+23
222	6,686956E+22	6,686891E+22	3,911814E+22	3,911755E+22	1,337385E+23	7,823569E+22	2,119742E+23
223	6,686801E+22	6,687014E+22	3,911914E+22	3,911855E+22	1,337382E+23	7,823769E+22	2,119758E+23
224	6,687094E+22	6,686910E+22	3,911883E+22	3,911947E+22	1,337400E+23	7,823831E+22	2,119783E+23
225	6,686738E+22	6,686778E+22	3,912078E+22	3,911954E+22	1,337352E+23	7,824032E+22	2,119755E+23
226	6,686786E+22	6,686962E+22	3,912058E+22	3,912113E+22	1,337375E+23	7,824171E+22	2,119792E+23
227	6,686936E+22	6,686764E+22	3,912055E+22	3,912118E+22	1,337370E+23	7,824173E+22	2,119787E+23
228	6,686593E+22	6,686773E+22	3,912171E+22	3,912100E+22	1,337337E+23	7,824271E+22	2,119764E+23
229	6,686912E+22	6,686884E+22	3,912074E+22	3,912151E+22	1,337380E+23	7,824225E+22	2,119802E+23
230	6,686900E+22	6,686686E+22	3,912106E+22	3,912019E+22	1,337359E+23	7,824126E+22	2,119771E+23
231	6,686677E+22	6,686874E+22	3,912105E+22	3,912003E+22	1,337355E+23	7,824108E+22	2,119766E+23
232	6,686994E+22	6,686935E+22	3,911928E+22	3,912040E+22	1,337393E+23	7,823968E+22	2,119790E+23
233	6,686709E+22	6,686796E+22	3,912001E+22	3,911917E+22	1,337351E+23	7,823919E+22	2,119742E+23
234	6,686739E+22	6,686995E+22	3,911935E+22	3,911921E+22	1,337373E+23	7,823856E+22	2,119759E+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	6,687054E+22	6,686853E+22	3,911833E+22	3,911863E+22	1,337391E+23	7,823695E+22	2,119760E+23
236	6,686763E+22	6,686806E+22	3,911894E+22	3,911786E+22	1,337357E+23	7,823681E+22	2,119725E+23
237	6,687000E+22	6,687002E+22	3,911797E+22	3,911861E+22	1,337400E+23	7,823659E+22	2,119766E+23
238	6,687024E+22	6,686848E+22	3,911808E+22	3,911819E+22	1,337387E+23	7,823628E+22	2,119750E+23
239	6,686704E+22	6,686949E+22	3,911899E+22	3,911839E+22	1,337365E+23	7,823739E+22	2,119739E+23
240	6,687013E+22	6,687008E+22	3,911846E+22	3,911965E+22	1,337402E+23	7,823811E+22	2,119783E+23
241	6,686816E+22	6,686746E+22	3,912022E+22	3,911933E+22	1,337356E+23	7,823955E+22	2,119752E+23
242	6,686693E+22	6,686881E+22	3,912115E+22	3,912021E+22	1,337357E+23	7,824136E+22	2,119771E+23
243	6,686968E+22	6,686801E+22	3,912077E+22	3,912150E+22	1,337377E+23	7,824227E+22	2,119800E+23
244	6,686591E+22	6,686647E+22	3,912216E+22	3,912174E+22	1,337324E+23	7,824390E+22	2,119763E+23
245	6,686683E+22	6,686827E+22	3,912217E+22	3,912287E+22	1,337351E+23	7,824504E+22	2,119801E+23
246	6,686838E+22	6,686645E+22	3,912225E+22	3,912271E+22	1,337348E+23	7,824497E+22	2,119798E+23
247	6,686539E+22	6,686648E+22	3,912314E+22	3,912204E+22	1,337319E+23	7,824518E+22	2,119771E+23
248	6,686852E+22	6,686811E+22	3,912210E+22	3,912278E+22	1,337366E+23	7,824489E+22	2,119815E+23
249	6,686740E+22	6,686627E+22	3,912253E+22	3,912181E+22	1,337337E+23	7,824433E+22	2,119780E+23
250	6,686513E+22	6,686822E+22	3,912249E+22	3,912148E+22	1,337334E+23	7,824397E+22	2,119773E+23
251	6,686857E+22	6,686855E+22	3,912092E+22	3,912191E+22	1,337371E+23	7,824283E+22	2,119799E+23
252	6,686615E+22	6,686633E+22	3,912129E+22	3,912061E+22	1,337325E+23	7,824190E+22	2,119744E+23
253	6,686706E+22	6,686826E+22	3,912082E+22	3,912039E+22	1,337353E+23	7,824122E+22	2,119765E+23
254	6,686992E+22	6,686738E+22	3,911973E+22	3,912006E+22	1,337373E+23	7,823979E+22	2,119771E+23
255	6,686680E+22	6,686720E+22	3,911997E+22	3,911926E+22	1,337340E+23	7,823923E+22	2,119732E+23
256	6,686889E+22	6,686963E+22	3,911912E+22	3,912027E+22	1,337385E+23	7,823939E+22	2,119779E+23
257	6,686858E+22	6,686763E+22	3,911977E+22	3,911990E+22	1,337362E+23	7,823967E+22	2,119759E+23
258	6,686585E+22	6,686836E+22	3,912100E+22	3,911973E+22	1,337342E+23	7,824072E+22	2,119749E+23
259	6,686912E+22	6,686881E+22	3,912065E+22	3,912118E+22	1,337379E+23	7,824184E+22	2,119798E+23
260	6,686695E+22	6,686583E+22	3,912197E+22	3,912128E+22	1,337328E+23	7,824325E+22	2,119760E+23
261	6,686577E+22	6,686745E+22	3,912290E+22	3,912223E+22	1,337332E+23	7,824513E+22	2,119784E+23
262	6,686808E+22	6,686699E+22	3,912245E+22	3,912365E+22	1,337351E+23	7,824610E+22	2,119812E+23
263	6,686482E+22	6,686529E+22	3,912358E+22	3,912340E+22	1,337301E+23	7,824698E+22	2,119771E+23
264	6,686624E+22	6,686730E+22	3,912365E+22	3,912434E+22	1,337335E+23	7,824798E+22	2,119815E+23
265	6,686736E+22	6,686538E+22	3,912405E+22	3,912416E+22	1,337327E+23	7,824820E+22	2,119809E+23
266	6,686451E+22	6,686572E+22	3,912488E+22	3,912331E+22	1,337302E+23	7,824819E+22	2,119784E+23
267	6,686716E+22	6,686752E+22	3,912377E+22	3,912436E+22	1,337347E+23	7,824813E+22	2,119828E+23
268	6,686571E+22	6,686516E+22	3,912379E+22	3,912363E+22	1,337309E+23	7,824741E+22	2,119783E+23
269	6,686412E+22	6,686664E+22	3,912390E+22	3,912290E+22	1,337308E+23	7,824681E+22	2,119776E+23
270	6,686763E+22	6,686699E+22	3,912236E+22	3,912319E+22	1,337346E+23	7,824555E+22	2,119802E+23
271	6,686586E+22	6,686486E+22	3,912231E+22	3,912160E+22	1,337307E+23	7,824391E+22	2,119746E+23
272	6,686676E+22	6,686747E+22	3,912177E+22	3,912162E+22	1,337342E+23	7,824339E+22	2,119776E+23
273	6,686854E+22	6,686698E+22	3,912102E+22	3,912160E+22	1,337355E+23	7,824263E+22	2,119781E+23
274	6,686540E+22	6,686692E+22	3,912151E+22	3,912063E+22	1,337323E+23	7,824214E+22	2,119745E+23
275	6,686744E+22	6,686902E+22	3,912112E+22	3,912175E+22	1,337365E+23	7,824287E+22	2,119793E+23
276	6,686725E+22	6,686618E+22	3,912165E+22	3,912162E+22	1,337334E+23	7,824327E+22	2,119767E+23
277	6,686506E+22	6,686651E+22	3,912308E+22	3,912143E+22	1,337316E+23	7,824450E+22	2,119761E+23
278	6,686784E+22	6,686738E+22	3,912258E+22	3,912326E+22	1,337352E+23	7,824584E+22	2,119811E+23
279	6,686577E+22	6,686453E+22	3,912329E+22	3,912336E+22	1,337303E+23	7,824666E+22	2,119770E+23
280	6,686466E+22	6,686650E+22	3,912416E+22	3,912432E+22	1,337312E+23	7,824848E+22	2,119796E+23
281	6,686675E+22	6,686587E+22	3,912416E+22	3,912547E+22	1,337326E+23	7,824963E+22	2,119823E+23
282	6,686412E+22	6,686418E+22	3,912543E+22	3,912456E+22	1,337283E+23	7,824999E+22	2,119783E+23
283	6,686555E+22	6,686645E+22	3,912565E+22	3,912554E+22	1,337320E+23	7,825118E+22	2,119832E+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							
284	6,686619E+22	6,686430E+22	3,912560E+22	3,912569E+22	1,337305E+23	7,825129E+22	2,119818E+23
285	6,686317E+22	6,686466E+22	3,912649E+22	3,912491E+22	1,337278E+23	7,825140E+22	2,119792E+23
286	6,686533E+22	6,686664E+22	3,912532E+22	3,912605E+22	1,337320E+23	7,825137E+22	2,119833E+23
287	6,686459E+22	6,686374E+22	3,912495E+22	3,912501E+22	1,337283E+23	7,824996E+22	2,119783E+23
288	6,686365E+22	6,686536E+22	3,912500E+22	3,912417E+22	1,337290E+23	7,824918E+22	2,119782E+23
289	6,686693E+22	6,686577E+22	3,912372E+22	3,912449E+22	1,337327E+23	7,824821E+22	2,119809E+23
290	6,686526E+22	6,686420E+22	3,912358E+22	3,912273E+22	1,337295E+23	7,824632E+22	2,119758E+23
291	6,686566E+22	6,686729E+22	3,912313E+22	3,912306E+22	1,337329E+23	7,824620E+22	2,119791E+23
292	6,686698E+22	6,686620E+22	3,912235E+22	3,912329E+22	1,337332E+23	7,824565E+22	2,119788E+23
293	6,686437E+22	6,686553E+22	3,912337E+22	3,912213E+22	1,337299E+23	7,824549E+22	2,119754E+23
294	6,686619E+22	6,686757E+22	3,912313E+22	3,912326E+22	1,337338E+23	7,824639E+22	2,119801E+23
295	6,686647E+22	6,686451E+22	3,912324E+22	3,912321E+22	1,337310E+23	7,824645E+22	2,119774E+23
296	6,686427E+22	6,686530E+22	3,912446E+22	3,912333E+22	1,337296E+23	7,824779E+22	2,119774E+23
297	6,686622E+22	6,686640E+22	3,912420E+22	3,912539E+22	1,337326E+23	7,824958E+22	2,119822E+23
298	6,686453E+22	6,686380E+22	3,912495E+22	3,912508E+22	1,337283E+23	7,825003E+22	2,119784E+23
299	6,686367E+22	6,686566E+22	3,912605E+22	3,912587E+22	1,337293E+23	7,825192E+22	2,119812E+23
300	6,686572E+22	6,686451E+22	3,912601E+22	3,912703E+22	1,337302E+23	7,825304E+22	2,119833E+23
301	6,686354E+22	6,686271E+22	3,912746E+22	3,912600E+22	1,337263E+23	7,825346E+22	2,119797E+23
302	6,686406E+22	6,686543E+22	3,912753E+22	3,912720E+22	1,337295E+23	7,825473E+22	2,119842E+23
303	6,686470E+22	6,686330E+22	3,912685E+22	3,912749E+22	1,337280E+23	7,825434E+22	2,119823E+23
304	6,686190E+22	6,686360E+22	3,912759E+22	3,912666E+22	1,337255E+23	7,825425E+22	2,119797E+23
305	6,686394E+22	6,686528E+22	3,912676E+22	3,912758E+22	1,337292E+23	7,825434E+22	2,119836E+23
306	6,686406E+22	6,686255E+22	3,912629E+22	3,912598E+22	1,337266E+23	7,825227E+22	2,119789E+23
307	6,686326E+22	6,686454E+22	3,912635E+22	3,912525E+22	1,337278E+23	7,825160E+22	2,119794E+23
308	6,686597E+22	6,686498E+22	3,912488E+22	3,912590E+22	1,337309E+23	7,825077E+22	2,119817E+23
309	6,686430E+22	6,686348E+22	3,912500E+22	3,912415E+22	1,337278E+23	7,824915E+22	2,119769E+23
310	6,686404E+22	6,686668E+22	3,912481E+22	3,912451E+22	1,337307E+23	7,824932E+22	2,119800E+23
311	6,686591E+22	6,686499E+22	3,912382E+22	3,912469E+22	1,337309E+23	7,824852E+22	2,119794E+23
312	6,686368E+22	6,686415E+22	3,912493E+22	3,912366E+22	1,337278E+23	7,824860E+22	2,119764E+23
313	6,686505E+22	6,686612E+22	3,912499E+22	3,912506E+22	1,337312E+23	7,825005E+22	2,119812E+23
314	6,686543E+22	6,686344E+22	3,912486E+22	3,912497E+22	1,337289E+23	7,824983E+22	2,119787E+23
315	6,686301E+22	6,686464E+22	3,912600E+22	3,912535E+22	1,337276E+23	7,825135E+22	2,119790E+23
316	6,686480E+22	6,686513E+22	3,912571E+22	3,912736E+22	1,337299E+23	7,825307E+22	2,119830E+23
317	6,686378E+22	6,686221E+22	3,912688E+22	3,912659E+22	1,337260E+23	7,825347E+22	2,119795E+23
318	6,686266E+22	6,686445E+22	3,912812E+22	3,912722E+22	1,337271E+23	7,825534E+22	2,119824E+23
319	6,686491E+22	6,686322E+22	3,912763E+22	3,912849E+22	1,337281E+23	7,825612E+22	2,119842E+23
320	6,686242E+22	6,686189E+22	3,912893E+22	3,912776E+22	1,337243E+23	7,825669E+22	2,119810E+23
321	6,686205E+22	6,686463E+22	3,912916E+22	3,912913E+22	1,337267E+23	7,825829E+22	2,119850E+23
322	6,686316E+22	6,686242E+22	3,912838E+22	3,912902E+22	1,337256E+23	7,825740E+22	2,119830E+23
323	6,686094E+22	6,686259E+22	3,912908E+22	3,912808E+22	1,337235E+23	7,825716E+22	2,119807E+23
324	6,686319E+22	6,686371E+22	3,912813E+22	3,912894E+22	1,337269E+23	7,825707E+22	2,119840E+23
325	6,686388E+22	6,686116E+22	3,912776E+22	3,912720E+22	1,337250E+23	7,825496E+22	2,119800E+23
326	6,686227E+22	6,686391E+22	3,912770E+22	3,912659E+22	1,337262E+23	7,825429E+22	2,119805E+23
327	6,686486E+22	6,686432E+22	3,912586E+22	3,912737E+22	1,337292E+23	7,825322E+22	2,119824E+23
328	6,686332E+22	6,686271E+22	3,912617E+22	3,912561E+22	1,337260E+23	7,825178E+22	2,119778E+23
329	6,686264E+22	6,686544E+22	3,912655E+22	3,912590E+22	1,337281E+23	7,825245E+22	2,119805E+23
330	6,686509E+22	6,686382E+22	3,912555E+22	3,912587E+22	1,337289E+23	7,825142E+22	2,119803E+23
331	6,686293E+22	6,686311E+22	3,912655E+22	3,912520E+22	1,337260E+23	7,825176E+22	2,119778E+23
332	6,686361E+22	6,686486E+22	3,912649E+22	3,912703E+22	1,337285E+23	7,825352E+22	2,119820E+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							
333	6,686429E+22	6,686233E+22	3,912650E+22	3,912689E+22	1,337266E+23	7,825339E+22	2,119800E+23
334	6,686150E+22	6,686367E+22	3,912782E+22	3,912709E+22	1,337252E+23	7,825491E+22	2,119801E+23
335	6,686389E+22	6,686380E+22	3,912735E+22	3,912896E+22	1,337277E+23	7,825632E+22	2,119840E+23
336	6,686322E+22	6,686098E+22	3,912861E+22	3,912815E+22	1,337242E+23	7,825676E+22	2,119810E+23
337	6,686134E+22	6,686331E+22	3,913015E+22	3,912896E+22	1,337246E+23	7,825911E+22	2,119838E+23
338	6,686346E+22	6,686253E+22	3,912935E+22	3,913021E+22	1,337260E+23	7,825956E+22	2,119856E+23
339	6,686082E+22	6,686124E+22	3,913048E+22	3,912974E+22	1,337221E+23	7,826021E+22	2,119823E+23
340	6,686041E+22	6,686312E+22	3,913069E+22	3,913100E+22	1,337235E+23	7,826169E+22	2,119852E+23
341	6,686256E+22	6,686063E+22	3,913003E+22	3,913038E+22	1,337232E+23	7,826041E+22	2,119836E+23
342	6,686033E+22	6,686129E+22	3,913062E+22	3,912919E+22	1,337216E+23	7,825981E+22	2,119814E+23
343	6,686287E+22	6,686254E+22	3,912916E+22	3,913013E+22	1,337254E+23	7,825929E+22	2,119847E+23
344	6,686320E+22	6,686071E+22	3,912872E+22	3,912851E+22	1,337239E+23	7,825724E+22	2,119811E+23
345	6,686072E+22	6,686355E+22	3,912909E+22	3,912803E+22	1,337243E+23	7,825712E+22	2,119814E+23
346	6,686352E+22	6,686377E+22	3,912733E+22	3,912848E+22	1,337273E+23	7,825581E+22	2,119831E+23
347	6,686226E+22	6,686192E+22	3,912782E+22	3,912696E+22	1,337242E+23	7,825477E+22	2,119790E+23
348	6,686151E+22	6,686380E+22	3,912824E+22	3,912745E+22	1,337253E+23	7,825569E+22	2,119810E+23
349	6,686432E+22	6,686217E+22	3,912730E+22	3,912754E+22	1,337265E+23	7,825484E+22	2,119813E+23
350	6,686154E+22	6,686217E+22	3,912809E+22	3,912709E+22	1,337237E+23	7,825518E+22	2,119789E+23
351	6,686246E+22	6,686365E+22	3,912764E+22	3,912900E+22	1,337261E+23	7,825664E+22	2,119827E+23
352	6,686343E+22	6,686119E+22	3,912789E+22	3,912862E+22	1,337246E+23	7,825651E+22	2,119811E+23
353	6,686042E+22	6,686241E+22	3,912974E+22	3,912861E+22	1,337228E+23	7,825835E+22	2,119812E+23
354	6,686305E+22	6,686278E+22	3,912928E+22	3,913020E+22	1,337258E+23	7,825948E+22	2,119853E+23
355	6,686219E+22	6,686034E+22	3,913048E+22	3,912984E+22	1,337225E+23	7,826033E+22	2,119829E+23
356	6,685949E+22	6,686221E+22	3,913195E+22	3,913100E+22	1,337217E+23	7,826295E+22	2,119847E+23
357	6,686195E+22	6,686131E+22	3,913122E+22	3,913214E+22	1,337233E+23	7,826335E+22	2,119866E+23
358	6,685930E+22	6,686003E+22	3,913227E+22	3,913141E+22	1,337193E+23	7,826368E+22	2,119830E+23
359	6,685971E+22	6,686140E+22	3,913206E+22	3,913250E+22	1,337211E+23	7,826455E+22	2,119857E+23
360	6,686239E+22	6,685930E+22	3,913130E+22	3,913170E+22	1,337217E+23	7,826299E+22	2,119847E+23
361	6,685951E+22	6,686035E+22	3,913202E+22	3,913057E+22	1,337199E+23	7,826259E+22	2,119825E+23
362	6,686178E+22	6,686232E+22	3,913032E+22	3,913138E+22	1,337241E+23	7,826170E+22	2,119858E+23
363	6,686194E+22	6,686057E+22	3,912988E+22	3,912995E+22	1,337225E+23	7,825983E+22	2,119823E+23
364	6,685910E+22	6,686233E+22	3,913061E+22	3,912944E+22	1,337214E+23	7,826005E+22	2,119815E+23
365	6,686263E+22	6,686227E+22	3,912910E+22	3,912967E+22	1,337249E+23	7,825877E+22	2,119837E+23
366	6,686125E+22	6,686058E+22	3,912953E+22	3,912826E+22	1,337218E+23	7,825779E+22	2,119796E+23
367	6,686070E+22	6,686230E+22	3,912948E+22	3,912915E+22	1,337230E+23	7,825864E+22	2,119816E+23
368	6,686339E+22	6,686122E+22	3,912846E+22	3,912937E+22	1,337246E+23	7,825783E+22	2,119824E+23
369	6,686007E+22	6,686132E+22	3,912960E+22	3,912891E+22	1,337214E+23	7,825851E+22	2,119799E+23
370	6,686138E+22	6,686287E+22	3,912925E+22	3,913038E+22	1,337243E+23	7,825963E+22	2,119839E+23
371	6,686265E+22	6,686045E+22	3,912970E+22	3,913011E+22	1,337231E+23	7,825981E+22	2,119829E+23
372	6,685930E+22	6,686097E+22	3,913186E+22	3,913030E+22	1,337203E+23	7,826216E+22	2,119824E+23
373	6,686197E+22	6,686149E+22	3,913145E+22	3,913201E+22	1,337235E+23	7,826345E+22	2,119869E+23
374	6,686037E+22	6,685952E+22	3,913244E+22	3,913191E+22	1,337199E+23	7,826434E+22	2,119842E+23
375	6,685800E+22	6,686072E+22	3,913340E+22	3,913315E+22	1,337187E+23	7,826655E+22	2,119853E+23
376	6,686096E+22	6,685972E+22	3,913269E+22	3,913388E+22	1,337207E+23	7,826657E+22	2,119872E+23
377	6,685848E+22	6,685855E+22	3,913389E+22	3,913285E+22	1,337170E+23	7,826674E+22	2,119838E+23
378	6,685930E+22	6,686032E+22	3,913338E+22	3,913352E+22	1,337196E+23	7,826691E+22	2,119865E+23
379	6,686167E+22	6,685902E+22	3,913249E+22	3,913302E+22	1,337207E+23	7,826550E+22	2,119862E+23
380	6,685802E+22	6,685978E+22	3,913334E+22	3,913206E+22	1,337178E+23	7,826540E+22	2,119832E+23
381	6,686039E+22	6,686154E+22	3,913190E+22	3,913267E+22	1,337219E+23	7,826457E+22	2,119865E+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							
382	6,686042E+22	6,685977E+22	3,913160E+22	3,913118E+22	1,337202E+23	7,826279E+22	2,119830E+23
383	6,685827E+22	6,686062E+22	3,913199E+22	3,913084E+22	1,337189E+23	7,826283E+22	2,119817E+23
384	6,686207E+22	6,686072E+22	3,913049E+22	3,913111E+22	1,337228E+23	7,826160E+22	2,119844E+23
385	6,686022E+22	6,685941E+22	3,913094E+22	3,913000E+22	1,337196E+23	7,826094E+22	2,119806E+23
386	6,685959E+22	6,686157E+22	3,913062E+22	3,913079E+22	1,337212E+23	7,826140E+22	2,119826E+23
387	6,686233E+22	6,686074E+22	3,912970E+22	3,913112E+22	1,337231E+23	7,826082E+22	2,119839E+23
388	6,685889E+22	6,685998E+22	3,913135E+22	3,913047E+22	1,337189E+23	7,826182E+22	2,119807E+23
389	6,686070E+22	6,686150E+22	3,913136E+22	3,913166E+22	1,337222E+23	7,826302E+22	2,119852E+23
390	6,686155E+22	6,685950E+22	3,913186E+22	3,913159E+22	1,337211E+23	7,826345E+22	2,119845E+23
391	6,685804E+22	6,685965E+22	3,913361E+22	3,913232E+22	1,337177E+23	7,826593E+22	2,119836E+23
392	6,686045E+22	6,686049E+22	3,913313E+22	3,913412E+22	1,337209E+23	7,826724E+22	2,119882E+23
393	6,685857E+22	6,685828E+22	3,913426E+22	3,913399E+22	1,337169E+23	7,826825E+22	2,119851E+23
394	6,685683E+22	6,685943E+22	3,913500E+22	3,913473E+22	1,337163E+23	7,826973E+22	2,119860E+23
395	6,686038E+22	6,685867E+22	3,913414E+22	3,913538E+22	1,337191E+23	7,826951E+22	2,119886E+23
396	6,685766E+22	6,685708E+22	3,913548E+22	3,913432E+22	1,337147E+23	7,826980E+22	2,119845E+23
397	6,685852E+22	6,685948E+22	3,913493E+22	3,913489E+22	1,337180E+23	7,826982E+22	2,119878E+23
398	6,686015E+22	6,685874E+22	3,913394E+22	3,913444E+22	1,337189E+23	7,826838E+22	2,119873E+23
399	6,685674E+22	6,685863E+22	3,913456E+22	3,913361E+22	1,337154E+23	7,826817E+22	2,119835E+23
400	6,685943E+22	6,686018E+22	3,913332E+22	3,913386E+22	1,337196E+23	7,826718E+22	2,119868E+23
401	6,685945E+22	6,685831E+22	3,913319E+22	3,913242E+22	1,337178E+23	7,826561E+22	2,119834E+23
402	6,685763E+22	6,685941E+22	3,913325E+22	3,913201E+22	1,337170E+23	7,826526E+22	2,119823E+23
403	6,686123E+22	6,686017E+22	3,913158E+22	3,913271E+22	1,337214E+23	7,826429E+22	2,119857E+23
404	6,685883E+22	6,685853E+22	3,913228E+22	3,913177E+22	1,337174E+23	7,826404E+22	2,119814E+23
405	6,685855E+22	6,686067E+22	3,913224E+22	3,913226E+22	1,337192E+23	7,826450E+22	2,119837E+23
406	6,686113E+22	6,686002E+22	3,913163E+22	3,913248E+22	1,337211E+23	7,826411E+22	2,119853E+23
407	6,685821E+22	6,685844E+22	3,913314E+22	3,913210E+22	1,337166E+23	7,826525E+22	2,119819E+23
408	6,685983E+22	6,686011E+22	3,913331E+22	3,913333E+22	1,337199E+23	7,826664E+22	2,119866E+23
409	6,685999E+22	6,685851E+22	3,913381E+22	3,913372E+22	1,337185E+23	7,826753E+22	2,119860E+23
410	6,685645E+22	6,685864E+22	3,913512E+22	3,913436E+22	1,337151E+23	7,826949E+22	2,119846E+23
411	6,685896E+22	6,685949E+22	3,913461E+22	3,913616E+22	1,337185E+23	7,827076E+22	2,119892E+23
412	6,685736E+22	6,685652E+22	3,913600E+22	3,913573E+22	1,337139E+23	7,827173E+22	2,119856E+23
413	6,685635E+22	6,685780E+22	3,913677E+22	3,913601E+22	1,337141E+23	7,827277E+22	2,119869E+23
414	6,685956E+22	6,685786E+22	3,913587E+22	3,913663E+22	1,337174E+23	7,827250E+22	2,119899E+23
415	6,685680E+22	6,685611E+22	3,913674E+22	3,913590E+22	1,337129E+23	7,827265E+22	2,119856E+23
416	6,685727E+22	6,685880E+22	3,913630E+22	3,913629E+22	1,337161E+23	7,827259E+22	2,119887E+23
417	6,685858E+22	6,685799E+22	3,913552E+22	3,913587E+22	1,337166E+23	7,827139E+22	2,119880E+23
418	6,685566E+22	6,685751E+22	3,913595E+22	3,913476E+22	1,337132E+23	7,827071E+22	2,119839E+23
419	6,685866E+22	6,685918E+22	3,913464E+22	3,913518E+22	1,337178E+23	7,826982E+22	2,119877E+23
420	6,685851E+22	6,685681E+22	3,913468E+22	3,913399E+22	1,337153E+23	7,826867E+22	2,119840E+23
421	6,685678E+22	6,685844E+22	3,913459E+22	3,913359E+22	1,337152E+23	7,826819E+22	2,119834E+23
422	6,685990E+22	6,685971E+22	3,913295E+22	3,913433E+22	1,337196E+23	7,826728E+22	2,119869E+23
423	6,685790E+22	6,685724E+22	3,913354E+22	3,913345E+22	1,337151E+23	7,826699E+22	2,119821E+23
424	6,685792E+22	6,685939E+22	3,913389E+22	3,913351E+22	1,337173E+23	7,826741E+22	2,119847E+23
425	6,686022E+22	6,685880E+22	3,913353E+22	3,913389E+22	1,337190E+23	7,826742E+22	2,119864E+23
426	6,685720E+22	6,685739E+22	3,913485E+22	3,913366E+22	1,337146E+23	7,826851E+22	2,119831E+23
427	6,685837E+22	6,685955E+22	3,913486E+22	3,913532E+22	1,337179E+23	7,827018E+22	2,119881E+23
428	6,685803E+22	6,685721E+22	3,913565E+22	3,913590E+22	1,337152E+23	7,827156E+22	2,119868E+23
429	6,685510E+22	6,685725E+22	3,913702E+22	3,913617E+22	1,337123E+23	7,827319E+22	2,119855E+23
430	6,685783E+22	6,685823E+22	3,913656E+22	3,913769E+22	1,337161E+23	7,827426E+22	2,119903E+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							
431	6,685692E+22	6,685471E+22	3,913761E+22	3,913738E+22	1,337116E+23	7,827498E+22	2,119866E+23
432	6,685587E+22	6,685654E+22	3,913835E+22	3,913745E+22	1,337124E+23	7,827580E+22	2,119882E+23
433	6,685825E+22	6,685727E+22	3,913742E+22	3,913833E+22	1,337155E+23	7,827575E+22	2,119913E+23
434	6,685540E+22	6,685557E+22	3,913797E+22	3,913744E+22	1,337110E+23	7,827541E+22	2,119864E+23
435	6,685592E+22	6,685815E+22	3,913760E+22	3,913771E+22	1,337141E+23	7,827531E+22	2,119894E+23
436	6,685733E+22	6,685647E+22	3,913719E+22	3,913720E+22	1,337138E+23	7,827439E+22	2,119882E+23
437	6,685504E+22	6,685605E+22	3,913751E+22	3,913589E+22	1,337111E+23	7,827340E+22	2,119845E+23
438	6,685767E+22	6,685834E+22	3,913613E+22	3,913650E+22	1,337160E+23	7,827263E+22	2,119886E+23
439	6,685765E+22	6,685572E+22	3,913570E+22	3,913576E+22	1,337134E+23	7,827146E+22	2,119848E+23
440	6,685583E+22	6,685752E+22	3,913577E+22	3,913508E+22	1,337134E+23	7,827086E+22	2,119842E+23
441	6,685871E+22	6,685893E+22	3,913449E+22	3,913578E+22	1,337176E+23	7,827028E+22	2,119879E+23
442	6,685720E+22	6,685620E+22	3,913497E+22	3,913463E+22	1,337134E+23	7,826960E+22	2,119830E+23
443	6,685711E+22	6,685847E+22	3,913549E+22	3,913488E+22	1,337156E+23	7,827038E+22	2,119860E+23
444	6,685889E+22	6,685752E+22	3,913548E+22	3,913570E+22	1,337164E+23	7,827118E+22	2,119876E+23
445	6,685577E+22	6,685634E+22	3,913666E+22	3,913562E+22	1,337121E+23	7,827228E+22	2,119844E+23
446	6,685652E+22	6,685867E+22	3,913674E+22	3,913734E+22	1,337152E+23	7,827407E+22	2,119893E+23
447	6,685690E+22	6,685532E+22	3,913727E+22	3,913795E+22	1,337122E+23	7,827522E+22	2,119874E+23
448	6,685454E+22	6,685539E+22	3,913875E+22	3,913767E+22	1,337099E+23	7,827642E+22	2,119864E+23
449	6,685713E+22	6,685691E+22	3,913837E+22	3,913921E+22	1,337140E+23	7,827758E+22	2,119916E+23
450	6,685616E+22	6,685389E+22	3,913900E+22	3,913884E+22	1,337101E+23	7,827784E+22	2,119879E+23
451	6,685461E+22	6,685639E+22	3,913967E+22	3,913909E+22	1,337110E+23	7,827876E+22	2,119898E+23
452	6,685646E+22	6,685648E+22	3,913915E+22	3,914004E+22	1,337129E+23	7,827919E+22	2,119921E+23
453	6,685402E+22	6,685462E+22	3,913975E+22	3,913883E+22	1,337086E+23	7,827858E+22	2,119872E+23
454	6,685465E+22	6,685712E+22	3,913942E+22	3,913897E+22	1,337118E+23	7,827839E+22	2,119902E+23
455	6,685666E+22	6,685462E+22	3,913860E+22	3,913878E+22	1,337113E+23	7,827738E+22	2,119887E+23
456	6,685455E+22	6,685467E+22	3,913876E+22	3,913736E+22	1,337092E+23	7,827612E+22	2,119853E+23
457	6,685660E+22	6,685753E+22	3,913726E+22	3,913817E+22	1,337141E+23	7,827543E+22	2,119896E+23
458	6,685665E+22	6,685500E+22	3,913658E+22	3,913718E+22	1,337116E+23	7,827376E+22	2,119854E+23
459	6,685505E+22	6,685689E+22	3,913686E+22	3,913627E+22	1,337119E+23	7,827313E+22	2,119851E+23
460	6,685774E+22	6,685758E+22	3,913624E+22	3,913693E+22	1,337153E+23	7,827318E+22	2,119885E+23
461	6,685642E+22	6,685516E+22	3,913682E+22	3,913583E+22	1,337116E+23	7,827265E+22	2,119842E+23
462	6,685567E+22	6,685781E+22	3,913744E+22	3,913645E+22	1,337135E+23	7,827389E+22	2,119874E+23
463	6,685733E+22	6,685624E+22	3,913711E+22	3,913789E+22	1,337136E+23	7,827500E+22	2,119886E+23
464	6,685440E+22	6,685495E+22	3,913839E+22	3,913759E+22	1,337094E+23	7,827597E+22	2,119853E+23
465	6,685515E+22	6,685724E+22	3,913862E+22	3,913924E+22	1,337124E+23	7,827785E+22	2,119903E+23
466	6,685620E+22	6,685388E+22	3,913882E+22	3,913956E+22	1,337101E+23	7,827839E+22	2,119885E+23
467	6,685401E+22	6,685440E+22	3,914025E+22	3,913926E+22	1,337084E+23	7,827951E+22	2,119879E+23
468	6,685596E+22	6,685589E+22	3,914022E+22	3,914102E+22	1,337118E+23	7,828125E+22	2,119931E+23
469	6,685478E+22	6,685344E+22	3,914066E+22	3,914058E+22	1,337082E+23	7,828124E+22	2,119895E+23
470	6,685279E+22	6,685590E+22	3,914150E+22	3,914072E+22	1,337087E+23	7,828221E+22	2,119909E+23
471	6,685524E+22	6,685484E+22	3,914076E+22	3,914170E+22	1,337101E+23	7,828247E+22	2,119925E+23
472	6,685339E+22	6,685274E+22	3,914135E+22	3,914006E+22	1,337061E+23	7,828141E+22	2,119875E+23
473	6,685381E+22	6,685569E+22	3,914092E+22	3,914036E+22	1,337095E+23	7,828128E+22	2,119908E+23
474	6,685595E+22	6,685364E+22	3,913947E+22	3,914017E+22	1,337096E+23	7,827963E+22	2,119892E+23
475	6,685358E+22	6,685428E+22	3,913951E+22	3,913879E+22	1,337079E+23	7,827830E+22	2,119862E+23
476	6,685530E+22	6,685673E+22	3,913863E+22	3,913956E+22	1,337120E+23	7,827819E+22	2,119902E+23
477	6,685572E+22	6,685431E+22	3,913809E+22	3,913822E+22	1,337100E+23	7,827631E+22	2,119863E+23
478	6,685403E+22	6,685616E+22	3,913876E+22	3,913732E+22	1,337102E+23	7,827608E+22	2,119863E+23
479	6,685686E+22	6,685605E+22	3,913798E+22	3,913853E+22	1,337129E+23	7,827652E+22	2,119894E+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							
480	6,685535E+22	6,685386E+22	3,913858E+22	3,913763E+22	1,337092E+23	7,827621E+22	2,119854E+23
481	6,685390E+22	6,685682E+22	3,913914E+22	3,913866E+22	1,337107E+23	7,827780E+22	2,119885E+23
482	6,685589E+22	6,685495E+22	3,913847E+22	3,913993E+22	1,337108E+23	7,827840E+22	2,119892E+23
483	6,685353E+22	6,685369E+22	3,913979E+22	3,913931E+22	1,337072E+23	7,827910E+22	2,119863E+23
484	6,685435E+22	6,685555E+22	3,914052E+22	3,914085E+22	1,337099E+23	7,828138E+22	2,119913E+23
485	6,685550E+22	6,685295E+22	3,914064E+22	3,914102E+22	1,337084E+23	7,828166E+22	2,119901E+23
486	6,685275E+22	6,685406E+22	3,914217E+22	3,914088E+22	1,337068E+23	7,828305E+22	2,119899E+23
487	6,685441E+22	6,685486E+22	3,914194E+22	3,914300E+22	1,337093E+23	7,828495E+22	2,119942E+23
488	6,685341E+22	6,685231E+22	3,914254E+22	3,914224E+22	1,337057E+23	7,828477E+22	2,119905E+23
489	6,685137E+22	6,685455E+22	3,914335E+22	3,914228E+22	1,337059E+23	7,828562E+22	2,119915E+23
490	6,685434E+22	6,685324E+22	3,914211E+22	3,914308E+22	1,337076E+23	7,828519E+22	2,119928E+23
491	6,685286E+22	6,685160E+22	3,914242E+22	3,914145E+22	1,337045E+23	7,828387E+22	2,119883E+23
492	6,685278E+22	6,685449E+22	3,914221E+22	3,914197E+22	1,337073E+23	7,828418E+22	2,119914E+23
493	6,685481E+22	6,685325E+22	3,914056E+22	3,914159E+22	1,337081E+23	7,828215E+22	2,119902E+23
494	6,685239E+22	6,685390E+22	3,914089E+22	3,913998E+22	1,337063E+23	7,828087E+22	2,119872E+23
495	6,685444E+22	6,685532E+22	3,914009E+22	3,914079E+22	1,337098E+23	7,828088E+22	2,119906E+23
496	6,685519E+22	6,685295E+22	3,913978E+22	3,913925E+22	1,337081E+23	7,827904E+22	2,119872E+23
497	6,685290E+22	6,685508E+22	3,914054E+22	3,913881E+22	1,337080E+23	7,827934E+22	2,119873E+23
498	6,685549E+22	6,685514E+22	3,913931E+22	3,914034E+22	1,337106E+23	7,827965E+22	2,119903E+23
499	6,685394E+22	6,685314E+22	3,913982E+22	3,913962E+22	1,337071E+23	7,827945E+22	2,119865E+23
500	6,685236E+22	6,685538E+22	3,914096E+22	3,914066E+22	1,337077E+23	7,828162E+22	2,119894E+23
501	6,685491E+22	6,685379E+22	3,914024E+22	3,914152E+22	1,337087E+23	7,828176E+22	2,119905E+23
502	6,685276E+22	6,685263E+22	3,914177E+22	3,914079E+22	1,337054E+23	7,828256E+22	2,119879E+23
503	6,685368E+22	6,685401E+22	3,914236E+22	3,914270E+22	1,337077E+23	7,828506E+22	2,119927E+23
504	6,685455E+22	6,685190E+22	3,914246E+22	3,914281E+22	1,337064E+23	7,828528E+22	2,119917E+23
505	6,685098E+22	6,685330E+22	3,914402E+22	3,914289E+22	1,337043E+23	7,828691E+22	2,119912E+23
506	6,685289E+22	6,685366E+22	3,914343E+22	3,914471E+22	1,337066E+23	7,828814E+22	2,119947E+23
507	6,685239E+22	6,685093E+22	3,914397E+22	3,914367E+22	1,337033E+23	7,828765E+22	2,119910E+23
508	6,685038E+22	6,685275E+22	3,914510E+22	3,914372E+22	1,337031E+23	7,828883E+22	2,119920E+23
509	6,685347E+22	6,685228E+22	3,914348E+22	3,914438E+22	1,337058E+23	7,828787E+22	2,119936E+23
510	6,685173E+22	6,685123E+22	3,914374E+22	3,914287E+22	1,337030E+23	7,828661E+22	2,119896E+23
511	6,685163E+22	6,685351E+22	3,914339E+22	3,914360E+22	1,337051E+23	7,828698E+22	2,119921E+23
512	6,685390E+22	6,685233E+22	3,914201E+22	3,914278E+22	1,337062E+23	7,828479E+22	2,119910E+23
513	6,685135E+22	6,685298E+22	3,914255E+22	3,914119E+22	1,337043E+23	7,828374E+22	2,119881E+23
514	6,685364E+22	6,685408E+22	3,914147E+22	3,914198E+22	1,337077E+23	7,828345E+22	2,119912E+23
515	6,685442E+22	6,685203E+22	3,914112E+22	3,914076E+22	1,337064E+23	7,828188E+22	2,119883E+23
516	6,685144E+22	6,685389E+22	3,914217E+22	3,914080E+22	1,337053E+23	7,828297E+22	2,119883E+23
517	6,685386E+22	6,685442E+22	3,914077E+22	3,914223E+22	1,337083E+23	7,828300E+22	2,119913E+23
518	6,685271E+22	6,685219E+22	3,914152E+22	3,914133E+22	1,337049E+23	7,828285E+22	2,119878E+23
519	6,685167E+22	6,685335E+22	3,914267E+22	3,914234E+22	1,337050E+23	7,828501E+22	2,119900E+23
520	6,685456E+22	6,685222E+22	3,914212E+22	3,914290E+22	1,337068E+23	7,828503E+22	2,119918E+23
521	6,685182E+22	6,685166E+22	3,914365E+22	3,914244E+22	1,337035E+23	7,828609E+22	2,119896E+23
522	6,685224E+22	6,685322E+22	3,914387E+22	3,914449E+22	1,337055E+23	7,828836E+22	2,119938E+23
523	6,685303E+22	6,685137E+22	3,914400E+22	3,914465E+22	1,337044E+23	7,828865E+22	2,119930E+23
524	6,684925E+22	6,685193E+22	3,914605E+22	3,914475E+22	1,337012E+23	7,829080E+22	2,119920E+23
525	6,685148E+22	6,685252E+22	3,914526E+22	3,914618E+22	1,337040E+23	7,829144E+22	2,119954E+23
526	6,685148E+22	6,684974E+22	3,914577E+22	3,914513E+22	1,337012E+23	7,829090E+22	2,119921E+23
527	6,684958E+22	6,685101E+22	3,914655E+22	3,914551E+22	1,337006E+23	7,829206E+22	2,119926E+23
528	6,685263E+22	6,685128E+22	3,914478E+22	3,914599E+22	1,337039E+23	7,829078E+22	2,119947E+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							
529	6,685046E+22	6,685059E+22	3,914501E+22	3,914445E+22	1,337011E+23	7,828946E+22	2,119905E+23
530	6,685071E+22	6,685249E+22	3,914444E+22	3,914479E+22	1,337032E+23	7,828923E+22	2,119924E+23
531	6,685339E+22	6,685139E+22	3,914319E+22	3,914372E+22	1,337048E+23	7,828691E+22	2,119917E+23
532	6,685051E+22	6,685164E+22	3,914425E+22	3,914242E+22	1,337022E+23	7,828668E+22	2,119888E+23
533	6,685241E+22	6,685348E+22	3,914296E+22	3,914329E+22	1,337059E+23	7,828624E+22	2,119921E+23
534	6,685294E+22	6,685157E+22	3,914269E+22	3,914245E+22	1,337045E+23	7,828515E+22	2,119897E+23
535	6,685006E+22	6,685245E+22	3,914371E+22	3,914281E+22	1,337025E+23	7,828651E+22	2,119890E+23
536	6,685298E+22	6,685289E+22	3,914248E+22	3,914381E+22	1,337059E+23	7,828629E+22	2,119922E+23
537	6,685181E+22	6,685083E+22	3,914334E+22	3,914288E+22	1,337026E+23	7,828622E+22	2,119889E+23
538	6,685111E+22	6,685192E+22	3,914413E+22	3,914384E+22	1,337030E+23	7,828797E+22	2,119910E+23
539	6,685380E+22	6,685137E+22	3,914361E+22	3,914457E+22	1,337052E+23	7,828818E+22	2,119933E+23
540	6,685020E+22	6,685080E+22	3,914556E+22	3,914456E+22	1,337010E+23	7,829012E+22	2,119911E+23
541	6,685029E+22	6,685270E+22	3,914566E+22	3,914632E+22	1,337030E+23	7,829198E+22	2,119950E+23
542	6,685150E+22	6,685038E+22	3,914603E+22	3,914636E+22	1,337019E+23	7,829240E+22	2,119943E+23
543	6,684823E+22	6,684978E+22	3,914793E+22	3,914650E+22	1,336980E+23	7,829444E+22	2,119924E+23
544	6,685083E+22	6,685074E+22	3,914704E+22	3,914765E+22	1,337016E+23	7,829468E+22	2,119963E+23
545	6,685046E+22	6,684872E+22	3,914729E+22	3,914680E+22	1,336992E+23	7,829409E+22	2,119933E+23
546	6,684856E+22	6,685013E+22	3,914749E+22	3,914712E+22	1,336987E+23	7,829462E+22	2,119933E+23
547	6,685172E+22	6,685078E+22	3,914582E+22	3,914735E+22	1,337025E+23	7,829317E+22	2,119957E+23
548	6,684941E+22	6,684963E+22	3,914659E+22	3,914573E+22	1,336990E+23	7,829232E+22	2,119914E+23
549	6,684967E+22	6,685185E+22	3,914597E+22	3,914566E+22	1,337015E+23	7,829164E+22	2,119931E+23
550	6,685261E+22	6,685068E+22	3,914489E+22	3,914487E+22	1,337033E+23	7,828976E+22	2,119931E+23
551	6,684947E+22	6,685009E+22	3,914577E+22	3,914418E+22	1,336996E+23	7,828995E+22	2,119895E+23
552	6,685110E+22	6,685242E+22	3,914444E+22	3,914507E+22	1,337035E+23	7,828951E+22	2,119930E+23
553	6,685148E+22	6,685055E+22	3,914415E+22	3,914429E+22	1,337020E+23	7,828844E+22	2,119905E+23
554	6,684917E+22	6,685080E+22	3,914488E+22	3,914434E+22	1,337000E+23	7,828922E+22	2,119892E+23
555	6,685261E+22	6,685158E+22	3,914383E+22	3,914508E+22	1,337042E+23	7,828890E+22	2,119931E+23
556	6,685108E+22	6,684954E+22	3,914512E+22	3,914442E+22	1,337006E+23	7,828954E+22	2,119902E+23
557	6,684976E+22	6,685157E+22	3,914581E+22	3,914534E+22	1,337013E+23	7,829114E+22	2,119925E+23
558	6,685219E+22	6,685115E+22	3,914550E+22	3,914643E+22	1,337033E+23	7,829193E+22	2,119953E+23
559	6,684846E+22	6,684937E+22	3,914758E+22	3,914670E+22	1,336978E+23	7,829428E+22	2,119921E+23
560	6,684892E+22	6,685115E+22	3,914780E+22	3,914806E+22	1,337001E+23	7,829586E+22	2,119959E+23
561	6,685031E+22	6,684878E+22	3,914808E+22	3,914811E+22	1,336991E+23	7,829619E+22	2,119953E+23
562	6,684758E+22	6,684794E+22	3,914934E+22	3,914822E+22	1,336955E+23	7,829756E+22	2,119931E+23
563	6,685023E+22	6,684965E+22	3,914821E+22	3,914931E+22	1,336999E+23	7,829752E+22	2,119974E+23
564	6,684924E+22	6,684792E+22	3,914865E+22	3,914864E+22	1,336972E+23	7,829729E+22	2,119945E+23
565	6,684727E+22	6,684982E+22	3,914871E+22	3,914838E+22	1,336971E+23	7,829709E+22	2,119942E+23
566	6,685082E+22	6,685015E+22	3,914740E+22	3,914838E+22	1,337010E+23	7,829578E+22	2,119968E+23
567	6,684866E+22	6,684808E+22	3,914824E+22	3,914693E+22	1,336967E+23	7,829517E+22	2,119919E+23
568	6,684888E+22	6,685059E+22	3,914761E+22	3,914676E+22	1,336995E+23	7,829437E+22	2,119938E+23
569	6,685112E+22	6,684988E+22	3,914642E+22	3,914645E+22	1,337010E+23	7,829287E+22	2,119939E+23
570	6,684813E+22	6,684900E+22	3,914676E+22	3,914595E+22	1,336971E+23	7,829272E+22	2,119898E+23
571	6,685006E+22	6,685132E+22	3,914557E+22	3,914664E+22	1,337014E+23	7,829221E+22	2,119936E+23
572	6,685047E+22	6,684923E+22	3,914574E+22	3,914591E+22	1,336997E+23	7,829165E+22	2,119913E+23
573	6,684839E+22	6,684994E+22	3,914635E+22	3,914552E+22	1,336983E+23	7,829187E+22	2,119902E+23
574	6,685197E+22	6,685084E+22	3,914561E+22	3,914651E+22	1,337028E+23	7,829212E+22	2,119949E+23
575	6,684992E+22	6,684835E+22	3,914694E+22	3,914641E+22	1,336983E+23	7,829335E+22	2,119916E+23
576	6,684819E+22	6,685069E+22	3,914774E+22	3,914726E+22	1,336989E+23	7,829500E+22	2,119939E+23
577	6,685038E+22	6,685011E+22	3,914758E+22	3,914842E+22	1,337005E+23	7,829600E+22	2,119965E+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	6,684737E+22	6,684744E+22	3,914927E+22	3,914851E+22	1,336948E+23	7,829777E+22	2,119926E+23
579	6,684830E+22	6,684940E+22	3,914945E+22	3,914959E+22	1,336977E+23	7,829904E+22	2,119967E+23
580	6,684943E+22	6,684731E+22	3,914980E+22	3,914992E+22	1,336967E+23	7,829972E+22	2,119965E+23
581	6,684635E+22	6,684747E+22	3,915063E+22	3,914977E+22	1,336938E+23	7,830040E+22	2,119942E+23
582	6,684909E+22	6,684945E+22	3,914968E+22	3,915092E+22	1,336985E+23	7,830060E+22	2,119991E+23
583	6,684803E+22	6,684679E+22	3,915022E+22	3,915021E+22	1,336948E+23	7,830043E+22	2,119953E+23
584	6,684627E+22	6,684877E+22	3,915047E+22	3,914944E+22	1,336950E+23	7,829991E+22	2,119950E+23
585	6,684977E+22	6,684913E+22	3,914915E+22	3,914952E+22	1,336989E+23	7,829868E+22	2,119976E+23
586	6,684780E+22	6,684654E+22	3,914946E+22	3,914836E+22	1,336943E+23	7,829782E+22	2,119922E+23
587	6,684782E+22	6,684961E+22	3,914871E+22	3,914835E+22	1,336974E+23	7,829707E+22	2,119945E+23
588	6,684958E+22	6,684891E+22	3,914768E+22	3,914838E+22	1,336985E+23	7,829607E+22	2,119946E+23
589	6,684684E+22	6,684823E+22	3,914786E+22	3,914734E+22	1,336951E+23	7,829520E+22	2,119903E+23
590	6,684953E+22	6,685029E+22	3,914703E+22	3,914786E+22	1,336998E+23	7,829489E+22	2,119947E+23
591	6,684996E+22	6,684760E+22	3,914735E+22	3,914728E+22	1,336976E+23	7,829463E+22	2,119922E+23
592	6,684771E+22	6,684895E+22	3,914813E+22	3,914681E+22	1,336967E+23	7,829494E+22	2,119916E+23
593	6,685045E+22	6,685033E+22	3,914751E+22	3,914823E+22	1,337008E+23	7,829574E+22	2,119965E+23
594	6,684838E+22	6,684730E+22	3,914855E+22	3,914843E+22	1,336957E+23	7,829698E+22	2,119927E+23
595	6,684682E+22	6,684946E+22	3,914955E+22	3,914909E+22	1,336963E+23	7,829864E+22	2,119949E+23
596	6,684892E+22	6,684856E+22	3,914967E+22	3,915041E+22	1,336975E+23	7,830008E+22	2,119976E+23
597	6,684634E+22	6,684618E+22	3,915097E+22	3,915010E+22	1,336925E+23	7,830107E+22	2,119936E+23
598	6,684761E+22	6,684823E+22	3,915118E+22	3,915136E+22	1,336958E+23	7,830254E+22	2,119984E+23
599	6,684825E+22	6,684611E+22	3,915136E+22	3,915201E+22	1,336944E+23	7,830337E+22	2,119977E+23
600	6,684514E+22	6,684673E+22	3,915213E+22	3,915142E+22	1,336919E+23	7,830355E+22	2,119954E+23
601	6,684765E+22	6,684861E+22	3,915141E+22	3,915234E+22	1,336963E+23	7,830375E+22	2,120000E+23
602	6,684722E+22	6,684533E+22	3,915160E+22	3,915143E+22	1,336926E+23	7,830303E+22	2,119956E+23
603	6,684567E+22	6,684743E+22	3,915189E+22	3,915046E+22	1,336931E+23	7,830234E+22	2,119954E+23
604	6,684852E+22	6,684807E+22	3,915067E+22	3,915103E+22	1,336966E+23	7,830170E+22	2,119983E+23
605	6,684633E+22	6,684609E+22	3,915053E+22	3,914979E+22	1,336924E+23	7,830031E+22	2,119927E+23
606	6,684663E+22	6,684897E+22	3,914998E+22	3,914995E+22	1,336956E+23	7,829993E+22	2,119955E+23
607	6,684847E+22	6,684751E+22	3,914912E+22	3,915001E+22	1,336960E+23	7,829913E+22	2,119951E+23
608	6,684624E+22	6,684702E+22	3,914942E+22	3,914847E+22	1,336933E+23	7,829790E+22	2,119912E+23
609	6,684884E+22	6,684925E+22	3,914882E+22	3,914908E+22	1,336981E+23	7,829790E+22	2,119960E+23
610	6,684931E+22	6,684635E+22	3,914875E+22	3,914888E+22	1,336957E+23	7,829763E+22	2,119933E+23
611	6,684656E+22	6,684820E+22	3,914966E+22	3,914857E+22	1,336948E+23	7,829824E+22	2,119930E+23
612	6,684857E+22	6,684951E+22	3,914935E+22	3,915038E+22	1,336981E+23	7,829973E+22	2,119978E+23
613	6,684672E+22	6,684630E+22	3,915029E+22	3,915016E+22	1,336930E+23	7,830045E+22	2,119935E+23
614	6,684594E+22	6,684804E+22	3,915151E+22	3,915081E+22	1,336940E+23	7,830232E+22	2,119963E+23
615	6,684801E+22	6,684657E+22	3,915155E+22	3,915227E+22	1,336946E+23	7,830383E+22	2,119984E+23
616	6,684542E+22	6,684495E+22	3,915268E+22	3,915177E+22	1,336904E+23	7,830446E+22	2,119948E+23
617	6,684622E+22	6,684758E+22	3,915286E+22	3,915317E+22	1,336938E+23	7,830603E+22	2,119998E+23
618	6,684702E+22	6,684503E+22	3,915269E+22	3,915378E+22	1,336920E+23	7,830647E+22	2,119985E+23
619	6,684416E+22	6,684573E+22	3,915370E+22	3,915275E+22	1,336899E+23	7,830645E+22	2,119963E+23
620	6,684645E+22	6,684746E+22	3,915322E+22	3,915371E+22	1,336939E+23	7,830693E+22	2,120008E+23
621	6,684618E+22	6,684441E+22	3,915308E+22	3,915254E+22	1,336906E+23	7,830562E+22	2,119962E+23
622	6,684481E+22	6,684651E+22	3,915334E+22	3,915196E+22	1,336913E+23	7,830529E+22	2,119966E+23
623	6,684702E+22	6,684689E+22	3,915197E+22	3,915293E+22	1,336939E+23	7,830491E+22	2,119988E+23
624	6,684512E+22	6,684516E+22	3,915178E+22	3,915133E+22	1,336903E+23	7,830311E+22	2,119934E+23
625	6,684565E+22	6,684781E+22	3,915149E+22	3,915125E+22	1,336935E+23	7,830274E+22	2,119962E+23
626	6,684812E+22	6,684591E+22	3,915034E+22	3,915121E+22	1,336940E+23	7,830155E+22	2,119956E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
627	6,684601E+22	6,684589E+22	3,915080E+22	3,914953E+22	1,336919E+23	7,830033E+22	2,119922E+23
628	6,684759E+22	6,684858E+22	3,915047E+22	3,915069E+22	1,336962E+23	7,830117E+22	2,119973E+23
629	6,684767E+22	6,684619E+22	3,915021E+22	3,915051E+22	1,336939E+23	7,830072E+22	2,119946E+23
630	6,684509E+22	6,684746E+22	3,915147E+22	3,915048E+22	1,336926E+23	7,830195E+22	2,119945E+23
631	6,684685E+22	6,684793E+22	3,915140E+22	3,915242E+22	1,336948E+23	7,830382E+22	2,119986E+23
632	6,684571E+22	6,684472E+22	3,915226E+22	3,915183E+22	1,336904E+23	7,830409E+22	2,119945E+23
633	6,684496E+22	6,684638E+22	3,915355E+22	3,915255E+22	1,336913E+23	7,830609E+22	2,119974E+23
634	6,684720E+22	6,684498E+22	3,915301E+22	3,915428E+22	1,336922E+23	7,830729E+22	2,119995E+23
635	6,684446E+22	6,684401E+22	3,915407E+22	3,915360E+22	1,336885E+23	7,830767E+22	2,119961E+23
636	6,684468E+22	6,684677E+22	3,915453E+22	3,915504E+22	1,336914E+23	7,830957E+22	2,120010E+23
637	6,684579E+22	6,684429E+22	3,915422E+22	3,915500E+22	1,336901E+23	7,830922E+22	2,119993E+23
638	6,684350E+22	6,684463E+22	3,915545E+22	3,915395E+22	1,336881E+23	7,830940E+22	2,119975E+23
639	6,684528E+22	6,684601E+22	3,915497E+22	3,915516E+22	1,336913E+23	7,831013E+22	2,120014E+23
640	6,684497E+22	6,684352E+22	3,915458E+22	3,915398E+22	1,336885E+23	7,830856E+22	2,119971E+23
641	6,684329E+22	6,684572E+22	3,915484E+22	3,915360E+22	1,336890E+23	7,830844E+22	2,119975E+23
642	6,684592E+22	6,684555E+22	3,915306E+22	3,915460E+22	1,336915E+23	7,830766E+22	2,119991E+23
643	6,684454E+22	6,684397E+22	3,915302E+22	3,915254E+22	1,336885E+23	7,830556E+22	2,119941E+23
644	6,684495E+22	6,684672E+22	3,915296E+22	3,915255E+22	1,336917E+23	7,830550E+22	2,119972E+23
645	6,684744E+22	6,684519E+22	3,915163E+22	3,915227E+22	1,336926E+23	7,830390E+22	2,119965E+23
646	6,684526E+22	6,684536E+22	3,915230E+22	3,915112E+22	1,336906E+23	7,830341E+22	2,119940E+23
647	6,684581E+22	6,684770E+22	3,915211E+22	3,915265E+22	1,336935E+23	7,830477E+22	2,119983E+23
648	6,684602E+22	6,684521E+22	3,915199E+22	3,915228E+22	1,336912E+23	7,830427E+22	2,119955E+23
649	6,684376E+22	6,684593E+22	3,915354E+22	3,915216E+22	1,336897E+23	7,830570E+22	2,119954E+23
650	6,684611E+22	6,684575E+22	3,915305E+22	3,915414E+22	1,336919E+23	7,830719E+22	2,119990E+23
651	6,684521E+22	6,684309E+22	3,915389E+22	3,915342E+22	1,336883E+23	7,830731E+22	2,119956E+23
652	6,684376E+22	6,684538E+22	3,915517E+22	3,915452E+22	1,336891E+23	7,830969E+22	2,119988E+23
653	6,684575E+22	6,684456E+22	3,915441E+22	3,915596E+22	1,336903E+23	7,831037E+22	2,120007E+23
654	6,684339E+22	6,684341E+22	3,915580E+22	3,915530E+22	1,336868E+23	7,831110E+22	2,119979E+23
655	6,684317E+22	6,684555E+22	3,915655E+22	3,915664E+22	1,336887E+23	7,831319E+22	2,120019E+23
656	6,684477E+22	6,684318E+22	3,915619E+22	3,915630E+22	1,336879E+23	7,831249E+22	2,120004E+23
657	6,684241E+22	6,684332E+22	3,915741E+22	3,915545E+22	1,336857E+23	7,831287E+22	2,119986E+23
658	6,684408E+22	6,684457E+22	3,915625E+22	3,915704E+22	1,336887E+23	7,831329E+22	2,120019E+23
659	6,684387E+22	6,684249E+22	3,915570E+22	3,915572E+22	1,336864E+23	7,831142E+22	2,119978E+23
660	6,684198E+22	6,684464E+22	3,915608E+22	3,915533E+22	1,336866E+23	7,831141E+22	2,119980E+23
661	6,684522E+22	6,684461E+22	3,915417E+22	3,915562E+22	1,336898E+23	7,830979E+22	2,119996E+23
662	6,684450E+22	6,684294E+22	3,915428E+22	3,915353E+22	1,336874E+23	7,830781E+22	2,119952E+23
663	6,684400E+22	6,684569E+22	3,915446E+22	3,915379E+22	1,336897E+23	7,830825E+22	2,119979E+23
664	6,684625E+22	6,684482E+22	3,915310E+22	3,915358E+22	1,336911E+23	7,830668E+22	2,119977E+23
665	6,684358E+22	6,684466E+22	3,915411E+22	3,915278E+22	1,336882E+23	7,830689E+22	2,119951E+23
666	6,684427E+22	6,684624E+22	3,915374E+22	3,915451E+22	1,336905E+23	7,830825E+22	2,119988E+23
667	6,684507E+22	6,684360E+22	3,915378E+22	3,915389E+22	1,336887E+23	7,830767E+22	2,119963E+23
668	6,684276E+22	6,684425E+22	3,915539E+22	3,915398E+22	1,336870E+23	7,830937E+22	2,119964E+23
669	6,684531E+22	6,684449E+22	3,915455E+22	3,915575E+22	1,336898E+23	7,831029E+22	2,120001E+23
670	6,684447E+22	6,684230E+22	3,915536E+22	3,915537E+22	1,336868E+23	7,831073E+22	2,119975E+23
671	6,684211E+22	6,684456E+22	3,915685E+22	3,915660E+22	1,336867E+23	7,831345E+22	2,120001E+23
672	6,684437E+22	6,684382E+22	3,915628E+22	3,915757E+22	1,336882E+23	7,831384E+22	2,120020E+23
673	6,684223E+22	6,684221E+22	3,915802E+22	3,915676E+22	1,336844E+23	7,831478E+22	2,119992E+23
674	6,684223E+22	6,684378E+22	3,915832E+22	3,915817E+22	1,336860E+23	7,831648E+22	2,120025E+23
675	6,684388E+22	6,684181E+22	3,915784E+22	3,915782E+22	1,336857E+23	7,831566E+22	2,120013E+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							
676	6,684093E+22	6,684234E+22	3,915884E+22	3,915739E+22	1,336833E+23	7,831623E+22	2,119995E+23
677	6,684268E+22	6,684376E+22	3,915729E+22	3,915858E+22	1,336864E+23	7,831587E+22	2,120023E+23
678	6,684316E+22	6,684166E+22	3,915687E+22	3,915717E+22	1,336848E+23	7,831405E+22	2,119989E+23
679	6,684110E+22	6,684342E+22	3,915744E+22	3,915655E+22	1,336845E+23	7,831399E+22	2,119985E+23
680	6,684468E+22	6,684367E+22	3,915563E+22	3,915649E+22	1,336884E+23	7,831212E+22	2,120005E+23
681	6,684375E+22	6,684213E+22	3,915598E+22	3,915469E+22	1,336859E+23	7,831067E+22	2,119965E+23
682	6,684276E+22	6,684465E+22	3,915575E+22	3,915541E+22	1,336874E+23	7,831116E+22	2,119986E+23
683	6,684488E+22	6,684393E+22	3,915457E+22	3,915526E+22	1,336888E+23	7,830983E+22	2,119986E+23
684	6,684203E+22	6,684338E+22	3,915579E+22	3,915465E+22	1,336854E+23	7,831044E+22	2,119959E+23
685	6,684322E+22	6,684474E+22	3,915527E+22	3,915591E+22	1,336880E+23	7,831118E+22	2,119991E+23
686	6,684470E+22	6,684221E+22	3,915533E+22	3,915549E+22	1,336869E+23	7,831082E+22	2,119977E+23
687	6,684164E+22	6,684297E+22	3,915704E+22	3,915583E+22	1,336846E+23	7,831287E+22	2,119975E+23
688	6,684406E+22	6,684395E+22	3,915621E+22	3,915751E+22	1,336880E+23	7,831372E+22	2,120017E+23
689	6,684302E+22	6,684168E+22	3,915736E+22	3,915722E+22	1,336847E+23	7,831458E+22	2,119993E+23
690	6,684071E+22	6,684327E+22	3,915870E+22	3,915843E+22	1,336840E+23	7,831713E+22	2,120011E+23
691	6,684345E+22	6,684248E+22	3,915830E+22	3,915910E+22	1,336859E+23	7,831741E+22	2,120033E+23
692	6,684105E+22	6,684071E+22	3,916003E+22	3,915856E+22	1,336818E+23	7,831859E+22	2,120004E+23
693	6,684108E+22	6,684256E+22	3,915983E+22	3,915978E+22	1,336836E+23	7,831960E+22	2,120032E+23
694	6,684291E+22	6,684090E+22	3,915904E+22	3,915972E+22	1,336838E+23	7,831876E+22	2,120026E+23
695	6,683932E+22	6,684123E+22	3,916010E+22	3,915924E+22	1,336806E+23	7,831934E+22	2,119999E+23
696	6,684176E+22	6,684280E+22	3,915862E+22	3,915976E+22	1,336846E+23	7,831838E+22	2,120029E+23
697	6,684263E+22	6,684050E+22	3,915846E+22	3,915809E+22	1,336831E+23	7,831655E+22	2,119997E+23
698	6,684063E+22	6,684206E+22	3,915872E+22	3,915758E+22	1,336827E+23	7,831629E+22	2,119990E+23
699	6,684401E+22	6,684287E+22	3,915700E+22	3,915759E+22	1,336869E+23	7,831459E+22	2,120015E+23
700	6,684217E+22	6,684160E+22	3,915743E+22	3,915638E+22	1,336838E+23	7,831382E+22	2,119976E+23
701	6,684108E+22	6,684395E+22	3,915708E+22	3,915692E+22	1,336850E+23	7,831400E+22	2,119990E+23
702	6,684377E+22	6,684291E+22	3,915607E+22	3,915694E+22	1,336867E+23	7,831301E+22	2,119997E+23
703	6,684080E+22	6,684184E+22	3,915751E+22	3,915638E+22	1,336826E+23	7,831389E+22	2,119965E+23
704	6,684253E+22	6,684338E+22	3,915700E+22	3,915739E+22	1,336859E+23	7,831439E+22	2,120003E+23
705	6,684388E+22	6,684115E+22	3,915718E+22	3,915726E+22	1,336850E+23	7,831444E+22	2,119995E+23
706	6,684045E+22	6,684187E+22	3,915846E+22	3,915791E+22	1,336823E+23	7,831636E+22	2,119987E+23
707	6,684282E+22	6,684302E+22	3,915795E+22	3,915938E+22	1,336858E+23	7,831733E+22	2,120032E+23
708	6,684165E+22	6,684055E+22	3,915938E+22	3,915910E+22	1,336822E+23	7,831848E+22	2,120007E+23
709	6,683969E+22	6,684179E+22	3,916051E+22	3,915977E+22	1,336815E+23	7,832028E+22	2,120018E+23
710	6,684273E+22	6,684120E+22	3,916004E+22	3,916069E+22	1,336839E+23	7,832073E+22	2,120047E+23
711	6,683957E+22	6,683948E+22	3,916167E+22	3,916041E+22	1,336790E+23	7,832208E+22	2,120011E+23
712	6,683955E+22	6,684172E+22	3,916130E+22	3,916143E+22	1,336813E+23	7,832274E+22	2,120040E+23
713	6,684155E+22	6,684006E+22	3,916068E+22	3,916134E+22	1,336816E+23	7,832202E+22	2,120036E+23
714	6,683837E+22	6,683982E+22	3,916138E+22	3,916069E+22	1,336782E+23	7,832207E+22	2,120003E+23
715	6,684133E+22	6,684154E+22	3,916011E+22	3,916082E+22	1,336829E+23	7,832093E+22	2,120038E+23
716	6,684189E+22	6,683951E+22	3,915997E+22	3,915937E+22	1,336814E+23	7,831934E+22	2,120007E+23
717	6,683963E+22	6,684130E+22	3,915990E+22	3,915877E+22	1,336809E+23	7,831868E+22	2,119996E+23
718	6,684280E+22	6,684249E+22	3,915815E+22	3,915925E+22	1,336853E+23	7,831739E+22	2,120027E+23
719	6,684032E+22	6,684065E+22	3,915889E+22	3,915824E+22	1,336810E+23	7,831713E+22	2,119981E+23
720	6,683985E+22	6,684273E+22	3,915874E+22	3,915834E+22	1,336826E+23	7,831708E+22	2,119997E+23
721	6,684303E+22	6,684143E+22	3,915795E+22	3,915835E+22	1,336845E+23	7,831629E+22	2,120008E+23
722	6,684017E+22	6,684013E+22	3,915894E+22	3,915800E+22	1,336803E+23	7,831694E+22	2,119972E+23
723	6,684190E+22	6,684226E+22	3,915855E+22	3,915904E+22	1,336842E+23	7,831759E+22	2,120017E+23
724	6,684246E+22	6,684045E+22	3,915881E+22	3,915925E+22	1,336829E+23	7,831807E+22	2,120010E+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							
725	6,683907E+22	6,684109E+22	3,916008E+22	3,915954E+22	1,336802E+23	7,831963E+22	2,119998E+23
726	6,684182E+22	6,684209E+22	3,915976E+22	3,916102E+22	1,336839E+23	7,832078E+22	2,120047E+23
727	6,684018E+22	6,683912E+22	3,916150E+22	3,916085E+22	1,336793E+23	7,832234E+22	2,120016E+23
728	6,683854E+22	6,684051E+22	3,916253E+22	3,916135E+22	1,336790E+23	7,832388E+22	2,120029E+23
729	6,684139E+22	6,684007E+22	3,916196E+22	3,916258E+22	1,336815E+23	7,832453E+22	2,120060E+23
730	6,683807E+22	6,683815E+22	3,916297E+22	3,916253E+22	1,336762E+23	7,832550E+22	2,120017E+23
731	6,683853E+22	6,684041E+22	3,916274E+22	3,916312E+22	1,336789E+23	7,832586E+22	2,120048E+23
732	6,684058E+22	6,683884E+22	3,916220E+22	3,916281E+22	1,336794E+23	7,832501E+22	2,120044E+23
733	6,683791E+22	6,683862E+22	3,916262E+22	3,916160E+22	1,336765E+23	7,832421E+22	2,120007E+23
734	6,684092E+22	6,684081E+22	3,916133E+22	3,916191E+22	1,336817E+23	7,832324E+22	2,120050E+23
735	6,684043E+22	6,683896E+22	3,916136E+22	3,916085E+22	1,336794E+23	7,832221E+22	2,120016E+23
736	6,683804E+22	6,684087E+22	3,916134E+22	3,916018E+22	1,336789E+23	7,832152E+22	2,120004E+23
737	6,684124E+22	6,684170E+22	3,915990E+22	3,916079E+22	1,336829E+23	7,832069E+22	2,120036E+23
738	6,683921E+22	6,683904E+22	3,916035E+22	3,915988E+22	1,336782E+23	7,832023E+22	2,119985E+23
739	6,683939E+22	6,684095E+22	3,916041E+22	3,915977E+22	1,336803E+23	7,832018E+22	2,120005E+23
740	6,684235E+22	6,684009E+22	3,915959E+22	3,916007E+22	1,336824E+23	7,831966E+22	2,120021E+23
741	6,683940E+22	6,683909E+22	3,916013E+22	3,915959E+22	1,336785E+23	7,831973E+22	2,119982E+23
742	6,684082E+22	6,684175E+22	3,915983E+22	3,916089E+22	1,336826E+23	7,832072E+22	2,120033E+23
743	6,684077E+22	6,683963E+22	3,916058E+22	3,916111E+22	1,336804E+23	7,832169E+22	2,120021E+23
744	6,683778E+22	6,683992E+22	3,916216E+22	3,916095E+22	1,336777E+23	7,832311E+22	2,120008E+23
745	6,684067E+22	6,684080E+22	3,916209E+22	3,916253E+22	1,336815E+23	7,832462E+22	2,120061E+23
746	6,683896E+22	6,683745E+22	3,916331E+22	3,916276E+22	1,336764E+23	7,832607E+22	2,120025E+23
747	6,683731E+22	6,683912E+22	3,916430E+22	3,916332E+22	1,336764E+23	7,832762E+22	2,120040E+23
748	6,683971E+22	6,683905E+22	3,916358E+22	3,916471E+22	1,336788E+23	7,832829E+22	2,120071E+23
749	6,683692E+22	6,683696E+22	3,916424E+22	3,916411E+22	1,336739E+23	7,832835E+22	2,120022E+23
750	6,683799E+22	6,683942E+22	3,916406E+22	3,916449E+22	1,336774E+23	7,832854E+22	2,120059E+23
751	6,683968E+22	6,683778E+22	3,916378E+22	3,916410E+22	1,336775E+23	7,832788E+22	2,120053E+23
752	6,683715E+22	6,683788E+22	3,916420E+22	3,916266E+22	1,336750E+23	7,832687E+22	2,120019E+23
753	6,683967E+22	6,684033E+22	3,916296E+22	3,916332E+22	1,336800E+23	7,832628E+22	2,120063E+23
754	6,683880E+22	6,683799E+22	3,916263E+22	3,916265E+22	1,336768E+23	7,832527E+22	2,120021E+23
755	6,683695E+22	6,683945E+22	3,916288E+22	3,916174E+22	1,336764E+23	7,832462E+22	2,120010E+23
756	6,684020E+22	6,684013E+22	3,916151E+22	3,916228E+22	1,336803E+23	7,832379E+22	2,120041E+23
757	6,683880E+22	6,683745E+22	3,916155E+22	3,916106E+22	1,336762E+23	7,832262E+22	2,119989E+23
758	6,683910E+22	6,683995E+22	3,916150E+22	3,916117E+22	1,336791E+23	7,832267E+22	2,120017E+23
759	6,684092E+22	6,683944E+22	3,916098E+22	3,916180E+22	1,336804E+23	7,832278E+22	2,120031E+23
760	6,683793E+22	6,683873E+22	3,916178E+22	3,916112E+22	1,336767E+23	7,832290E+22	2,119996E+23
761	6,683930E+22	6,684108E+22	3,916194E+22	3,916247E+22	1,336804E+23	7,832441E+22	2,120048E+23
762	6,683938E+22	6,683817E+22	3,916258E+22	3,916292E+22	1,336776E+23	7,832550E+22	2,120031E+23
763	6,683692E+22	6,683812E+22	3,916436E+22	3,916270E+22	1,336750E+23	7,832706E+22	2,120021E+23
764	6,683928E+22	6,683930E+22	3,916412E+22	3,916461E+22	1,336786E+23	7,832873E+22	2,120073E+23
765	6,683770E+22	6,683614E+22	3,916468E+22	3,916482E+22	1,336738E+23	7,832950E+22	2,120033E+23
766	6,683618E+22	6,683811E+22	3,916551E+22	3,916539E+22	1,336743E+23	7,833090E+22	2,120052E+23
767	6,683832E+22	6,683788E+22	3,916516E+22	3,916651E+22	1,336762E+23	7,833166E+22	2,120079E+23
768	6,683628E+22	6,683586E+22	3,916589E+22	3,916518E+22	1,336721E+23	7,833106E+22	2,120032E+23
769	6,683740E+22	6,683853E+22	3,916587E+22	3,916550E+22	1,336759E+23	7,833137E+22	2,120073E+23
770	6,683872E+22	6,683680E+22	3,916521E+22	3,916547E+22	1,336755E+23	7,833068E+22	2,120062E+23
771	6,683600E+22	6,683697E+22	3,916575E+22	3,916415E+22	1,336730E+23	7,832990E+22	2,120029E+23
772	6,683785E+22	6,683960E+22	3,916454E+22	3,916501E+22	1,336775E+23	7,832955E+22	2,120070E+23
773	6,683762E+22	6,683668E+22	3,916384E+22	3,916405E+22	1,336743E+23	7,832788E+22	2,120022E+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	6,683634E+22	6,683809E+22	3,916408E+22	3,916312E+22	1,336744E+23	7,832720E+22	2,120016E+23
775	6,683934E+22	6,683878E+22	3,916295E+22	3,916374E+22	1,336781E+23	7,832669E+22	2,120048E+23
776	6,683813E+22	6,683654E+22	3,916292E+22	3,916234E+22	1,336747E+23	7,832526E+22	2,119999E+23
777	6,683797E+22	6,683956E+22	3,916302E+22	3,916277E+22	1,336775E+23	7,832579E+22	2,120033E+23
778	6,683940E+22	6,683862E+22	3,916242E+22	3,916368E+22	1,336780E+23	7,832610E+22	2,120041E+23
779	6,683684E+22	6,683737E+22	3,916379E+22	3,916278E+22	1,336742E+23	7,832657E+22	2,120008E+23
780	6,683795E+22	6,683963E+22	3,916414E+22	3,916412E+22	1,336776E+23	7,832826E+22	2,120058E+23
781	6,683849E+22	6,683647E+22	3,916434E+22	3,916454E+22	1,336750E+23	7,832888E+22	2,120038E+23
782	6,683604E+22	6,683684E+22	3,916590E+22	3,916464E+22	1,336729E+23	7,833055E+22	2,120034E+23
783	6,683755E+22	6,683825E+22	3,916578E+22	3,916678E+22	1,336758E+23	7,833256E+22	2,120084E+23
784	6,683630E+22	6,683532E+22	3,916632E+22	3,916655E+22	1,336716E+23	7,833287E+22	2,120045E+23
785	6,683514E+22	6,683725E+22	3,916734E+22	3,916694E+22	1,336724E+23	7,833428E+22	2,120067E+23
786	6,683741E+22	6,683654E+22	3,916686E+22	3,916801E+22	1,336740E+23	7,833488E+22	2,120088E+23
787	6,683589E+22	6,683452E+22	3,916778E+22	3,916649E+22	1,336704E+23	7,833427E+22	2,120047E+23
788	6,683619E+22	6,683759E+22	3,916761E+22	3,916698E+22	1,336738E+23	7,833459E+22	2,120084E+23
789	6,683736E+22	6,683596E+22	3,916635E+22	3,916707E+22	1,336733E+23	7,833342E+22	2,120067E+23
790	6,683477E+22	6,683610E+22	3,916677E+22	3,916581E+22	1,336709E+23	7,833258E+22	2,120034E+23
791	6,683630E+22	6,683824E+22	3,916594E+22	3,916653E+22	1,336745E+23	7,833247E+22	2,120070E+23
792	6,683691E+22	6,683542E+22	3,916524E+22	3,916507E+22	1,336723E+23	7,833031E+22	2,120026E+23
793	6,683589E+22	6,683705E+22	3,916551E+22	3,916427E+22	1,336729E+23	7,832978E+22	2,120027E+23
794	6,683843E+22	6,683775E+22	3,916420E+22	3,916527E+22	1,336762E+23	7,832947E+22	2,120057E+23
795	6,683721E+22	6,683575E+22	3,916442E+22	3,916390E+22	1,336730E+23	7,832832E+22	2,120013E+23
796	6,683632E+22	6,683889E+22	3,916479E+22	3,916439E+22	1,336752E+23	7,832918E+22	2,120044E+23
797	6,683823E+22	6,683744E+22	3,916405E+22	3,916520E+22	1,336757E+23	7,832925E+22	2,120049E+23
798	6,683606E+22	6,683599E+22	3,916553E+22	3,916444E+22	1,336721E+23	7,832997E+22	2,120020E+23
799	6,683660E+22	6,683812E+22	3,916618E+22	3,916602E+22	1,336747E+23	7,833220E+22	2,120069E+23
800	6,683731E+22	6,683533E+22	3,916615E+22	3,916639E+22	1,336726E+23	7,833254E+22	2,120052E+23
801	6,683466E+22	6,683602E+22	3,916759E+22	3,916676E+22	1,336707E+23	7,833435E+22	2,120050E+23
802	6,683609E+22	6,683695E+22	3,916735E+22	3,916891E+22	1,336730E+23	7,833626E+22	2,120093E+23
803	6,683562E+22	6,683373E+22	3,916820E+22	3,916814E+22	1,336694E+23	7,833635E+22	2,120057E+23
804	6,683426E+22	6,683603E+22	3,916930E+22	3,916828E+22	1,336703E+23	7,833757E+22	2,120079E+23
805	6,683680E+22	6,683532E+22	3,916829E+22	3,916926E+22	1,336721E+23	7,833756E+22	2,120097E+23
806	6,683488E+22	6,683377E+22	3,916907E+22	3,916802E+22	1,336687E+23	7,833709E+22	2,120057E+23
807	6,683417E+22	6,683696E+22	3,916910E+22	3,916872E+22	1,336711E+23	7,833782E+22	2,120090E+23
808	6,683573E+22	6,683518E+22	3,916779E+22	3,916846E+22	1,336709E+23	7,833625E+22	2,120072E+23
809	6,683367E+22	6,683507E+22	3,916829E+22	3,916719E+22	1,336687E+23	7,833548E+22	2,120042E+23
810	6,683550E+22	6,683663E+22	3,916732E+22	3,916794E+22	1,336721E+23	7,833526E+22	2,120074E+23
811	6,683671E+22	6,683390E+22	3,916674E+22	3,916636E+22	1,336706E+23	7,833311E+22	2,120037E+23
812	6,683495E+22	6,683628E+22	3,916691E+22	3,916573E+22	1,336712E+23	7,833264E+22	2,120039E+23
813	6,683737E+22	6,683703E+22	3,916524E+22	3,916683E+22	1,336744E+23	7,833207E+22	2,120065E+23
814	6,683619E+22	6,683502E+22	3,916570E+22	3,916552E+22	1,336712E+23	7,833122E+22	2,120024E+23
815	6,683484E+22	6,683768E+22	3,916668E+22	3,916592E+22	1,336725E+23	7,833261E+22	2,120051E+23
816	6,683722E+22	6,683622E+22	3,916599E+22	3,916649E+22	1,336734E+23	7,833248E+22	2,120059E+23
817	6,683514E+22	6,683489E+22	3,916744E+22	3,916614E+22	1,336700E+23	7,833359E+22	2,120036E+23
818	6,683509E+22	6,683676E+22	3,916790E+22	3,916816E+22	1,336719E+23	7,833606E+22	2,120079E+23
819	6,683610E+22	6,683414E+22	3,916798E+22	3,916850E+22	1,336702E+23	7,833648E+22	2,120067E+23
820	6,683317E+22	6,683493E+22	3,916943E+22	3,916864E+22	1,336681E+23	7,833807E+22	2,120062E+23
821	6,683518E+22	6,683553E+22	3,916893E+22	3,917051E+22	1,336707E+23	7,833944E+22	2,120102E+23
822	6,683514E+22	6,683258E+22	3,916977E+22	3,916960E+22	1,336677E+23	7,833936E+22	2,120071E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
823	6,683303E+22	6,683489E+22	3,917113E+22	3,916981E+22	1,336679E+23	7,834093E+22	2,120088E+23
824	6,683544E+22	6,683471E+22	3,916989E+22	3,917073E+22	1,336702E+23	7,834061E+22	2,120108E+23
825	6,683333E+22	6,683326E+22	3,917053E+22	3,916979E+22	1,336666E+23	7,834032E+22	2,120069E+23
826	6,683248E+22	6,683557E+22	3,917054E+22	3,917049E+22	1,336680E+23	7,834103E+22	2,120091E+23
827	6,683504E+22	6,683345E+22	3,916941E+22	3,916979E+22	1,336685E+23	7,833920E+22	2,120077E+23
828	6,683302E+22	6,683364E+22	3,916978E+22	3,916831E+22	1,336667E+23	7,833810E+22	2,120048E+23
829	6,683521E+22	6,683532E+22	3,916833E+22	3,916913E+22	1,336705E+23	7,833746E+22	2,120080E+23
830	6,683612E+22	6,683334E+22	3,916768E+22	3,916774E+22	1,336695E+23	7,833541E+22	2,120049E+23
831	6,683336E+22	6,683587E+22	3,916832E+22	3,916726E+22	1,336692E+23	7,833558E+22	2,120048E+23
832	6,683596E+22	6,683656E+22	3,916684E+22	3,916808E+22	1,336725E+23	7,833492E+22	2,120074E+23
833	6,683502E+22	6,683425E+22	3,916759E+22	3,916703E+22	1,336693E+23	7,833462E+22	2,120039E+23
834	6,683359E+22	6,683608E+22	3,916866E+22	3,916770E+22	1,336697E+23	7,833636E+22	2,120060E+23
835	6,683641E+22	6,683450E+22	3,916803E+22	3,916836E+22	1,336709E+23	7,833639E+22	2,120073E+23
836	6,683368E+22	6,683376E+22	3,916923E+22	3,916823E+22	1,336674E+23	7,833747E+22	2,120049E+23
837	6,683387E+22	6,683544E+22	3,916916E+22	3,917029E+22	1,336693E+23	7,833945E+22	2,120088E+23
838	6,683511E+22	6,683289E+22	3,916937E+22	3,917037E+22	1,336680E+23	7,833974E+22	2,120077E+23
839	6,683202E+22	6,683362E+22	3,917130E+22	3,917022E+22	1,336656E+23	7,834152E+22	2,120072E+23
840	6,683441E+22	6,683448E+22	3,917076E+22	3,917166E+22	1,336689E+23	7,834242E+22	2,120113E+23
841	6,683420E+22	6,683194E+22	3,917157E+22	3,917110E+22	1,336661E+23	7,834267E+22	2,120088E+23
842	6,683131E+22	6,683394E+22	3,917281E+22	3,917164E+22	1,336652E+23	7,834445E+22	2,120097E+23
843	6,683393E+22	6,683363E+22	3,917166E+22	3,917246E+22	1,336676E+23	7,834412E+22	2,120117E+23
844	6,683174E+22	6,683214E+22	3,917224E+22	3,917136E+22	1,336639E+23	7,834360E+22	2,120075E+23
845	6,683173E+22	6,683386E+22	3,917181E+22	3,917190E+22	1,336656E+23	7,834370E+22	2,120093E+23
846	6,683479E+22	6,683210E+22	3,917058E+22	3,917108E+22	1,336669E+23	7,834166E+22	2,120086E+23
847	6,683226E+22	6,683262E+22	3,917109E+22	3,916969E+22	1,336649E+23	7,834077E+22	2,120056E+23
848	6,683420E+22	6,683499E+22	3,916947E+22	3,917039E+22	1,336692E+23	7,833985E+22	2,120090E+23
849	6,683491E+22	6,683327E+22	3,916892E+22	3,916929E+22	1,336682E+23	7,833821E+22	2,120064E+23
850	6,683181E+22	6,683474E+22	3,916996E+22	3,916884E+22	1,336666E+23	7,833879E+22	2,120053E+23
851	6,683506E+22	6,683509E+22	3,916886E+22	3,916943E+22	1,336702E+23	7,833830E+22	2,120084E+23
852	6,683397E+22	6,683284E+22	3,916953E+22	3,916850E+22	1,336668E+23	7,833803E+22	2,120048E+23
853	6,683265E+22	6,683440E+22	3,917012E+22	3,916954E+22	1,336671E+23	7,833965E+22	2,120067E+23
854	6,683529E+22	6,683345E+22	3,916935E+22	3,917038E+22	1,336687E+23	7,833972E+22	2,120085E+23
855	6,683202E+22	6,683272E+22	3,917081E+22	3,917024E+22	1,336647E+23	7,834105E+22	2,120058E+23
856	6,683267E+22	6,683449E+22	3,917085E+22	3,917181E+22	1,336672E+23	7,834265E+22	2,120098E+23
857	6,683432E+22	6,683209E+22	3,917120E+22	3,917191E+22	1,336664E+23	7,834312E+22	2,120095E+23
858	6,683096E+22	6,683220E+22	3,917335E+22	3,917186E+22	1,336632E+23	7,834522E+22	2,120084E+23
859	6,683346E+22	6,683324E+22	3,917290E+22	3,917331E+22	1,336667E+23	7,834621E+22	2,120129E+23
860	6,683246E+22	6,683118E+22	3,917345E+22	3,917298E+22	1,336636E+23	7,834643E+22	2,120101E+23
861	6,682979E+22	6,683259E+22	3,917416E+22	3,917362E+22	1,336624E+23	7,834779E+22	2,120102E+23
862	6,683285E+22	6,683219E+22	3,917299E+22	3,917412E+22	1,336650E+23	7,834710E+22	2,120121E+23
863	6,683078E+22	6,683062E+22	3,917373E+22	3,917275E+22	1,336614E+23	7,834648E+22	2,120079E+23
864	6,683130E+22	6,683274E+22	3,917306E+22	3,917289E+22	1,336640E+23	7,834596E+22	2,120100E+23
865	6,683419E+22	6,683172E+22	3,917174E+22	3,917240E+22	1,336659E+23	7,834414E+22	2,120100E+23
866	6,683092E+22	6,683207E+22	3,917239E+22	3,917124E+22	1,336630E+23	7,834362E+22	2,120066E+23
867	6,683298E+22	6,683426E+22	3,917108E+22	3,917173E+22	1,336672E+23	7,834282E+22	2,120100E+23
868	6,683339E+22	6,683249E+22	3,917075E+22	3,917061E+22	1,336659E+23	7,834136E+22	2,120072E+23
869	6,683093E+22	6,683309E+22	3,917148E+22	3,917031E+22	1,336640E+23	7,834179E+22	2,120058E+23
870	6,683431E+22	6,683349E+22	3,917042E+22	3,917100E+22	1,336678E+23	7,834141E+22	2,120092E+23
871	6,683273E+22	6,683152E+22	3,917117E+22	3,917041E+22	1,336642E+23	7,834157E+22	2,120058E+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							
872	6,683140E+22	6,683349E+22	3,917146E+22	3,917135E+22	1,336649E+23	7,834281E+22	2,120077E+23
873	6,683407E+22	6,683281E+22	3,917077E+22	3,917235E+22	1,336669E+23	7,834312E+22	2,120100E+23
874	6,683079E+22	6,683130E+22	3,917263E+22	3,917200E+22	1,336621E+23	7,834463E+22	2,120067E+23
875	6,683202E+22	6,683302E+22	3,917300E+22	3,917317E+22	1,336650E+23	7,834617E+22	2,120112E+23
876	6,683327E+22	6,683110E+22	3,917337E+22	3,917335E+22	1,336644E+23	7,834672E+22	2,120111E+23
877	6,682982E+22	6,683092E+22	3,917504E+22	3,917372E+22	1,336607E+23	7,834877E+22	2,120095E+23
878	6,683189E+22	6,683236E+22	3,917450E+22	3,917526E+22	1,336642E+23	7,834977E+22	2,120140E+23
879	6,683056E+22	6,683010E+22	3,917517E+22	3,917496E+22	1,336607E+23	7,835014E+22	2,120108E+23
880	6,682850E+22	6,683133E+22	3,917569E+22	3,917511E+22	1,336598E+23	7,835080E+22	2,120106E+23
881	6,683222E+22	6,683117E+22	3,917439E+22	3,917559E+22	1,336634E+23	7,834998E+22	2,120134E+23
882	6,683012E+22	6,682913E+22	3,917519E+22	3,917418E+22	1,336592E+23	7,834937E+22	2,120086E+23
883	6,683077E+22	6,683180E+22	3,917454E+22	3,917420E+22	1,336626E+23	7,834873E+22	2,120113E+23
884	6,683289E+22	6,683144E+22	3,917308E+22	3,917375E+22	1,336643E+23	7,834683E+22	2,120112E+23
885	6,682970E+22	6,683098E+22	3,917354E+22	3,917275E+22	1,336607E+23	7,834629E+22	2,120070E+23
886	6,683193E+22	6,683304E+22	3,917253E+22	3,917297E+22	1,336650E+23	7,834550E+22	2,120105E+23
887	6,683229E+22	6,683101E+22	3,917245E+22	3,917193E+22	1,336633E+23	7,834438E+22	2,120077E+23
888	6,683012E+22	6,683176E+22	3,917297E+22	3,917160E+22	1,336619E+23	7,834457E+22	2,120065E+23
889	6,683332E+22	6,683279E+22	3,917175E+22	3,917278E+22	1,336661E+23	7,834453E+22	2,120106E+23
890	6,683118E+22	6,683048E+22	3,917268E+22	3,917240E+22	1,336617E+23	7,834508E+22	2,120067E+23
891	6,683026E+22	6,683242E+22	3,917326E+22	3,917307E+22	1,336627E+23	7,834633E+22	2,120090E+23
892	6,683280E+22	6,683191E+22	3,917280E+22	3,917389E+22	1,336647E+23	7,834670E+22	2,120114E+23
893	6,683007E+22	6,682973E+22	3,917447E+22	3,917370E+22	1,336598E+23	7,834818E+22	2,120080E+23
894	6,683120E+22	6,683169E+22	3,917494E+22	3,917484E+22	1,336629E+23	7,834979E+22	2,120127E+23
895	6,683170E+22	6,683010E+22	3,917533E+22	3,917541E+22	1,336618E+23	7,835075E+22	2,120125E+23
896	6,682818E+22	6,683006E+22	3,917660E+22	3,917571E+22	1,336582E+23	7,835232E+22	2,120106E+23
897	6,683034E+22	6,683148E+22	3,917600E+22	3,917729E+22	1,336618E+23	7,835329E+22	2,120151E+23
898	6,682931E+22	6,682841E+22	3,917690E+22	3,917671E+22	1,336577E+23	7,835361E+22	2,120113E+23
899	6,682815E+22	6,682962E+22	3,917737E+22	3,917632E+22	1,336578E+23	7,835369E+22	2,120115E+23
900	6,683151E+22	6,683021E+22	3,917597E+22	3,917673E+22	1,336617E+23	7,835270E+22	2,120144E+23
901	6,682943E+22	6,682817E+22	3,917624E+22	3,917559E+22	1,336576E+23	7,835184E+22	2,120094E+23
902	6,682962E+22	6,683119E+22	3,917569E+22	3,917548E+22	1,336608E+23	7,835118E+22	2,120120E+23
903	6,683129E+22	6,683078E+22	3,917459E+22	3,917512E+22	1,336621E+23	7,834971E+22	2,120118E+23
904	6,682858E+22	6,682997E+22	3,917499E+22	3,917388E+22	1,336585E+23	7,834887E+22	2,120074E+23
905	6,683101E+22	6,683207E+22	3,917402E+22	3,917436E+22	1,336631E+23	7,834838E+22	2,120115E+23
906	6,683124E+22	6,682948E+22	3,917413E+22	3,917363E+22	1,336607E+23	7,834776E+22	2,120085E+23
907	6,682922E+22	6,683054E+22	3,917455E+22	3,917334E+22	1,336598E+23	7,834789E+22	2,120076E+23
908	6,683187E+22	6,683213E+22	3,917330E+22	3,917462E+22	1,336640E+23	7,834792E+22	2,120119E+23
909	6,683018E+22	6,682907E+22	3,917403E+22	3,917429E+22	1,336593E+23	7,834832E+22	2,120076E+23
910	6,682953E+22	6,683103E+22	3,917497E+22	3,917453E+22	1,336606E+23	7,834950E+22	2,120101E+23
911	6,683186E+22	6,683066E+22	3,917480E+22	3,917543E+22	1,336625E+23	7,835023E+22	2,120127E+23
912	6,682909E+22	6,682867E+22	3,917630E+22	3,917528E+22	1,336578E+23	7,835158E+22	2,120093E+23
913	6,682975E+22	6,683120E+22	3,917665E+22	3,917685E+22	1,336609E+23	7,835350E+22	2,120144E+23
914	6,682977E+22	6,682890E+22	3,917723E+22	3,917759E+22	1,336587E+23	7,835481E+22	2,120135E+23
915	6,682680E+22	6,682864E+22	3,917853E+22	3,917751E+22	1,336554E+23	7,835604E+22	2,120115E+23
916	6,682915E+22	6,683020E+22	3,917787E+22	3,917875E+22	1,336594E+23	7,835662E+22	2,120160E+23
917	6,682883E+22	6,682654E+22	3,917831E+22	3,917823E+22	1,336554E+23	7,835654E+22	2,120119E+23
918	6,682774E+22	6,682834E+22	3,917875E+22	3,917763E+22	1,336561E+23	7,835638E+22	2,120125E+23
919	6,683036E+22	6,682956E+22	3,917732E+22	3,917825E+22	1,336599E+23	7,835557E+22	2,120155E+23
920	6,682813E+22	6,682774E+22	3,917734E+22	3,917697E+22	1,336559E+23	7,835432E+22	2,120102E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
921	6,682831E+22	6,683072E+22	3,917693E+22	3,917684E+22	1,336590E+23	7,835378E+22	2,120128E+23
922	6,683000E+22	6,682937E+22	3,917627E+22	3,917643E+22	1,336594E+23	7,835270E+22	2,120121E+23
923	6,682792E+22	6,682849E+22	3,917669E+22	3,917507E+22	1,336564E+23	7,835177E+22	2,120082E+23
924	6,682992E+22	6,683109E+22	3,917567E+22	3,917576E+22	1,336610E+23	7,835144E+22	2,120124E+23
925	6,683022E+22	6,682824E+22	3,917532E+22	3,917555E+22	1,336585E+23	7,835087E+22	2,120093E+23
926	6,682814E+22	6,682954E+22	3,917584E+22	3,917508E+22	1,336577E+23	7,835092E+22	2,120086E+23
927	6,683055E+22	6,683115E+22	3,917498E+22	3,917632E+22	1,336617E+23	7,835130E+22	2,120130E+23
928	6,682939E+22	6,682801E+22	3,917565E+22	3,917569E+22	1,336574E+23	7,835134E+22	2,120087E+23
929	6,682877E+22	6,683013E+22	3,917674E+22	3,917607E+22	1,336589E+23	7,835281E+22	2,120117E+23
930	6,683060E+22	6,682940E+22	3,917693E+22	3,917732E+22	1,336600E+23	7,835425E+22	2,120143E+23
931	6,682777E+22	6,682762E+22	3,917826E+22	3,917725E+22	1,336554E+23	7,835551E+22	2,120109E+23
932	6,682776E+22	6,683032E+22	3,917859E+22	3,917886E+22	1,336581E+23	7,835745E+22	2,120155E+23
933	6,682847E+22	6,682709E+22	3,917882E+22	3,917963E+22	1,336556E+23	7,835845E+22	2,120140E+23
934	6,682613E+22	6,682674E+22	3,918016E+22	3,917898E+22	1,336529E+23	7,835914E+22	2,120120E+23
935	6,682843E+22	6,682874E+22	3,917954E+22	3,918018E+22	1,336572E+23	7,835972E+22	2,120169E+23
936	6,682820E+22	6,682570E+22	3,917952E+22	3,917951E+22	1,336539E+23	7,835903E+22	2,120129E+23
937	6,682663E+22	6,682824E+22	3,917986E+22	3,917911E+22	1,336549E+23	7,835897E+22	2,120138E+23
938	6,682868E+22	6,682895E+22	3,917887E+22	3,917980E+22	1,336576E+23	7,835867E+22	2,120163E+23
939	6,682684E+22	6,682686E+22	3,917903E+22	3,917824E+22	1,336537E+23	7,835727E+22	2,120110E+23
940	6,682697E+22	6,682977E+22	3,917875E+22	3,917803E+22	1,336567E+23	7,835678E+22	2,120135E+23
941	6,682927E+22	6,682758E+22	3,917771E+22	3,917799E+22	1,336568E+23	7,835570E+22	2,120125E+23
942	6,682731E+22	6,682700E+22	3,917804E+22	3,917663E+22	1,336543E+23	7,835467E+22	2,120090E+23
943	6,682875E+22	6,683014E+22	3,917697E+22	3,917762E+22	1,336589E+23	7,835458E+22	2,120135E+23
944	6,682913E+22	6,682744E+22	3,917635E+22	3,917723E+22	1,336566E+23	7,835358E+22	2,120101E+23
945	6,682730E+22	6,682886E+22	3,917711E+22	3,917658E+22	1,336562E+23	7,835370E+22	2,120099E+23
946	6,682964E+22	6,682972E+22	3,917688E+22	3,917770E+22	1,336594E+23	7,835457E+22	2,120139E+23
947	6,682868E+22	6,682683E+22	3,917769E+22	3,917701E+22	1,336555E+23	7,835470E+22	2,120102E+23
948	6,682734E+22	6,682942E+22	3,917882E+22	3,917766E+22	1,336568E+23	7,835648E+22	2,120132E+23
949	6,682894E+22	6,682809E+22	3,917864E+22	3,917951E+22	1,336570E+23	7,835815E+22	2,120152E+23
950	6,682619E+22	6,682625E+22	3,918007E+22	3,917928E+22	1,336524E+23	7,835935E+22	2,120118E+23
951	6,682620E+22	6,682882E+22	3,918050E+22	3,918081E+22	1,336550E+23	7,836131E+22	2,120163E+23
952	6,682761E+22	6,682560E+22	3,918037E+22	3,918124E+22	1,336532E+23	7,836160E+22	2,120148E+23
953	6,682562E+22	6,682573E+22	3,918154E+22	3,918054E+22	1,336513E+23	7,836208E+22	2,120134E+23
954	6,682743E+22	6,682764E+22	3,918122E+22	3,918184E+22	1,336551E+23	7,836306E+22	2,120181E+23
955	6,682704E+22	6,682526E+22	3,918102E+22	3,918105E+22	1,336523E+23	7,836207E+22	2,120144E+23
956	6,682495E+22	6,682787E+22	3,918149E+22	3,918053E+22	1,336528E+23	7,836202E+22	2,120148E+23
957	6,682745E+22	6,682748E+22	3,918036E+22	3,918130E+22	1,336549E+23	7,836166E+22	2,120166E+23
958	6,682617E+22	6,682517E+22	3,918061E+22	3,917942E+22	1,336513E+23	7,836003E+22	2,120114E+23
959	6,682605E+22	6,682829E+22	3,918032E+22	3,917943E+22	1,336543E+23	7,835974E+22	2,120141E+23
960	6,682847E+22	6,682657E+22	3,917875E+22	3,917948E+22	1,336550E+23	7,835823E+22	2,120133E+23
961	6,682635E+22	6,682653E+22	3,917892E+22	3,917826E+22	1,336529E+23	7,835718E+22	2,120101E+23
962	6,682744E+22	6,682922E+22	3,917845E+22	3,917924E+22	1,336567E+23	7,835769E+22	2,120143E+23
963	6,682826E+22	6,682662E+22	3,917797E+22	3,917846E+22	1,336549E+23	7,835643E+22	2,120113E+23
964	6,682620E+22	6,682802E+22	3,917911E+22	3,917776E+22	1,336542E+23	7,835687E+22	2,120111E+23
965	6,682871E+22	6,682820E+22	3,917875E+22	3,917938E+22	1,336569E+23	7,835813E+22	2,120150E+23
966	6,682758E+22	6,682549E+22	3,917960E+22	3,917888E+22	1,336531E+23	7,835847E+22	2,120115E+23
967	6,682545E+22	6,682837E+22	3,918070E+22	3,917993E+22	1,336538E+23	7,836063E+22	2,120145E+23
968	6,682732E+22	6,682686E+22	3,918013E+22	3,918163E+22	1,336542E+23	7,836176E+22	2,120159E+23
969	6,682514E+22	6,682495E+22	3,918154E+22	3,918112E+22	1,336501E+23	7,836266E+22	2,120128E+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							
970	6,682535E+22	6,682702E+22	3,918240E+22	3,918246E+22	1,336524E+23	7,836486E+22	2,120172E+23
971	6,682704E+22	6,682449E+22	3,918209E+22	3,918262E+22	1,336515E+23	7,836471E+22	2,120162E+23
972	6,682447E+22	6,682532E+22	3,918328E+22	3,918199E+22	1,336498E+23	7,836527E+22	2,120151E+23
973	6,682606E+22	6,682674E+22	3,918270E+22	3,918363E+22	1,336528E+23	7,836633E+22	2,120191E+23
974	6,682571E+22	6,682428E+22	3,918269E+22	3,918253E+22	1,336500E+23	7,836522E+22	2,120152E+23
975	6,682352E+22	6,682669E+22	3,918326E+22	3,918197E+22	1,336502E+23	7,836524E+22	2,120155E+23
976	6,682652E+22	6,682606E+22	3,918171E+22	3,918260E+22	1,336526E+23	7,836431E+22	2,120169E+23
977	6,682562E+22	6,682408E+22	3,918176E+22	3,918086E+22	1,336497E+23	7,836262E+22	2,120123E+23
978	6,682510E+22	6,682699E+22	3,918169E+22	3,918109E+22	1,336521E+23	7,836277E+22	2,120149E+23
979	6,682734E+22	6,682599E+22	3,917993E+22	3,918103E+22	1,336533E+23	7,836096E+22	2,120143E+23
980	6,682508E+22	6,682609E+22	3,918031E+22	3,917961E+22	1,336512E+23	7,835992E+22	2,120111E+23
981	6,682654E+22	6,682771E+22	3,917994E+22	3,918064E+22	1,336542E+23	7,836058E+22	2,120148E+23
982	6,682767E+22	6,682521E+22	3,917979E+22	3,917964E+22	1,336529E+23	7,835943E+22	2,120123E+23
983	6,682507E+22	6,682686E+22	3,918106E+22	3,917935E+22	1,336519E+23	7,836041E+22	2,120123E+23
984	6,682724E+22	6,682726E+22	3,918030E+22	3,918126E+22	1,336545E+23	7,836156E+22	2,120161E+23
985	6,682601E+22	6,682480E+22	3,918106E+22	3,918102E+22	1,336508E+23	7,836208E+22	2,120129E+23
986	6,682372E+22	6,682684E+22	3,918267E+22	3,918208E+22	1,336506E+23	7,836475E+22	2,120153E+23
987	6,682618E+22	6,682554E+22	3,918203E+22	3,918334E+22	1,336517E+23	7,836537E+22	2,120171E+23
988	6,682430E+22	6,682377E+22	3,918349E+22	3,918263E+22	1,336481E+23	7,836612E+22	2,120142E+23
989	6,682472E+22	6,682537E+22	3,918414E+22	3,918424E+22	1,336501E+23	7,836838E+22	2,120185E+23
990	6,682623E+22	6,682349E+22	3,918380E+22	3,918430E+22	1,336497E+23	7,836810E+22	2,120178E+23
991	6,682286E+22	6,682468E+22	3,918498E+22	3,918385E+22	1,336475E+23	7,836883E+22	2,120164E+23
992	6,682460E+22	6,682581E+22	3,918409E+22	3,918521E+22	1,336504E+23	7,836930E+22	2,120197E+23
993	6,682477E+22	6,682312E+22	3,918404E+22	3,918387E+22	1,336479E+23	7,836792E+22	2,120158E+23
994	6,682256E+22	6,682495E+22	3,918498E+22	3,918332E+22	1,336475E+23	7,836831E+22	2,120158E+23
995	6,682570E+22	6,682504E+22	3,918305E+22	3,918382E+22	1,336507E+23	7,836687E+22	2,120176E+23
996	6,682443E+22	6,682356E+22	3,918303E+22	3,918224E+22	1,336480E+23	7,836527E+22	2,120133E+23
997	6,682391E+22	6,682592E+22	3,918282E+22	3,918279E+22	1,336498E+23	7,836561E+22	2,120154E+23
998	6,682641E+22	6,682496E+22	3,918136E+22	3,918235E+22	1,336514E+23	7,836371E+22	2,120151E+23
999	6,682401E+22	6,682507E+22	3,918204E+22	3,918094E+22	1,336491E+23	7,836298E+22	2,120121E+23
1000	6,682572E+22	6,682650E+22	3,918145E+22	3,918191E+22	1,336522E+23	7,836336E+22	2,120156E+23
1001	6,682687E+22	6,682427E+22	3,918129E+22	3,918125E+22	1,336511E+23	7,836254E+22	2,120137E+23
1002	6,682357E+22	6,682562E+22	3,918294E+22	3,918144E+22	1,336492E+23	7,836438E+22	2,120136E+23
1003	6,682550E+22	6,682647E+22	3,918197E+22	3,918328E+22	1,336520E+23	7,836525E+22	2,120172E+23
1004	6,682449E+22	6,682377E+22	3,918293E+22	3,918290E+22	1,336483E+23	7,836583E+22	2,120141E+23
1005	6,682288E+22	6,682471E+22	3,918448E+22	3,918394E+22	1,336476E+23	7,836842E+22	2,120160E+23
1006	6,682576E+22	6,682378E+22	3,918395E+22	3,918484E+22	1,336495E+23	7,836879E+22	2,120183E+23
1007	6,682344E+22	6,682271E+22	3,918536E+22	3,918431E+22	1,336462E+23	7,836968E+22	2,120158E+23
1008	6,682348E+22	6,682462E+22	3,918557E+22	3,918596E+22	1,336481E+23	7,837153E+22	2,120196E+23
1009	6,682484E+22	6,682315E+22	3,918522E+22	3,918604E+22	1,336480E+23	7,837127E+22	2,120193E+23
1010	6,682123E+22	6,682348E+22	3,918688E+22	3,918554E+22	1,336447E+23	7,837242E+22	2,120171E+23
1011	6,682316E+22	6,682473E+22	3,918583E+22	3,918650E+22	1,336479E+23	7,837234E+22	2,120202E+23
1012	6,682373E+22	6,682205E+22	3,918575E+22	3,918519E+22	1,336458E+23	7,837094E+22	2,120167E+23
1013	6,682176E+22	6,682313E+22	3,918634E+22	3,918501E+22	1,336449E+23	7,837136E+22	2,120162E+23
1014	6,682488E+22	6,682392E+22	3,918432E+22	3,918541E+22	1,336488E+23	7,836973E+22	2,120185E+23
1015	6,682320E+22	6,682287E+22	3,918424E+22	3,918387E+22	1,336461E+23	7,836811E+22	2,120142E+23
1016	6,682296E+22	6,682491E+22	3,918386E+22	3,918407E+22	1,336479E+23	7,836793E+22	2,120158E+23
1017	6,682590E+22	6,682406E+22	3,918261E+22	3,918341E+22	1,336500E+23	7,836602E+22	2,120160E+23
1018	6,682320E+22	6,682368E+22	3,918388E+22	3,918224E+22	1,336469E+23	7,836612E+22	2,120130E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1019	6,682448E+22	6,682582E+22	3,918316E+22	3,918329E+22	1,336503E+23	7,836645E+22	2,120167E+23
1020	6,682527E+22	6,682380E+22	3,918307E+22	3,918305E+22	1,336491E+23	7,836612E+22	2,120152E+23
1021	6,682197E+22	6,682410E+22	3,918467E+22	3,918364E+22	1,336461E+23	7,836830E+22	2,120144E+23
1022	6,682437E+22	6,682488E+22	3,918390E+22	3,918512E+22	1,336492E+23	7,836902E+22	2,120183E+23
1023	6,682344E+22	6,682228E+22	3,918490E+22	3,918469E+22	1,336457E+23	7,836959E+22	2,120153E+23
1024	6,682230E+22	6,682321E+22	3,918605E+22	3,918561E+22	1,336455E+23	7,837166E+22	2,120172E+23
1025	6,682517E+22	6,682287E+22	3,918545E+22	3,918656E+22	1,336480E+23	7,837200E+22	2,120200E+23
1026	6,682200E+22	6,682183E+22	3,918722E+22	3,918633E+22	1,336438E+23	7,837355E+22	2,120174E+23
1027	6,682167E+22	6,682423E+22	3,918722E+22	3,918763E+22	1,336459E+23	7,837485E+22	2,120208E+23
1028	6,682324E+22	6,682229E+22	3,918709E+22	3,918756E+22	1,336455E+23	7,837465E+22	2,120202E+23
1029	6,682015E+22	6,682144E+22	3,918865E+22	3,918714E+22	1,336416E+23	7,837578E+22	2,120174E+23
1030	6,682249E+22	6,682296E+22	3,918751E+22	3,918782E+22	1,336455E+23	7,837532E+22	2,120208E+23
1031	6,682271E+22	6,682093E+22	3,918719E+22	3,918674E+22	1,336436E+23	7,837393E+22	2,120176E+23
1032	6,682077E+22	6,682223E+22	3,918719E+22	3,918658E+22	1,336430E+23	7,837376E+22	2,120168E+23
1033	6,682398E+22	6,682337E+22	3,918525E+22	3,918678E+22	1,336474E+23	7,837203E+22	2,120194E+23
1034	6,682217E+22	6,682187E+22	3,918578E+22	3,918517E+22	1,336440E+23	7,837094E+22	2,120150E+23
1035	6,682200E+22	6,682424E+22	3,918540E+22	3,918496E+22	1,336462E+23	7,837036E+22	2,120166E+23
1036	6,682503E+22	6,682336E+22	3,918440E+22	3,918458E+22	1,336484E+23	7,836898E+22	2,120174E+23
1037	6,682214E+22	6,682215E+22	3,918560E+22	3,918410E+22	1,336443E+23	7,836970E+22	2,120140E+23
1038	6,682306E+22	6,682469E+22	3,918490E+22	3,918524E+22	1,336478E+23	7,837014E+22	2,120179E+23
1039	6,682360E+22	6,682276E+22	3,918481E+22	3,918519E+22	1,336464E+23	7,837000E+22	2,120164E+23
1040	6,682094E+22	6,682236E+22	3,918607E+22	3,918547E+22	1,336433E+23	7,837154E+22	2,120148E+23
1041	6,682390E+22	6,682341E+22	3,918542E+22	3,918665E+22	1,336473E+23	7,837207E+22	2,120194E+23
1042	6,682277E+22	6,682082E+22	3,918675E+22	3,918632E+22	1,336436E+23	7,837307E+22	2,120167E+23
1043	6,682104E+22	6,682268E+22	3,918772E+22	3,918712E+22	1,336437E+23	7,837484E+22	2,120186E+23
1044	6,682356E+22	6,682270E+22	3,918730E+22	3,918833E+22	1,336463E+23	7,837562E+22	2,120219E+23
1045	6,682028E+22	6,682050E+22	3,918914E+22	3,918836E+22	1,336408E+23	7,837750E+22	2,120183E+23
1046	6,682025E+22	6,682277E+22	3,918931E+22	3,918923E+22	1,336430E+23	7,837854E+22	2,120216E+23
1047	6,682200E+22	6,682081E+22	3,918905E+22	3,918916E+22	1,336428E+23	7,837821E+22	2,120210E+23
1048	6,681947E+22	6,681964E+22	3,918996E+22	3,918870E+22	1,336391E+23	7,837865E+22	2,120178E+23
1049	6,682193E+22	6,682187E+22	3,918859E+22	3,918937E+22	1,336438E+23	7,837795E+22	2,120218E+23
1050	6,682158E+22	6,682007E+22	3,918841E+22	3,918848E+22	1,336417E+23	7,837690E+22	2,120186E+23
1051	6,681952E+22	6,682192E+22	3,918828E+22	3,918781E+22	1,336414E+23	7,837609E+22	2,120175E+23
1052	6,682309E+22	6,682282E+22	3,918673E+22	3,918781E+22	1,336459E+23	7,837454E+22	2,120204E+23
1053	6,682146E+22	6,682033E+22	3,918741E+22	3,918639E+22	1,336418E+23	7,837380E+22	2,120156E+23
1054	6,682126E+22	6,682301E+22	3,918717E+22	3,918612E+22	1,336443E+23	7,837329E+22	2,120176E+23
1055	6,682358E+22	6,682256E+22	3,918613E+22	3,918627E+22	1,336461E+23	7,837240E+22	2,120185E+23
1056	6,682071E+22	6,682109E+22	3,918685E+22	3,918608E+22	1,336418E+23	7,837293E+22	2,120147E+23
1057	6,682188E+22	6,682357E+22	3,918623E+22	3,918706E+22	1,336454E+23	7,837329E+22	2,120187E+23
1058	6,682238E+22	6,682123E+22	3,918660E+22	3,918703E+22	1,336436E+23	7,837363E+22	2,120172E+23
1059	6,682004E+22	6,682134E+22	3,918766E+22	3,918684E+22	1,336414E+23	7,837450E+22	2,120159E+23
1060	6,682319E+22	6,682247E+22	3,918726E+22	3,918818E+22	1,336457E+23	7,837544E+22	2,120211E+23
1061	6,682168E+22	6,681951E+22	3,918861E+22	3,918834E+22	1,336412E+23	7,837695E+22	2,120181E+23
1062	6,681959E+22	6,682182E+22	3,918965E+22	3,918900E+22	1,336414E+23	7,837865E+22	2,120201E+23
1063	6,682172E+22	6,682178E+22	3,918934E+22	3,919026E+22	1,336435E+23	7,837960E+22	2,120231E+23
1064	6,681910E+22	6,681875E+22	3,919079E+22	3,919009E+22	1,336379E+23	7,838088E+22	2,120187E+23
1065	6,681954E+22	6,682108E+22	3,919089E+22	3,919066E+22	1,336406E+23	7,838155E+22	2,120222E+23
1066	6,682108E+22	6,681928E+22	3,919071E+22	3,919082E+22	1,336404E+23	7,838153E+22	2,120219E+23
1067	6,681831E+22	6,681908E+22	3,919110E+22	3,919011E+22	1,336374E+23	7,838122E+22	2,120186E+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							
1068	6,682076E+22	6,682161E+22	3,918987E+22	3,919087E+22	1,336424E+23	7,838075E+22	2,120231E+23
1069	6,682042E+22	6,681902E+22	3,918983E+22	3,919003E+22	1,336394E+23	7,837986E+22	2,120193E+23
1070	6,681862E+22	6,682091E+22	3,918996E+22	3,918888E+22	1,336395E+23	7,837883E+22	2,120184E+23
1071	6,682210E+22	6,682191E+22	3,918853E+22	3,918899E+22	1,336440E+23	7,837752E+22	2,120215E+23
1072	6,682072E+22	6,681887E+22	3,918875E+22	3,918786E+22	1,336396E+23	7,837660E+22	2,120162E+23
1073	6,682021E+22	6,682203E+22	3,918847E+22	3,918780E+22	1,336422E+23	7,837626E+22	2,120185E+23
1074	6,682197E+22	6,682157E+22	3,918757E+22	3,918832E+22	1,336435E+23	7,837589E+22	2,120194E+23
1075	6,681919E+22	6,682018E+22	3,918811E+22	3,918768E+22	1,336394E+23	7,837579E+22	2,120152E+23
1076	6,682107E+22	6,682237E+22	3,918789E+22	3,918851E+22	1,336434E+23	7,837641E+22	2,120199E+23
1077	6,682179E+22	6,681938E+22	3,918835E+22	3,918860E+22	1,336412E+23	7,837695E+22	2,120181E+23
1078	6,681939E+22	6,682013E+22	3,918955E+22	3,918827E+22	1,336395E+23	7,837782E+22	2,120173E+23
1079	6,682175E+22	6,682189E+22	3,918922E+22	3,918997E+22	1,336436E+23	7,837920E+22	2,120228E+23
1080	6,682014E+22	6,681853E+22	3,919025E+22	3,919035E+22	1,336387E+23	7,838060E+22	2,120193E+23
1081	6,681815E+22	6,682075E+22	3,919146E+22	3,919080E+22	1,336389E+23	7,838226E+22	2,120212E+23
1082	6,682018E+22	6,682027E+22	3,919143E+22	3,919214E+22	1,336405E+23	7,838357E+22	2,120240E+23
1083	6,681793E+22	6,681752E+22	3,919246E+22	3,919159E+22	1,336354E+23	7,838405E+22	2,120195E+23
1084	6,681878E+22	6,681991E+22	3,919255E+22	3,919231E+22	1,336387E+23	7,838486E+22	2,120236E+23
1085	6,681998E+22	6,681797E+22	3,919215E+22	3,919281E+22	1,336380E+23	7,838495E+22	2,120229E+23
1086	6,681725E+22	6,681836E+22	3,919245E+22	3,919172E+22	1,336356E+23	7,838418E+22	2,120198E+23
1087	6,681951E+22	6,682085E+22	3,919143E+22	3,919226E+22	1,336404E+23	7,838369E+22	2,120240E+23
1088	6,681975E+22	6,681769E+22	3,919111E+22	3,919119E+22	1,336374E+23	7,838230E+22	2,120197E+23
1089	6,681818E+22	6,681968E+22	3,919130E+22	3,918981E+22	1,336379E+23	7,838110E+22	2,120190E+23
1090	6,682088E+22	6,682080E+22	3,919009E+22	3,919040E+22	1,336417E+23	7,838049E+22	2,120222E+23
1091	6,681916E+22	6,681844E+22	3,918993E+22	3,918932E+22	1,336376E+23	7,837924E+22	2,120169E+23
1092	6,681880E+22	6,682132E+22	3,918987E+22	3,918951E+22	1,336401E+23	7,837938E+22	2,120195E+23
1093	6,682063E+22	6,682001E+22	3,918920E+22	3,919017E+22	1,336406E+23	7,837937E+22	2,120200E+23
1094	6,681847E+22	6,681879E+22	3,918983E+22	3,918905E+22	1,336373E+23	7,837888E+22	2,120161E+23
1095	6,682030E+22	6,682114E+22	3,918980E+22	3,918996E+22	1,336414E+23	7,837976E+22	2,120212E+23
1096	6,682116E+22	6,681804E+22	3,918988E+22	3,919034E+22	1,336392E+23	7,838022E+22	2,120194E+23
1097	6,681832E+22	6,681933E+22	3,919117E+22	3,919011E+22	1,336377E+23	7,838128E+22	2,120189E+23
1098	6,681983E+22	6,682110E+22	3,919116E+22	3,919216E+22	1,336409E+23	7,838332E+22	2,120243E+23
1099	6,681837E+22	6,681766E+22	3,919203E+22	3,919212E+22	1,336360E+23	7,838415E+22	2,120202E+23
1100	6,681704E+22	6,681935E+22	3,919347E+22	3,919251E+22	1,336364E+23	7,838598E+22	2,120224E+23
1101	6,681918E+22	6,681829E+22	3,919334E+22	3,919400E+22	1,336375E+23	7,838734E+22	2,120248E+23
1102	6,681708E+22	6,681619E+22	3,919415E+22	3,919324E+22	1,336333E+23	7,838739E+22	2,120207E+23
1103	6,681751E+22	6,681920E+22	3,919416E+22	3,919408E+22	1,336367E+23	7,838824E+22	2,120250E+23
1104	6,681893E+22	6,681695E+22	3,919329E+22	3,919449E+22	1,336359E+23	7,838778E+22	2,120237E+23
1105	6,681638E+22	6,681745E+22	3,919381E+22	3,919293E+22	1,336338E+23	7,838674E+22	2,120206E+23
1106	6,681842E+22	6,681981E+22	3,919307E+22	3,919346E+22	1,336382E+23	7,838653E+22	2,120248E+23
1107	6,681873E+22	6,681685E+22	3,919247E+22	3,919215E+22	1,336356E+23	7,838462E+22	2,120202E+23
1108	6,681729E+22	6,681880E+22	3,919280E+22	3,919121E+22	1,336361E+23	7,838401E+22	2,120201E+23
1109	6,681936E+22	6,681962E+22	3,919151E+22	3,919231E+22	1,336390E+23	7,838382E+22	2,120228E+23
1110	6,681783E+22	6,681747E+22	3,919133E+22	3,919102E+22	1,336353E+23	7,838235E+22	2,120176E+23
1111	6,681763E+22	6,682008E+22	3,919153E+22	3,919107E+22	1,336377E+23	7,838259E+22	2,120203E+23
1112	6,682015E+22	6,681823E+22	3,919055E+22	3,919161E+22	1,336384E+23	7,838216E+22	2,120205E+23
1113	6,681821E+22	6,681749E+22	3,919131E+22	3,919029E+22	1,336357E+23	7,838160E+22	2,120173E+23
1114	6,681915E+22	6,682028E+22	3,919155E+22	3,919166E+22	1,336394E+23	7,838321E+22	2,120226E+23
1115	6,681947E+22	6,681784E+22	3,919144E+22	3,919204E+22	1,336373E+23	7,838348E+22	2,120208E+23
1116	6,681674E+22	6,681872E+22	3,919310E+22	3,919209E+22	1,336355E+23	7,838519E+22	2,120206E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1117	6,681801E+22	6,681955E+22	3,919335E+22	3,919426E+22	1,336376E+23	7,838761E+22	2,120252E+23
1118	6,681727E+22	6,681610E+22	3,919417E+22	3,919387E+22	1,336334E+23	7,838804E+22	2,120214E+23
1119	6,681606E+22	6,681764E+22	3,919556E+22	3,919428E+22	1,336337E+23	7,838984E+22	2,120235E+23
1120	6,681843E+22	6,681660E+22	3,919478E+22	3,919596E+22	1,336350E+23	7,839074E+22	2,120258E+23
1121	6,681629E+22	6,681524E+22	3,919535E+22	3,919495E+22	1,336315E+23	7,839030E+22	2,120218E+23
1122	6,681606E+22	6,681836E+22	3,919558E+22	3,919582E+22	1,336344E+23	7,839140E+22	2,120258E+23
1123	6,681771E+22	6,681635E+22	3,919459E+22	3,919556E+22	1,336341E+23	7,839016E+22	2,120242E+23
1124	6,681577E+22	6,681643E+22	3,919539E+22	3,919395E+22	1,336322E+23	7,838934E+22	2,120215E+23
1125	6,681733E+22	6,681839E+22	3,919476E+22	3,919474E+22	1,336357E+23	7,838951E+22	2,120252E+23
1126	6,681762E+22	6,681598E+22	3,919400E+22	3,919349E+22	1,336336E+23	7,838749E+22	2,120211E+23
1127	6,681571E+22	6,681802E+22	3,919435E+22	3,919288E+22	1,336337E+23	7,838723E+22	2,120210E+23
1128	6,681810E+22	6,681830E+22	3,919268E+22	3,919411E+22	1,336364E+23	7,838679E+22	2,120232E+23
1129	6,681709E+22	6,681618E+22	3,919265E+22	3,919242E+22	1,336333E+23	7,838507E+22	2,120183E+23
1130	6,681679E+22	6,681880E+22	3,919311E+22	3,919256E+22	1,336356E+23	7,838568E+22	2,120213E+23
1131	6,681940E+22	6,681741E+22	3,919194E+22	3,919286E+22	1,336368E+23	7,838480E+22	2,120216E+23
1132	6,681745E+22	6,681682E+22	3,919297E+22	3,919199E+22	1,336343E+23	7,838497E+22	2,120192E+23
1133	6,681743E+22	6,681939E+22	3,919340E+22	3,919377E+22	1,336368E+23	7,838717E+22	2,120240E+23
1134	6,681785E+22	6,681692E+22	3,919341E+22	3,919398E+22	1,336348E+23	7,838739E+22	2,120222E+23
1135	6,681529E+22	6,681725E+22	3,919538E+22	3,919393E+22	1,336325E+23	7,838931E+22	2,120219E+23
1136	6,681718E+22	6,681738E+22	3,919511E+22	3,919605E+22	1,336346E+23	7,839117E+22	2,120257E+23
1137	6,681668E+22	6,681435E+22	3,919582E+22	3,919548E+22	1,336310E+23	7,839130E+22	2,120223E+23
1138	6,681486E+22	6,681651E+22	3,919713E+22	3,919621E+22	1,336314E+23	7,839334E+22	2,120247E+23
1139	6,681698E+22	6,681613E+22	3,919601E+22	3,919756E+22	1,336331E+23	7,839356E+22	2,120267E+23
1140	6,681521E+22	6,681469E+22	3,919688E+22	3,919651E+22	1,336299E+23	7,839340E+22	2,120233E+23
1141	6,681470E+22	6,681722E+22	3,919738E+22	3,919725E+22	1,336319E+23	7,839463E+22	2,120266E+23
1142	6,681679E+22	6,681535E+22	3,919640E+22	3,919667E+22	1,336321E+23	7,839307E+22	2,120252E+23
1143	6,681475E+22	6,681527E+22	3,919727E+22	3,919528E+22	1,336300E+23	7,839255E+22	2,120226E+23
1144	6,681618E+22	6,681699E+22	3,919602E+22	3,919648E+22	1,336332E+23	7,839250E+22	2,120257E+23
1145	6,681648E+22	6,681501E+22	3,919513E+22	3,919521E+22	1,336315E+23	7,839034E+22	2,120218E+23
1146	6,681432E+22	6,681688E+22	3,919561E+22	3,919470E+22	1,336312E+23	7,839031E+22	2,120215E+23
1147	6,681720E+22	6,681723E+22	3,919384E+22	3,919529E+22	1,336344E+23	7,838913E+22	2,120236E+23
1148	6,681694E+22	6,681506E+22	3,919402E+22	3,919359E+22	1,336320E+23	7,838761E+22	2,120196E+23
1149	6,681595E+22	6,681759E+22	3,919475E+22	3,919398E+22	1,336335E+23	7,838873E+22	2,120223E+23
1150	6,681835E+22	6,681694E+22	3,919364E+22	3,919435E+22	1,336353E+23	7,838799E+22	2,120233E+23
1151	6,681584E+22	6,681615E+22	3,919498E+22	3,919381E+22	1,336320E+23	7,838879E+22	2,120208E+23
1152	6,681579E+22	6,681797E+22	3,919521E+22	3,919576E+22	1,336338E+23	7,839098E+22	2,120247E+23
1153	6,681676E+22	6,681536E+22	3,919533E+22	3,919569E+22	1,336321E+23	7,839102E+22	2,120231E+23
1154	6,681408E+22	6,681543E+22	3,919733E+22	3,919584E+22	1,336295E+23	7,839317E+22	2,120227E+23
1155	6,681617E+22	6,681602E+22	3,919669E+22	3,919771E+22	1,336322E+23	7,839439E+22	2,120266E+23
1156	6,681592E+22	6,681343E+22	3,919730E+22	3,919742E+22	1,336293E+23	7,839472E+22	2,120241E+23
1157	6,681329E+22	6,681560E+22	3,919871E+22	3,919827E+22	1,336289E+23	7,839698E+22	2,120259E+23
1158	6,681571E+22	6,681545E+22	3,919771E+22	3,919910E+22	1,336312E+23	7,839681E+22	2,120280E+23
1159	6,681411E+22	6,681360E+22	3,919891E+22	3,919782E+22	1,336277E+23	7,839673E+22	2,120244E+23
1160	6,681386E+22	6,681558E+22	3,919900E+22	3,919855E+22	1,336294E+23	7,839755E+22	2,120270E+23
1161	6,681602E+22	6,681409E+22	3,919790E+22	3,919795E+22	1,336301E+23	7,839586E+22	2,120260E+23
1162	6,681326E+22	6,681430E+22	3,919865E+22	3,919707E+22	1,336276E+23	7,839573E+22	2,120233E+23
1163	6,681464E+22	6,681630E+22	3,919704E+22	3,919800E+22	1,336309E+23	7,839504E+22	2,120260E+23
1164	6,681559E+22	6,681414E+22	3,919634E+22	3,919676E+22	1,336297E+23	7,839310E+22	2,120228E+23
1165	6,681339E+22	6,681558E+22	3,919707E+22	3,919611E+22	1,336290E+23	7,839319E+22	2,120221E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1166	6,681676E+22	6,681617E+22	3,919541E+22	3,919635E+22	1,336329E+23	7,839176E+22	2,120247E+23
1167	6,681630E+22	6,681416E+22	3,919586E+22	3,919489E+22	1,336305E+23	7,839075E+22	2,120212E+23
1168	6,681488E+22	6,681652E+22	3,919617E+22	3,919568E+22	1,336314E+23	7,839185E+22	2,120232E+23
1169	6,681694E+22	6,681609E+22	3,919522E+22	3,919613E+22	1,336330E+23	7,839135E+22	2,120244E+23
1170	6,681409E+22	6,681493E+22	3,919683E+22	3,919586E+22	1,336290E+23	7,839269E+22	2,120217E+23
1171	6,681444E+22	6,681645E+22	3,919691E+22	3,919731E+22	1,336309E+23	7,839422E+22	2,120251E+23
1172	6,681614E+22	6,681383E+22	3,919708E+22	3,919740E+22	1,336300E+23	7,839448E+22	2,120244E+23
1173	6,681295E+22	6,681393E+22	3,919908E+22	3,919777E+22	1,336269E+23	7,839685E+22	2,120237E+23
1174	6,681498E+22	6,681528E+22	3,919836E+22	3,919950E+22	1,336303E+23	7,839786E+22	2,120281E+23
1175	6,681449E+22	6,681282E+22	3,919921E+22	3,919923E+22	1,336273E+23	7,839844E+22	2,120257E+23
1176	6,681201E+22	6,681435E+22	3,920038E+22	3,919998E+22	1,336264E+23	7,840036E+22	2,120267E+23
1177	6,681484E+22	6,681423E+22	3,919955E+22	3,920045E+22	1,336291E+23	7,840000E+22	2,120291E+23
1178	6,681300E+22	6,681225E+22	3,920074E+22	3,919940E+22	1,336252E+23	7,840014E+22	2,120254E+23
1179	6,681268E+22	6,681446E+22	3,920039E+22	3,919994E+22	1,336271E+23	7,840033E+22	2,120275E+23
1180	6,681503E+22	6,681329E+22	3,919910E+22	3,919972E+22	1,336283E+23	7,839883E+22	2,120272E+23
1181	6,681170E+22	6,681322E+22	3,919990E+22	3,919895E+22	1,336249E+23	7,839884E+22	2,120238E+23
1182	6,681372E+22	6,681533E+22	3,919840E+22	3,919932E+22	1,336291E+23	7,839772E+22	2,120268E+23
1183	6,681508E+22	6,681292E+22	3,919794E+22	3,919780E+22	1,336280E+23	7,839574E+22	2,120237E+23
1184	6,681299E+22	6,681407E+22	3,919835E+22	3,919723E+22	1,336271E+23	7,839559E+22	2,120226E+23
1185	6,681619E+22	6,681531E+22	3,919681E+22	3,919750E+22	1,336315E+23	7,839431E+22	2,120258E+23
1186	6,681472E+22	6,681355E+22	3,919739E+22	3,919666E+22	1,336283E+23	7,839405E+22	2,120223E+23
1187	6,681302E+22	6,681588E+22	3,919766E+22	3,919731E+22	1,336289E+23	7,839497E+22	2,120239E+23
1188	6,681562E+22	6,681509E+22	3,919695E+22	3,919796E+22	1,336307E+23	7,839491E+22	2,120256E+23
1189	6,681263E+22	6,681329E+22	3,919881E+22	3,919777E+22	1,336259E+23	7,839657E+22	2,120225E+23
1190	6,681359E+22	6,681496E+22	3,919885E+22	3,919898E+22	1,336285E+23	7,839782E+22	2,120264E+23
1191	6,681523E+22	6,681254E+22	3,919907E+22	3,919928E+22	1,336278E+23	7,839835E+22	2,120261E+23
1192	6,681183E+22	6,681267E+22	3,920053E+22	3,919991E+22	1,336245E+23	7,840044E+22	2,120249E+23
1193	6,681385E+22	6,681435E+22	3,919999E+22	3,920136E+22	1,336282E+23	7,840136E+22	2,120295E+23
1194	6,681310E+22	6,681175E+22	3,920108E+22	3,920105E+22	1,336248E+23	7,840213E+22	2,120270E+23
1195	6,681097E+22	6,681309E+22	3,920206E+22	3,920119E+22	1,336241E+23	7,840324E+22	2,120273E+23
1196	6,681418E+22	6,681307E+22	3,920121E+22	3,920184E+22	1,336273E+23	7,840305E+22	2,120303E+23
1197	6,681163E+22	6,681110E+22	3,920237E+22	3,920112E+22	1,336227E+23	7,840349E+22	2,120262E+23
1198	6,681127E+22	6,681368E+22	3,920183E+22	3,920151E+22	1,336249E+23	7,840334E+22	2,120283E+23
1199	6,681362E+22	6,681250E+22	3,920069E+22	3,920131E+22	1,336261E+23	7,840201E+22	2,120281E+23
1200	6,681078E+22	6,681180E+22	3,920106E+22	3,920039E+22	1,336226E+23	7,840145E+22	2,120240E+23
1201	6,681328E+22	6,681397E+22	3,919978E+22	3,920038E+22	1,336273E+23	7,840016E+22	2,120274E+23
1202	6,681434E+22	6,681187E+22	3,919941E+22	3,919911E+22	1,336262E+23	7,839851E+22	2,120247E+23
1203	6,681204E+22	6,681328E+22	3,919957E+22	3,919843E+22	1,336253E+23	7,839800E+22	2,120233E+23
1204	6,681502E+22	6,681490E+22	3,919811E+22	3,919920E+22	1,336299E+23	7,839731E+22	2,120272E+23
1205	6,681284E+22	6,681267E+22	3,919902E+22	3,919865E+22	1,336255E+23	7,839767E+22	2,120232E+23
1206	6,681161E+22	6,681465E+22	3,919953E+22	3,919891E+22	1,336263E+23	7,839844E+22	2,120247E+23
1207	6,681464E+22	6,681354E+22	3,919906E+22	3,919954E+22	1,336282E+23	7,839861E+22	2,120268E+23
1208	6,681193E+22	6,681135E+22	3,920040E+22	3,919955E+22	1,336233E+23	7,839995E+22	2,120232E+23
1209	6,681290E+22	6,681360E+22	3,920050E+22	3,920075E+22	1,336265E+23	7,840125E+22	2,120278E+23
1210	6,681379E+22	6,681175E+22	3,920073E+22	3,920139E+22	1,336255E+23	7,840211E+22	2,120276E+23
1211	6,681037E+22	6,681190E+22	3,920209E+22	3,920159E+22	1,336223E+23	7,840368E+22	2,120260E+23
1212	6,681285E+22	6,681351E+22	3,920180E+22	3,920300E+22	1,336264E+23	7,840480E+22	2,120312E+23
1213	6,681175E+22	6,681043E+22	3,920315E+22	3,920272E+22	1,336222E+23	7,840587E+22	2,120281E+23
1214	6,680993E+22	6,681192E+22	3,920405E+22	3,920262E+22	1,336218E+23	7,840668E+22	2,120285E+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							
1215	6,681294E+22	6,681201E+22	3,920307E+22	3,920352E+22	1,336250E+23	7,840659E+22	2,120315E+23
1216	6,681017E+22	6,680978E+22	3,920356E+22	3,920311E+22	1,336199E+23	7,840667E+22	2,120266E+23
1217	6,681019E+22	6,681245E+22	3,920311E+22	3,920315E+22	1,336226E+23	7,840626E+22	2,120289E+23
1218	6,681256E+22	6,681121E+22	3,920205E+22	3,920280E+22	1,336238E+23	7,840485E+22	2,120286E+23
1219	6,681027E+22	6,681056E+22	3,920218E+22	3,920128E+22	1,336208E+23	7,840346E+22	2,120243E+23
1220	6,681300E+22	6,681317E+22	3,920096E+22	3,920145E+22	1,336262E+23	7,840240E+22	2,120286E+23
1221	6,681302E+22	6,681126E+22	3,920084E+22	3,920058E+22	1,336243E+23	7,840142E+22	2,120257E+23
1222	6,681050E+22	6,681290E+22	3,920113E+22	3,919989E+22	1,336234E+23	7,840102E+22	2,120244E+23
1223	6,681332E+22	6,681416E+22	3,920005E+22	3,920083E+22	1,336275E+23	7,840088E+22	2,120283E+23
1224	6,681155E+22	6,681102E+22	3,920071E+22	3,920047E+22	1,336226E+23	7,840118E+22	2,120237E+23
1225	6,681097E+22	6,681278E+22	3,920139E+22	3,920053E+22	1,336237E+23	7,840192E+22	2,120257E+23
1226	6,681372E+22	6,681198E+22	3,920088E+22	3,920147E+22	1,336257E+23	7,840235E+22	2,120280E+23
1227	6,681104E+22	6,681019E+22	3,920175E+22	3,920131E+22	1,336212E+23	7,840306E+22	2,120243E+23
1228	6,681188E+22	6,681299E+22	3,920189E+22	3,920277E+22	1,336249E+23	7,840466E+22	2,120295E+23
1229	6,681215E+22	6,681097E+22	3,920255E+22	3,920341E+22	1,336231E+23	7,840596E+22	2,120291E+23
1230	6,680921E+22	6,681083E+22	3,920415E+22	3,920303E+22	1,336200E+23	7,840718E+22	2,120272E+23
1231	6,681173E+22	6,681227E+22	3,920410E+22	3,920440E+22	1,336240E+23	7,840851E+22	2,120325E+23
1232	6,681065E+22	6,680883E+22	3,920487E+22	3,920444E+22	1,336195E+23	7,840930E+22	2,120288E+23
1233	6,680872E+22	6,681052E+22	3,920569E+22	3,920439E+22	1,336192E+23	7,841007E+22	2,120293E+23
1234	6,681115E+22	6,681104E+22	3,920455E+22	3,920554E+22	1,336222E+23	7,841009E+22	2,120323E+23
1235	6,680892E+22	6,680864E+22	3,920465E+22	3,920459E+22	1,336176E+23	7,840925E+22	2,120268E+23
1236	6,680965E+22	6,681140E+22	3,920430E+22	3,920446E+22	1,336210E+23	7,840875E+22	2,120298E+23
1237	6,681177E+22	6,681012E+22	3,920351E+22	3,920403E+22	1,336219E+23	7,840754E+22	2,120294E+23
1238	6,680966E+22	6,680976E+22	3,920369E+22	3,920227E+22	1,336194E+23	7,840595E+22	2,120254E+23
1239	6,681188E+22	6,681269E+22	3,920263E+22	3,920277E+22	1,336246E+23	7,840539E+22	2,120300E+23
1240	6,681150E+22	6,681035E+22	3,920215E+22	3,920239E+22	1,336218E+23	7,840453E+22	2,120264E+23
1241	6,680926E+22	6,681156E+22	3,920279E+22	3,920157E+22	1,336208E+23	7,840437E+22	2,120252E+23
1242	6,681200E+22	6,681261E+22	3,920184E+22	3,920255E+22	1,336246E+23	7,840439E+22	2,120290E+23
1243	6,681086E+22	6,680931E+22	3,920213E+22	3,920189E+22	1,336202E+23	7,840402E+22	2,120242E+23
1244	6,681059E+22	6,681156E+22	3,920275E+22	3,920220E+22	1,336222E+23	7,840495E+22	2,120271E+23
1245	6,681238E+22	6,681110E+22	3,920246E+22	3,920345E+22	1,336235E+23	7,840591E+22	2,120294E+23
1246	6,680963E+22	6,680975E+22	3,920349E+22	3,920304E+22	1,336194E+23	7,840653E+22	2,120259E+23
1247	6,681040E+22	6,681233E+22	3,920403E+22	3,920443E+22	1,336227E+23	7,840846E+22	2,120312E+23
1248	6,681076E+22	6,680951E+22	3,920454E+22	3,920520E+22	1,336203E+23	7,840974E+22	2,120300E+23
1249	6,680830E+22	6,680915E+22	3,920633E+22	3,920468E+22	1,336174E+23	7,841102E+22	2,120285E+23
1250	6,681029E+22	6,681078E+22	3,920610E+22	3,920635E+22	1,336211E+23	7,841244E+22	2,120335E+23
1251	6,680932E+22	6,680753E+22	3,920621E+22	3,920633E+22	1,336169E+23	7,841254E+22	2,120294E+23
1252	6,680761E+22	6,680956E+22	3,920681E+22	3,920636E+22	1,336172E+23	7,841317E+22	2,120303E+23
1253	6,680975E+22	6,680988E+22	3,920597E+22	3,920728E+22	1,336196E+23	7,841325E+22	2,120329E+23
1254	6,680831E+22	6,680757E+22	3,920613E+22	3,920558E+22	1,336159E+23	7,841171E+22	2,120276E+23
1255	6,680920E+22	6,681045E+22	3,920595E+22	3,920534E+22	1,336196E+23	7,841129E+22	2,120309E+23
1256	6,681098E+22	6,680912E+22	3,920483E+22	3,920527E+22	1,336201E+23	7,841010E+22	2,120302E+23
1257	6,680866E+22	6,680895E+22	3,920518E+22	3,920367E+22	1,336176E+23	7,840885E+22	2,120265E+23
1258	6,680997E+22	6,681203E+22	3,920423E+22	3,920449E+22	1,336220E+23	7,840872E+22	2,120307E+23
1259	6,681011E+22	6,680918E+22	3,920351E+22	3,920392E+22	1,336193E+23	7,840744E+22	2,120267E+23
1260	6,680851E+22	6,681017E+22	3,920423E+22	3,920317E+22	1,336187E+23	7,840740E+22	2,120261E+23
1261	6,681103E+22	6,681114E+22	3,920354E+22	3,920427E+22	1,336222E+23	7,840782E+22	2,120300E+23
1262	6,681021E+22	6,680820E+22	3,920369E+22	3,920337E+22	1,336184E+23	7,840706E+22	2,120255E+23
1263	6,680947E+22	6,681091E+22	3,920444E+22	3,920396E+22	1,336204E+23	7,840840E+22	2,120288E+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	6,681090E+22	6,681021E+22	3,920396E+22	3,920548E+22	1,336211E+23	7,840944E+22	2,120306E+23
1265	6,680850E+22	6,680838E+22	3,920550E+22	3,920479E+22	1,336169E+23	7,841028E+22	2,120272E+23
1266	6,680895E+22	6,681089E+22	3,920627E+22	3,920611E+22	1,336198E+23	7,841238E+22	2,120322E+23
1267	6,680983E+22	6,680786E+22	3,920632E+22	3,920673E+22	1,336177E+23	7,841305E+22	2,120307E+23
1268	6,680741E+22	6,680784E+22	3,920791E+22	3,920653E+22	1,336153E+23	7,841444E+22	2,120297E+23
1269	6,680852E+22	6,680974E+22	3,920773E+22	3,920843E+22	1,336183E+23	7,841615E+22	2,120344E+23
1270	6,680787E+22	6,680672E+22	3,920773E+22	3,920799E+22	1,336146E+23	7,841572E+22	2,120303E+23
1271	6,680652E+22	6,680866E+22	3,920851E+22	3,920782E+22	1,336152E+23	7,841633E+22	2,120315E+23
1272	6,680895E+22	6,680850E+22	3,920745E+22	3,920867E+22	1,336175E+23	7,841613E+22	2,120336E+23
1273	6,680800E+22	6,680624E+22	3,920781E+22	3,920674E+22	1,336142E+23	7,841455E+22	2,120288E+23
1274	6,680811E+22	6,680959E+22	3,920756E+22	3,920670E+22	1,336177E+23	7,841427E+22	2,120320E+23
1275	6,680972E+22	6,680839E+22	3,920594E+22	3,920677E+22	1,336181E+23	7,841271E+22	2,120308E+23
1276	6,680745E+22	6,680826E+22	3,920631E+22	3,920543E+22	1,336157E+23	7,841173E+22	2,120274E+23
1277	6,680835E+22	6,681077E+22	3,920579E+22	3,920618E+22	1,336191E+23	7,841197E+22	2,120311E+23
1278	6,680925E+22	6,680785E+22	3,920512E+22	3,920515E+22	1,336171E+23	7,841026E+22	2,120274E+23
1279	6,680798E+22	6,680893E+22	3,920584E+22	3,920448E+22	1,336169E+23	7,841031E+22	2,120272E+23
1280	6,681010E+22	6,680978E+22	3,920491E+22	3,920597E+22	1,336199E+23	7,841088E+22	2,120308E+23
1281	6,680924E+22	6,680727E+22	3,920530E+22	3,920510E+22	1,336165E+23	7,841040E+22	2,120269E+23
1282	6,680778E+22	6,681016E+22	3,920626E+22	3,920577E+22	1,336179E+23	7,841203E+22	2,120300E+23
1283	6,680963E+22	6,680904E+22	3,920569E+22	3,920709E+22	1,336187E+23	7,841278E+22	2,120314E+23
1284	6,680767E+22	6,680709E+22	3,920736E+22	3,920649E+22	1,336148E+23	7,841385E+22	2,120286E+23
1285	6,680752E+22	6,680941E+22	3,920840E+22	3,920798E+22	1,336169E+23	7,841638E+22	2,120333E+23
1286	6,680860E+22	6,680672E+22	3,920822E+22	3,920850E+22	1,336153E+23	7,841672E+22	2,120320E+23
1287	6,680601E+22	6,680695E+22	3,920962E+22	3,920856E+22	1,336130E+23	7,841817E+22	2,120311E+23
1288	6,680701E+22	6,680843E+22	3,920919E+22	3,921052E+22	1,336154E+23	7,841970E+22	2,120351E+23
1289	6,680715E+22	6,680521E+22	3,920942E+22	3,920954E+22	1,336124E+23	7,841896E+22	2,120313E+23
1290	6,680567E+22	6,680739E+22	3,921024E+22	3,920908E+22	1,336131E+23	7,841932E+22	2,120324E+23
1291	6,680849E+22	6,680734E+22	3,920873E+22	3,920976E+22	1,336158E+23	7,841850E+22	2,120343E+23
1292	6,680730E+22	6,680557E+22	3,920899E+22	3,920811E+22	1,336129E+23	7,841710E+22	2,120300E+23
1293	6,680627E+22	6,680910E+22	3,920902E+22	3,920834E+22	1,336154E+23	7,841736E+22	2,120327E+23
1294	6,680813E+22	6,680779E+22	3,920737E+22	3,920811E+22	1,336159E+23	7,841548E+22	2,120314E+23
1295	6,680620E+22	6,680721E+22	3,920793E+22	3,920684E+22	1,336134E+23	7,841477E+22	2,120282E+23
1296	6,680739E+22	6,680909E+22	3,920727E+22	3,920770E+22	1,336165E+23	7,841497E+22	2,120314E+23
1297	6,680892E+22	6,680615E+22	3,920672E+22	3,920658E+22	1,336151E+23	7,841330E+22	2,120284E+23
1298	6,680699E+22	6,680788E+22	3,920738E+22	3,920611E+22	1,336149E+23	7,841349E+22	2,120284E+23
1299	6,680907E+22	6,680893E+22	3,920606E+22	3,920769E+22	1,336180E+23	7,841375E+22	2,120318E+23
1300	6,680820E+22	6,680654E+22	3,920668E+22	3,920690E+22	1,336147E+23	7,841358E+22	2,120283E+23
1301	6,680623E+22	6,680902E+22	3,920827E+22	3,920745E+22	1,336152E+23	7,841573E+22	2,120310E+23
1302	6,680854E+22	6,680783E+22	3,920777E+22	3,920844E+22	1,336164E+23	7,841621E+22	2,120326E+23
1303	6,680666E+22	6,680591E+22	3,920946E+22	3,920820E+22	1,336126E+23	7,841765E+22	2,120302E+23
1304	6,680598E+22	6,680798E+22	3,921018E+22	3,921012E+22	1,336140E+23	7,842030E+22	2,120343E+23
1305	6,680723E+22	6,680548E+22	3,921004E+22	3,921062E+22	1,336127E+23	7,842066E+22	2,120334E+23
1306	6,680440E+22	6,680587E+22	3,921139E+22	3,921051E+22	1,336103E+23	7,842189E+22	2,120322E+23
1307	6,680612E+22	6,680700E+22	3,921065E+22	3,921209E+22	1,336131E+23	7,842274E+22	2,120359E+23
1308	6,680681E+22	6,680414E+22	3,921086E+22	3,921094E+22	1,336109E+23	7,842179E+22	2,120327E+23
1309	6,680471E+22	6,680632E+22	3,921188E+22	3,921045E+22	1,336110E+23	7,842233E+22	2,120334E+23
1310	6,680734E+22	6,680679E+22	3,921021E+22	3,921100E+22	1,336141E+23	7,842121E+22	2,120353E+23
1311	6,680587E+22	6,680522E+22	3,921037E+22	3,920969E+22	1,336111E+23	7,842006E+22	2,120312E+23
1312	6,680452E+22	6,680782E+22	3,921038E+22	3,921005E+22	1,336123E+23	7,842044E+22	2,120328E+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	6,680724E+22	6,680613E+22	3,920904E+22	3,920948E+22	1,336134E+23	7,841852E+22	2,120319E+23
1314	6,680542E+22	6,680566E+22	3,920949E+22	3,920808E+22	1,336111E+23	7,841757E+22	2,120286E+23
1315	6,680702E+22	6,680757E+22	3,920839E+22	3,920899E+22	1,336146E+23	7,841739E+22	2,120320E+23
1316	6,680836E+22	6,680545E+22	3,920777E+22	3,920812E+22	1,336138E+23	7,841589E+22	2,120297E+23
1317	6,680539E+22	6,680738E+22	3,920884E+22	3,920783E+22	1,336128E+23	7,841667E+22	2,120294E+23
1318	6,680759E+22	6,680846E+22	3,920779E+22	3,920909E+22	1,336160E+23	7,841688E+22	2,120329E+23
1319	6,680697E+22	6,680574E+22	3,920873E+22	3,920850E+22	1,336127E+23	7,841723E+22	2,120299E+23
1320	6,680486E+22	6,680740E+22	3,921039E+22	3,920930E+22	1,336123E+23	7,841969E+22	2,120320E+23
1321	6,680760E+22	6,680613E+22	3,920997E+22	3,921036E+22	1,336137E+23	7,842033E+22	2,120341E+23
1322	6,680511E+22	6,680465E+22	3,921139E+22	3,921037E+22	1,336098E+23	7,842175E+22	2,120315E+23
1323	6,680470E+22	6,680663E+22	3,921153E+22	3,921233E+22	1,336113E+23	7,842387E+22	2,120352E+23
1324	6,680629E+22	6,680426E+22	3,921140E+22	3,921259E+22	1,336105E+23	7,842399E+22	2,120345E+23
1325	6,680331E+22	6,680456E+22	3,921312E+22	3,921210E+22	1,336079E+23	7,842521E+22	2,120331E+23
1326	6,680553E+22	6,680596E+22	3,921229E+22	3,921308E+22	1,336115E+23	7,842536E+22	2,120369E+23
1327	6,680603E+22	6,680346E+22	3,921247E+22	3,921217E+22	1,336095E+23	7,842464E+22	2,120341E+23
1328	6,680316E+22	6,680547E+22	3,921338E+22	3,921202E+22	1,336086E+23	7,842540E+22	2,120340E+23
1329	6,680585E+22	6,680587E+22	3,921183E+22	3,921254E+22	1,336117E+23	7,842438E+22	2,120361E+23
1330	6,680416E+22	6,680418E+22	3,921204E+22	3,921122E+22	1,336083E+23	7,842325E+22	2,120316E+23
1331	6,680365E+22	6,680615E+22	3,921166E+22	3,921146E+22	1,336098E+23	7,842312E+22	2,120329E+23
1332	6,680688E+22	6,680473E+22	3,921025E+22	3,921087E+22	1,336116E+23	7,842112E+22	2,120327E+23
1333	6,680461E+22	6,680451E+22	3,921085E+22	3,920957E+22	1,336091E+23	7,842042E+22	2,120295E+23
1334	6,680608E+22	6,680704E+22	3,920962E+22	3,921035E+22	1,336131E+23	7,841998E+22	2,120331E+23
1335	6,680713E+22	6,680529E+22	3,920913E+22	3,920982E+22	1,336124E+23	7,841895E+22	2,120314E+23
1336	6,680382E+22	6,680630E+22	3,921057E+22	3,920959E+22	1,336101E+23	7,842016E+22	2,120303E+23
1337	6,680657E+22	6,680697E+22	3,920998E+22	3,921060E+22	1,336135E+23	7,842058E+22	2,120341E+23
1338	6,680579E+22	6,680432E+22	3,921092E+22	3,921014E+22	1,336101E+23	7,842106E+22	2,120312E+23
1339	6,680389E+22	6,680565E+22	3,921208E+22	3,921124E+22	1,336095E+23	7,842332E+22	2,120329E+23
1340	6,680645E+22	6,680504E+22	3,921148E+22	3,921252E+22	1,336115E+23	7,842400E+22	2,120355E+23
1341	6,680342E+22	6,680357E+22	3,921300E+22	3,921250E+22	1,336070E+23	7,842550E+22	2,120325E+23
1342	6,680342E+22	6,680558E+22	3,921320E+22	3,921390E+22	1,336090E+23	7,842710E+22	2,120361E+23
1343	6,680549E+22	6,680343E+22	3,921314E+22	3,921407E+22	1,336089E+23	7,842721E+22	2,120361E+23
1344	6,680235E+22	6,680314E+22	3,921494E+22	3,921358E+22	1,336055E+23	7,842852E+22	2,120340E+23
1345	6,680472E+22	6,680475E+22	3,921426E+22	3,921449E+22	1,336095E+23	7,842875E+22	2,120382E+23
1346	6,680444E+22	6,680280E+22	3,921419E+22	3,921381E+22	1,336072E+23	7,842800E+22	2,120352E+23
1347	6,680167E+22	6,680431E+22	3,921461E+22	3,921382E+22	1,336060E+23	7,842843E+22	2,120344E+23
1348	6,680469E+22	6,680466E+22	3,921308E+22	3,921414E+22	1,336093E+23	7,842722E+22	2,120366E+23
1349	6,680308E+22	6,680267E+22	3,921348E+22	3,921262E+22	1,336058E+23	7,842609E+22	2,120318E+23
1350	6,680317E+22	6,680490E+22	3,921294E+22	3,921246E+22	1,336081E+23	7,842541E+22	2,120335E+23
1351	6,680634E+22	6,680413E+22	3,921144E+22	3,921221E+22	1,336105E+23	7,842365E+22	2,120341E+23
1352	6,680332E+22	6,680381E+22	3,921214E+22	3,921120E+22	1,336071E+23	7,842334E+22	2,120305E+23
1353	6,680487E+22	6,680633E+22	3,921130E+22	3,921185E+22	1,336112E+23	7,842315E+22	2,120343E+23
1354	6,680557E+22	6,680451E+22	3,921109E+22	3,921132E+22	1,336101E+23	7,842241E+22	2,120325E+23
1355	6,680288E+22	6,680471E+22	3,921234E+22	3,921123E+22	1,336076E+23	7,842357E+22	2,120312E+23
1356	6,680579E+22	6,680542E+22	3,921176E+22	3,921232E+22	1,336112E+23	7,842408E+22	2,120353E+23
1357	6,680446E+22	6,680289E+22	3,921279E+22	3,921219E+22	1,336073E+23	7,842498E+22	2,120323E+23
1358	6,680258E+22	6,680461E+22	3,921359E+22	3,921316E+22	1,336072E+23	7,842674E+22	2,120339E+23
1359	6,680506E+22	6,680424E+22	3,921297E+22	3,921461E+22	1,336093E+23	7,842758E+22	2,120369E+23
1360	6,680206E+22	6,680211E+22	3,921477E+22	3,921436E+22	1,336042E+23	7,842913E+22	2,120333E+23
1361	6,680281E+22	6,680403E+22	3,921525E+22	3,921526E+22	1,336068E+23	7,843051E+22	2,120373E+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	6,680452E+22	6,680239E+22	3,921518E+22	3,921539E+22	1,336069E+23	7,843057E+22	2,120375E+23
1363	6,680140E+22	6,680194E+22	3,921649E+22	3,921520E+22	1,336033E+23	7,843169E+22	2,120350E+23
1364	6,680327E+22	6,680403E+22	3,921571E+22	3,921623E+22	1,336073E+23	7,843193E+22	2,120392E+23
1365	6,680250E+22	6,680192E+22	3,921578E+22	3,921564E+22	1,336044E+23	7,843142E+22	2,120358E+23
1366	6,680032E+22	6,680313E+22	3,921606E+22	3,921519E+22	1,336034E+23	7,843124E+22	2,120347E+23
1367	6,680391E+22	6,680360E+22	3,921446E+22	3,921556E+22	1,336075E+23	7,843002E+22	2,120375E+23
1368	6,680238E+22	6,680115E+22	3,921487E+22	3,921406E+22	1,336035E+23	7,842893E+22	2,120325E+23
1369	6,680271E+22	6,680376E+22	3,921442E+22	3,921381E+22	1,336065E+23	7,842823E+22	2,120347E+23
1370	6,680514E+22	6,680376E+22	3,921286E+22	3,921368E+22	1,336089E+23	7,842654E+22	2,120354E+23
1371	6,680224E+22	6,680279E+22	3,921337E+22	3,921285E+22	1,336050E+23	7,842622E+22	2,120313E+23
1372	6,680385E+22	6,680525E+22	3,921290E+22	3,921328E+22	1,336091E+23	7,842617E+22	2,120353E+23
1373	6,680444E+22	6,680309E+22	3,921295E+22	3,921279E+22	1,336075E+23	7,842574E+22	2,120333E+23
1374	6,680194E+22	6,680327E+22	3,921406E+22	3,921262E+22	1,336052E+23	7,842668E+22	2,120319E+23
1375	6,680462E+22	6,680460E+22	3,921333E+22	3,921421E+22	1,336092E+23	7,842754E+22	2,120368E+23
1376	6,680275E+22	6,680169E+22	3,921442E+22	3,921434E+22	1,336044E+23	7,842876E+22	2,120332E+23
1377	6,680129E+22	6,680337E+22	3,921548E+22	3,921505E+22	1,336047E+23	7,843053E+22	2,120352E+23
1378	6,680373E+22	6,680321E+22	3,921503E+22	3,921626E+22	1,336069E+23	7,843129E+22	2,120382E+23
1379	6,680138E+22	6,680051E+22	3,921655E+22	3,921603E+22	1,336019E+23	7,843257E+22	2,120345E+23
1380	6,680212E+22	6,680279E+22	3,921708E+22	3,921681E+22	1,336049E+23	7,843389E+22	2,120388E+23
1381	6,680311E+22	6,680143E+22	3,921701E+22	3,921723E+22	1,336045E+23	7,843424E+22	2,120388E+23
1382	6,679983E+22	6,680121E+22	3,921795E+22	3,921695E+22	1,336010E+23	7,843490E+22	2,120359E+23
1383	6,680168E+22	6,680334E+22	3,921708E+22	3,921809E+22	1,336050E+23	7,843516E+22	2,120402E+23
1384	6,680111E+22	6,680031E+22	3,921738E+22	3,921730E+22	1,336014E+23	7,843467E+22	2,120361E+23
1385	6,679992E+22	6,680139E+22	3,921769E+22	3,921638E+22	1,336013E+23	7,843407E+22	2,120354E+23
1386	6,680329E+22	6,680249E+22	3,921600E+22	3,921670E+22	1,336058E+23	7,843270E+22	2,120385E+23
1387	6,680189E+22	6,680012E+22	3,921591E+22	3,921548E+22	1,336020E+23	7,843139E+22	2,120334E+23
1388	6,680178E+22	6,680321E+22	3,921552E+22	3,921517E+22	1,336050E+23	7,843068E+22	2,120357E+23
1389	6,680356E+22	6,680314E+22	3,921437E+22	3,921514E+22	1,336067E+23	7,842951E+22	2,120362E+23
1390	6,680105E+22	6,680187E+22	3,921493E+22	3,921405E+22	1,336029E+23	7,842898E+22	2,120319E+23
1391	6,680275E+22	6,680424E+22	3,921457E+22	3,921475E+22	1,336070E+23	7,842932E+22	2,120363E+23
1392	6,680317E+22	6,680149E+22	3,921486E+22	3,921462E+22	1,336047E+23	7,842947E+22	2,120341E+23
1393	6,680094E+22	6,680184E+22	3,921589E+22	3,921452E+22	1,336028E+23	7,843040E+22	2,120332E+23
1394	6,680301E+22	6,680373E+22	3,921508E+22	3,921626E+22	1,336067E+23	7,843133E+22	2,120381E+23
1395	6,680163E+22	6,680024E+22	3,921586E+22	3,921644E+22	1,336019E+23	7,843230E+22	2,120342E+23
1396	6,680050E+22	6,680193E+22	3,921719E+22	3,921668E+22	1,336024E+23	7,843388E+22	2,120363E+23
1397	6,680279E+22	6,680189E+22	3,921701E+22	3,921783E+22	1,336047E+23	7,843485E+22	2,120395E+23
1398	6,680052E+22	6,679944E+22	3,921831E+22	3,921746E+22	1,336000E+23	7,843577E+22	2,120357E+23
1399	6,680073E+22	6,680233E+22	3,921872E+22	3,921862E+22	1,336031E+23	7,843734E+22	2,120404E+23
1400	6,680118E+22	6,680045E+22	3,921879E+22	3,921924E+22	1,336016E+23	7,843803E+22	2,120397E+23
1401	6,679840E+22	6,679989E+22	3,921980E+22	3,921865E+22	1,335983E+23	7,843846E+22	2,120367E+23
1402	6,680040E+22	6,680213E+22	3,921892E+22	3,921951E+22	1,336025E+23	7,843843E+22	2,120410E+23
1403	6,680070E+22	6,679848E+22	3,921870E+22	3,921877E+22	1,335992E+23	7,843747E+22	2,120366E+23
1404	6,679965E+22	6,680010E+22	3,921895E+22	3,921767E+22	1,335997E+23	7,843662E+22	2,120364E+23
1405	6,680234E+22	6,680178E+22	3,921723E+22	3,921815E+22	1,336041E+23	7,843538E+22	2,120395E+23
1406	6,680068E+22	6,679968E+22	3,921692E+22	3,921680E+22	1,336004E+23	7,843372E+22	2,120341E+23
1407	6,680044E+22	6,680286E+22	3,921675E+22	3,921655E+22	1,336033E+23	7,843330E+22	2,120366E+23
1408	6,680219E+22	6,680180E+22	3,921611E+22	3,921652E+22	1,336040E+23	7,843262E+22	2,120366E+23
1409	6,680030E+22	6,680031E+22	3,921685E+22	3,921534E+22	1,336006E+23	7,843219E+22	2,120328E+23
1410	6,680155E+22	6,680312E+22	3,921645E+22	3,921627E+22	1,336047E+23	7,843272E+22	2,120374E+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	6,680206E+22	6,680010E+22	3,921625E+22	3,921668E+22	1,336022E+23	7,843293E+22	2,120351E+23
1412	6,679973E+22	6,680075E+22	3,921732E+22	3,921648E+22	1,336005E+23	7,843380E+22	2,120343E+23
1413	6,680158E+22	6,680257E+22	3,921683E+22	3,921816E+22	1,336041E+23	7,843499E+22	2,120391E+23
1414	6,680073E+22	6,679908E+22	3,921756E+22	3,921793E+22	1,335998E+23	7,843549E+22	2,120353E+23
1415	6,679976E+22	6,680103E+22	3,921896E+22	3,921825E+22	1,336008E+23	7,843721E+22	2,120380E+23
1416	6,680158E+22	6,680061E+22	3,921911E+22	3,921965E+22	1,336022E+23	7,843876E+22	2,120410E+23
1417	6,679930E+22	6,679844E+22	3,922032E+22	3,921934E+22	1,335977E+23	7,843966E+22	2,120374E+23
1418	6,679879E+22	6,680157E+22	3,922065E+22	3,922055E+22	1,336004E+23	7,844119E+22	2,120416E+23
1419	6,679986E+22	6,679882E+22	3,922034E+22	3,922123E+22	1,335987E+23	7,844158E+22	2,120403E+23
1420	6,679774E+22	6,679809E+22	3,922130E+22	3,922008E+22	1,335958E+23	7,844138E+22	2,120372E+23
1421	6,679968E+22	6,680056E+22	3,922044E+22	3,922085E+22	1,336002E+23	7,844128E+22	2,120415E+23
1422	6,680015E+22	6,679759E+22	3,921975E+22	3,921990E+22	1,335977E+23	7,843965E+22	2,120374E+23
1423	6,679865E+22	6,679993E+22	3,921988E+22	3,921904E+22	1,335986E+23	7,843892E+22	2,120375E+23
1424	6,680070E+22	6,680122E+22	3,921865E+22	3,921964E+22	1,336019E+23	7,843830E+22	2,120402E+23
1425	6,679944E+22	6,679886E+22	3,921861E+22	3,921806E+22	1,335983E+23	7,843667E+22	2,120350E+23
1426	6,679903E+22	6,680193E+22	3,921868E+22	3,921776E+22	1,336010E+23	7,843644E+22	2,120374E+23
1427	6,680138E+22	6,680008E+22	3,921771E+22	3,921815E+22	1,336015E+23	7,843585E+22	2,120373E+23
1428	6,679960E+22	6,679874E+22	3,921839E+22	3,921704E+22	1,335983E+23	7,843543E+22	2,120338E+23
1429	6,680025E+22	6,680197E+22	3,921797E+22	3,921830E+22	1,336022E+23	7,843627E+22	2,120385E+23
1430	6,680083E+22	6,679919E+22	3,921744E+22	3,921856E+22	1,336000E+23	7,843599E+22	2,120360E+23
1431	6,679871E+22	6,679995E+22	3,921869E+22	3,921823E+22	1,335987E+23	7,843692E+22	2,120356E+23
1432	6,680059E+22	6,680111E+22	3,921882E+22	3,921974E+22	1,336017E+23	7,843856E+22	2,120403E+23
1433	6,680010E+22	6,679781E+22	3,921969E+22	3,921934E+22	1,335979E+23	7,843903E+22	2,120369E+23
1434	6,679844E+22	6,680032E+22	3,922115E+22	3,921984E+22	1,335988E+23	7,844099E+22	2,120398E+23
1435	6,680009E+22	6,679942E+22	3,922085E+22	3,922177E+22	1,335995E+23	7,844261E+22	2,120421E+23
1436	6,679770E+22	6,679724E+22	3,922209E+22	3,922133E+22	1,335949E+23	7,844342E+22	2,120384E+23
1437	6,679713E+22	6,680016E+22	3,922246E+22	3,922241E+22	1,335973E+23	7,844487E+22	2,120422E+23
1438	6,679885E+22	6,679731E+22	3,922175E+22	3,922270E+22	1,335962E+23	7,844445E+22	2,120406E+23
1439	6,679719E+22	6,679704E+22	3,922252E+22	3,922151E+22	1,335942E+23	7,844403E+22	2,120383E+23
1440	6,679882E+22	6,679937E+22	3,922191E+22	3,922235E+22	1,335982E+23	7,844426E+22	2,120424E+23
1441	6,679920E+22	6,679708E+22	3,922110E+22	3,922129E+22	1,335963E+23	7,844239E+22	2,120387E+23
1442	6,679711E+22	6,679968E+22	3,922138E+22	3,922035E+22	1,335968E+23	7,844173E+22	2,120385E+23
1443	6,679952E+22	6,679991E+22	3,922007E+22	3,922110E+22	1,335994E+23	7,844117E+22	2,120406E+23
1444	6,679872E+22	6,679730E+22	3,922024E+22	3,921927E+22	1,335960E+23	7,843951E+22	2,120355E+23
1445	6,679804E+22	6,680038E+22	3,922037E+22	3,921920E+22	1,335984E+23	7,843957E+22	2,120380E+23
1446	6,680041E+22	6,679894E+22	3,921894E+22	3,921971E+22	1,335994E+23	7,843865E+22	2,120380E+23
1447	6,679848E+22	6,679817E+22	3,921943E+22	3,921887E+22	1,335967E+23	7,843831E+22	2,120350E+23
1448	6,679877E+22	6,680088E+22	3,921958E+22	3,922018E+22	1,335997E+23	7,843976E+22	2,120394E+23
1449	6,679987E+22	6,679822E+22	3,921926E+22	3,922008E+22	1,335981E+23	7,843934E+22	2,120374E+23
1450	6,679765E+22	6,679903E+22	3,922082E+22	3,921962E+22	1,335967E+23	7,844044E+22	2,120371E+23
1451	6,679976E+22	6,679959E+22	3,922081E+22	3,922154E+22	1,335994E+23	7,844235E+22	2,120417E+23
1452	6,679913E+22	6,679652E+22	3,922167E+22	3,922120E+22	1,335957E+23	7,844287E+22	2,120385E+23
1453	6,679654E+22	6,679925E+22	3,922306E+22	3,922206E+22	1,335958E+23	7,844512E+22	2,120409E+23
1454	6,679829E+22	6,679834E+22	3,922233E+22	3,922381E+22	1,335966E+23	7,844614E+22	2,120428E+23
1455	6,679648E+22	6,679598E+22	3,922349E+22	3,922315E+22	1,335925E+23	7,844665E+22	2,120391E+23
1456	6,679617E+22	6,679827E+22	3,922428E+22	3,922399E+22	1,335944E+23	7,844827E+22	2,120427E+23
1457	6,679840E+22	6,679606E+22	3,922336E+22	3,922396E+22	1,335945E+23	7,844732E+22	2,120418E+23
1458	6,679622E+22	6,679655E+22	3,922407E+22	3,922278E+22	1,335928E+23	7,844685E+22	2,120396E+23
1459	6,679767E+22	6,679856E+22	3,922317E+22	3,922397E+22	1,335962E+23	7,844714E+22	2,120434E+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							
1460	6,679799E+22	6,679627E+22	3,922258E+22	3,922264E+22	1,335943E+23	7,844522E+22	2,120395E+23
1461	6,679567E+22	6,679861E+22	3,922309E+22	3,922171E+22	1,335943E+23	7,844480E+22	2,120391E+23
1462	6,679850E+22	6,679864E+22	3,922146E+22	3,922232E+22	1,335971E+23	7,844378E+22	2,120409E+23
1463	6,679801E+22	6,679622E+22	3,922150E+22	3,922078E+22	1,335942E+23	7,844227E+22	2,120365E+23
1464	6,679697E+22	6,679899E+22	3,922193E+22	3,922102E+22	1,335960E+23	7,844295E+22	2,120389E+23
1465	6,679927E+22	6,679817E+22	3,922034E+22	3,922149E+22	1,335974E+23	7,844183E+22	2,120393E+23
1466	6,679715E+22	6,679764E+22	3,922101E+22	3,922052E+22	1,335948E+23	7,844152E+22	2,120363E+23
1467	6,679794E+22	6,679931E+22	3,922117E+22	3,922184E+22	1,335972E+23	7,844301E+22	2,120403E+23
1468	6,679930E+22	6,679673E+22	3,922117E+22	3,922143E+22	1,335960E+23	7,844260E+22	2,120386E+23
1469	6,679657E+22	6,679781E+22	3,922285E+22	3,922124E+22	1,335944E+23	7,844409E+22	2,120385E+23
1470	6,679826E+22	6,679861E+22	3,922245E+22	3,922335E+22	1,335969E+23	7,844579E+22	2,120427E+23
1471	6,679743E+22	6,679589E+22	3,922322E+22	3,922333E+22	1,335933E+23	7,844655E+22	2,120399E+23
1472	6,679466E+22	6,679776E+22	3,922505E+22	3,922420E+22	1,335924E+23	7,844925E+22	2,120417E+23
1473	6,679703E+22	6,679693E+22	3,922425E+22	3,922551E+22	1,335940E+23	7,844976E+22	2,120437E+23
1474	6,679557E+22	6,679477E+22	3,922536E+22	3,922460E+22	1,335903E+23	7,844996E+22	2,120403E+23
1475	6,679566E+22	6,679655E+22	3,922584E+22	3,922565E+22	1,335922E+23	7,845149E+22	2,120437E+23
1476	6,679778E+22	6,679505E+22	3,922487E+22	3,922546E+22	1,335928E+23	7,845034E+22	2,120432E+23
1477	6,679481E+22	6,679596E+22	3,922552E+22	3,922444E+22	1,335908E+23	7,844997E+22	2,120407E+23
1478	6,679622E+22	6,679781E+22	3,922439E+22	3,922537E+22	1,335940E+23	7,844976E+22	2,120438E+23
1479	6,679699E+22	6,679536E+22	3,922386E+22	3,922392E+22	1,335923E+23	7,844778E+22	2,120401E+23
1480	6,679465E+22	6,679692E+22	3,922484E+22	3,922305E+22	1,335916E+23	7,844789E+22	2,120395E+23
1481	6,679767E+22	6,679756E+22	3,922298E+22	3,922362E+22	1,335952E+23	7,844660E+22	2,120418E+23
1482	6,679684E+22	6,679559E+22	3,922293E+22	3,922230E+22	1,335924E+23	7,844522E+22	2,120377E+23
1483	6,679578E+22	6,679782E+22	3,922320E+22	3,922293E+22	1,335936E+23	7,844613E+22	2,120397E+23
1484	6,679831E+22	6,679706E+22	3,922185E+22	3,922305E+22	1,335954E+23	7,844490E+22	2,120403E+23
1485	6,679598E+22	6,679643E+22	3,922280E+22	3,922202E+22	1,335924E+23	7,844483E+22	2,120372E+23
1486	6,679703E+22	6,679808E+22	3,922279E+22	3,922322E+22	1,335951E+23	7,844601E+22	2,120411E+23
1487	6,679847E+22	6,679578E+22	3,922280E+22	3,922311E+22	1,335943E+23	7,844591E+22	2,120402E+23
1488	6,679505E+22	6,679652E+22	3,922491E+22	3,922335E+22	1,335916E+23	7,844826E+22	2,120398E+23
1489	6,679649E+22	6,679782E+22	3,922428E+22	3,922540E+22	1,335943E+23	7,844968E+22	2,120440E+23
1490	6,679574E+22	6,679489E+22	3,922517E+22	3,922528E+22	1,335906E+23	7,845044E+22	2,120411E+23
1491	6,679370E+22	6,679563E+22	3,922687E+22	3,922612E+22	1,335893E+23	7,845299E+22	2,120423E+23
1492	6,679660E+22	6,679508E+22	3,922609E+22	3,922698E+22	1,335917E+23	7,845307E+22	2,120448E+23
1493	6,679478E+22	6,679358E+22	3,922707E+22	3,922615E+22	1,335884E+23	7,845322E+22	2,120416E+23
1494	6,679460E+22	6,679585E+22	3,922704E+22	3,922717E+22	1,335905E+23	7,845421E+22	2,120447E+23
1495	6,679646E+22	6,679484E+22	3,922605E+22	3,922704E+22	1,335913E+23	7,845309E+22	2,120444E+23
1496	6,679324E+22	6,679497E+22	3,922729E+22	3,922600E+22	1,335882E+23	7,845329E+22	2,120415E+23
1497	6,679489E+22	6,679685E+22	3,922611E+22	3,922656E+22	1,335917E+23	7,845267E+22	2,120444E+23
1498	6,679596E+22	6,679439E+22	3,922561E+22	3,922519E+22	1,335904E+23	7,845079E+22	2,120412E+23
1499	6,679396E+22	6,679509E+22	3,922624E+22	3,922474E+22	1,335891E+23	7,845098E+22	2,120400E+23
1500	6,679683E+22	6,679628E+22	3,922432E+22	3,922527E+22	1,335931E+23	7,844959E+22	2,120427E+23
1501	6,679554E+22	6,679480E+22	3,922416E+22	3,922406E+22	1,335903E+23	7,844822E+22	2,120386E+23
1502	6,679472E+22	6,679671E+22	3,922425E+22	3,922438E+22	1,335914E+23	7,844864E+22	2,120401E+23
1503	6,679768E+22	6,679608E+22	3,922320E+22	3,922431E+22	1,335938E+23	7,844750E+22	2,120413E+23
1504	6,679518E+22	6,679496E+22	3,922477E+22	3,922343E+22	1,335901E+23	7,844820E+22	2,120384E+23
1505	6,679584E+22	6,679726E+22	3,922470E+22	3,922466E+22	1,335931E+23	7,844936E+22	2,120425E+23
1506	6,679683E+22	6,679531E+22	3,922476E+22	3,922496E+22	1,335921E+23	7,844972E+22	2,120419E+23
1507	6,679335E+22	6,679500E+22	3,922676E+22	3,922564E+22	1,335884E+23	7,845240E+22	2,120408E+23
1508	6,679513E+22	6,679621E+22	3,922631E+22	3,922735E+22	1,335913E+23	7,845365E+22	2,120450E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1509	6,679453E+22	6,679331E+22	3,922715E+22	3,922713E+22	1,335878E+23	7,845428E+22	2,120421E+23
1510	6,679300E+22	6,679403E+22	3,922839E+22	3,922778E+22	1,335870E+23	7,845616E+22	2,120432E+23
1511	6,679606E+22	6,679415E+22	3,922748E+22	3,922866E+22	1,335902E+23	7,845614E+22	2,120464E+23
1512	6,679354E+22	6,679270E+22	3,922877E+22	3,922803E+22	1,335862E+23	7,845680E+22	2,120430E+23
1513	6,679302E+22	6,679559E+22	3,922857E+22	3,922872E+22	1,335886E+23	7,845729E+22	2,120459E+23
1514	6,679501E+22	6,679423E+22	3,922777E+22	3,922841E+22	1,335892E+23	7,845617E+22	2,120454E+23
1515	6,679224E+22	6,679309E+22	3,922897E+22	3,922748E+22	1,335853E+23	7,845644E+22	2,120418E+23
1516	6,679424E+22	6,679517E+22	3,922773E+22	3,922776E+22	1,335894E+23	7,845549E+22	2,120449E+23
1517	6,679489E+22	6,679315E+22	3,922702E+22	3,922668E+22	1,335880E+23	7,845371E+22	2,120417E+23
1518	6,679288E+22	6,679411E+22	3,922711E+22	3,922632E+22	1,335870E+23	7,845343E+22	2,120404E+23
1519	6,679586E+22	6,679567E+22	3,922525E+22	3,922678E+22	1,335915E+23	7,845203E+22	2,120436E+23
1520	6,679443E+22	6,679370E+22	3,922576E+22	3,922550E+22	1,335881E+23	7,845126E+22	2,120394E+23
1521	6,679378E+22	6,679597E+22	3,922590E+22	3,922542E+22	1,335898E+23	7,845132E+22	2,120411E+23
1522	6,679679E+22	6,679536E+22	3,922512E+22	3,922557E+22	1,335922E+23	7,845069E+22	2,120428E+23
1523	6,679414E+22	6,679343E+22	3,922669E+22	3,922538E+22	1,335876E+23	7,845207E+22	2,120396E+23
1524	6,679440E+22	6,679609E+22	3,922663E+22	3,922669E+22	1,335905E+23	7,845332E+22	2,120438E+23
1525	6,679494E+22	6,679423E+22	3,922665E+22	3,922723E+22	1,335892E+23	7,845388E+22	2,120431E+23
1526	6,679207E+22	6,679329E+22	3,922828E+22	3,922763E+22	1,335854E+23	7,845591E+22	2,120413E+23
1527	6,679449E+22	6,679463E+22	3,922788E+22	3,922902E+22	1,335891E+23	7,845690E+22	2,120460E+23
1528	6,679386E+22	6,679173E+22	3,922903E+22	3,922882E+22	1,335856E+23	7,845786E+22	2,120435E+23
1529	6,679201E+22	6,679339E+22	3,922999E+22	3,922925E+22	1,335854E+23	7,845924E+22	2,120446E+23
1530	6,679465E+22	6,679404E+22	3,922921E+22	3,923030E+22	1,335887E+23	7,845951E+22	2,120482E+23
1531	6,679204E+22	6,679158E+22	3,923047E+22	3,922987E+22	1,335836E+23	7,846034E+22	2,120440E+23
1532	6,679163E+22	6,679424E+22	3,923048E+22	3,923009E+22	1,335859E+23	7,846057E+22	2,120464E+23
1533	6,679371E+22	6,679289E+22	3,922959E+22	3,922980E+22	1,335866E+23	7,845940E+22	2,120460E+23
1534	6,679148E+22	6,679135E+22	3,923018E+22	3,922888E+22	1,335828E+23	7,845906E+22	2,120419E+23
1535	6,679362E+22	6,679403E+22	3,922878E+22	3,922925E+22	1,335876E+23	7,845804E+22	2,120457E+23
1536	6,679378E+22	6,679221E+22	3,922825E+22	3,922843E+22	1,335860E+23	7,845667E+22	2,120427E+23
1537	6,679164E+22	6,679371E+22	3,922819E+22	3,922766E+22	1,335854E+23	7,845585E+22	2,120412E+23
1538	6,679492E+22	6,679510E+22	3,922677E+22	3,922794E+22	1,335900E+23	7,845471E+22	2,120447E+23
1539	6,679377E+22	6,679210E+22	3,922745E+22	3,922683E+22	1,335859E+23	7,845429E+22	2,120402E+23
1540	6,679306E+22	6,679468E+22	3,922782E+22	3,922665E+22	1,335877E+23	7,845447E+22	2,120422E+23
1541	6,679533E+22	6,679452E+22	3,922701E+22	3,922733E+22	1,335898E+23	7,845434E+22	2,120442E+23
1542	6,679253E+22	6,679236E+22	3,922814E+22	3,922748E+22	1,335849E+23	7,845562E+22	2,120405E+23
1543	6,679294E+22	6,679502E+22	3,922818E+22	3,922874E+22	1,335880E+23	7,845693E+22	2,120449E+23
1544	6,679354E+22	6,679260E+22	3,922866E+22	3,922928E+22	1,335861E+23	7,845794E+22	2,120441E+23
1545	6,679113E+22	6,679211E+22	3,923003E+22	3,922920E+22	1,335832E+23	7,845923E+22	2,120425E+23
1546	6,679387E+22	6,679359E+22	3,922975E+22	3,923061E+22	1,335875E+23	7,846036E+22	2,120478E+23
1547	6,679296E+22	6,679033E+22	3,923083E+22	3,923077E+22	1,335833E+23	7,846160E+22	2,120449E+23
1548	6,679076E+22	6,679261E+22	3,923176E+22	3,923097E+22	1,335834E+23	7,846273E+22	2,120461E+23
1549	6,679286E+22	6,679324E+22	3,923104E+22	3,923205E+22	1,335861E+23	7,846309E+22	2,120492E+23
1550	6,679078E+22	6,679004E+22	3,923198E+22	3,923141E+22	1,335808E+23	7,846339E+22	2,120442E+23
1551	6,679087E+22	6,679272E+22	3,923193E+22	3,923137E+22	1,335836E+23	7,846330E+22	2,120469E+23
1552	6,679275E+22	6,679136E+22	3,923119E+22	3,923130E+22	1,335841E+23	7,846249E+22	2,120466E+23
1553	6,679039E+22	6,679073E+22	3,923128E+22	3,923021E+22	1,335811E+23	7,846149E+22	2,120426E+23
1554	6,679246E+22	6,679371E+22	3,922999E+22	3,923073E+22	1,335862E+23	7,846072E+22	2,120469E+23
1555	6,679263E+22	6,679113E+22	3,922960E+22	3,923002E+22	1,335838E+23	7,845962E+22	2,120434E+23
1556	6,679080E+22	6,679266E+22	3,922982E+22	3,922879E+22	1,335835E+23	7,845861E+22	2,120421E+23
1557	6,679389E+22	6,679414E+22	3,922859E+22	3,922918E+22	1,335880E+23	7,845777E+22	2,120458E+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							
1558	6,679300E+22	6,679073E+22	3,922892E+22	3,922837E+22	1,335837E+23	7,845729E+22	2,120410E+23
1559	6,679199E+22	6,679368E+22	3,922931E+22	3,922844E+22	1,335857E+23	7,845775E+22	2,120434E+23
1560	6,679363E+22	6,679352E+22	3,922874E+22	3,922956E+22	1,335872E+23	7,845830E+22	2,120454E+23
1561	6,679093E+22	6,679142E+22	3,922965E+22	3,922933E+22	1,335824E+23	7,845898E+22	2,120413E+23
1562	6,679195E+22	6,679373E+22	3,923004E+22	3,923043E+22	1,335857E+23	7,846047E+22	2,120461E+23
1563	6,679292E+22	6,679061E+22	3,923049E+22	3,923101E+22	1,335835E+23	7,846150E+22	2,120450E+23
1564	6,679051E+22	6,679067E+22	3,923190E+22	3,923068E+22	1,335812E+23	7,846258E+22	2,120438E+23
1565	6,679249E+22	6,679291E+22	3,923165E+22	3,923236E+22	1,335854E+23	7,846401E+22	2,120494E+23
1566	6,679147E+22	6,678945E+22	3,923232E+22	3,923266E+22	1,335809E+23	7,846498E+22	2,120459E+23
1567	6,678930E+22	6,679170E+22	3,923344E+22	3,923262E+22	1,335810E+23	7,846606E+22	2,120471E+23
1568	6,679132E+22	6,679189E+22	3,923303E+22	3,923373E+22	1,335832E+23	7,846676E+22	2,120500E+23
1569	6,678956E+22	6,678891E+22	3,923357E+22	3,923275E+22	1,335785E+23	7,846633E+22	2,120448E+23
1570	6,679005E+22	6,679159E+22	3,923353E+22	3,923288E+22	1,335816E+23	7,846640E+22	2,120480E+23
1571	6,679174E+22	6,678996E+22	3,923254E+22	3,923318E+22	1,335817E+23	7,846573E+22	2,120474E+23
1572	6,678936E+22	6,678994E+22	3,923251E+22	3,923179E+22	1,335793E+23	7,846430E+22	2,120436E+23
1573	6,679122E+22	6,679296E+22	3,923141E+22	3,923215E+22	1,335842E+23	7,846357E+22	2,120478E+23
1574	6,679195E+22	6,678981E+22	3,923082E+22	3,923123E+22	1,335818E+23	7,846205E+22	2,120438E+23
1575	6,679039E+22	6,679150E+22	3,923124E+22	3,922981E+22	1,335819E+23	7,846105E+22	2,120429E+23
1576	6,679280E+22	6,679301E+22	3,923034E+22	3,923066E+22	1,335858E+23	7,846100E+22	2,120468E+23
1577	6,679149E+22	6,679030E+22	3,923036E+22	3,922997E+22	1,335818E+23	7,846034E+22	2,120421E+23
1578	6,679048E+22	6,679300E+22	3,923094E+22	3,923032E+22	1,335835E+23	7,846126E+22	2,120447E+23
1579	6,679207E+22	6,679186E+22	3,923055E+22	3,923162E+22	1,335839E+23	7,846217E+22	2,120461E+23
1580	6,679002E+22	6,678987E+22	3,923152E+22	3,923090E+22	1,335799E+23	7,846242E+22	2,120423E+23
1581	6,679105E+22	6,679227E+22	3,923201E+22	3,923202E+22	1,335833E+23	7,846404E+22	2,120474E+23
1582	6,679225E+22	6,678914E+22	3,923207E+22	3,923281E+22	1,335814E+23	7,846488E+22	2,120463E+23
1583	6,678956E+22	6,678986E+22	3,923349E+22	3,923250E+22	1,335794E+23	7,846599E+22	2,120454E+23
1584	6,679067E+22	6,679217E+22	3,923354E+22	3,923445E+22	1,335828E+23	7,846799E+22	2,120508E+23
1585	6,678972E+22	6,678878E+22	3,923403E+22	3,923432E+22	1,335785E+23	7,846835E+22	2,120468E+23
1586	6,678814E+22	6,679043E+22	3,923537E+22	3,923416E+22	1,335786E+23	7,846953E+22	2,120481E+23
1587	6,679028E+22	6,678995E+22	3,923486E+22	3,923541E+22	1,335802E+23	7,847027E+22	2,120505E+23
1588	6,678878E+22	6,678753E+22	3,923513E+22	3,923423E+22	1,335763E+23	7,846936E+22	2,120457E+23
1589	6,678878E+22	6,679077E+22	3,923498E+22	3,923453E+22	1,335795E+23	7,846951E+22	2,120491E+23
1590	6,679069E+22	6,678900E+22	3,923353E+22	3,923484E+22	1,335797E+23	7,846837E+22	2,120481E+23
1591	6,678858E+22	6,678907E+22	3,923372E+22	3,923301E+22	1,335776E+23	7,846674E+22	2,120444E+23
1592	6,679026E+22	6,679195E+22	3,923305E+22	3,923338E+22	1,335822E+23	7,846643E+22	2,120486E+23
1593	6,679109E+22	6,678906E+22	3,923221E+22	3,923221E+22	1,335801E+23	7,846442E+22	2,120446E+23
1594	6,678953E+22	6,679065E+22	3,923289E+22	3,923122E+22	1,335802E+23	7,846411E+22	2,120443E+23
1595	6,679129E+22	6,679184E+22	3,923193E+22	3,923261E+22	1,335831E+23	7,846454E+22	2,120477E+23
1596	6,678998E+22	6,678923E+22	3,923193E+22	3,923184E+22	1,335792E+23	7,846377E+22	2,120430E+23
1597	6,678901E+22	6,679164E+22	3,923278E+22	3,923212E+22	1,335807E+23	7,846490E+22	2,120456E+23
1598	6,679138E+22	6,678993E+22	3,923205E+22	3,923330E+22	1,335813E+23	7,846535E+22	2,120467E+23
1599	6,678966E+22	6,678839E+22	3,923309E+22	3,923233E+22	1,335781E+23	7,846543E+22	2,120435E+23
1600	6,678999E+22	6,679124E+22	3,923383E+22	3,923382E+22	1,335812E+23	7,846765E+22	2,120489E+23
1601	6,679064E+22	6,678891E+22	3,923365E+22	3,923453E+22	1,335795E+23	7,846818E+22	2,120477E+23
1602	6,678796E+22	6,678938E+22	3,923543E+22	3,923443E+22	1,335773E+23	7,846985E+22	2,120472E+23
1603	6,678885E+22	6,679070E+22	3,923569E+22	3,923644E+22	1,335795E+23	7,847214E+22	2,120517E+23
1604	6,678852E+22	6,678725E+22	3,923613E+22	3,923595E+22	1,335758E+23	7,847208E+22	2,120478E+23
1605	6,678707E+22	6,678879E+22	3,923737E+22	3,923583E+22	1,335759E+23	7,847319E+22	2,120491E+23
1606	6,678952E+22	6,678824E+22	3,923619E+22	3,923725E+22	1,335778E+23	7,847344E+22	2,120512E+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							
1607	6,678808E+22	6,678661E+22	3,923622E+22	3,923589E+22	1,335747E+23	7,847211E+22	2,120468E+23
1608	6,678754E+22	6,678995E+22	3,923625E+22	3,923623E+22	1,335775E+23	7,847248E+22	2,120500E+23
1609	6,678959E+22	6,678849E+22	3,923472E+22	3,923590E+22	1,335781E+23	7,847061E+22	2,120487E+23
1610	6,678809E+22	6,678817E+22	3,923521E+22	3,923396E+22	1,335763E+23	7,846917E+22	2,120454E+23
1611	6,678926E+22	6,679051E+22	3,923472E+22	3,923458E+22	1,335798E+23	7,846930E+22	2,120491E+23
1612	6,679000E+22	6,678820E+22	3,923382E+22	3,923352E+22	1,335782E+23	7,846734E+22	2,120455E+23
1613	6,678786E+22	6,678983E+22	3,923455E+22	3,923296E+22	1,335777E+23	7,846750E+22	2,120452E+23
1614	6,678979E+22	6,679049E+22	3,923327E+22	3,923457E+22	1,335803E+23	7,846784E+22	2,120481E+23
1615	6,678905E+22	6,678788E+22	3,923341E+22	3,923346E+22	1,335769E+23	7,846687E+22	2,120438E+23
1616	6,678804E+22	6,679014E+22	3,923453E+22	3,923383E+22	1,335782E+23	7,846836E+22	2,120465E+23
1617	6,679058E+22	6,678896E+22	3,923359E+22	3,923473E+22	1,335795E+23	7,846831E+22	2,120478E+23
1618	6,678895E+22	6,678758E+22	3,923485E+22	3,923409E+22	1,335765E+23	7,846894E+22	2,120455E+23
1619	6,678836E+22	6,679029E+22	3,923573E+22	3,923595E+22	1,335787E+23	7,847168E+22	2,120503E+23
1620	6,678905E+22	6,678808E+22	3,923562E+22	3,923645E+22	1,335771E+23	7,847207E+22	2,120492E+23
1621	6,678637E+22	6,678800E+22	3,923769E+22	3,923624E+22	1,335744E+23	7,847393E+22	2,120483E+23
1622	6,678789E+22	6,678865E+22	3,923748E+22	3,923820E+22	1,335765E+23	7,847568E+22	2,120522E+23
1623	6,678795E+22	6,678553E+22	3,923775E+22	3,923750E+22	1,335735E+23	7,847526E+22	2,120487E+23
1624	6,678598E+22	6,678758E+22	3,923891E+22	3,923769E+22	1,335736E+23	7,847659E+22	2,120502E+23
1625	6,678823E+22	6,678778E+22	3,923726E+22	3,923875E+22	1,335760E+23	7,847601E+22	2,120520E+23
1626	6,678706E+22	6,678610E+22	3,923753E+22	3,923733E+22	1,335732E+23	7,847487E+22	2,120480E+23
1627	6,678631E+22	6,678887E+22	3,923784E+22	3,923753E+22	1,335752E+23	7,847536E+22	2,120505E+23
1628	6,678874E+22	6,678751E+22	3,923637E+22	3,923686E+22	1,335763E+23	7,847323E+22	2,120495E+23
1629	6,678706E+22	6,678707E+22	3,923706E+22	3,923520E+22	1,335741E+23	7,847226E+22	2,120464E+23
1630	6,678813E+22	6,678915E+22	3,923605E+22	3,923626E+22	1,335773E+23	7,847232E+22	2,120496E+23
1631	6,678879E+22	6,678725E+22	3,923507E+22	3,923531E+22	1,335760E+23	7,847039E+22	2,120464E+23
1632	6,678633E+22	6,678866E+22	3,923597E+22	3,923495E+22	1,335750E+23	7,847093E+22	2,120459E+23
1633	6,678868E+22	6,678931E+22	3,923458E+22	3,923599E+22	1,335780E+23	7,847057E+22	2,120486E+23
1634	6,678873E+22	6,678660E+22	3,923496E+22	3,923483E+22	1,335753E+23	7,846979E+22	2,120451E+23
1635	6,678725E+22	6,678871E+22	3,923628E+22	3,923540E+22	1,335760E+23	7,847168E+22	2,120476E+23
1636	6,678955E+22	6,678829E+22	3,923539E+22	3,923633E+22	1,335778E+23	7,847172E+22	2,120496E+23
1637	6,678731E+22	6,678697E+22	3,923694E+22	3,923600E+22	1,335743E+23	7,847294E+22	2,120472E+23
1638	6,678668E+22	6,678897E+22	3,923763E+22	3,923799E+22	1,335756E+23	7,847562E+22	2,120513E+23
1639	6,678789E+22	6,678666E+22	3,923764E+22	3,923821E+22	1,335745E+23	7,847585E+22	2,120504E+23
1640	6,678518E+22	6,678622E+22	3,923970E+22	3,923816E+22	1,335714E+23	7,847786E+22	2,120493E+23
1641	6,678681E+22	6,678732E+22	3,923905E+22	3,923981E+22	1,335741E+23	7,847886E+22	2,120530E+23
1642	6,678722E+22	6,678459E+22	3,923914E+22	3,923931E+22	1,335718E+23	7,847845E+22	2,120503E+23
1643	6,678452E+22	6,678657E+22	3,924028E+22	3,923961E+22	1,335711E+23	7,847989E+22	2,120510E+23
1644	6,678703E+22	6,678711E+22	3,923874E+22	3,924018E+22	1,335741E+23	7,847891E+22	2,120531E+23
1645	6,678603E+22	6,678508E+22	3,923932E+22	3,923847E+22	1,335711E+23	7,847779E+22	2,120489E+23
1646	6,678559E+22	6,678731E+22	3,923930E+22	3,923865E+22	1,335729E+23	7,847795E+22	2,120508E+23
1647	6,678811E+22	6,678639E+22	3,923779E+22	3,923799E+22	1,335745E+23	7,847577E+22	2,120503E+23
1648	6,678563E+22	6,678612E+22	3,923848E+22	3,923693E+22	1,335718E+23	7,847541E+22	2,120472E+23
1649	6,678644E+22	6,678855E+22	3,923717E+22	3,923784E+22	1,335750E+23	7,847501E+22	2,120500E+23
1650	6,678770E+22	6,678633E+22	3,923642E+22	3,923698E+22	1,335740E+23	7,847340E+22	2,120474E+23
1651	6,678524E+22	6,678715E+22	3,923757E+22	3,923656E+22	1,335724E+23	7,847413E+22	2,120465E+23
1652	6,678817E+22	6,678807E+22	3,923627E+22	3,923725E+22	1,335762E+23	7,847353E+22	2,120498E+23
1653	6,678803E+22	6,678552E+22	3,923690E+22	3,923630E+22	1,335736E+23	7,847320E+22	2,120468E+23
1654	6,678626E+22	6,678758E+22	3,923785E+22	3,923726E+22	1,335738E+23	7,847512E+22	2,120490E+23
1655	6,678825E+22	6,678751E+22	3,923711E+22	3,923825E+22	1,335758E+23	7,847535E+22	2,120511E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1656	6,678555E+22	6,678585E+22	3,923896E+22	3,923818E+22	1,335714E+23	7,847714E+22	2,120485E+23
1657	6,678522E+22	6,678758E+22	3,923942E+22	3,923960E+22	1,335728E+23	7,847902E+22	2,120518E+23
1658	6,678710E+22	6,678508E+22	3,923947E+22	3,923992E+22	1,335722E+23	7,847939E+22	2,120516E+23
1659	6,678400E+22	6,678461E+22	3,924144E+22	3,924004E+22	1,335686E+23	7,848148E+22	2,120501E+23
1660	6,678566E+22	6,678640E+22	3,924061E+22	3,924151E+22	1,335721E+23	7,848213E+22	2,120542E+23
1661	6,678578E+22	6,678396E+22	3,924087E+22	3,924102E+22	1,335697E+23	7,848189E+22	2,120516E+23
1662	6,678335E+22	6,678539E+22	3,924171E+22	3,924119E+22	1,335687E+23	7,848290E+22	2,120516E+23
1663	6,678628E+22	6,678600E+22	3,924036E+22	3,924134E+22	1,335723E+23	7,848170E+22	2,120540E+23
1664	6,678504E+22	6,678387E+22	3,924101E+22	3,923987E+22	1,335689E+23	7,848088E+22	2,120498E+23
1665	6,678446E+22	6,678632E+22	3,924062E+22	3,923985E+22	1,335708E+23	7,848047E+22	2,120513E+23
1666	6,678709E+22	6,678567E+22	3,923904E+22	3,923964E+22	1,335728E+23	7,847868E+22	2,120514E+23
1667	6,678404E+22	6,678507E+22	3,923977E+22	3,923883E+22	1,335691E+23	7,847860E+22	2,120477E+23
1668	6,678533E+22	6,678748E+22	3,923861E+22	3,923931E+22	1,335728E+23	7,847793E+22	2,120507E+23
1669	6,678700E+22	6,678504E+22	3,923815E+22	3,923826E+22	1,335720E+23	7,847641E+22	2,120484E+23
1670	6,678485E+22	6,678548E+22	3,923897E+22	3,923791E+22	1,335703E+23	7,847688E+22	2,120472E+23
1671	6,678772E+22	6,678709E+22	3,923783E+22	3,923861E+22	1,335748E+23	7,847644E+22	2,120513E+23
1672	6,678662E+22	6,678486E+22	3,923856E+22	3,923821E+22	1,335715E+23	7,847678E+22	2,120483E+23
1673	6,678436E+22	6,678702E+22	3,923946E+22	3,923898E+22	1,335714E+23	7,847845E+22	2,120498E+23
1674	6,678682E+22	6,678662E+22	3,923897E+22	3,924011E+22	1,335734E+23	7,847908E+22	2,120525E+23
1675	6,678393E+22	6,678413E+22	3,924105E+22	3,924013E+22	1,335681E+23	7,848118E+22	2,120492E+23
1676	6,678418E+22	6,678598E+22	3,924146E+22	3,924129E+22	1,335702E+23	7,848276E+22	2,120529E+23
1677	6,678609E+22	6,678367E+22	3,924148E+22	3,924177E+22	1,335698E+23	7,848325E+22	2,120530E+23
1678	6,678294E+22	6,678322E+22	3,924281E+22	3,924212E+22	1,335662E+23	7,848493E+22	2,120511E+23
1679	6,678466E+22	6,678550E+22	3,924206E+22	3,924328E+22	1,335702E+23	7,848534E+22	2,120555E+23
1680	6,678449E+22	6,678296E+22	3,924250E+22	3,924270E+22	1,335675E+23	7,848521E+22	2,120527E+23
1681	6,678237E+22	6,678430E+22	3,924318E+22	3,924219E+22	1,335667E+23	7,848537E+22	2,120520E+23
1682	6,678572E+22	6,678496E+22	3,924186E+22	3,924248E+22	1,335707E+23	7,848434E+22	2,120550E+23
1683	6,678372E+22	6,678276E+22	3,924255E+22	3,924140E+22	1,335665E+23	7,848395E+22	2,120504E+23
1684	6,678304E+22	6,678562E+22	3,924203E+22	3,924136E+22	1,335687E+23	7,848339E+22	2,120521E+23
1685	6,678553E+22	6,678489E+22	3,924065E+22	3,924127E+22	1,335704E+23	7,848192E+22	2,120523E+23
1686	6,678303E+22	6,678361E+22	3,924103E+22	3,924044E+22	1,335666E+23	7,848147E+22	2,120481E+23
1687	6,678494E+22	6,678604E+22	3,924008E+22	3,924056E+22	1,335710E+23	7,848065E+22	2,120516E+23
1688	6,678630E+22	6,678387E+22	3,923973E+22	3,923978E+22	1,335702E+23	7,847951E+22	2,120497E+23
1689	6,678396E+22	6,678466E+22	3,924026E+22	3,923923E+22	1,335686E+23	7,847950E+22	2,120481E+23
1690	6,678655E+22	6,678659E+22	3,923927E+22	3,924040E+22	1,335731E+23	7,847966E+22	2,120528E+23
1691	6,678467E+22	6,678402E+22	3,924035E+22	3,924031E+22	1,335687E+23	7,848067E+22	2,120494E+23
1692	6,678282E+22	6,678578E+22	3,924149E+22	3,924070E+22	1,335686E+23	7,848219E+22	2,120508E+23
1693	6,678559E+22	6,678502E+22	3,924127E+22	3,924178E+22	1,335706E+23	7,848305E+22	2,120537E+23
1694	6,678314E+22	6,678210E+22	3,924277E+22	3,924199E+22	1,335652E+23	7,848476E+22	2,120500E+23
1695	6,678347E+22	6,678448E+22	3,924316E+22	3,924310E+22	1,335679E+23	7,848626E+22	2,120542E+23
1696	6,678467E+22	6,678280E+22	3,924309E+22	3,924389E+22	1,335675E+23	7,848698E+22	2,120544E+23
1697	6,678151E+22	6,678249E+22	3,924418E+22	3,924373E+22	1,335640E+23	7,848791E+22	2,120519E+23
1698	6,678371E+22	6,678473E+22	3,924368E+22	3,924477E+22	1,335684E+23	7,848845E+22	2,120569E+23
1699	6,678325E+22	6,678180E+22	3,924436E+22	3,924416E+22	1,335650E+23	7,848852E+22	2,120536E+23
1700	6,678139E+22	6,678323E+22	3,924501E+22	3,924340E+22	1,335646E+23	7,848841E+22	2,120530E+23
1701	6,678450E+22	6,678404E+22	3,924369E+22	3,924398E+22	1,335685E+23	7,848767E+22	2,120562E+23
1702	6,678238E+22	6,678152E+22	3,924374E+22	3,924333E+22	1,335639E+23	7,848707E+22	2,120510E+23
1703	6,678199E+22	6,678446E+22	3,924334E+22	3,924306E+22	1,335665E+23	7,848639E+22	2,120528E+23
1704	6,678447E+22	6,678358E+22	3,924201E+22	3,924288E+22	1,335680E+23	7,848489E+22	2,120529E+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							
1705	6,678245E+22	6,678227E+22	3,924214E+22	3,924144E+22	1,335647E+23	7,848358E+22	2,120483E+23
1706	6,678471E+22	6,678513E+22	3,924129E+22	3,924170E+22	1,335698E+23	7,848299E+22	2,120528E+23
1707	6,678505E+22	6,678310E+22	3,924120E+22	3,924131E+22	1,335681E+23	7,848251E+22	2,120507E+23
1708	6,678242E+22	6,678423E+22	3,924196E+22	3,924077E+22	1,335666E+23	7,848273E+22	2,120494E+23
1709	6,678474E+22	6,678588E+22	3,924138E+22	3,924211E+22	1,335706E+23	7,848349E+22	2,120541E+23
1710	6,678324E+22	6,678234E+22	3,924225E+22	3,924226E+22	1,335656E+23	7,848451E+22	2,120501E+23
1711	6,678201E+22	6,678389E+22	3,924353E+22	3,924245E+22	1,335659E+23	7,848598E+22	2,120519E+23
1712	6,678451E+22	6,678332E+22	3,924320E+22	3,924383E+22	1,335678E+23	7,848703E+22	2,120549E+23
1713	6,678215E+22	6,678082E+22	3,924418E+22	3,924381E+22	1,335630E+23	7,848799E+22	2,120510E+23
1714	6,678250E+22	6,678377E+22	3,924451E+22	3,924512E+22	1,335663E+23	7,848963E+22	2,120559E+23
1715	6,678304E+22	6,678199E+22	3,924479E+22	3,924587E+22	1,335650E+23	7,849066E+22	2,120557E+23
1716	6,678040E+22	6,678155E+22	3,924610E+22	3,924508E+22	1,335619E+23	7,849118E+22	2,120531E+23
1717	6,678267E+22	6,678358E+22	3,924587E+22	3,924600E+22	1,335663E+23	7,849187E+22	2,120581E+23
1718	6,678232E+22	6,678033E+22	3,924600E+22	3,924571E+22	1,335626E+23	7,849171E+22	2,120544E+23
1719	6,678039E+22	6,678196E+22	3,924656E+22	3,924500E+22	1,335624E+23	7,849156E+22	2,120539E+23
1720	6,678272E+22	6,678317E+22	3,924510E+22	3,924592E+22	1,335659E+23	7,849102E+22	2,120569E+23
1721	6,678104E+22	6,678049E+22	3,924474E+22	3,924478E+22	1,335615E+23	7,848952E+22	2,120510E+23
1722	6,678135E+22	6,678329E+22	3,924448E+22	3,924438E+22	1,335646E+23	7,848886E+22	2,120535E+23
1723	6,678363E+22	6,678236E+22	3,924347E+22	3,924417E+22	1,335660E+23	7,848764E+22	2,120536E+23
1724	6,678191E+22	6,678136E+22	3,924364E+22	3,924247E+22	1,335633E+23	7,848612E+22	2,120494E+23
1725	6,678364E+22	6,678454E+22	3,924306E+22	3,924305E+22	1,335682E+23	7,848611E+22	2,120543E+23
1726	6,678362E+22	6,678223E+22	3,924264E+22	3,924320E+22	1,335659E+23	7,848583E+22	2,120517E+23
1727	6,678111E+22	6,678298E+22	3,924379E+22	3,924259E+22	1,335641E+23	7,848638E+22	2,120505E+23
1728	6,678321E+22	6,678436E+22	3,924339E+22	3,924401E+22	1,335676E+23	7,848740E+22	2,120550E+23
1729	6,678232E+22	6,678057E+22	3,924386E+22	3,924382E+22	1,335629E+23	7,848768E+22	2,120506E+23
1730	6,678146E+22	6,678246E+22	3,924506E+22	3,924426E+22	1,335639E+23	7,848932E+22	2,120533E+23
1731	6,678312E+22	6,678227E+22	3,924486E+22	3,924592E+22	1,335654E+23	7,849078E+22	2,120562E+23
1732	6,678073E+22	6,678026E+22	3,924588E+22	3,924560E+22	1,335610E+23	7,849147E+22	2,120525E+23
1733	6,678106E+22	6,678313E+22	3,924661E+22	3,924679E+22	1,335642E+23	7,849340E+22	2,120576E+23
1734	6,678186E+22	6,678062E+22	3,924668E+22	3,924759E+22	1,335625E+23	7,849427E+22	2,120567E+23
1735	6,677965E+22	6,678005E+22	3,924817E+22	3,924659E+22	1,335597E+23	7,849476E+22	2,120545E+23
1736	6,678137E+22	6,678224E+22	3,924773E+22	3,924773E+22	1,335636E+23	7,849546E+22	2,120591E+23
1737	6,678099E+22	6,677910E+22	3,924722E+22	3,924737E+22	1,335601E+23	7,849459E+22	2,120547E+23
1738	6,677926E+22	6,678107E+22	3,924757E+22	3,924683E+22	1,335603E+23	7,849440E+22	2,120547E+23
1739	6,678125E+22	6,678198E+22	3,924638E+22	3,924762E+22	1,335632E+23	7,849399E+22	2,120572E+23
1740	6,678036E+22	6,677935E+22	3,924613E+22	3,924577E+22	1,335597E+23	7,849190E+22	2,120516E+23
1741	6,678094E+22	6,678224E+22	3,924608E+22	3,924527E+22	1,335632E+23	7,849135E+22	2,120545E+23
1742	6,678300E+22	6,678124E+22	3,924477E+22	3,924543E+22	1,335642E+23	7,849020E+22	2,120544E+23
1743	6,678102E+22	6,678058E+22	3,924519E+22	3,924391E+22	1,335616E+23	7,848910E+22	2,120507E+23
1744	6,678172E+22	6,678391E+22	3,924477E+22	3,924485E+22	1,335656E+23	7,848962E+22	2,120552E+23
1745	6,678203E+22	6,678114E+22	3,924417E+22	3,924484E+22	1,335632E+23	7,848901E+22	2,120522E+23
1746	6,678017E+22	6,678157E+22	3,924544E+22	3,924434E+22	1,335617E+23	7,848978E+22	2,120515E+23
1747	6,678196E+22	6,678275E+22	3,924528E+22	3,924593E+22	1,335647E+23	7,849121E+22	2,120559E+23
1748	6,678149E+22	6,677932E+22	3,924563E+22	3,924553E+22	1,335608E+23	7,849116E+22	2,120520E+23
1749	6,678036E+22	6,678159E+22	3,924691E+22	3,924620E+22	1,335619E+23	7,849311E+22	2,120551E+23
1750	6,678178E+22	6,678130E+22	3,924644E+22	3,924811E+22	1,335631E+23	7,849455E+22	2,120576E+23
1751	6,677977E+22	6,677899E+22	3,924783E+22	3,924738E+22	1,335588E+23	7,849521E+22	2,120540E+23
1752	6,677969E+22	6,678177E+22	3,924875E+22	3,924842E+22	1,335615E+23	7,849717E+22	2,120586E+23
1753	6,678096E+22	6,677916E+22	3,924833E+22	3,924891E+22	1,335601E+23	7,849724E+22	2,120574E+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							
1754	6,677880E+22	6,677879E+22	3,924963E+22	3,924820E+22	1,335576E+23	7,849783E+22	2,120554E+23
1755	6,677955E+22	6,678125E+22	3,924926E+22	3,924962E+22	1,335608E+23	7,849888E+22	2,120597E+23
1756	6,677948E+22	6,677835E+22	3,924861E+22	3,924891E+22	1,335578E+23	7,849752E+22	2,120554E+23
1757	6,677810E+22	6,678012E+22	3,924918E+22	3,924821E+22	1,335582E+23	7,849738E+22	2,120556E+23
1758	6,678052E+22	6,678056E+22	3,924775E+22	3,924897E+22	1,335611E+23	7,849671E+22	2,120578E+23
1759	6,678015E+22	6,677801E+22	3,924768E+22	3,924687E+22	1,335582E+23	7,849455E+22	2,120527E+23
1760	6,677997E+22	6,678137E+22	3,924764E+22	3,924661E+22	1,335613E+23	7,849425E+22	2,120556E+23
1761	6,678182E+22	6,678056E+22	3,924589E+22	3,924688E+22	1,335624E+23	7,849277E+22	2,120552E+23
1762	6,677977E+22	6,677995E+22	3,924643E+22	3,924572E+22	1,335597E+23	7,849215E+22	2,120519E+23
1763	6,677992E+22	6,678274E+22	3,924650E+22	3,924670E+22	1,335627E+23	7,849319E+22	2,120559E+23
1764	6,678096E+22	6,677976E+22	3,924600E+22	3,924627E+22	1,335607E+23	7,849227E+22	2,120530E+23
1765	6,677949E+22	6,678016E+22	3,924734E+22	3,924587E+22	1,335597E+23	7,849321E+22	2,120529E+23
1766	6,678110E+22	6,678118E+22	3,924685E+22	3,924784E+22	1,335623E+23	7,849470E+22	2,120570E+23
1767	6,678056E+22	6,677826E+22	3,924735E+22	3,924743E+22	1,335588E+23	7,849479E+22	2,120536E+23
1768	6,677872E+22	6,678081E+22	3,924872E+22	3,924813E+22	1,335595E+23	7,849685E+22	2,120564E+23
1769	6,678045E+22	6,678011E+22	3,924812E+22	3,924971E+22	1,335606E+23	7,849784E+22	2,120584E+23
1770	6,677893E+22	6,67779E+22	3,924965E+22	3,924900E+22	1,335567E+23	7,849865E+22	2,120554E+23
1771	6,677826E+22	6,678035E+22	3,925079E+22	3,925012E+22	1,335586E+23	7,850091E+22	2,120595E+23
1772	6,677972E+22	6,677806E+22	3,925017E+22	3,925048E+22	1,335578E+23	7,850065E+22	2,120584E+23
1773	6,677741E+22	6,677795E+22	3,925129E+22	3,925004E+22	1,335554E+23	7,850133E+22	2,120567E+23
1774	6,677804E+22	6,677998E+22	3,925059E+22	3,925162E+22	1,335580E+23	7,850220E+22	2,120602E+23
1775	6,677873E+22	6,677692E+22	3,925015E+22	3,925041E+22	1,335557E+23	7,850056E+22	2,120562E+23
1776	6,677730E+22	6,677880E+22	3,925072E+22	3,924943E+22	1,335561E+23	7,850015E+22	2,120563E+23
1777	6,678011E+22	6,677936E+22	3,924889E+22	3,924996E+22	1,335595E+23	7,849885E+22	2,120583E+23
1778	6,677961E+22	6,677738E+22	3,924877E+22	3,924817E+22	1,335570E+23	7,849694E+22	2,120539E+23
1779	6,677818E+22	6,678090E+22	3,924908E+22	3,924822E+22	1,335591E+23	7,849730E+22	2,120564E+23
1780	6,678016E+22	6,678010E+22	3,924745E+22	3,924831E+22	1,335603E+23	7,849576E+22	2,120560E+23
1781	6,677843E+22	6,677892E+22	3,924830E+22	3,924729E+22	1,335574E+23	7,849559E+22	2,120529E+23
1782	6,677886E+22	6,678101E+22	3,924825E+22	3,924845E+22	1,335599E+23	7,849670E+22	2,120566E+23
1783	6,678056E+22	6,677797E+22	3,924781E+22	3,924791E+22	1,335585E+23	7,849573E+22	2,120543E+23
1784	6,677842E+22	6,677886E+22	3,924903E+22	3,924772E+22	1,335573E+23	7,849675E+22	2,120540E+23
1785	6,678004E+22	6,678020E+22	3,924809E+22	3,924969E+22	1,335602E+23	7,849778E+22	2,120580E+23
1786	6,677950E+22	6,677749E+22	3,924875E+22	3,924933E+22	1,335570E+23	7,849808E+22	2,120551E+23
1787	6,677711E+22	6,677969E+22	3,925073E+22	3,924988E+22	1,335568E+23	7,850061E+22	2,120574E+23
1788	6,677936E+22	6,677896E+22	3,925021E+22	3,925102E+22	1,335583E+23	7,850122E+22	2,120595E+23
1789	6,677790E+22	6,677663E+22	3,925178E+22	3,925058E+22	1,335545E+23	7,850235E+22	2,120569E+23
1790	6,677677E+22	6,677897E+22	3,925254E+22	3,925212E+22	1,335557E+23	7,850466E+22	2,120604E+23
1791	6,677834E+22	6,677687E+22	3,925189E+22	3,925245E+22	1,335552E+23	7,850435E+22	2,120596E+23
1792	6,677573E+22	6,677688E+22	3,925290E+22	3,925190E+22	1,335526E+23	7,850480E+22	2,120574E+23
1793	6,677715E+22	6,677855E+22	3,925185E+22	3,925305E+22	1,335557E+23	7,850489E+22	2,120606E+23
1794	6,677841E+22	6,677582E+22	3,925138E+22	3,925168E+22	1,335542E+23	7,850306E+22	2,120573E+23
1795	6,677644E+22	6,677780E+22	3,925219E+22	3,925071E+22	1,335542E+23	7,850290E+22	2,120571E+23
1796	6,677914E+22	6,677884E+22	3,925029E+22	3,925109E+22	1,335580E+23	7,850139E+22	2,120594E+23
1797	6,677833E+22	6,677711E+22	3,925023E+22	3,924972E+22	1,335554E+23	7,849996E+22	2,120554E+23
1798	6,677656E+22	6,677976E+22	3,925053E+22	3,925000E+22	1,335563E+23	7,850053E+22	2,120568E+23
1799	6,677918E+22	6,677851E+22	3,924928E+22	3,924981E+22	1,335577E+23	7,849909E+22	2,120568E+23
1800	6,677749E+22	6,677731E+22	3,925002E+22	3,924871E+22	1,335548E+23	7,849873E+22	2,120535E+23
1801	6,677831E+22	6,677925E+22	3,924952E+22	3,924989E+22	1,335576E+23	7,849941E+22	2,120570E+23
1802	6,677989E+22	6,677705E+22	3,924901E+22	3,924965E+22	1,335569E+23	7,849866E+22	2,120556E+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							
1803	6,677678E+22	6,677820E+22	3,925055E+22	3,924962E+22	1,335550E+23	7,850017E+22	2,120552E+23
1804	6,677850E+22	6,677964E+22	3,924989E+22	3,925123E+22	1,335581E+23	7,850112E+22	2,120593E+23
1805	6,677825E+22	6,677670E+22	3,925090E+22	3,925097E+22	1,335549E+23	7,850187E+22	2,120568E+23
1806	6,677576E+22	6,677813E+22	3,925288E+22	3,925171E+22	1,335539E+23	7,850459E+22	2,120585E+23
1807	6,677838E+22	6,677735E+22	3,925246E+22	3,925285E+22	1,335557E+23	7,850531E+22	2,120610E+23
1808	6,677632E+22	6,677535E+22	3,925371E+22	3,925267E+22	1,335517E+23	7,850638E+22	2,120580E+23
1809	6,677538E+22	6,67762E+22	3,925384E+22	3,925422E+22	1,335530E+23	7,850806E+22	2,120611E+23
1810	6,677733E+22	6,677574E+22	3,925311E+22	3,925438E+22	1,335531E+23	7,850749E+22	2,120606E+23
1811	6,677463E+22	6,677555E+22	3,925443E+22	3,925344E+22	1,335502E+23	7,850786E+22	2,120580E+23
1812	6,677669E+22	6,677751E+22	3,925334E+22	3,925395E+22	1,335542E+23	7,850729E+22	2,120615E+23
1813	6,677790E+22	6,677517E+22	3,925288E+22	3,925277E+22	1,335531E+23	7,850566E+22	2,120587E+23
1814	6,677517E+22	6,677704E+22	3,925360E+22	3,925218E+22	1,335522E+23	7,850578E+22	2,120580E+23
1815	6,677781E+22	6,677810E+22	3,925187E+22	3,925254E+22	1,335559E+23	7,850441E+22	2,120603E+23
1816	6,677652E+22	6,677614E+22	3,925192E+22	3,925127E+22	1,335527E+23	7,850319E+22	2,120559E+23
1817	6,677549E+22	6,677813E+22	3,925191E+22	3,925145E+22	1,335536E+23	7,850336E+22	2,120570E+23
1818	6,677862E+22	6,677703E+22	3,925061E+22	3,925132E+22	1,335557E+23	7,850193E+22	2,120576E+23
1819	6,677652E+22	6,677597E+22	3,925152E+22	3,925038E+22	1,335525E+23	7,850190E+22	2,120544E+23
1820	6,677737E+22	6,677850E+22	3,925091E+22	3,925141E+22	1,335559E+23	7,850232E+22	2,120582E+23
1821	6,677866E+22	6,677674E+22	3,925052E+22	3,925150E+22	1,335554E+23	7,850202E+22	2,120574E+23
1822	6,677524E+22	6,677715E+22	3,925235E+22	3,925154E+22	1,335524E+23	7,850389E+22	2,120563E+23
1823	6,677748E+22	6,677817E+22	3,925217E+22	3,925281E+22	1,335556E+23	7,850498E+22	2,120606E+23
1824	6,677701E+22	6,677527E+22	3,925318E+22	3,925263E+22	1,335523E+23	7,850580E+22	2,120581E+23
1825	6,677474E+22	6,677640E+22	3,925462E+22	3,925356E+22	1,335511E+23	7,850818E+22	2,120593E+23
1826	6,677713E+22	6,677625E+22	3,925398E+22	3,925496E+22	1,335534E+23	7,850893E+22	2,120623E+23
1827	6,677451E+22	6,677431E+22	3,925529E+22	3,925480E+22	1,335488E+23	7,851010E+22	2,120589E+23
1828	6,677409E+22	6,677654E+22	3,925544E+22	3,925576E+22	1,335506E+23	7,851121E+22	2,120618E+23
1829	6,677662E+22	6,677488E+22	3,925478E+22	3,925581E+22	1,335515E+23	7,851059E+22	2,120621E+23
1830	6,677393E+22	6,677418E+22	3,925603E+22	3,925480E+22	1,335481E+23	7,851082E+22	2,120589E+23
1831	6,677610E+22	6,677635E+22	3,925511E+22	3,925518E+22	1,335524E+23	7,851029E+22	2,120627E+23
1832	6,677649E+22	6,677462E+22	3,925444E+22	3,925421E+22	1,335511E+23	7,850865E+22	2,120598E+23
1833	6,677371E+22	6,677599E+22	3,925472E+22	3,925381E+22	1,335497E+23	7,850853E+22	2,120582E+23
1834	6,677651E+22	6,677705E+22	3,925313E+22	3,925413E+22	1,335536E+23	7,850726E+22	2,120608E+23
1835	6,677528E+22	6,677464E+22	3,925343E+22	3,925276E+22	1,335499E+23	7,850620E+22	2,120561E+23
1836	6,677485E+22	6,677673E+22	3,925335E+22	3,925259E+22	1,335516E+23	7,850594E+22	2,120575E+23
1837	6,677802E+22	6,677622E+22	3,925198E+22	3,925282E+22	1,335542E+23	7,850480E+22	2,120590E+23
1838	6,677526E+22	6,677507E+22	3,925289E+22	3,925218E+22	1,335503E+23	7,850507E+22	2,120554E+23
1839	6,677615E+22	6,677771E+22	3,925268E+22	3,925309E+22	1,335539E+23	7,850577E+22	2,120596E+23
1840	6,677706E+22	6,677591E+22	3,925257E+22	3,925315E+22	1,335530E+23	7,850571E+22	2,120587E+23
1841	6,677419E+22	6,677555E+22	3,925425E+22	3,925323E+22	1,335497E+23	7,850748E+22	2,120572E+23
1842	6,677660E+22	6,677672E+22	3,925408E+22	3,925459E+22	1,335533E+23	7,850867E+22	2,120620E+23
1843	6,677558E+22	6,677381E+22	3,925517E+22	3,925472E+22	1,335494E+23	7,850989E+22	2,120593E+23
1844	6,677339E+22	6,677534E+22	3,925628E+22	3,925552E+22	1,335487E+23	7,851179E+22	2,120605E+23
1845	6,677577E+22	6,677545E+22	3,925552E+22	3,925708E+22	1,335512E+23	7,851259E+22	2,120638E+23
1846	6,677319E+22	6,677288E+22	3,925695E+22	3,925670E+22	1,335461E+23	7,851365E+22	2,120597E+23
1847	6,677360E+22	6,677500E+22	3,925730E+22	3,925704E+22	1,335486E+23	7,851435E+22	2,120629E+23
1848	6,677576E+22	6,677377E+22	3,925658E+22	3,925695E+22	1,335495E+23	7,851353E+22	2,120631E+23
1849	6,677314E+22	6,677305E+22	3,925735E+22	3,925615E+22	1,335462E+23	7,851349E+22	2,120597E+23
1850	6,677480E+22	6,677577E+22	3,925635E+22	3,925668E+22	1,335506E+23	7,851303E+22	2,120636E+23
1851	6,677453E+22	6,677389E+22	3,925592E+22	3,925589E+22	1,335484E+23	7,851181E+22	2,120602E+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							
1852	6,677230E+22	6,677493E+22	3,925617E+22	3,925511E+22	1,335472E+23	7,851128E+22	2,120585E+23
1853	6,677559E+22	6,677597E+22	3,925460E+22	3,925556E+22	1,335516E+23	7,851016E+22	2,120617E+23
1854	6,677449E+22	6,677306E+22	3,925490E+22	3,925431E+22	1,335475E+23	7,850922E+22	2,120568E+23
1855	6,677441E+22	6,677537E+22	3,925491E+22	3,925406E+22	1,335498E+23	7,850897E+22	2,120587E+23
1856	6,677682E+22	6,677562E+22	3,925349E+22	3,925446E+22	1,335524E+23	7,850795E+22	2,120604E+23
1857	6,677419E+22	6,677406E+22	3,925417E+22	3,925396E+22	1,335482E+23	7,850813E+22	2,120564E+23
1858	6,677508E+22	6,677665E+22	3,925435E+22	3,925468E+22	1,335517E+23	7,850903E+22	2,120608E+23
1859	6,677583E+22	6,677454E+22	3,925461E+22	3,925478E+22	1,335504E+23	7,850939E+22	2,120598E+23
1860	6,677323E+22	6,677411E+22	3,925619E+22	3,925472E+22	1,335473E+23	7,851092E+22	2,120583E+23
1861	6,677539E+22	6,677586E+22	3,925589E+22	3,925658E+22	1,335512E+23	7,851247E+22	2,120637E+23
1862	6,677387E+22	6,677260E+22	3,925688E+22	3,925696E+22	1,335465E+23	7,851383E+22	2,120603E+23
1863	6,677201E+22	6,677398E+22	3,925817E+22	3,925747E+22	1,335460E+23	7,851564E+22	2,120616E+23
1864	6,677436E+22	6,677434E+22	3,925748E+22	3,925872E+22	1,335487E+23	7,851620E+22	2,120649E+23
1865	6,677253E+22	6,677125E+22	3,925851E+22	3,925822E+22	1,335438E+23	7,851674E+22	2,120605E+23
1866	6,677302E+22	6,677382E+22	3,925890E+22	3,925843E+22	1,335468E+23	7,851733E+22	2,120642E+23
1867	6,677451E+22	6,677290E+22	3,925821E+22	3,925855E+22	1,335474E+23	7,851675E+22	2,120642E+23
1868	6,677169E+22	6,677244E+22	3,925869E+22	3,925765E+22	1,335441E+23	7,851634E+22	2,120605E+23
1869	6,677323E+22	6,677528E+22	3,925767E+22	3,925838E+22	1,335485E+23	7,851605E+22	2,120646E+23
1870	6,677309E+22	6,677240E+22	3,925746E+22	3,925750E+22	1,335455E+23	7,851495E+22	2,120604E+23
1871	6,677182E+22	6,677315E+22	3,925785E+22	3,925632E+22	1,335450E+23	7,851417E+22	2,120591E+23
1872	6,677492E+22	6,677470E+22	3,925616E+22	3,925676E+22	1,335496E+23	7,851293E+22	2,120626E+23
1873	6,677395E+22	6,677185E+22	3,925596E+22	3,925582E+22	1,335458E+23	7,851178E+22	2,120576E+23
1874	6,677347E+22	6,677480E+22	3,925606E+22	3,925560E+22	1,335483E+23	7,851165E+22	2,120599E+23
1875	6,677523E+22	6,677498E+22	3,925510E+22	3,925611E+22	1,335502E+23	7,851121E+22	2,120614E+23
1876	6,677299E+22	6,677317E+22	3,925595E+22	3,925534E+22	1,335462E+23	7,851129E+22	2,120574E+23
1877	6,677401E+22	6,677569E+22	3,925625E+22	3,925628E+22	1,335497E+23	7,851253E+22	2,120622E+23
1878	6,677451E+22	6,677296E+22	3,925669E+22	3,925671E+22	1,335475E+23	7,851340E+22	2,120609E+23
1879	6,677219E+22	6,677260E+22	3,925819E+22	3,925669E+22	1,335448E+23	7,851488E+22	2,120597E+23
1880	6,677363E+22	6,677482E+22	3,925772E+22	3,925868E+22	1,335484E+23	7,851640E+22	2,120648E+23
1881	6,677260E+22	6,677110E+22	3,925833E+22	3,925910E+22	1,335437E+23	7,851743E+22	2,120611E+23
1882	6,677120E+22	6,677252E+22	3,925977E+22	3,925914E+22	1,335437E+23	7,851891E+22	2,120626E+23
1883	6,677346E+22	6,677294E+22	3,925932E+22	3,926022E+22	1,335464E+23	7,851954E+22	2,120659E+23
1884	6,677184E+22	6,677024E+22	3,926011E+22	3,925944E+22	1,335421E+23	7,851955E+22	2,120616E+23
1885	6,677183E+22	6,677343E+22	3,926038E+22	3,925997E+22	1,335453E+23	7,852034E+22	2,120656E+23
1886	6,677267E+22	6,677213E+22	3,925980E+22	3,926032E+22	1,335448E+23	7,852013E+22	2,120649E+23
1887	6,677028E+22	6,677126E+22	3,926043E+22	3,925919E+22	1,335415E+23	7,851962E+22	2,120612E+23
1888	6,677179E+22	6,677408E+22	3,925945E+22	3,925972E+22	1,335459E+23	7,851918E+22	2,120651E+23
1889	6,677257E+22	6,677061E+22	3,925874E+22	3,925895E+22	1,335432E+23	7,851769E+22	2,120609E+23
1890	6,677151E+22	6,677177E+22	3,925907E+22	3,925767E+22	1,335433E+23	7,851675E+22	2,120600E+23
1891	6,677403E+22	6,677384E+22	3,925746E+22	3,925834E+22	1,335479E+23	7,851581E+22	2,120637E+23
1892	6,677289E+22	6,677138E+22	3,925706E+22	3,925726E+22	1,335443E+23	7,851432E+22	2,120586E+23
1893	6,677221E+22	6,677450E+22	3,925742E+22	3,925716E+22	1,335467E+23	7,851458E+22	2,120613E+23
1894	6,677388E+22	6,677374E+22	3,925694E+22	3,925764E+22	1,335476E+23	7,851458E+22	2,120622E+23
1895	6,677215E+22	6,677153E+22	3,925806E+22	3,925676E+22	1,335437E+23	7,851482E+22	2,120585E+23
1896	6,677264E+22	6,677447E+22	3,925835E+22	3,925790E+22	1,335471E+23	7,851624E+22	2,120634E+23
1897	6,677326E+22	6,677145E+22	3,925824E+22	3,925886E+22	1,335447E+23	7,851709E+22	2,120618E+23
1898	6,677081E+22	6,677141E+22	3,925974E+22	3,925879E+22	1,335422E+23	7,851853E+22	2,120608E+23
1899	6,677207E+22	6,677355E+22	3,925952E+22	3,926070E+22	1,335456E+23	7,852022E+22	2,120658E+23
1900	6,677164E+22	6,676987E+22	3,926002E+22	3,926062E+22	1,335415E+23	7,852063E+22	2,120621E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1901	6,677051E+22	6,677164E+22	3,926145E+22	3,926066E+22	1,335422E+23	7,852212E+22	2,120643E+23
1902	6,677240E+22	6,677171E+22	3,926125E+22	3,926187E+22	1,335441E+23	7,852312E+22	2,120672E+23
1903	6,677077E+22	6,676929E+22	3,926200E+22	3,926108E+22	1,335401E+23	7,852308E+22	2,120631E+23
1904	6,676996E+22	6,677284E+22	3,926214E+22	3,926166E+22	1,335428E+23	7,852380E+22	2,120666E+23
1905	6,677128E+22	6,677069E+22	3,926120E+22	3,926215E+22	1,335420E+23	7,852335E+22	2,120653E+23
1906	6,676953E+22	6,676962E+22	3,926185E+22	3,926059E+22	1,335392E+23	7,852245E+22	2,120616E+23
1907	6,677106E+22	6,677247E+22	3,926094E+22	3,926107E+22	1,335435E+23	7,852201E+22	2,120655E+23
1908	6,677209E+22	6,676965E+22	3,925982E+22	3,926011E+22	1,335417E+23	7,851994E+22	2,120617E+23
1909	6,677072E+22	6,677153E+22	3,925998E+22	3,925910E+22	1,335422E+23	7,851908E+22	2,120613E+23
1910	6,677247E+22	6,677326E+22	3,925885E+22	3,925990E+22	1,335457E+23	7,851876E+22	2,120645E+23
1911	6,677170E+22	6,677059E+22	3,925879E+22	3,925858E+22	1,335423E+23	7,851737E+22	2,120597E+23
1912	6,677072E+22	6,677352E+22	3,925945E+22	3,925841E+22	1,335442E+23	7,851786E+22	2,120621E+23
1913	6,677293E+22	6,677202E+22	3,925871E+22	3,925933E+22	1,335450E+23	7,851805E+22	2,120630E+23
1914	6,677132E+22	6,676994E+22	3,925981E+22	3,925857E+22	1,335413E+23	7,851838E+22	2,120596E+23
1915	6,677118E+22	6,677315E+22	3,926007E+22	3,926006E+22	1,335443E+23	7,852014E+22	2,120645E+23
1916	6,677189E+22	6,677046E+22	3,925960E+22	3,926087E+22	1,335423E+23	7,852047E+22	2,120628E+23
1917	6,676970E+22	6,677052E+22	3,926116E+22	3,926071E+22	1,335402E+23	7,852187E+22	2,120621E+23
1918	6,677104E+22	6,677201E+22	3,926149E+22	3,926237E+22	1,335431E+23	7,852386E+22	2,120669E+23
1919	6,677112E+22	6,676852E+22	3,926208E+22	3,926196E+22	1,335396E+23	7,852404E+22	2,120637E+23
1920	6,676928E+22	6,677090E+22	3,926352E+22	3,926208E+22	1,335402E+23	7,852561E+22	2,120658E+23
1921	6,677101E+22	6,677069E+22	3,926285E+22	3,926378E+22	1,335417E+23	7,852664E+22	2,120683E+23
1922	6,676920E+22	6,676831E+22	3,926363E+22	3,926293E+22	1,335375E+23	7,852655E+22	2,120641E+23
1923	6,676825E+22	6,677156E+22	3,926390E+22	3,926344E+22	1,335398E+23	7,852734E+22	2,120671E+23
1924	6,677028E+22	6,676927E+22	3,926257E+22	3,926353E+22	1,335396E+23	7,852610E+22	2,120657E+23
1925	6,676900E+22	6,676858E+22	3,926301E+22	3,926200E+22	1,335376E+23	7,852501E+22	2,120626E+23
1926	6,677032E+22	6,677122E+22	3,926230E+22	3,926253E+22	1,335415E+23	7,852482E+22	2,120664E+23
1927	6,677127E+22	6,676895E+22	3,926111E+22	3,926146E+22	1,335402E+23	7,852257E+22	2,120628E+23
1928	6,676922E+22	6,677127E+22	3,926144E+22	3,926042E+22	1,335405E+23	7,852186E+22	2,120623E+23
1929	6,677132E+22	6,677203E+22	3,926027E+22	3,926140E+22	1,335434E+23	7,852167E+22	2,120650E+23
1930	6,677091E+22	6,676910E+22	3,926054E+22	3,925989E+22	1,335400E+23	7,852043E+22	2,120604E+23
1931	6,676964E+22	6,677196E+22	3,926133E+22	3,925995E+22	1,335416E+23	7,852129E+22	2,120629E+23
1932	6,677182E+22	6,677082E+22	3,926019E+22	3,926099E+22	1,335426E+23	7,852118E+22	2,120638E+23
1933	6,677005E+22	6,676928E+22	3,926108E+22	3,926059E+22	1,335393E+23	7,852167E+22	2,120610E+23
1934	6,676956E+22	6,677192E+22	3,926181E+22	3,926214E+22	1,335415E+23	7,852395E+22	2,120654E+23
1935	6,677080E+22	6,676929E+22	3,926153E+22	3,926256E+22	1,335401E+23	7,852409E+22	2,120642E+23
1936	6,676860E+22	6,676953E+22	3,926328E+22	3,926217E+22	1,335381E+23	7,852545E+22	2,120636E+23
1937	6,677027E+22	6,677048E+22	3,926341E+22	3,926414E+22	1,335407E+23	7,852754E+22	2,120683E+23
1938	6,677026E+22	6,676735E+22	3,926402E+22	3,926374E+22	1,335376E+23	7,852776E+22	2,120654E+23
1939	6,676756E+22	6,676992E+22	3,926539E+22	3,926415E+22	1,335375E+23	7,852953E+22	2,120670E+23
1940	6,676928E+22	6,676982E+22	3,926429E+22	3,926568E+22	1,335391E+23	7,852997E+22	2,120691E+23
1941	6,676798E+22	6,676724E+22	3,926492E+22	3,926466E+22	1,335352E+23	7,852957E+22	2,120648E+23
1942	6,676722E+22	6,676967E+22	3,926558E+22	3,926492E+22	1,335369E+23	7,853049E+22	2,120674E+23
1943	6,676986E+22	6,676794E+22	3,926406E+22	3,926467E+22	1,335378E+23	7,852872E+22	2,120665E+23
1944	6,676812E+22	6,676793E+22	3,926437E+22	3,926314E+22	1,335360E+23	7,852751E+22	2,120636E+23
1945	6,676930E+22	6,677037E+22	3,926342E+22	3,926406E+22	1,335397E+23	7,852748E+22	2,120671E+23
1946	6,677015E+22	6,676825E+22	3,926248E+22	3,926280E+22	1,335384E+23	7,852528E+22	2,120637E+23
1947	6,676777E+22	6,677023E+22	3,926317E+22	3,926180E+22	1,335380E+23	7,852497E+22	2,120630E+23
1948	6,677022E+22	6,677086E+22	3,926181E+22	3,926264E+22	1,335411E+23	7,852445E+22	2,120655E+23
1949	6,677009E+22	6,676803E+22	3,926198E+22	3,926150E+22	1,335381E+23	7,852348E+22	2,120616E+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							
1950	6,676841E+22	6,677045E+22	3,926312E+22	3,926190E+22	1,335389E+23	7,852502E+22	2,120639E+23
1951	6,677058E+22	6,676986E+22	3,926179E+22	3,926295E+22	1,335404E+23	7,852474E+22	2,120652E+23
1952	6,676851E+22	6,676857E+22	3,926277E+22	3,926245E+22	1,335371E+23	7,852522E+22	2,120623E+23
1953	6,676862E+22	6,677028E+22	3,926349E+22	3,926404E+22	1,335389E+23	7,852753E+22	2,120664E+23
1954	6,677024E+22	6,676775E+22	3,926350E+22	3,926410E+22	1,335380E+23	7,852760E+22	2,120656E+23
1955	6,676764E+22	6,676827E+22	3,926537E+22	3,926386E+22	1,335359E+23	7,852923E+22	2,120651E+23
1956	6,676899E+22	6,676957E+22	3,926506E+22	3,926585E+22	1,335386E+23	7,853091E+22	2,120695E+23
1957	6,676864E+22	6,676686E+22	3,926552E+22	3,926577E+22	1,335355E+23	7,853129E+22	2,120668E+23
1958	6,676565E+22	6,676861E+22	3,926727E+22	3,926614E+22	1,335343E+23	7,853341E+22	2,120677E+23
1959	6,676791E+22	6,676840E+22	3,926611E+22	3,926722E+22	1,335363E+23	7,853333E+22	2,120696E+23
1960	6,676695E+22	6,676601E+22	3,926667E+22	3,926597E+22	1,335330E+23	7,853264E+22	2,120656E+23
1961	6,676679E+22	6,676789E+22	3,926696E+22	3,926645E+22	1,335347E+23	7,853341E+22	2,120681E+23
1962	6,676937E+22	6,676685E+22	3,926541E+22	3,926606E+22	1,335362E+23	7,853147E+22	2,120677E+23
1963	6,676689E+22	6,676735E+22	3,926567E+22	3,926469E+22	1,335342E+23	7,853036E+22	2,120646E+23
1964	6,676794E+22	6,676976E+22	3,926452E+22	3,926539E+22	1,335377E+23	7,852991E+22	2,120676E+23
1965	6,676913E+22	6,676753E+22	3,926376E+22	3,926410E+22	1,335367E+23	7,852786E+22	2,120645E+23
1966	6,676672E+22	6,676860E+22	3,926500E+22	3,926316E+22	1,335353E+23	7,852817E+22	2,120635E+23
1967	6,676928E+22	6,676966E+22	3,926352E+22	3,926400E+22	1,335389E+23	7,852753E+22	2,120665E+23
1968	6,676877E+22	6,676731E+22	3,926361E+22	3,926316E+22	1,335361E+23	7,852677E+22	2,120628E+23
1969	6,676711E+22	6,676912E+22	3,926454E+22	3,926404E+22	1,335362E+23	7,852858E+22	2,120648E+23
1970	6,676950E+22	6,676865E+22	3,926348E+22	3,926480E+22	1,335381E+23	7,852828E+22	2,120664E+23
1971	6,676736E+22	6,676723E+22	3,926468E+22	3,926419E+22	1,335346E+23	7,852887E+22	2,120635E+23
1972	6,676777E+22	6,676902E+22	3,926520E+22	3,926555E+22	1,335368E+23	7,853075E+22	2,120675E+23
1973	6,676952E+22	6,676687E+22	3,926515E+22	3,926579E+22	1,335364E+23	7,853093E+22	2,120673E+23
1974	6,676616E+22	6,676695E+22	3,926743E+22	3,926586E+22	1,335331E+23	7,853329E+22	2,120664E+23
1975	6,676722E+22	6,676882E+22	3,926691E+22	3,926777E+22	1,335360E+23	7,853468E+22	2,120707E+23
1976	6,676683E+22	6,676595E+22	3,926740E+22	3,926759E+22	1,335328E+23	7,853499E+22	2,120678E+23
1977	6,676458E+22	6,676652E+22	3,926900E+22	3,926798E+22	1,335311E+23	7,853697E+22	2,120681E+23
1978	6,676747E+22	6,676655E+22	3,926782E+22	3,926860E+22	1,335340E+23	7,853642E+22	2,120704E+23
1979	6,676624E+22	6,676472E+22	3,926819E+22	3,926739E+22	1,335310E+23	7,853558E+22	2,120665E+23
1980	6,676588E+22	6,676721E+22	3,926796E+22	3,926782E+22	1,335331E+23	7,853578E+22	2,120689E+23
1981	6,676820E+22	6,676671E+22	3,926638E+22	3,926752E+22	1,335349E+23	7,853390E+22	2,120688E+23
1982	6,676536E+22	6,676646E+22	3,926731E+22	3,926615E+22	1,335318E+23	7,853347E+22	2,120653E+23
1983	6,676665E+22	6,676888E+22	3,926624E+22	3,926651E+22	1,335355E+23	7,853275E+22	2,120683E+23
1984	6,676798E+22	6,676659E+22	3,926558E+22	3,926536E+22	1,335346E+23	7,853095E+22	2,120655E+23
1985	6,676593E+22	6,676678E+22	3,926659E+22	3,926497E+22	1,335327E+23	7,853156E+22	2,120643E+23
1986	6,676840E+22	6,676827E+22	3,926508E+22	3,926585E+22	1,335367E+23	7,853094E+22	2,120676E+23
1987	6,676741E+22	6,676638E+22	3,926507E+22	3,926519E+22	1,335338E+23	7,853026E+22	2,120640E+23
1988	6,676604E+22	6,676796E+22	3,926573E+22	3,926574E+22	1,335340E+23	7,853147E+22	2,120655E+23
1989	6,676880E+22	6,676756E+22	3,926493E+22	3,926630E+22	1,335364E+23	7,853122E+22	2,120676E+23
1990	6,676656E+22	6,676571E+22	3,926672E+22	3,926567E+22	1,335323E+23	7,853239E+22	2,120647E+23
1991	6,676666E+22	6,676808E+22	3,926717E+22	3,926697E+22	1,335347E+23	7,853415E+22	2,120689E+23
1992	6,676783E+22	6,676638E+22	3,926718E+22	3,926757E+22	1,335342E+23	7,853475E+22	2,120690E+23
1993	6,676443E+22	6,676555E+22	3,926928E+22	3,926812E+22	1,335300E+23	7,853740E+22	2,120674E+23
1994	6,676570E+22	6,676727E+22	3,926893E+22	3,926968E+22	1,335330E+23	7,853861E+22	2,120716E+23
1995	6,676551E+22	6,676437E+22	3,926933E+22	3,926940E+22	1,335299E+23	7,853873E+22	2,120686E+23
1996	6,676386E+22	6,676490E+22	3,927037E+22	3,926952E+22	1,335288E+23	7,853990E+22	2,120687E+23
1997	6,676699E+22	6,676559E+22	3,926904E+22	3,927015E+22	1,335326E+23	7,853919E+22	2,120718E+23
1998	6,676520E+22	6,676381E+22	3,926966E+22	3,926905E+22	1,335290E+23	7,853871E+22	2,120677E+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							
1999	6,676448E+22	6,676695E+22	3,926929E+22	3,926918E+22	1,335314E+23	7,853847E+22	2,120699E+23
2000	6,676678E+22	6,676633E+22	3,926796E+22	3,926876E+22	1,335331E+23	7,853672E+22	2,120698E+23
2001	6,676442E+22	6,676474E+22	3,926895E+22	3,926759E+22	1,335292E+23	7,853655E+22	2,120657E+23
2002	6,676600E+22	6,676728E+22	3,926798E+22	3,926775E+22	1,335333E+23	7,853573E+22	2,120690E+23
2003	6,676696E+22	6,676529E+22	3,926714E+22	3,926695E+22	1,335323E+23	7,853409E+22	2,120663E+23
2004	6,676482E+22	6,676572E+22	3,926761E+22	3,926669E+22	1,335305E+23	7,853431E+22	2,120648E+23
2005	6,676734E+22	6,676760E+22	3,926611E+22	3,926756E+22	1,335349E+23	7,853367E+22	2,120686E+23
2006	6,676615E+22	6,676509E+22	3,926673E+22	3,926682E+22	1,335312E+23	7,853355E+22	2,120648E+23
2007	6,676502E+22	6,676704E+22	3,926749E+22	3,926695E+22	1,335321E+23	7,853445E+22	2,120665E+23
2008	6,676786E+22	6,676677E+22	3,926694E+22	3,926765E+22	1,335346E+23	7,853459E+22	2,120692E+23
2009	6,676555E+22	6,676415E+22	3,926875E+22	3,926766E+22	1,335297E+23	7,853641E+22	2,120661E+23
2010	6,676524E+22	6,676695E+22	3,926923E+22	3,926900E+22	1,335322E+23	7,853823E+22	2,120704E+23
2011	6,676586E+22	6,676536E+22	3,926914E+22	3,926985E+22	1,335312E+23	7,853899E+22	2,120702E+23
2012	6,676298E+22	6,676394E+22	3,927084E+22	3,927013E+22	1,335269E+23	7,854096E+22	2,120679E+23
2013	6,676493E+22	6,676570E+22	3,927045E+22	3,927137E+22	1,335306E+23	7,854182E+22	2,120724E+23
2014	6,676478E+22	6,676268E+22	3,927111E+22	3,927101E+22	1,335275E+23	7,854212E+22	2,120696E+23
2015	6,676303E+22	6,676417E+22	3,927180E+22	3,927086E+22	1,335272E+23	7,854266E+22	2,120699E+23
2016	6,676572E+22	6,676545E+22	3,927054E+22	3,927161E+22	1,335312E+23	7,854215E+22	2,120733E+23
2017	6,676386E+22	6,676287E+22	3,927118E+22	3,927076E+22	1,335267E+23	7,854193E+22	2,120687E+23
2018	6,676327E+22	6,676579E+22	3,927109E+22	3,927044E+22	1,335291E+23	7,854153E+22	2,120706E+23
2019	6,676554E+22	6,676515E+22	3,926977E+22	3,927009E+22	1,335307E+23	7,853986E+22	2,120706E+23
2020	6,676368E+22	6,676316E+22	3,927019E+22	3,926896E+22	1,335268E+23	7,853915E+22	2,120660E+23
2021	6,676527E+22	6,676610E+22	3,926911E+22	3,926929E+22	1,335314E+23	7,853840E+22	2,120698E+23
2022	6,676574E+22	6,676424E+22	3,926848E+22	3,926877E+22	1,335300E+23	7,853725E+22	2,120672E+23
2023	6,676350E+22	6,676515E+22	3,926876E+22	3,926820E+22	1,335286E+23	7,853696E+22	2,120656E+23
2024	6,676624E+22	6,676690E+22	3,926773E+22	3,926893E+22	1,335331E+23	7,853666E+22	2,120698E+23
2025	6,676548E+22	6,676342E+22	3,926852E+22	3,926833E+22	1,335289E+23	7,853685E+22	2,120658E+23
2026	6,676435E+22	6,676566E+22	3,926953E+22	3,926829E+22	1,335300E+23	7,853782E+22	2,120678E+23
2027	6,676645E+22	6,676589E+22	3,926896E+22	3,926946E+22	1,335323E+23	7,853843E+22	2,120708E+23
2028	6,676390E+22	6,676311E+22	3,927032E+22	3,926978E+22	1,335270E+23	7,854011E+22	2,120671E+23
2029	6,676359E+22	6,676595E+22	3,927086E+22	3,927111E+22	1,335295E+23	7,854198E+22	2,120715E+23
2030	6,676428E+22	6,676371E+22	3,927118E+22	3,927191E+22	1,335280E+23	7,854309E+22	2,120711E+23
2031	6,676191E+22	6,676262E+22	3,927258E+22	3,927169E+22	1,335245E+23	7,854427E+22	2,120688E+23
2032	6,676426E+22	6,676460E+22	3,927226E+22	3,927290E+22	1,335289E+23	7,854516E+22	2,120740E+23
2033	6,676408E+22	6,676123E+22	3,927276E+22	3,927285E+22	1,335253E+23	7,854561E+22	2,120709E+23
2034	6,676206E+22	6,676343E+22	3,927341E+22	3,927246E+22	1,335255E+23	7,854587E+22	2,120714E+23
2035	6,676419E+22	6,676484E+22	3,927215E+22	3,927320E+22	1,335290E+23	7,854535E+22	2,120744E+23
2036	6,676267E+22	6,676158E+22	3,927252E+22	3,927214E+22	1,335243E+23	7,854466E+22	2,120689E+23
2037	6,676250E+22	6,676448E+22	3,927243E+22	3,927158E+22	1,335270E+23	7,854401E+22	2,120710E+23
2038	6,676452E+22	6,676358E+22	3,927134E+22	3,927146E+22	1,335281E+23	7,854280E+22	2,120709E+23
2039	6,676253E+22	6,676242E+22	3,927136E+22	3,927028E+22	1,335249E+23	7,854164E+22	2,120666E+23
2040	6,676401E+22	6,676566E+22	3,927038E+22	3,927083E+22	1,335297E+23	7,854121E+22	2,120709E+23
2041	6,676452E+22	6,676305E+22	3,926988E+22	3,927054E+22	1,335276E+23	7,854043E+22	2,120680E+23
2042	6,676263E+22	6,676400E+22	3,927047E+22	3,926952E+22	1,335266E+23	7,853999E+22	2,120666E+23
2043	6,676521E+22	6,676583E+22	3,926964E+22	3,927033E+22	1,335310E+23	7,853997E+22	2,120710E+23
2044	6,676469E+22	6,676208E+22	3,927013E+22	3,926996E+22	1,335268E+23	7,854008E+22	2,120668E+23
2045	6,676329E+22	6,676465E+22	3,927118E+22	3,927013E+22	1,335279E+23	7,854130E+22	2,120692E+23
2046	6,676464E+22	6,676484E+22	3,927087E+22	3,927172E+22	1,335295E+23	7,854259E+22	2,120721E+23
2047	6,676214E+22	6,676223E+22	3,927198E+22	3,927175E+22	1,335244E+23	7,854373E+22	2,120681E+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							
2048	6,676236E+22	6,676462E+22	3,927283E+22	3,927291E+22	1,335270E+23	7,854574E+22	2,120727E+23
2049	6,676360E+22	6,676165E+22	3,927311E+22	3,927375E+22	1,335252E+23	7,854686E+22	2,120721E+23
2050	6,676147E+22	6,676107E+22	3,927441E+22	3,927319E+22	1,335225E+23	7,854760E+22	2,120701E+23
2051	6,676312E+22	6,676385E+22	3,927403E+22	3,927457E+22	1,335270E+23	7,854861E+22	2,120756E+23
2052	6,676280E+22	6,676054E+22	3,927400E+22	3,927455E+22	1,335233E+23	7,854855E+22	2,120719E+23
2053	6,676066E+22	6,676270E+22	3,927483E+22	3,927390E+22	1,335234E+23	7,854872E+22	2,120721E+23
2054	6,676265E+22	6,676365E+22	3,927398E+22	3,927464E+22	1,335263E+23	7,854862E+22	2,120749E+23
2055	6,676146E+22	6,676055E+22	3,927400E+22	3,927330E+22	1,335220E+23	7,854730E+22	2,120693E+23
2056	6,676158E+22	6,676338E+22	3,927401E+22	3,927297E+22	1,335250E+23	7,854697E+22	2,120719E+23
2057	6,676352E+22	6,676214E+22	3,927271E+22	3,927331E+22	1,335257E+23	7,854602E+22	2,120717E+23
2058	6,676153E+22	6,676150E+22	3,927260E+22	3,927192E+22	1,335230E+23	7,854452E+22	2,120676E+23
2059	6,676277E+22	6,676486E+22	3,927180E+22	3,927240E+22	1,335276E+23	7,854421E+22	2,120718E+23
2060	6,676381E+22	6,676170E+22	3,927111E+22	3,927190E+22	1,335255E+23	7,854301E+22	2,120685E+23
2061	6,676219E+22	6,676281E+22	3,927195E+22	3,927066E+22	1,335250E+23	7,854262E+22	2,120676E+23
2062	6,676416E+22	6,676465E+22	3,927151E+22	3,927185E+22	1,335288E+23	7,854336E+22	2,120722E+23
2063	6,676314E+22	6,676157E+22	3,927175E+22	3,927162E+22	1,335247E+23	7,854337E+22	2,120681E+23
2064	6,676160E+22	6,676403E+22	3,927303E+22	3,927213E+22	1,335256E+23	7,854517E+22	2,120708E+23
2065	6,676296E+22	6,676318E+22	3,927288E+22	3,927396E+22	1,335261E+23	7,854684E+22	2,120730E+23
2066	6,676112E+22	6,676059E+22	3,927404E+22	3,927352E+22	1,335217E+23	7,854756E+22	2,120693E+23
2067	6,676147E+22	6,676306E+22	3,927483E+22	3,927462E+22	1,335245E+23	7,854945E+22	2,120740E+23
2068	6,676296E+22	6,676009E+22	3,927462E+22	3,927555E+22	1,335230E+23	7,855016E+22	2,120732E+23
2069	6,676066E+22	6,676029E+22	3,927582E+22	3,927489E+22	1,335209E+23	7,855072E+22	2,120717E+23
2070	6,676144E+22	6,676313E+22	3,927570E+22	3,927646E+22	1,335246E+23	7,855216E+22	2,120767E+23
2071	6,676107E+22	6,676004E+22	3,927552E+22	3,927601E+22	1,335211E+23	7,855154E+22	2,120726E+23
2072	6,675948E+22	6,676163E+22	3,927662E+22	3,927523E+22	1,335211E+23	7,855185E+22	2,120730E+23
2073	6,676162E+22	6,676180E+22	3,927573E+22	3,927614E+22	1,335234E+23	7,855188E+22	2,120753E+23
2074	6,676072E+22	6,675916E+22	3,927553E+22	3,927467E+22	1,335199E+23	7,855020E+22	2,120701E+23
2075	6,676036E+22	6,676245E+22	3,927541E+22	3,927458E+22	1,335228E+23	7,854999E+22	2,120728E+23
2076	6,676242E+22	6,676115E+22	3,927366E+22	3,927500E+22	1,335236E+23	7,854866E+22	2,120722E+23
2077	6,676072E+22	6,676063E+22	3,927373E+22	3,927323E+22	1,335213E+23	7,854697E+22	2,120683E+23
2078	6,676176E+22	6,676372E+22	3,927345E+22	3,927371E+22	1,335255E+23	7,854715E+22	2,120726E+23
2079	6,676294E+22	6,676098E+22	3,927261E+22	3,927298E+22	1,335239E+23	7,854559E+22	2,120695E+23
2080	6,676133E+22	6,676196E+22	3,927379E+22	3,927216E+22	1,335233E+23	7,854595E+22	2,120692E+23
2081	6,676270E+22	6,676346E+22	3,927339E+22	3,927394E+22	1,335262E+23	7,854732E+22	2,120735E+23
2082	6,676167E+22	6,676052E+22	3,927356E+22	3,927368E+22	1,335222E+23	7,854723E+22	2,120694E+23
2083	6,675998E+22	6,676265E+22	3,927504E+22	3,927417E+22	1,335226E+23	7,854921E+22	2,120718E+23
2084	6,676209E+22	6,676123E+22	3,927447E+22	3,927580E+22	1,335233E+23	7,855027E+22	2,120736E+23
2085	6,676066E+22	6,675893E+22	3,927560E+22	3,927503E+22	1,335196E+23	7,855063E+22	2,120702E+23
2086	6,676047E+22	6,676183E+22	3,927662E+22	3,927639E+22	1,335223E+23	7,855300E+22	2,120753E+23
2087	6,676149E+22	6,675981E+22	3,927607E+22	3,927715E+22	1,335213E+23	7,855322E+22	2,120745E+23
2088	6,675912E+22	6,675991E+22	3,927760E+22	3,927664E+22	1,335190E+23	7,855424E+22	2,120733E+23
2089	6,675973E+22	6,676183E+22	3,927770E+22	3,927825E+22	1,335216E+23	7,855595E+22	2,120775E+23
2090	6,675992E+22	6,675863E+22	3,927750E+22	3,927743E+22	1,335186E+23	7,855493E+22	2,120735E+23
2091	6,675839E+22	6,676010E+22	3,927851E+22	3,927671E+22	1,335185E+23	7,855522E+22	2,120737E+23
2092	6,676085E+22	6,676012E+22	3,927695E+22	3,927783E+22	1,335210E+23	7,855477E+22	2,120757E+23
2093	6,676000E+22	6,675820E+22	3,927651E+22	3,927625E+22	1,335182E+23	7,855276E+22	2,120710E+23
2094	6,675915E+22	6,676160E+22	3,927658E+22	3,927629E+22	1,335207E+23	7,855286E+22	2,120736E+23
2095	6,676130E+22	6,676060E+22	3,927478E+22	3,927615E+22	1,335219E+23	7,855093E+22	2,120728E+23
2096	6,676021E+22	6,675976E+22	3,927528E+22	3,927429E+22	1,335200E+23	7,854957E+22	2,120695E+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							
2097	6,676094E+22	6,676226E+22	3,927524E+22	3,927501E+22	1,335232E+23	7,855025E+22	2,120735E+23
2098	6,676199E+22	6,676009E+22	3,927442E+22	3,927441E+22	1,335221E+23	7,854882E+22	2,120709E+23
2099	6,675969E+22	6,676116E+22	3,927562E+22	3,927402E+22	1,335208E+23	7,854964E+22	2,120705E+23
2100	6,676097E+22	6,676212E+22	3,927488E+22	3,927605E+22	1,335231E+23	7,855094E+22	2,120740E+23
2101	6,676045E+22	6,675914E+22	3,927519E+22	3,927549E+22	1,335196E+23	7,855069E+22	2,120703E+23
2102	6,675882E+22	6,676091E+22	3,927692E+22	3,927604E+22	1,335197E+23	7,855295E+22	2,120727E+23
2103	6,676116E+22	6,676007E+22	3,927610E+22	3,927736E+22	1,335212E+23	7,855345E+22	2,120747E+23
2104	6,675999E+22	6,675802E+22	3,927737E+22	3,927679E+22	1,335180E+23	7,855416E+22	2,120722E+23
2105	6,675903E+22	6,676081E+22	3,927847E+22	3,927844E+22	1,335198E+23	7,855691E+22	2,120768E+23
2106	6,676004E+22	6,675911E+22	3,927794E+22	3,927895E+22	1,335192E+23	7,855690E+22	2,120761E+23
2107	6,675756E+22	6,675873E+22	3,927971E+22	3,927831E+22	1,335163E+23	7,855802E+22	2,120743E+23
2108	6,675869E+22	6,675996E+22	3,927937E+22	3,927982E+22	1,335187E+23	7,855919E+22	2,120778E+23
2109	6,675934E+22	6,675704E+22	3,927898E+22	3,927880E+22	1,335164E+23	7,855778E+22	2,120741E+23
2110	6,675731E+22	6,675879E+22	3,927993E+22	3,927842E+22	1,335161E+23	7,855834E+22	2,120744E+23
2111	6,675955E+22	6,675967E+22	3,927793E+22	3,927928E+22	1,335192E+23	7,855721E+22	2,120764E+23
2112	6,675900E+22	6,675772E+22	3,927773E+22	3,927770E+22	1,335167E+23	7,855543E+22	2,120721E+23
2113	6,675805E+22	6,676052E+22	3,927813E+22	3,927766E+22	1,335186E+23	7,855578E+22	2,120743E+23
2114	6,676066E+22	6,675964E+22	3,927642E+22	3,927715E+22	1,335203E+23	7,855357E+22	2,120739E+23
2115	6,675927E+22	6,675869E+22	3,927717E+22	3,927556E+22	1,335180E+23	7,855273E+22	2,120707E+23
2116	6,675985E+22	6,676097E+22	3,927668E+22	3,927668E+22	1,335208E+23	7,855337E+22	2,120742E+23
2117	6,676070E+22	6,675912E+22	3,927580E+22	3,927625E+22	1,335198E+23	7,855205E+22	2,120719E+23
2118	6,675796E+22	6,675992E+22	3,927724E+22	3,927617E+22	1,335179E+23	7,855341E+22	2,120713E+23
2119	6,675961E+22	6,676088E+22	3,927636E+22	3,927769E+22	1,335205E+23	7,855405E+22	2,120745E+23
2120	6,675990E+22	6,675770E+22	3,927691E+22	3,927705E+22	1,335176E+23	7,855396E+22	2,120716E+23
2121	6,675807E+22	6,675928E+22	3,927876E+22	3,927775E+22	1,335173E+23	7,855650E+22	2,120738E+23
2122	6,676027E+22	6,675920E+22	3,927794E+22	3,927899E+22	1,335195E+23	7,855693E+22	2,120764E+23
2123	6,675842E+22	6,675743E+22	3,927941E+22	3,927866E+22	1,335159E+23	7,855807E+22	2,120739E+23
2124	6,675740E+22	6,675963E+22	3,928023E+22	3,928037E+22	1,335170E+23	7,856060E+22	2,120776E+23
2125	6,675880E+22	6,675783E+22	3,927984E+22	3,928057E+22	1,335166E+23	7,856040E+22	2,120770E+23
2126	6,675628E+22	6,675709E+22	3,928163E+22	3,928008E+22	1,335134E+23	7,856171E+22	2,120751E+23
2127	6,675755E+22	6,675870E+22	3,928085E+22	3,928129E+22	1,335162E+23	7,856214E+22	2,120784E+23
2128	6,675861E+22	6,675610E+22	3,928034E+22	3,928052E+22	1,335147E+23	7,856086E+22	2,120756E+23
2129	6,675607E+22	6,675773E+22	3,928120E+22	3,928029E+22	1,335138E+23	7,856149E+22	2,120753E+23
2130	6,675852E+22	6,675901E+22	3,927928E+22	3,928071E+22	1,335175E+23	7,855999E+22	2,120775E+23
2131	6,675808E+22	6,675679E+22	3,927935E+22	3,927882E+22	1,335149E+23	7,855817E+22	2,120730E+23
2132	6,675739E+22	6,675897E+22	3,927948E+22	3,927873E+22	1,335164E+23	7,855821E+22	2,120746E+23
2133	6,676007E+22	6,675857E+22	3,927785E+22	3,927822E+22	1,335186E+23	7,855607E+22	2,120747E+23
2134	6,675788E+22	6,675770E+22	3,927869E+22	3,927728E+22	1,335156E+23	7,855597E+22	2,120716E+23
2135	6,675800E+22	6,676038E+22	3,927799E+22	3,927835E+22	1,335184E+23	7,855634E+22	2,120747E+23
2136	6,675938E+22	6,675821E+22	3,927736E+22	3,927809E+22	1,335176E+23	7,855545E+22	2,120730E+23
2137	6,675669E+22	6,675823E+22	3,927905E+22	3,927799E+22	1,335149E+23	7,855704E+22	2,120720E+23
2138	6,675899E+22	6,675944E+22	3,927823E+22	3,927916E+22	1,335184E+23	7,855740E+22	2,120758E+23
2139	6,675917E+22	6,675646E+22	3,927893E+22	3,927865E+22	1,335156E+23	7,855758E+22	2,120732E+23
2140	6,675713E+22	6,675804E+22	3,928037E+22	3,927966E+22	1,335152E+23	7,856003E+22	2,120752E+23
2141	6,675906E+22	6,675851E+22	3,927961E+22	3,928090E+22	1,335176E+23	7,856051E+22	2,120781E+23
2142	6,675664E+22	6,675642E+22	3,928137E+22	3,928080E+22	1,335131E+23	7,856218E+22	2,120752E+23
2143	6,675582E+22	6,675846E+22	3,928203E+22	3,928193E+22	1,335143E+23	7,856396E+22	2,120782E+23
2144	6,675799E+22	6,675636E+22	3,928167E+22	3,928217E+22	1,335144E+23	7,856385E+22	2,120782E+23
2145	6,675523E+22	6,675544E+22	3,928336E+22	3,928186E+22	1,335107E+23	7,856522E+22	2,120759E+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							
2146	6,675658E+22	6,675774E+22	3,928229E+22	3,928286E+22	1,335143E+23	7,856515E+22	2,120795E+23
2147	6,675722E+22	6,675546E+22	3,928185E+22	3,928211E+22	1,335127E+23	7,856396E+22	2,120766E+23
2148	6,675497E+22	6,675663E+22	3,928237E+22	3,928177E+22	1,335116E+23	7,856414E+22	2,120757E+23
2149	6,675783E+22	6,675792E+22	3,928067E+22	3,928175E+22	1,335157E+23	7,856242E+22	2,120782E+23
2150	6,675714E+22	6,675561E+22	3,928094E+22	3,928010E+22	1,335128E+23	7,856104E+22	2,120738E+23
2151	6,675631E+22	6,675807E+22	3,928080E+22	3,927984E+22	1,335144E+23	7,856064E+22	2,120750E+23
2152	6,675905E+22	6,675787E+22	3,927923E+22	3,927984E+22	1,335169E+23	7,855907E+22	2,120760E+23
2153	6,675624E+22	6,675666E+22	3,928016E+22	3,927928E+22	1,335129E+23	7,855944E+22	2,120723E+23
2154	6,675673E+22	6,675924E+22	3,927959E+22	3,928003E+22	1,335160E+23	7,855962E+22	2,120756E+23
2155	6,675841E+22	6,675681E+22	3,927927E+22	3,927961E+22	1,335152E+23	7,855888E+22	2,120741E+23
2156	6,675621E+22	6,675639E+22	3,928054E+22	3,927955E+22	1,335126E+23	7,856009E+22	2,120727E+23
2157	6,675852E+22	6,675823E+22	3,927986E+22	3,928067E+22	1,335168E+23	7,856053E+22	2,120773E+23
2158	6,675780E+22	6,675572E+22	3,928067E+22	3,928066E+22	1,335135E+23	7,856134E+22	2,120749E+23
2159	6,675525E+22	6,675757E+22	3,928201E+22	3,928145E+22	1,335128E+23	7,856345E+22	2,120763E+23
2160	6,675759E+22	6,675776E+22	3,928158E+22	3,928281E+22	1,335154E+23	7,856439E+22	2,120797E+23
2161	6,675508E+22	6,675480E+22	3,928352E+22	3,928274E+22	1,335099E+23	7,856627E+22	2,120761E+23
2162	6,675475E+22	6,675689E+22	3,928408E+22	3,928357E+22	1,335116E+23	7,856764E+22	2,120793E+23
2163	6,675696E+22	6,675498E+22	3,928361E+22	3,928388E+22	1,335119E+23	7,856749E+22	2,120794E+23
2164	6,675422E+22	6,675394E+22	3,928456E+22	3,928377E+22	1,335082E+23	7,856834E+22	2,120765E+23
2165	6,675566E+22	6,675683E+22	3,928352E+22	3,928449E+22	1,335125E+23	7,856801E+22	2,120805E+23
2166	6,675602E+22	6,675453E+22	3,928323E+22	3,928367E+22	1,335105E+23	7,856690E+22	2,120774E+23
2167	6,675403E+22	6,675567E+22	3,928365E+22	3,928265E+22	1,335097E+23	7,856630E+22	2,120760E+23
2168	6,675737E+22	6,675700E+22	3,928210E+22	3,928274E+22	1,335144E+23	7,856484E+22	2,120792E+23
2169	6,675597E+22	6,675452E+22	3,928249E+22	3,928153E+22	1,335105E+23	7,856402E+22	2,120745E+23
2170	6,675492E+22	6,675740E+22	3,928231E+22	3,928132E+22	1,335123E+23	7,856363E+22	2,120760E+23
2171	6,675733E+22	6,675713E+22	3,928094E+22	3,928154E+22	1,335145E+23	7,856248E+22	2,120769E+23
2172	6,675500E+22	6,675513E+22	3,928154E+22	3,928107E+22	1,335101E+23	7,856262E+22	2,120727E+23
2173	6,675616E+22	6,675769E+22	3,928119E+22	3,928148E+22	1,335138E+23	7,856267E+22	2,120765E+23
2174	6,675761E+22	6,675543E+22	3,928096E+22	3,928135E+22	1,335130E+23	7,856230E+22	2,120753E+23
2175	6,675532E+22	6,675547E+22	3,928199E+22	3,928106E+22	1,335108E+23	7,856304E+22	2,120738E+23
2176	6,675753E+22	6,675767E+22	3,928145E+22	3,928257E+22	1,335152E+23	7,856402E+22	2,120792E+23
2177	6,675600E+22	6,675493E+22	3,928258E+22	3,928285E+22	1,335109E+23	7,856543E+22	2,120764E+23
2178	6,675375E+22	6,675647E+22	3,928407E+22	3,928319E+22	1,335102E+23	7,856726E+22	2,120775E+23
2179	6,675621E+22	6,675620E+22	3,928390E+22	3,928443E+22	1,335124E+23	7,856833E+22	2,120807E+23
2180	6,675420E+22	6,675276E+22	3,928524E+22	3,928451E+22	1,335070E+23	7,856975E+22	2,120767E+23
2181	6,675403E+22	6,675529E+22	3,928568E+22	3,928524E+22	1,335093E+23	7,857092E+22	2,120802E+23
2182	6,675554E+22	6,675400E+22	3,928508E+22	3,928589E+22	1,335095E+23	7,857097E+22	2,120805E+23
2183	6,675282E+22	6,675330E+22	3,928569E+22	3,928526E+22	1,335061E+23	7,857095E+22	2,120771E+23
2184	6,675478E+22	6,675610E+22	3,928492E+22	3,928584E+22	1,335109E+23	7,857077E+22	2,120816E+23
2185	6,675492E+22	6,675345E+22	3,928490E+22	3,928496E+22	1,335084E+23	7,856986E+22	2,120782E+23
2186	6,675320E+22	6,675468E+22	3,928534E+22	3,928368E+22	1,335079E+23	7,856902E+22	2,120769E+23
2187	6,675617E+22	6,675616E+22	3,928392E+22	3,928408E+22	1,335123E+23	7,856800E+22	2,120803E+23
2188	6,675466E+22	6,675335E+22	3,928371E+22	3,928341E+22	1,335080E+23	7,856713E+22	2,120751E+23
2189	6,675372E+22	6,675626E+22	3,928366E+22	3,928312E+22	1,335100E+23	7,856678E+22	2,120768E+23
2190	6,675605E+22	6,675579E+22	3,928244E+22	3,928340E+22	1,335118E+23	7,856584E+22	2,120777E+23
2191	6,675428E+22	6,675370E+22	3,928280E+22	3,928232E+22	1,335080E+23	7,856512E+22	2,120731E+23
2192	6,675597E+22	6,675659E+22	3,928260E+22	3,928285E+22	1,335126E+23	7,856546E+22	2,120780E+23
2193	6,675657E+22	6,675451E+22	3,928257E+22	3,928304E+22	1,335111E+23	7,856560E+22	2,120767E+23
2194	6,675389E+22	6,675498E+22	3,928378E+22	3,928270E+22	1,335089E+23	7,856649E+22	2,120754E+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							
2195	6,675567E+22	6,675706E+22	3,928364E+22	3,928433E+22	1,335127E+23	7,856797E+22	2,120807E+23
2196	6,675444E+22	6,675328E+22	3,928454E+22	3,928481E+22	1,335077E+23	7,856935E+22	2,120771E+23
2197	6,675276E+22	6,675461E+22	3,928619E+22	3,928493E+22	1,335074E+23	7,857112E+22	2,120785E+23
2198	6,675500E+22	6,675447E+22	3,928585E+22	3,928645E+22	1,335095E+23	7,857230E+22	2,120818E+23
2199	6,675312E+22	6,675143E+22	3,928662E+22	3,928627E+22	1,335045E+23	7,857289E+22	2,120774E+23
2200	6,675315E+22	6,675452E+22	3,928695E+22	3,928717E+22	1,335077E+23	7,857412E+22	2,120818E+23
2201	6,675405E+22	6,675321E+22	3,928656E+22	3,928778E+22	1,335073E+23	7,857434E+22	2,120816E+23
2202	6,675181E+22	6,675245E+22	3,928736E+22	3,928648E+22	1,335043E+23	7,857384E+22	2,120781E+23
2203	6,675387E+22	6,675505E+22	3,928688E+22	3,928685E+22	1,335089E+23	7,857373E+22	2,120827E+23
2204	6,675411E+22	6,675204E+22	3,928638E+22	3,928628E+22	1,335061E+23	7,857266E+22	2,120788E+23
2205	6,675230E+22	6,675354E+22	3,928682E+22	3,928511E+22	1,335058E+23	7,857193E+22	2,120778E+23
2206	6,675438E+22	6,675533E+22	3,928532E+22	3,928599E+22	1,335097E+23	7,857131E+22	2,120810E+23
2207	6,675317E+22	6,675243E+22	3,928480E+22	3,928498E+22	1,335056E+23	7,856979E+22	2,120754E+23
2208	6,675305E+22	6,675502E+22	3,928495E+22	3,928463E+22	1,335081E+23	7,856957E+22	2,120776E+23
2209	6,675520E+22	6,675441E+22	3,928402E+22	3,928491E+22	1,335096E+23	7,856893E+22	2,120785E+23
2210	6,675381E+22	6,675266E+22	3,928436E+22	3,928350E+22	1,335065E+23	7,856786E+22	2,120743E+23
2211	6,675494E+22	6,675581E+22	3,928445E+22	3,928428E+22	1,335107E+23	7,856873E+22	2,120795E+23
2212	6,675519E+22	6,675360E+22	3,928411E+22	3,928499E+22	1,335088E+23	7,856910E+22	2,120779E+23
2213	6,675253E+22	6,675382E+22	3,928569E+22	3,928459E+22	1,335064E+23	7,857028E+22	2,120766E+23
2214	6,675394E+22	6,675558E+22	3,928579E+22	3,928633E+22	1,335095E+23	7,857212E+22	2,120816E+23
2215	6,675332E+22	6,675155E+22	3,928628E+22	3,928644E+22	1,335049E+23	7,857272E+22	2,120776E+23
2216	6,675213E+22	6,675305E+22	3,928782E+22	3,928677E+22	1,335052E+23	7,857459E+22	2,120798E+23
2217	6,675362E+22	6,675328E+22	3,928752E+22	3,928853E+22	1,335069E+23	7,857605E+22	2,120830E+23
2218	6,675177E+22	6,675080E+22	3,928817E+22	3,928801E+22	1,335026E+23	7,857618E+22	2,120788E+23
2219	6,675172E+22	6,675388E+22	3,928884E+22	3,928874E+22	1,335056E+23	7,857758E+22	2,120832E+23
2220	6,675297E+22	6,675194E+22	3,928822E+22	3,928932E+22	1,335049E+23	7,857754E+22	2,120825E+23
2221	6,675116E+22	6,675107E+22	3,928921E+22	3,928777E+22	1,335022E+23	7,857697E+22	2,120792E+23
2222	6,675266E+22	6,675385E+22	3,928864E+22	3,928841E+22	1,335065E+23	7,857705E+22	2,120836E+23
2223	6,675290E+22	6,675096E+22	3,928758E+22	3,928779E+22	1,335039E+23	7,857537E+22	2,120792E+23
2224	6,675127E+22	6,675273E+22	3,928790E+22	3,928691E+22	1,335040E+23	7,857481E+22	2,120788E+23
2225	6,675291E+22	6,675424E+22	3,928661E+22	3,928776E+22	1,335072E+23	7,857436E+22	2,120815E+23
2226	6,675237E+22	6,675122E+22	3,928621E+22	3,928612E+22	1,335036E+23	7,857233E+22	2,120759E+23
2227	6,675255E+22	6,675385E+22	3,928661E+22	3,928562E+22	1,335064E+23	7,857223E+22	2,120786E+23
2228	6,675463E+22	6,675306E+22	3,928537E+22	3,928626E+22	1,335077E+23	7,857163E+22	2,120793E+23
2229	6,675298E+22	6,675177E+22	3,928599E+22	3,928501E+22	1,335047E+23	7,857100E+22	2,120758E+23
2230	6,675303E+22	6,675520E+22	3,928625E+22	3,928620E+22	1,335082E+23	7,857244E+22	2,120807E+23
2231	6,675344E+22	6,675262E+22	3,928577E+22	3,928674E+22	1,335061E+23	7,857251E+22	2,120786E+23
2232	6,675144E+22	6,675245E+22	3,928754E+22	3,928645E+22	1,335039E+23	7,857399E+22	2,120779E+23
2233	6,675253E+22	6,675392E+22	3,928782E+22	3,928832E+22	1,335064E+23	7,857614E+22	2,120826E+23
2234	6,675236E+22	6,675018E+22	3,928816E+22	3,928820E+22	1,335025E+23	7,857635E+22	2,120789E+23
2235	6,675101E+22	6,675201E+22	3,928969E+22	3,928868E+22	1,335030E+23	7,857837E+22	2,120814E+23
2236	6,675234E+22	6,675218E+22	3,928900E+22	3,929068E+22	1,335045E+23	7,857968E+22	2,120842E+23
2237	6,675087E+22	6,674966E+22	3,928992E+22	3,928973E+22	1,335005E+23	7,857965E+22	2,120802E+23
2238	6,675049E+22	6,675263E+22	3,929077E+22	3,929026E+22	1,335031E+23	7,858102E+22	2,120841E+23
2239	6,675221E+22	6,675066E+22	3,928973E+22	3,929046E+22	1,335029E+23	7,858018E+22	2,120831E+23
2240	6,675057E+22	6,674997E+22	3,929056E+22	3,928916E+22	1,335005E+23	7,857972E+22	2,120803E+23
2241	6,675096E+22	6,675296E+22	3,929009E+22	3,929013E+22	1,335039E+23	7,858023E+22	2,120841E+23
2242	6,675137E+22	6,675034E+22	3,928887E+22	3,928924E+22	1,335017E+23	7,857811E+22	2,120798E+23
2243	6,674995E+22	6,675172E+22	3,928944E+22	3,928828E+22	1,335017E+23	7,857772E+22	2,120794E+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	6,675208E+22	6,675268E+22	3,928798E+22	3,928917E+22	1,335048E+23	7,857715E+22	2,120819E+23
2245	6,675214E+22	6,674978E+22	3,928773E+22	3,928730E+22	1,335019E+23	7,857503E+22	2,120770E+23
2246	6,675161E+22	6,675284E+22	3,928820E+22	3,928708E+22	1,335044E+23	7,857527E+22	2,120797E+23
2247	6,675352E+22	6,675237E+22	3,928660E+22	3,928778E+22	1,335059E+23	7,857438E+22	2,120803E+23
2248	6,675176E+22	6,675118E+22	3,928738E+22	3,928693E+22	1,335029E+23	7,857431E+22	2,120773E+23
2249	6,675111E+22	6,675412E+22	3,928815E+22	3,928819E+22	1,335052E+23	7,857634E+22	2,120816E+23
2250	6,675219E+22	6,675122E+22	3,928778E+22	3,928830E+22	1,335034E+23	7,857608E+22	2,120795E+23
2251	6,675054E+22	6,675087E+22	3,928965E+22	3,928807E+22	1,335014E+23	7,857772E+22	2,120791E+23
2252	6,675161E+22	6,675218E+22	3,928950E+22	3,929032E+22	1,335038E+23	7,857983E+22	2,120836E+23
2253	6,675143E+22	6,674898E+22	3,928989E+22	3,929016E+22	1,335004E+23	7,858006E+22	2,120805E+23
2254	6,674941E+22	6,675121E+22	3,929144E+22	3,929072E+22	1,335006E+23	7,858216E+22	2,120828E+23
2255	6,675112E+22	6,675108E+22	3,929057E+22	3,929227E+22	1,335022E+23	7,858284E+22	2,120850E+23
2256	6,675018E+22	6,674860E+22	3,929163E+22	3,929123E+22	1,334988E+23	7,858285E+22	2,120816E+23
2257	6,674924E+22	6,675140E+22	3,929262E+22	3,929173E+22	1,335006E+23	7,858435E+22	2,120850E+23
2258	6,675104E+22	6,674966E+22	3,929140E+22	3,929176E+22	1,335007E+23	7,858316E+22	2,120839E+23
2259	6,674920E+22	6,674920E+22	3,929215E+22	3,929077E+22	1,334984E+23	7,858291E+22	2,120813E+23
2260	6,674944E+22	6,675175E+22	3,929129E+22	3,929201E+22	1,335012E+23	7,858331E+22	2,120845E+23
2261	6,675050E+22	6,674895E+22	3,929034E+22	3,929074E+22	1,334995E+23	7,858107E+22	2,120805E+23
2262	6,674911E+22	6,675035E+22	3,929091E+22	3,928958E+22	1,334995E+23	7,858049E+22	2,120800E+23
2263	6,675170E+22	6,675136E+22	3,928910E+22	3,929019E+22	1,335031E+23	7,857929E+22	2,120823E+23
2264	6,675175E+22	6,674908E+22	3,928886E+22	3,928861E+22	1,335008E+23	7,857747E+22	2,120783E+23
2265	6,674996E+22	6,675234E+22	3,928967E+22	3,928872E+22	1,335023E+23	7,857839E+22	2,120807E+23
2266	6,675180E+22	6,675198E+22	3,928826E+22	3,928928E+22	1,335038E+23	7,857754E+22	2,120813E+23
2267	6,675025E+22	6,675021E+22	3,928944E+22	3,928860E+22	1,335005E+23	7,857804E+22	2,120785E+23
2268	6,674983E+22	6,675229E+22	3,929009E+22	3,929008E+22	1,335021E+23	7,858018E+22	2,120823E+23
2269	6,675158E+22	6,674937E+22	3,928981E+22	3,929012E+22	1,335010E+23	7,857993E+22	2,120809E+23
2270	6,674944E+22	6,674937E+22	3,929149E+22	3,929011E+22	1,334988E+23	7,858160E+22	2,120804E+23
2271	6,675060E+22	6,675107E+22	3,929086E+22	3,929229E+22	1,335017E+23	7,858315E+22	2,120848E+23
2272	6,675052E+22	6,674825E+22	3,929124E+22	3,929213E+22	1,334988E+23	7,858337E+22	2,120821E+23
2273	6,674787E+22	6,675017E+22	3,929331E+22	3,929246E+22	1,334980E+23	7,858577E+22	2,120838E+23
2274	6,675008E+22	6,675007E+22	3,929250E+22	3,929342E+22	1,335002E+23	7,858592E+22	2,120861E+23
2275	6,674919E+22	6,674748E+22	3,929361E+22	3,929254E+22	1,334967E+23	7,858615E+22	2,120828E+23
2276	6,674782E+22	6,675005E+22	3,929426E+22	3,929347E+22	1,334979E+23	7,858773E+22	2,120856E+23
2277	6,674969E+22	6,674859E+22	3,929298E+22	3,929353E+22	1,334983E+23	7,858652E+22	2,120848E+23
2278	6,674744E+22	6,674818E+22	3,929363E+22	3,929256E+22	1,334956E+23	7,858619E+22	2,120818E+23
2279	6,674846E+22	6,675035E+22	3,929246E+22	3,929340E+22	1,334988E+23	7,858585E+22	2,120847E+23
2280	6,675020E+22	6,674780E+22	3,929148E+22	3,929201E+22	1,334980E+23	7,858349E+22	2,120815E+23
2281	6,674831E+22	6,674928E+22	3,929231E+22	3,929087E+22	1,334976E+23	7,858318E+22	2,120808E+23
2282	6,675087E+22	6,675077E+22	3,929049E+22	3,929130E+22	1,335016E+23	7,858179E+22	2,120834E+23
2283	6,675052E+22	6,674876E+22	3,929041E+22	3,929016E+22	1,334993E+23	7,858057E+22	2,120798E+23
2284	6,674833E+22	6,675132E+22	3,929124E+22	3,929059E+22	1,334996E+23	7,858183E+22	2,120815E+23
2285	6,675067E+22	6,675048E+22	3,929026E+22	3,929095E+22	1,335012E+23	7,858121E+22	2,120824E+23
2286	6,674912E+22	6,674856E+22	3,929144E+22	3,929028E+22	1,334977E+23	7,858172E+22	2,120794E+23
2287	6,674921E+22	6,675042E+22	3,929161E+22	3,929172E+22	1,334996E+23	7,858332E+22	2,120830E+23
2288	6,675091E+22	6,674829E+22	3,929119E+22	3,929204E+22	1,334992E+23	7,858323E+22	2,120824E+23
2289	6,674783E+22	6,674863E+22	3,929302E+22	3,929214E+22	1,334965E+23	7,858516E+22	2,120816E+23
2290	6,674904E+22	6,675043E+22	3,929259E+22	3,929388E+22	1,334995E+23	7,858647E+22	2,120859E+23
2291	6,674922E+22	6,674748E+22	3,929335E+22	3,929369E+22	1,334967E+23	7,858703E+22	2,120837E+23
2292	6,674661E+22	6,674867E+22	3,929533E+22	3,929412E+22	1,334953E+23	7,858945E+22	2,120847E+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							
2293	6,674916E+22	6,674856E+22	3,929465E+22	3,929503E+22	1,334977E+23	7,858968E+22	2,120874E+23
2294	6,674769E+22	6,674629E+22	3,929545E+22	3,929443E+22	1,334940E+23	7,858988E+22	2,120839E+23
2295	6,674644E+22	6,674877E+22	3,929545E+22	3,929537E+22	1,334952E+23	7,859082E+22	2,120860E+23
2296	6,674865E+22	6,674759E+22	3,929407E+22	3,929536E+22	1,334962E+23	7,858943E+22	2,120857E+23
2297	6,674631E+22	6,674687E+22	3,929496E+22	3,929404E+22	1,334932E+23	7,858900E+22	2,120822E+23
2298	6,674801E+22	6,674922E+22	3,929382E+22	3,929424E+22	1,334972E+23	7,858805E+22	2,120853E+23
2299	6,674980E+22	6,674709E+22	3,929290E+22	3,929300E+22	1,334969E+23	7,858590E+22	2,120828E+23
2300	6,674721E+22	6,674846E+22	3,929366E+22	3,929229E+22	1,334957E+23	7,858595E+22	2,120816E+23
2301	6,674960E+22	6,675014E+22	3,929214E+22	3,929280E+22	1,334997E+23	7,858494E+22	2,120847E+23
2302	6,674871E+22	6,674789E+22	3,929224E+22	3,929187E+22	1,334966E+23	7,858410E+22	2,120807E+23
2303	6,674712E+22	6,674975E+22	3,929286E+22	3,929221E+22	1,334969E+23	7,858508E+22	2,120820E+23
2304	6,675001E+22	6,674902E+22	3,929179E+22	3,929264E+22	1,334990E+23	7,858444E+22	2,120835E+23
2305	6,674798E+22	6,674704E+22	3,929309E+22	3,929214E+22	1,334950E+23	7,858523E+22	2,120803E+23
2306	6,674819E+22	6,674946E+22	3,929314E+22	3,929338E+22	1,334976E+23	7,858652E+22	2,120842E+23
2307	6,674964E+22	6,674777E+22	3,929278E+22	3,929399E+22	1,334974E+23	7,858677E+22	2,120842E+23
2308	6,674629E+22	6,674754E+22	3,929479E+22	3,929416E+22	1,334938E+23	7,858895E+22	2,120828E+23
2309	6,674805E+22	6,674902E+22	3,929483E+22	3,929548E+22	1,334971E+23	7,859031E+22	2,120874E+23
2310	6,674801E+22	6,674608E+22	3,929558E+22	3,929526E+22	1,334941E+23	7,859084E+22	2,120849E+23
2311	6,674566E+22	6,674705E+22	3,929701E+22	3,929576E+22	1,334927E+23	7,859278E+22	2,120855E+23
2312	6,674799E+22	6,674755E+22	3,929608E+22	3,929692E+22	1,334955E+23	7,859299E+22	2,120885E+23
2313	6,674582E+22	6,674534E+22	3,929691E+22	3,929643E+22	1,334912E+23	7,859334E+22	2,120845E+23
2314	6,674509E+22	6,674775E+22	3,929687E+22	3,929681E+22	1,334928E+23	7,859368E+22	2,120865E+23
2315	6,674785E+22	6,674664E+22	3,929561E+22	3,929669E+22	1,334945E+23	7,859229E+22	2,120868E+23
2316	6,674568E+22	6,674551E+22	3,929639E+22	3,929534E+22	1,334912E+23	7,859173E+22	2,120829E+23
2317	6,674763E+22	6,674806E+22	3,929546E+22	3,929540E+22	1,334957E+23	7,859086E+22	2,120866E+23
2318	6,674860E+22	6,674657E+22	3,929446E+22	3,929443E+22	1,334952E+23	7,858889E+22	2,120841E+23
2319	6,674596E+22	6,674758E+22	3,929481E+22	3,929390E+22	1,334935E+23	7,858872E+22	2,120823E+23
2320	6,674828E+22	6,674926E+22	3,929349E+22	3,929447E+22	1,334975E+23	7,858797E+22	2,120855E+23
2321	6,674730E+22	6,674648E+22	3,929388E+22	3,929350E+22	1,334938E+23	7,858738E+22	2,120812E+23
2322	6,674628E+22	6,674816E+22	3,929446E+22	3,929348E+22	1,334944E+23	7,858795E+22	2,120824E+23
2323	6,674924E+22	6,674793E+22	3,929339E+22	3,929428E+22	1,334972E+23	7,858767E+22	2,120848E+23
2324	6,674672E+22	6,674593E+22	3,929456E+22	3,929408E+22	1,334926E+23	7,858864E+22	2,120813E+23
2325	6,674697E+22	6,674853E+22	3,929497E+22	3,929521E+22	1,334955E+23	7,859018E+22	2,120857E+23
2326	6,674803E+22	6,674693E+22	3,929485E+22	3,929575E+22	1,334950E+23	7,859061E+22	2,120856E+23
2327	6,674525E+22	6,674599E+22	3,929669E+22	3,929583E+22	1,334912E+23	7,859252E+22	2,120838E+23
2328	6,674718E+22	6,674769E+22	3,929674E+22	3,929717E+22	1,334949E+23	7,859391E+22	2,120888E+23
2329	6,674660E+22	6,674469E+22	3,929752E+22	3,929720E+22	1,334913E+23	7,859473E+22	2,120860E+23
2330	6,674426E+22	6,674597E+22	3,929863E+22	3,929754E+22	1,334902E+23	7,859618E+22	2,120864E+23
2331	6,674656E+22	6,674684E+22	3,929753E+22	3,929891E+22	1,334934E+23	7,859644E+22	2,120898E+23
2332	6,674446E+22	6,674396E+22	3,929837E+22	3,929827E+22	1,334884E+23	7,859665E+22	2,120851E+23
2333	6,674464E+22	6,674622E+22	3,929861E+22	3,929807E+22	1,334909E+23	7,859669E+22	2,120875E+23
2334	6,674721E+22	6,674549E+22	3,929726E+22	3,929778E+22	1,334927E+23	7,859504E+22	2,120877E+23
2335	6,674516E+22	6,674440E+22	3,929758E+22	3,929657E+22	1,334896E+23	7,859415E+22	2,120837E+23
2336	6,674659E+22	6,674762E+22	3,929658E+22	3,929678E+22	1,334942E+23	7,859336E+22	2,120876E+23
2337	6,674665E+22	6,674595E+22	3,929586E+22	3,929607E+22	1,334926E+23	7,859193E+22	2,120845E+23
2338	6,674440E+22	6,674662E+22	3,929635E+22	3,929522E+22	1,334910E+23	7,859157E+22	2,120826E+23
2339	6,674715E+22	6,674814E+22	3,929513E+22	3,929597E+22	1,334953E+23	7,859111E+22	2,120864E+23
2340	6,674631E+22	6,674478E+22	3,929553E+22	3,929521E+22	1,334911E+23	7,859073E+22	2,120818E+23
2341	6,674577E+22	6,674659E+22	3,929622E+22	3,929513E+22	1,334924E+23	7,859136E+22	2,120837E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2342	6,674802E+22	6,674706E+22	3,929506E+22	3,929611E+22	1,334951E+23	7,859118E+22	2,120863E+23
2343	6,674566E+22	6,674487E+22	3,929591E+22	3,929601E+22	1,334905E+23	7,859192E+22	2,120824E+23
2344	6,674593E+22	6,674754E+22	3,929664E+22	3,929693E+22	1,334935E+23	7,859357E+22	2,120870E+23
2345	6,674672E+22	6,674562E+22	3,929693E+22	3,929743E+22	1,334923E+23	7,859436E+22	2,120867E+23
2346	6,674426E+22	6,674462E+22	3,929868E+22	3,929725E+22	1,334889E+23	7,859593E+22	2,120848E+23
2347	6,674590E+22	6,674678E+22	3,929860E+22	3,929903E+22	1,334927E+23	7,859763E+22	2,120903E+23
2348	6,674486E+22	6,674353E+22	3,929923E+22	3,929939E+22	1,334884E+23	7,859862E+22	2,120870E+23
2349	6,674289E+22	6,674466E+22	3,930046E+22	3,929947E+22	1,334875E+23	7,859994E+22	2,120875E+23
2350	6,674516E+22	6,674572E+22	3,929939E+22	3,930055E+22	1,334909E+23	7,859994E+22	2,120908E+23
2351	6,674396E+22	6,674239E+22	3,929972E+22	3,929967E+22	1,334864E+23	7,859939E+22	2,120857E+23
2352	6,674425E+22	6,674509E+22	3,929995E+22	3,929930E+22	1,334893E+23	7,859924E+22	2,120886E+23
2353	6,674613E+22	6,674470E+22	3,929867E+22	3,929916E+22	1,334908E+23	7,859783E+22	2,120887E+23
2354	6,674387E+22	6,674384E+22	3,929879E+22	3,929786E+22	1,334877E+23	7,859665E+22	2,120844E+23
2355	6,674501E+22	6,674724E+22	3,929790E+22	3,929837E+22	1,334923E+23	7,859627E+22	2,120885E+23
2356	6,674514E+22	6,674460E+22	3,929742E+22	3,929770E+22	1,334897E+23	7,859511E+22	2,120848E+23
2357	6,674377E+22	6,674478E+22	3,929816E+22	3,929654E+22	1,334886E+23	7,859470E+22	2,120833E+23
2358	6,674636E+22	6,674671E+22	3,929866E+22	3,929732E+22	1,334931E+23	7,859418E+22	2,120873E+23
2359	6,674574E+22	6,674337E+22	3,929671E+22	3,929685E+22	1,334891E+23	7,859356E+22	2,120827E+23
2360	6,674482E+22	6,674589E+22	3,929745E+22	3,929686E+22	1,334907E+23	7,859431E+22	2,120850E+23
2361	6,674638E+22	6,674635E+22	3,929670E+22	3,929795E+22	1,334927E+23	7,859465E+22	2,120874E+23
2362	6,674434E+22	6,674394E+22	3,929777E+22	3,929748E+22	1,334883E+23	7,859525E+22	2,120835E+23
2363	6,674477E+22	6,674662E+22	3,929867E+22	3,929857E+22	1,334914E+23	7,859724E+22	2,120886E+23
2364	6,674539E+22	6,674409E+22	3,929909E+22	3,929938E+22	1,334895E+23	7,859847E+22	2,120879E+23
2365	6,674323E+22	6,674311E+22	3,930083E+22	3,929924E+22	1,334863E+23	7,860008E+22	2,120864E+23
2366	6,674419E+22	6,674574E+22	3,930049E+22	3,930114E+22	1,334899E+23	7,860164E+22	2,120916E+23
2367	6,674357E+22	6,674210E+22	3,930061E+22	3,930153E+22	1,334857E+23	7,860215E+22	2,120878E+23
2368	6,674211E+22	6,674329E+22	3,930186E+22	3,930111E+22	1,334854E+23	7,860297E+22	2,120884E+23
2369	6,674429E+22	6,674423E+22	3,930100E+22	3,930192E+22	1,334885E+23	7,860291E+22	2,120914E+23
2370	6,674339E+22	6,674137E+22	3,930111E+22	3,930063E+22	1,334848E+23	7,860174E+22	2,120865E+23
2371	6,674329E+22	6,674473E+22	3,930123E+22	3,930057E+22	1,334880E+23	7,860179E+22	2,120898E+23
2372	6,674443E+22	6,674407E+22	3,930010E+22	3,930074E+22	1,334885E+23	7,860084E+22	2,120893E+23
2373	6,674249E+22	6,674285E+22	3,930049E+22	3,929931E+22	1,334853E+23	7,859980E+22	2,120851E+23
2374	6,674345E+22	6,674610E+22	3,929973E+22	3,929972E+22	1,334895E+23	7,859945E+22	2,120890E+23
2375	6,674446E+22	6,674284E+22	3,929880E+22	3,929920E+22	1,334873E+23	7,859801E+22	2,120853E+23
2376	6,674339E+22	6,674332E+22	3,929945E+22	3,929802E+22	1,334867E+23	7,859747E+22	2,120842E+23
2377	6,674538E+22	6,674561E+22	3,929827E+22	3,929904E+22	1,334910E+23	7,859731E+22	2,120883E+23
2378	6,674466E+22	6,674280E+22	3,929790E+22	3,929842E+22	1,334875E+23	7,859632E+22	2,120838E+23
2379	6,674353E+22	6,674555E+22	3,929888E+22	3,929861E+22	1,334891E+23	7,859749E+22	2,120866E+23
2380	6,674500E+22	6,674517E+22	3,929867E+22	3,929967E+22	1,334902E+23	7,859835E+22	2,120885E+23
2381	6,674357E+22	6,674231E+22	3,930007E+22	3,929902E+22	1,334859E+23	7,859909E+22	2,120850E+23
2382	6,674345E+22	6,674538E+22	3,930095E+22	3,930025E+22	1,334888E+23	7,860120E+22	2,120900E+23
2383	6,674420E+22	6,674260E+22	3,930071E+22	3,930148E+22	1,334868E+23	7,860220E+22	2,120890E+23
2384	6,674180E+22	6,674193E+22	3,930235E+22	3,930134E+22	1,334837E+23	7,860369E+22	2,120874E+23
2385	6,674249E+22	6,674448E+22	3,930220E+22	3,930313E+22	1,334870E+23	7,860533E+22	2,120923E+23
2386	6,674253E+22	6,674082E+22	3,930215E+22	3,930293E+22	1,334834E+23	7,860508E+22	2,120884E+23
2387	6,674146E+22	6,674236E+22	3,930337E+22	3,930248E+22	1,334838E+23	7,860586E+22	2,120897E+23
2388	6,674342E+22	6,674305E+22	3,930269E+22	3,930336E+22	1,334865E+23	7,860605E+22	2,120925E+23
2389	6,674255E+22	6,674046E+22	3,930282E+22	3,930203E+22	1,334830E+23	7,860484E+22	2,120879E+23
2390	6,674157E+22	6,674429E+22	3,930285E+22	3,930204E+22	1,334859E+23	7,860490E+22	2,120908E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2391	6,674306E+22	6,674287E+22	3,930138E+22	3,930242E+22	1,334859E+23	7,860380E+22	2,120897E+23
2392	6,674160E+22	6,674138E+22	3,930190E+22	3,930072E+22	1,334830E+23	7,860262E+22	2,120856E+23
2393	6,674256E+22	6,674445E+22	3,930124E+22	3,930112E+22	1,334870E+23	7,860237E+22	2,120894E+23
2394	6,674385E+22	6,674168E+22	3,929998E+22	3,930044E+22	1,334855E+23	7,860042E+22	2,120859E+23
2395	6,674257E+22	6,674292E+22	3,930048E+22	3,929961E+22	1,334855E+23	7,860009E+22	2,120856E+23
2396	6,674390E+22	6,674492E+22	3,929973E+22	3,930082E+22	1,334888E+23	7,860055E+22	2,120894E+23
2397	6,674353E+22	6,674198E+22	3,929980E+22	3,929997E+22	1,334855E+23	7,859976E+22	2,120853E+23
2398	6,674211E+22	6,674459E+22	3,930107E+22	3,930001E+22	1,334867E+23	7,860107E+22	2,120878E+23
2399	6,674404E+22	6,674351E+22	3,930059E+22	3,930144E+22	1,334875E+23	7,860203E+22	2,120896E+23
2400	6,674269E+22	6,674079E+22	3,930194E+22	3,930088E+22	1,334835E+23	7,860282E+22	2,120863E+23
2401	6,674184E+22	6,674392E+22	3,930278E+22	3,930243E+22	1,334858E+23	7,860521E+22	2,120910E+23
2402	6,674265E+22	6,674155E+22	3,930216E+22	3,930350E+22	1,334842E+23	7,860567E+22	2,120899E+23
2403	6,674058E+22	6,674102E+22	3,930373E+22	3,930329E+22	1,334816E+23	7,860702E+22	2,120886E+23
2404	6,674143E+22	6,674289E+22	3,930405E+22	3,930478E+22	1,334843E+23	7,860883E+22	2,120932E+23
2405	6,674214E+22	6,673946E+22	3,930407E+22	3,930415E+22	1,334816E+23	7,860822E+22	2,120898E+23
2406	6,674043E+22	6,674161E+22	3,930523E+22	3,930368E+22	1,334820E+23	7,860891E+22	2,120910E+23
2407	6,674224E+22	6,674216E+22	3,930408E+22	3,930500E+22	1,334844E+23	7,860908E+22	2,120935E+23
2408	6,674108E+22	6,673972E+22	3,930423E+22	3,930366E+22	1,334808E+23	7,860789E+22	2,120887E+23
2409	6,673975E+22	6,674313E+22	3,930448E+22	3,930369E+22	1,334829E+23	7,860817E+22	2,120910E+23
2410	6,674191E+22	6,674158E+22	3,930274E+22	3,930371E+22	1,334835E+23	7,860645E+22	2,120899E+23
2411	6,674099E+22	6,674028E+22	3,930307E+22	3,930215E+22	1,334813E+23	7,860522E+22	2,120865E+23
2412	6,674184E+22	6,674308E+22	3,930269E+22	3,930269E+22	1,334849E+23	7,860538E+22	2,120903E+23
2413	6,674322E+22	6,674080E+22	3,930138E+22	3,930194E+22	1,334840E+23	7,860331E+22	2,120873E+23
2414	6,674120E+22	6,674259E+22	3,930201E+22	3,930110E+22	1,334838E+23	7,860311E+22	2,120869E+23
2415	6,674283E+22	6,674379E+22	3,930118E+22	3,930245E+22	1,334866E+23	7,860363E+22	2,120902E+23
2416	6,674268E+22	6,674054E+22	3,930161E+22	3,930139E+22	1,334832E+23	7,860300E+22	2,120862E+23
2417	6,674091E+22	6,674300E+22	3,930311E+22	3,930159E+22	1,334839E+23	7,860470E+22	2,120886E+23
2418	6,674281E+22	6,674225E+22	3,930224E+22	3,930309E+22	1,334851E+23	7,860533E+22	2,120904E+23
2419	6,674127E+22	6,674004E+22	3,930339E+22	3,930298E+22	1,334813E+23	7,860637E+22	2,120877E+23
2420	6,674008E+22	6,674264E+22	3,930458E+22	3,930461E+22	1,334827E+23	7,860919E+22	2,120919E+23
2421	6,674147E+22	6,674025E+22	3,930412E+22	3,930528E+22	1,334817E+23	7,860940E+22	2,120911E+23
2422	6,673947E+22	6,673995E+22	3,930576E+22	3,930475E+22	1,334794E+23	7,861052E+22	2,120899E+23
2423	6,674082E+22	6,674135E+22	3,930577E+22	3,930642E+22	1,334822E+23	7,861219E+22	2,120944E+23
2424	6,674142E+22	6,673838E+22	3,930579E+22	3,930572E+22	1,334798E+23	7,861151E+22	2,120913E+23
2425	6,673887E+22	6,674076E+22	3,930689E+22	3,930548E+22	1,334796E+23	7,861237E+22	2,120920E+23
2426	6,674052E+22	6,674148E+22	3,930536E+22	3,930665E+22	1,334820E+23	7,861202E+22	2,120940E+23
2427	6,673979E+22	6,673888E+22	3,930547E+22	3,930532E+22	1,334787E+23	7,861079E+22	2,120895E+23
2428	6,673871E+22	6,674131E+22	3,930614E+22	3,930516E+22	1,334800E+23	7,861130E+22	2,120913E+23
2429	6,674155E+22	6,674014E+22	3,930430E+22	3,930490E+22	1,334817E+23	7,860919E+22	2,120909E+23
2430	6,674026E+22	6,673952E+22	3,930442E+22	3,930332E+22	1,334798E+23	7,860774E+22	2,120875E+23
2431	6,674094E+22	6,674212E+22	3,930377E+22	3,930428E+22	1,334831E+23	7,860805E+22	2,120911E+23
2432	6,674213E+22	6,674017E+22	3,930271E+22	3,930337E+22	1,334823E+23	7,860608E+22	2,120884E+23
2433	6,673968E+22	6,674153E+22	3,930377E+22	3,930256E+22	1,334812E+23	7,860633E+22	2,120875E+23
2434	6,674160E+22	6,674263E+22	3,930288E+22	3,930374E+22	1,334842E+23	7,860663E+22	2,120909E+23
2435	6,674175E+22	6,673950E+22	3,930325E+22	3,930309E+22	1,334813E+23	7,860634E+22	2,120876E+23
2436	6,673957E+22	6,674141E+22	3,930510E+22	3,930364E+22	1,334810E+23	7,860873E+22	2,120897E+23
2437	6,674149E+22	6,674116E+22	3,930406E+22	3,930515E+22	1,334827E+23	7,860921E+22	2,120919E+23
2438	6,673961E+22	6,673923E+22	3,930516E+22	3,930497E+22	1,334788E+23	7,861013E+22	2,120890E+23
2439	6,673906E+22	6,674096E+22	3,930626E+22	3,930662E+22	1,334800E+23	7,861288E+22	2,120929E+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	6,674093E+22	6,673868E+22	3,930598E+22	3,930683E+22	1,334796E+23	7,861281E+22	2,120924E+23
2441	6,673858E+22	6,673861E+22	3,930769E+22	3,930632E+22	1,334772E+23	7,861400E+22	2,120912E+23
2442	6,673969E+22	6,674053E+22	3,930728E+22	3,930791E+22	1,334802E+23	7,861519E+22	2,120954E+23
2443	6,673996E+22	6,673805E+22	3,930714E+22	3,930753E+22	1,334780E+23	7,861467E+22	2,120927E+23
2444	6,673702E+22	6,673968E+22	3,930865E+22	3,930732E+22	1,334767E+23	7,861597E+22	2,120927E+23
2445	6,673923E+22	6,674020E+22	3,930712E+22	3,930807E+22	1,334794E+23	7,861519E+22	2,120946E+23
2446	6,673873E+22	6,673769E+22	3,930716E+22	3,930656E+22	1,334764E+23	7,861372E+22	2,120901E+23
2447	6,673833E+22	6,673954E+22	3,930741E+22	3,930664E+22	1,334779E+23	7,861404E+22	2,120919E+23
2448	6,674110E+22	6,673890E+22	3,930554E+22	3,930627E+22	1,334800E+23	7,861181E+22	2,120918E+23
2449	6,673908E+22	6,673882E+22	3,930566E+22	3,930488E+22	1,334779E+23	7,861054E+22	2,120884E+23
2450	6,673963E+22	6,674157E+22	3,930483E+22	3,930563E+22	1,334812E+23	7,861047E+22	2,120917E+23
2451	6,674105E+22	6,673953E+22	3,930406E+22	3,930478E+22	1,334806E+23	7,860883E+22	2,120894E+23
2452	6,673856E+22	6,673996E+22	3,930576E+22	3,930402E+22	1,334785E+23	7,860978E+22	2,120883E+23
2453	6,674061E+22	6,674133E+22	3,930484E+22	3,930519E+22	1,334819E+23	7,861004E+22	2,120920E+23
2454	6,674031E+22	6,673867E+22	3,930512E+22	3,930486E+22	1,334790E+23	7,860998E+22	2,120890E+23
2455	6,673817E+22	6,673996E+22	3,930665E+22	3,930592E+22	1,334781E+23	7,861258E+22	2,120907E+23
2456	6,674020E+22	6,673985E+22	3,930582E+22	3,930719E+22	1,334800E+23	7,861301E+22	2,120931E+23
2457	6,673832E+22	6,673780E+22	3,930709E+22	3,930682E+22	1,334761E+23	7,861391E+22	2,120900E+23
2458	6,673819E+22	6,673962E+22	3,930793E+22	3,930815E+22	1,334778E+23	7,861608E+22	2,120939E+23
2459	6,674029E+22	6,673785E+22	3,930761E+22	3,930849E+22	1,334781E+23	7,861610E+22	2,120942E+23
2460	6,673735E+22	6,673737E+22	3,930967E+22	3,930818E+22	1,334747E+23	7,861786E+22	2,120926E+23
2461	6,673816E+22	6,673988E+22	3,930909E+22	3,930965E+22	1,334780E+23	7,861874E+22	2,120968E+23
2462	6,673824E+22	6,673740E+22	3,930886E+22	3,930918E+22	1,334756E+23	7,861804E+22	2,120937E+23
2463	6,673592E+22	6,673773E+22	3,931021E+22	3,930902E+22	1,334736E+23	7,861923E+22	2,120929E+23
2464	6,673869E+22	6,673843E+22	3,930869E+22	3,930934E+22	1,334771E+23	7,861803E+22	2,120952E+23
2465	6,673801E+22	6,673629E+22	3,930852E+22	3,930789E+22	1,334743E+23	7,861641E+22	2,120907E+23
2466	6,673748E+22	6,673874E+22	3,930832E+22	3,930792E+22	1,334762E+23	7,861624E+22	2,120925E+23
2467	6,674003E+22	6,673878E+22	3,930643E+22	3,930772E+22	1,334788E+23	7,861415E+22	2,120930E+23
2468	6,673760E+22	6,673798E+22	3,930725E+22	3,930635E+22	1,334756E+23	7,861361E+22	2,120892E+23
2469	6,673838E+22	6,674072E+22	3,930665E+22	3,930677E+22	1,334791E+23	7,861342E+22	2,120925E+23
2470	6,673987E+22	6,673863E+22	3,930600E+22	3,930607E+22	1,334785E+23	7,861207E+22	2,120906E+23
2471	6,673769E+22	6,673813E+22	3,930752E+22	3,930591E+22	1,334758E+23	7,861343E+22	2,120893E+23
2472	6,673960E+22	6,673988E+22	3,930658E+22	3,930716E+22	1,334795E+23	7,861374E+22	2,120932E+23
2473	6,673875E+22	6,673756E+22	3,930673E+22	3,930708E+22	1,334763E+23	7,861381E+22	2,120901E+23
2474	6,673692E+22	6,673874E+22	3,930798E+22	3,930785E+22	1,334757E+23	7,861583E+22	2,120915E+23
2475	6,673947E+22	6,673868E+22	3,930735E+22	3,930890E+22	1,334781E+23	7,861626E+22	2,120944E+23
2476	6,673762E+22	6,673623E+22	3,930916E+22	3,930841E+22	1,334738E+23	7,861757E+22	2,120914E+23
2477	6,673738E+22	6,673866E+22	3,930988E+22	3,930951E+22	1,334760E+23	7,861939E+22	2,120954E+23
2478	6,673876E+22	6,673744E+22	3,930955E+22	3,931011E+22	1,334762E+23	7,861967E+22	2,120959E+23
2479	6,673570E+22	6,673621E+22	3,931137E+22	3,931024E+22	1,334719E+23	7,862161E+22	2,120935E+23
2480	6,673654E+22	6,673849E+22	3,931093E+22	3,931139E+22	1,334750E+23	7,862231E+22	2,120973E+23
2481	6,673675E+22	6,673585E+22	3,931068E+22	3,931083E+22	1,334726E+23	7,862151E+22	2,120941E+23
2482	6,673514E+22	6,673613E+22	3,931145E+22	3,931041E+22	1,334713E+23	7,862186E+22	2,120931E+23
2483	6,673824E+22	6,673741E+22	3,930977E+22	3,931080E+22	1,334757E+23	7,862057E+22	2,120962E+23
2484	6,673711E+22	6,673533E+22	3,930986E+22	3,930943E+22	1,334724E+23	7,861929E+22	2,120917E+23
2485	6,673628E+22	6,673845E+22	3,930953E+22	3,930923E+22	1,334747E+23	7,861876E+22	2,120935E+23
2486	6,673865E+22	6,673850E+22	3,930795E+22	3,930896E+22	1,334771E+23	7,861690E+22	2,120941E+23
2487	6,673670E+22	6,673636E+22	3,930890E+22	3,930782E+22	1,334731E+23	7,861672E+22	2,120898E+23
2488	6,673764E+22	6,673910E+22	3,930851E+22	3,930806E+22	1,334767E+23	7,861657E+22	2,120933E+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							
2489	6,673873E+22	6,673729E+22	3,930774E+22	3,930775E+22	1,334760E+23	7,861549E+22	2,120915E+23
2490	6,673645E+22	6,673696E+22	3,930876E+22	3,930777E+22	1,334734E+23	7,861653E+22	2,120899E+23
2491	6,673838E+22	6,673915E+22	3,930783E+22	3,930915E+22	1,334775E+23	7,861698E+22	2,120945E+23
2492	6,673743E+22	6,673618E+22	3,930855E+22	3,930896E+22	1,334736E+23	7,861750E+22	2,120911E+23
2493	6,673595E+22	6,673768E+22	3,930987E+22	3,930927E+22	1,334736E+23	7,861913E+22	2,120928E+23
2494	6,673858E+22	6,673787E+22	3,930938E+22	3,931031E+22	1,334765E+23	7,861969E+22	2,120961E+23
2495	6,673670E+22	6,673465E+22	3,931113E+22	3,931032E+22	1,334714E+23	7,862145E+22	2,120928E+23
2496	6,673603E+22	6,673758E+22	3,931189E+22	3,931137E+22	1,334736E+23	7,862326E+22	2,120969E+23
2497	6,673681E+22	6,673652E+22	3,931140E+22	3,931221E+22	1,334733E+23	7,862361E+22	2,120969E+23
2498	6,673413E+22	6,673477E+22	3,931283E+22	3,931211E+22	1,334689E+23	7,862494E+22	2,120938E+23
2499	6,673566E+22	6,673703E+22	3,931234E+22	3,931296E+22	1,334727E+23	7,862531E+22	2,120980E+23
2500	6,673602E+22	6,673412E+22	3,931232E+22	3,931230E+22	1,334701E+23	7,862462E+22	2,120948E+23
2501	6,673448E+22	6,673528E+22	3,931273E+22	3,931160E+22	1,334698E+23	7,862433E+22	2,120941E+23
2502	6,673716E+22	6,673721E+22	3,931108E+22	3,931209E+22	1,334744E+23	7,862317E+22	2,120975E+23
2503	6,673591E+22	6,673447E+22	3,931118E+22	3,931102E+22	1,334704E+23	7,862220E+22	2,120926E+23
2504	6,673514E+22	6,673745E+22	3,931120E+22	3,931041E+22	1,334726E+23	7,862161E+22	2,120942E+23
2505	6,673737E+22	6,673737E+22	3,930975E+22	3,931025E+22	1,334747E+23	7,862001E+22	2,120947E+23
2506	6,673586E+22	6,673490E+22	3,931030E+22	3,930925E+22	1,334708E+23	7,861955E+22	2,120903E+23
2507	6,673686E+22	6,673793E+22	3,930985E+22	3,930975E+22	1,334748E+23	7,861960E+22	2,120944E+23
2508	6,673747E+22	6,673613E+22	3,930934E+22	3,930976E+22	1,334736E+23	7,861910E+22	2,120927E+23
2509	6,673516E+22	6,673628E+22	3,931007E+22	3,930951E+22	1,334714E+23	7,861957E+22	2,120910E+23
2510	6,673716E+22	6,673831E+22	3,930954E+22	3,931074E+22	1,334755E+23	7,862029E+22	2,120958E+23
2511	6,673671E+22	6,673446E+22	3,931039E+22	3,931061E+22	1,334712E+23	7,862100E+22	2,120922E+23
2512	6,673530E+22	6,673619E+22	3,931190E+22	3,931066E+22	1,334715E+23	7,862256E+22	2,120940E+23
2513	6,673720E+22	6,673690E+22	3,931144E+22	3,931209E+22	1,334741E+23	7,862352E+22	2,120976E+23
2514	6,673509E+22	6,673372E+22	3,931271E+22	3,931234E+22	1,334688E+23	7,862504E+22	2,120939E+23
2515	6,673430E+22	6,673674E+22	3,931348E+22	3,931341E+22	1,334710E+23	7,862689E+22	2,120979E+23
2516	6,673512E+22	6,673498E+22	3,931341E+22	3,931416E+22	1,334701E+23	7,862757E+22	2,120977E+23
2517	6,673303E+22	6,673342E+22	3,931451E+22	3,931355E+22	1,334664E+23	7,862806E+22	2,120945E+23
2518	6,673495E+22	6,673590E+22	3,931402E+22	3,931435E+22	1,334708E+23	7,862837E+22	2,120992E+23
2519	6,673546E+22	6,673264E+22	3,931375E+22	3,931398E+22	1,334681E+23	7,862774E+22	2,120958E+23
2520	6,673366E+22	6,673450E+22	3,931411E+22	3,931304E+22	1,334682E+23	7,862716E+22	2,120953E+23
2521	6,673574E+22	6,673673E+22	3,931250E+22	3,931358E+22	1,334725E+23	7,862608E+22	2,120985E+23
2522	6,673480E+22	6,673340E+22	3,931241E+22	3,931235E+22	1,334682E+23	7,862476E+22	2,120930E+23
2523	6,673441E+22	6,673632E+22	3,931260E+22	3,931157E+22	1,334707E+23	7,862418E+22	2,120949E+23
2524	6,673642E+22	6,673588E+22	3,931145E+22	3,931164E+22	1,334723E+23	7,862309E+22	2,120954E+23
2525	6,673472E+22	6,673408E+22	3,931165E+22	3,931067E+22	1,334688E+23	7,862232E+22	2,120911E+23
2526	6,673549E+22	6,673742E+22	3,931126E+22	3,931141E+22	1,334729E+23	7,862268E+22	2,120956E+23
2527	6,673609E+22	6,673477E+22	3,931082E+22	3,931173E+22	1,334709E+23	7,862255E+22	2,120934E+23
2528	6,673415E+22	6,673496E+22	3,931187E+22	3,931102E+22	1,334691E+23	7,862289E+22	2,120920E+23
2529	6,673610E+22	6,673708E+22	3,931151E+22	3,931227E+22	1,334732E+23	7,862379E+22	2,120970E+23
2530	6,673590E+22	6,673310E+22	3,931206E+22	3,931228E+22	1,334690E+23	7,862434E+22	2,120933E+23
2531	6,673430E+22	6,673525E+22	3,931361E+22	3,931248E+22	1,334695E+23	7,862609E+22	2,120956E+23
2532	6,673544E+22	6,673588E+22	3,931340E+22	3,931426E+22	1,334713E+23	7,862766E+22	2,120990E+23
2533	6,673328E+22	6,673293E+22	3,931441E+22	3,931426E+22	1,334662E+23	7,862867E+22	2,120949E+23
2534	6,673292E+22	6,673548E+22	3,931541E+22	3,931514E+22	1,334684E+23	7,863055E+22	2,120990E+23
2535	6,673433E+22	6,673288E+22	3,931524E+22	3,931592E+22	1,334672E+23	7,863116E+22	2,120984E+23
2536	6,673263E+22	6,673182E+22	3,931616E+22	3,931493E+22	1,334645E+23	7,863109E+22	2,120955E+23
2537	6,673396E+22	6,673502E+22	3,931557E+22	3,931588E+22	1,334690E+23	7,863145E+22	2,121004E+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							
2538	6,673434E+22	6,673205E+22	3,931480E+22	3,931555E+22	1,334664E+23	7,863034E+22	2,120967E+23
2539	6,673248E+22	6,673397E+22	3,931533E+22	3,931440E+22	1,334664E+23	7,862973E+22	2,120962E+23
2540	6,673433E+22	6,673569E+22	3,931426E+22	3,931492E+22	1,334700E+23	7,862918E+22	2,120992E+23
2541	6,673369E+22	6,673251E+22	3,931389E+22	3,931342E+22	1,334662E+23	7,862731E+22	2,120935E+23
2542	6,673340E+22	6,673524E+22	3,931423E+22	3,931292E+22	1,334686E+23	7,862715E+22	2,120958E+23
2543	6,673533E+22	6,673438E+22	3,931295E+22	3,931352E+22	1,334697E+23	7,862646E+22	2,120962E+23
2544	6,673363E+22	6,673301E+22	3,931300E+22	3,931243E+22	1,334666E+23	7,862542E+22	2,120921E+23
2545	6,673410E+22	6,673643E+22	3,931280E+22	3,931320E+22	1,334705E+23	7,862600E+22	2,120965E+23
2546	6,673529E+22	6,673336E+22	3,931215E+22	3,931330E+22	1,334687E+23	7,862545E+22	2,120941E+23
2547	6,673370E+22	6,673369E+22	3,931343E+22	3,931234E+22	1,334674E+23	7,862577E+22	2,120932E+23
2548	6,673513E+22	6,673583E+22	3,931350E+22	3,931386E+22	1,334710E+23	7,862736E+22	2,120983E+23
2549	6,673446E+22	6,673256E+22	3,931379E+22	3,931394E+22	1,334670E+23	7,862774E+22	2,120948E+23
2550	6,673252E+22	6,673469E+22	3,931556E+22	3,931446E+22	1,334672E+23	7,863001E+22	2,120972E+23
2551	6,673364E+22	6,673434E+22	3,931543E+22	3,931648E+22	1,334680E+23	7,863191E+22	2,120999E+23
2552	6,673208E+22	6,673125E+22	3,931647E+22	3,931603E+22	1,334633E+23	7,863250E+22	2,120958E+23
2553	6,673192E+22	6,673386E+22	3,931739E+22	3,931685E+22	1,334658E+23	7,863423E+22	2,121000E+23
2554	6,673376E+22	6,673129E+22	3,931663E+22	3,931765E+22	1,334651E+23	7,863429E+22	2,120993E+23
2555	6,673205E+22	6,673105E+22	3,931741E+22	3,931654E+22	1,334631E+23	7,863394E+22	2,120970E+23
2556	6,673263E+22	6,673439E+22	3,931700E+22	3,931759E+22	1,334670E+23	7,863459E+22	2,121016E+23
2557	6,673280E+22	6,673173E+22	3,931610E+22	3,931683E+22	1,334645E+23	7,863293E+22	2,120975E+23
2558	6,673133E+22	6,673314E+22	3,931697E+22	3,931552E+22	1,334645E+23	7,863249E+22	2,120970E+23
2559	6,673330E+22	6,673390E+22	3,931593E+22	3,931626E+22	1,334672E+23	7,863219E+22	2,120994E+23
2560	6,673291E+22	6,673108E+22	3,931546E+22	3,931473E+22	1,334640E+23	7,863019E+22	2,120942E+23
2561	6,673213E+22	6,673420E+22	3,931568E+22	3,931457E+22	1,334663E+23	7,863025E+22	2,120966E+23
2562	6,673411E+22	6,673331E+22	3,931396E+22	3,931534E+22	1,334674E+23	7,862929E+22	2,120967E+23
2563	6,673271E+22	6,673209E+22	3,931418E+22	3,931393E+22	1,334648E+23	7,862811E+22	2,120929E+23
2564	6,673308E+22	6,673514E+22	3,931452E+22	3,931467E+22	1,334682E+23	7,862918E+22	2,120974E+23
2565	6,673440E+22	6,673257E+22	3,931377E+22	3,931451E+22	1,334670E+23	7,862828E+22	2,120952E+23
2566	6,673283E+22	6,673283E+22	3,931538E+22	3,931388E+22	1,334657E+23	7,862925E+22	2,120949E+23
2567	6,673366E+22	6,673457E+22	3,931551E+22	3,931596E+22	1,334682E+23	7,863148E+22	2,120997E+23
2568	6,673291E+22	6,673156E+22	3,931574E+22	3,931604E+22	1,334645E+23	7,863178E+22	2,120963E+23
2569	6,673075E+22	6,673334E+22	3,931764E+22	3,931659E+22	1,334641E+23	7,863423E+22	2,120983E+23
2570	6,673259E+22	6,673243E+22	3,931711E+22	3,931843E+22	1,334650E+23	7,863554E+22	2,121006E+23
2571	6,673165E+22	6,672958E+22	3,931801E+22	3,931761E+22	1,334612E+23	7,863561E+22	2,120968E+23
2572	6,673107E+22	6,673251E+22	3,931908E+22	3,931856E+22	1,334636E+23	7,863765E+22	2,121012E+23
2573	6,673253E+22	6,673102E+22	3,931788E+22	3,931910E+22	1,334635E+23	7,863698E+22	2,121005E+23
2574	6,673062E+22	6,673075E+22	3,931890E+22	3,931805E+22	1,334614E+23	7,863696E+22	2,120983E+23
2575	6,673101E+22	6,673324E+22	3,931879E+22	3,931914E+22	1,334643E+23	7,863792E+22	2,121022E+23
2576	6,673170E+22	6,673045E+22	3,931792E+22	3,931802E+22	1,334622E+23	7,863594E+22	2,120981E+23
2577	6,673022E+22	6,673169E+22	3,931880E+22	3,931686E+22	1,334619E+23	7,863566E+22	2,120976E+23
2578	6,673248E+22	6,673232E+22	3,931716E+22	3,931786E+22	1,334648E+23	7,863502E+22	2,120998E+23
2579	6,673215E+22	6,673008E+22	3,931648E+22	3,931635E+22	1,334622E+23	7,863283E+22	2,120951E+23
2580	6,673089E+22	6,673325E+22	3,931691E+22	3,931637E+22	1,334641E+23	7,863329E+22	2,120974E+23
2581	6,673296E+22	6,673268E+22	3,931511E+22	3,931666E+22	1,334656E+23	7,863177E+22	2,120974E+23
2582	6,673210E+22	6,673115E+22	3,931579E+22	3,931513E+22	1,334633E+23	7,863092E+22	2,120942E+23
2583	6,673230E+22	6,673364E+22	3,931638E+22	3,931607E+22	1,334659E+23	7,863246E+22	2,120984E+23
2584	6,673349E+22	6,673158E+22	3,931569E+22	3,931601E+22	1,334651E+23	7,863171E+22	2,120968E+23
2585	6,673115E+22	6,673203E+22	3,931741E+22	3,931584E+22	1,334632E+23	7,863325E+22	2,120964E+23
2586	6,673187E+22	6,673332E+22	3,931718E+22	3,931819E+22	1,334652E+23	7,863537E+22	2,121006E+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							
2587	6,673158E+22	6,673023E+22	3,931752E+22	3,931802E+22	1,334618E+23	7,863554E+22	2,120974E+23
2588	6,672956E+22	6,673155E+22	3,931958E+22	3,931852E+22	1,334611E+23	7,863810E+22	2,120992E+23
2589	6,673162E+22	6,673115E+22	3,931872E+22	3,931998E+22	1,334628E+23	7,863870E+22	2,121015E+23
2590	6,673099E+22	6,672865E+22	3,931965E+22	3,931924E+22	1,334596E+23	7,863889E+22	2,120985E+23
2591	6,672983E+22	6,673142E+22	3,932071E+22	3,932043E+22	1,334613E+23	7,864114E+22	2,121024E+23
2592	6,673122E+22	6,673039E+22	3,931954E+22	3,932069E+22	1,334616E+23	7,864023E+22	2,121018E+23
2593	6,672915E+22	6,672977E+22	3,932078E+22	3,931951E+22	1,334589E+23	7,864030E+22	2,120992E+23
2594	6,673001E+22	6,673156E+22	3,932031E+22	3,932049E+22	1,334616E+23	7,864079E+22	2,121024E+23
2595	6,673114E+22	6,672902E+22	3,931930E+22	3,931922E+22	1,334602E+23	7,863853E+22	2,120987E+23
2596	6,672918E+22	6,673034E+22	3,932018E+22	3,931846E+22	1,334595E+23	7,863863E+22	2,120982E+23
2597	6,673112E+22	6,673182E+22	3,931813E+22	3,931931E+22	1,334629E+23	7,863745E+22	2,121004E+23
2598	6,673104E+22	6,672958E+22	3,931766E+22	3,931786E+22	1,334606E+23	7,863552E+22	2,120961E+23
2599	6,672972E+22	6,673202E+22	3,931845E+22	3,931788E+22	1,334617E+23	7,863633E+22	2,120981E+23
2600	6,673230E+22	6,673162E+22	3,931685E+22	3,931781E+22	1,334639E+23	7,863466E+22	2,120986E+23
2601	6,673121E+22	6,673004E+22	3,931779E+22	3,931653E+22	1,334613E+23	7,863432E+22	2,120956E+23
2602	6,673128E+22	6,673237E+22	3,931804E+22	3,931787E+22	1,334637E+23	7,863591E+22	2,120996E+23
2603	6,673229E+22	6,673069E+22	3,931726E+22	3,931797E+22	1,334630E+23	7,863524E+22	2,120982E+23
2604	6,672936E+22	6,673081E+22	3,931921E+22	3,931813E+22	1,334602E+23	7,863735E+22	2,120975E+23
2605	6,673030E+22	6,673214E+22	3,931879E+22	3,931996E+22	1,334624E+23	7,863874E+22	2,121012E+23
2606	6,673080E+22	6,672866E+22	3,931932E+22	3,931966E+22	1,334595E+23	7,863897E+22	2,120984E+23
2607	6,672876E+22	6,672970E+22	3,932144E+22	3,932026E+22	1,334585E+23	7,864170E+22	2,121002E+23
2608	6,673086E+22	6,673012E+22	3,932048E+22	3,932156E+22	1,334610E+23	7,864203E+22	2,121030E+23
2609	6,672955E+22	6,672806E+22	3,932152E+22	3,932097E+22	1,334576E+23	7,864248E+22	2,121001E+23
2610	6,672833E+22	6,673045E+22	3,932225E+22	3,932216E+22	1,334588E+23	7,864441E+22	2,121032E+23
2611	6,673005E+22	6,672933E+22	3,932122E+22	3,932208E+22	1,334594E+23	7,864330E+22	2,121027E+23
2612	6,672790E+22	6,672830E+22	3,932258E+22	3,932106E+22	1,334562E+23	7,864364E+22	2,120998E+23
2613	6,672883E+22	6,673043E+22	3,932167E+22	3,932177E+22	1,334593E+23	7,864344E+22	2,121027E+23
2614	6,673031E+22	6,672809E+22	3,932062E+22	3,932080E+22	1,334584E+23	7,864143E+22	2,120998E+23
2615	6,672797E+22	6,672924E+22	3,932140E+22	3,932029E+22	1,334572E+23	7,864169E+22	2,120989E+23
2616	6,673011E+22	6,673105E+22	3,931943E+22	3,932081E+22	1,334612E+23	7,864024E+22	2,121014E+23
2617	6,673011E+22	6,672865E+22	3,931930E+22	3,931912E+22	1,334588E+23	7,863842E+22	2,120972E+23
2618	6,672921E+22	6,673049E+22	3,931985E+22	3,931908E+22	1,334597E+23	7,863893E+22	2,120986E+23
2619	6,673186E+22	6,673057E+22	3,931837E+22	3,931900E+22	1,334624E+23	7,863737E+22	2,120998E+23
2620	6,672995E+22	6,672907E+22	3,931944E+22	3,931830E+22	1,334590E+23	7,863775E+22	2,120968E+23
2621	6,672933E+22	6,673178E+22	3,931948E+22	3,931961E+22	1,334611E+23	7,863909E+22	2,121002E+23
2622	6,673069E+22	6,672982E+22	3,931901E+22	3,931991E+22	1,334605E+23	7,863892E+22	2,120994E+23
2623	6,672788E+22	6,672898E+22	3,932116E+22	3,932008E+22	1,334569E+23	7,864125E+22	2,120981E+23
2624	6,672951E+22	6,673048E+22	3,932078E+22	3,932156E+22	1,334600E+23	7,864234E+22	2,121023E+23
2625	6,673000E+22	6,672730E+22	3,932135E+22	3,932132E+22	1,334573E+23	7,864268E+22	2,121000E+23
2626	6,672793E+22	6,672838E+22	3,932297E+22	3,932216E+22	1,334563E+23	7,864513E+22	2,121014E+23
2627	6,672981E+22	6,672949E+22	3,932202E+22	3,932336E+22	1,334593E+23	7,864537E+22	2,121047E+23
2628	6,672790E+22	6,672720E+22	3,932328E+22	3,932293E+22	1,334551E+23	7,864621E+22	2,121013E+23
2629	6,672674E+22	6,672949E+22	3,932389E+22	3,932352E+22	1,334562E+23	7,864741E+22	2,121036E+23
2630	6,672920E+22	6,672806E+22	3,932292E+22	3,932345E+22	1,334573E+23	7,864637E+22	2,121036E+23
2631	6,672683E+22	6,672665E+22	3,932421E+22	3,932266E+22	1,334535E+23	7,864687E+22	2,121003E+23
2632	6,672787E+22	6,672943E+22	3,932307E+22	3,932327E+22	1,334573E+23	7,864634E+22	2,121036E+23
2633	6,672898E+22	6,672741E+22	3,932206E+22	3,932240E+22	1,334564E+23	7,864446E+22	2,121009E+23
2634	6,672696E+22	6,672815E+22	3,932251E+22	3,932185E+22	1,334551E+23	7,864436E+22	2,120995E+23
2635	6,672958E+22	6,673000E+22	3,932077E+22	3,932190E+22	1,334596E+23	7,864267E+22	2,121023E+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	6,672927E+22	6,672745E+22	3,932089E+22	3,932044E+22	1,334567E+23	7,864133E+22	2,120980E+23
2637	6,672816E+22	6,672969E+22	3,932123E+22	3,932018E+22	1,334578E+23	7,864142E+22	2,120993E+23
2638	6,673078E+22	6,672985E+22	3,931989E+22	3,932061E+22	1,334606E+23	7,864051E+22	2,121011E+23
2639	6,672821E+22	6,672798E+22	3,932113E+22	3,932040E+22	1,334562E+23	7,864153E+22	2,120977E+23
2640	6,672788E+22	6,673062E+22	3,932128E+22	3,932145E+22	1,334585E+23	7,864274E+22	2,121012E+23
2641	6,672947E+22	6,672832E+22	3,932110E+22	3,932163E+22	1,334578E+23	7,864272E+22	2,121005E+23
2642	6,672730E+22	6,672702E+22	3,932278E+22	3,932180E+22	1,334543E+23	7,864458E+22	2,120989E+23
2643	6,672909E+22	6,672911E+22	3,932243E+22	3,932315E+22	1,334582E+23	7,864558E+22	2,121038E+23
2644	6,672873E+22	6,672647E+22	3,932307E+22	3,932332E+22	1,334552E+23	7,864638E+22	2,121016E+23
2645	6,672615E+22	6,672801E+22	3,932446E+22	3,932385E+22	1,334542E+23	7,864831E+22	2,121025E+23
2646	6,672832E+22	6,672886E+22	3,932384E+22	3,932509E+22	1,334572E+23	7,864894E+22	2,121061E+23
2647	6,672635E+22	6,672574E+22	3,932532E+22	3,932469E+22	1,334521E+23	7,865001E+22	2,121021E+23
2648	6,672569E+22	6,672801E+22	3,932583E+22	3,932497E+22	1,334537E+23	7,865080E+22	2,121045E+23
2649	6,672816E+22	6,672677E+22	3,932480E+22	3,932503E+22	1,334549E+23	7,864983E+22	2,121048E+23
2650	6,672599E+22	6,672517E+22	3,932532E+22	3,932448E+22	1,334512E+23	7,864979E+22	2,121010E+23
2651	6,672709E+22	6,672853E+22	3,932416E+22	3,932486E+22	1,334556E+23	7,864902E+22	2,121046E+23
2652	6,672788E+22	6,672653E+22	3,932326E+22	3,932394E+22	1,334544E+23	7,864720E+22	2,121016E+23
2653	6,672603E+22	6,672720E+22	3,932363E+22	3,932271E+22	1,334532E+23	7,864634E+22	2,120996E+23
2654	6,672914E+22	6,672909E+22	3,932219E+22	3,932285E+22	1,334582E+23	7,864504E+22	2,121033E+23
2655	6,672820E+22	6,672634E+22	3,932249E+22	3,932184E+22	1,334545E+23	7,864433E+22	2,120989E+23
2656	6,672677E+22	6,672897E+22	3,932290E+22	3,932170E+22	1,334557E+23	7,864460E+22	2,121003E+23
2657	6,672892E+22	6,672917E+22	3,932178E+22	3,932242E+22	1,334581E+23	7,864420E+22	2,121023E+23
2658	6,672677E+22	6,672642E+22	3,932270E+22	3,932238E+22	1,334532E+23	7,864508E+22	2,120983E+23
2659	6,672711E+22	6,672895E+22	3,932306E+22	3,932311E+22	1,334561E+23	7,864617E+22	2,121022E+23
2660	6,672856E+22	6,672674E+22	3,932289E+22	3,932353E+22	1,334553E+23	7,864643E+22	2,121017E+23
2661	6,672633E+22	6,672597E+22	3,932426E+22	3,932342E+22	1,334523E+23	7,864768E+22	2,121000E+23
2662	6,672815E+22	6,672850E+22	3,932404E+22	3,932506E+22	1,334566E+23	7,864909E+22	2,121057E+23
2663	6,672702E+22	6,672568E+22	3,932491E+22	3,932545E+22	1,334527E+23	7,865036E+22	2,121031E+23
2664	6,672470E+22	6,672706E+22	3,932650E+22	3,932553E+22	1,334518E+23	7,865203E+22	2,121038E+23
2665	6,672700E+22	6,672745E+22	3,932613E+22	3,932660E+22	1,334545E+23	7,865274E+22	2,121072E+23
2666	6,672556E+22	6,672382E+22	3,932700E+22	3,932635E+22	1,334494E+23	7,865335E+22	2,121027E+23
2667	6,672510E+22	6,672649E+22	3,932730E+22	3,932648E+22	1,334516E+23	7,865379E+22	2,121054E+23
2668	6,672679E+22	6,672575E+22	3,932610E+22	3,932690E+22	1,334525E+23	7,865301E+22	2,121055E+23
2669	6,672457E+22	6,672462E+22	3,932623E+22	3,932585E+22	1,334492E+23	7,865207E+22	2,121013E+23
2670	6,672624E+22	6,672779E+22	3,932537E+22	3,932610E+22	1,334540E+23	7,865147E+22	2,121055E+23
2671	6,672684E+22	6,672543E+22	3,932483E+22	3,932514E+22	1,334523E+23	7,864997E+22	2,121022E+23
2672	6,672532E+22	6,672625E+22	3,932528E+22	3,932368E+22	1,334516E+23	7,864895E+22	2,121005E+23
2673	6,672798E+22	6,672827E+22	3,932406E+22	3,932414E+22	1,334563E+23	7,864820E+22	2,121045E+23
2674	6,672693E+22	6,672522E+22	3,932385E+22	3,932374E+22	1,334521E+23	7,864759E+22	2,120997E+23
2675	6,672550E+22	6,672786E+22	3,932438E+22	3,932360E+22	1,334534E+23	7,864798E+22	2,121013E+23
2676	6,672740E+22	6,672779E+22	3,932345E+22	3,932446E+22	1,334552E+23	7,864792E+22	2,121031E+23
2677	6,672581E+22	6,672491E+22	3,932408E+22	3,932382E+22	1,334507E+23	7,864790E+22	2,120986E+23
2678	6,672679E+22	6,672760E+22	3,932460E+22	3,932465E+22	1,334544E+23	7,864925E+22	2,121036E+23
2679	6,672756E+22	6,672564E+22	3,932461E+22	3,932536E+22	1,334532E+23	7,864997E+22	2,121032E+23
2680	6,672506E+22	6,672539E+22	3,932608E+22	3,932514E+22	1,334504E+23	7,865122E+22	2,121017E+23
2681	6,672639E+22	6,672797E+22	3,932626E+22	3,932684E+22	1,334544E+23	7,865310E+22	2,121075E+23
2682	6,672559E+22	6,672422E+22	3,932684E+22	3,932736E+22	1,334498E+23	7,865421E+22	2,121040E+23
2683	6,672371E+22	6,672534E+22	3,932856E+22	3,932715E+22	1,334491E+23	7,865571E+22	2,121048E+23
2684	6,672575E+22	6,672585E+22	3,932798E+22	3,932846E+22	1,334516E+23	7,865644E+22	2,121080E+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							
2685	6,672438E+22	6,672250E+22	3,932823E+22	3,932793E+22	1,334469E+23	7,865616E+22	2,121030E+23
2686	6,672421E+22	6,672564E+22	3,932846E+22	3,932825E+22	1,334498E+23	7,865671E+22	2,121066E+23
2687	6,672539E+22	6,672493E+22	3,932738E+22	3,932868E+22	1,334503E+23	7,865605E+22	2,121064E+23
2688	6,672365E+22	6,672378E+22	3,932768E+22	3,932698E+22	1,334474E+23	7,865467E+22	2,121021E+23
2689	6,672542E+22	6,672682E+22	3,932718E+22	3,932701E+22	1,334522E+23	7,865419E+22	2,121064E+23
2690	6,672619E+22	6,672407E+22	3,932622E+22	3,932637E+22	1,334503E+23	7,865259E+22	2,121029E+23
2691	6,672451E+22	6,672520E+22	3,932678E+22	3,932504E+22	1,334497E+23	7,865182E+22	2,121015E+23
2692	6,672617E+22	6,672749E+22	3,932555E+22	3,932605E+22	1,334537E+23	7,865160E+22	2,121053E+23
2693	6,672520E+22	6,672433E+22	3,932506E+22	3,932543E+22	1,334495E+23	7,865049E+22	2,121000E+23
2694	6,672458E+22	6,672656E+22	3,932585E+22	3,932529E+22	1,334511E+23	7,865115E+22	2,121023E+23
2695	6,672640E+22	6,672618E+22	3,932521E+22	3,932620E+22	1,334526E+23	7,865140E+22	2,121040E+23
2696	6,672529E+22	6,672370E+22	3,932582E+22	3,932524E+22	1,334490E+23	7,865106E+22	2,121001E+23
2697	6,672589E+22	6,672669E+22	3,932658E+22	3,932625E+22	1,334526E+23	7,865283E+22	2,121054E+23
2698	6,672636E+22	6,672472E+22	3,932624E+22	3,932742E+22	1,334511E+23	7,865366E+22	2,121047E+23
2699	6,672383E+22	6,672441E+22	3,932796E+22	3,932703E+22	1,334482E+23	7,865499E+22	2,121032E+23
2700	6,672460E+22	6,672659E+22	3,932838E+22	3,932880E+22	1,334512E+23	7,865717E+22	2,121084E+23
2701	6,672432E+22	6,672263E+22	3,932858E+22	3,932887E+22	1,334470E+23	7,865745E+22	2,121044E+23
2702	6,672301E+22	6,672378E+22	3,933015E+22	3,932883E+22	1,334468E+23	7,865898E+22	2,121058E+23
2703	6,672435E+22	6,672457E+22	3,932957E+22	3,933039E+22	1,334489E+23	7,865996E+22	2,121089E+23
2704	6,672310E+22	6,672185E+22	3,932961E+22	3,932953E+22	1,334449E+23	7,865914E+22	2,121041E+23
2705	6,672285E+22	6,672500E+22	3,933012E+22	3,932969E+22	1,334478E+23	7,865981E+22	2,121077E+23
2706	6,672446E+22	6,672371E+22	3,932882E+22	3,933007E+22	1,334482E+23	7,865889E+22	2,121071E+23
2707	6,672318E+22	6,672250E+22	3,932931E+22	3,932808E+22	1,334457E+23	7,865739E+22	2,121031E+23
2708	6,672431E+22	6,672571E+22	3,932883E+22	3,932840E+22	1,334500E+23	7,865723E+22	2,121072E+23
2709	6,672499E+22	6,672316E+22	3,932739E+22	3,932775E+22	1,334482E+23	7,865514E+22	2,121033E+23
2710	6,672341E+22	6,672440E+22	3,932794E+22	3,932684E+22	1,334478E+23	7,865477E+22	2,121026E+23
2711	6,672454E+22	6,672641E+22	3,932699E+22	3,932798E+22	1,334510E+23	7,865497E+22	2,121059E+23
2712	6,672429E+22	6,672304E+22	3,932664E+22	3,932682E+22	1,334473E+23	7,865346E+22	2,121008E+23
2713	6,672403E+22	6,672522E+22	3,932773E+22	3,932655E+22	1,334492E+23	7,865427E+22	2,121035E+23
2714	6,672597E+22	6,672468E+22	3,932667E+22	3,932776E+22	1,334506E+23	7,865444E+22	2,121051E+23
2715	6,672456E+22	6,672270E+22	3,932751E+22	3,932687E+22	1,334473E+23	7,865438E+22	2,121016E+23
2716	6,672404E+22	6,672610E+22	3,932839E+22	3,932823E+22	1,334501E+23	7,865662E+22	2,121068E+23
2717	6,672450E+22	6,672383E+22	3,932791E+22	3,932916E+22	1,334483E+23	7,865707E+22	2,121054E+23
2718	6,672259E+22	6,672310E+22	3,932991E+22	3,932886E+22	1,334457E+23	7,865877E+22	2,121044E+23
2719	6,672308E+22	6,672495E+22	3,933045E+22	3,933073E+22	1,334480E+23	7,866118E+22	2,121092E+23
2720	6,672327E+22	6,672122E+22	3,933046E+22	3,933057E+22	1,334445E+23	7,866103E+22	2,121055E+23
2721	6,672189E+22	6,672267E+22	3,933197E+22	3,933064E+22	1,334446E+23	7,866262E+22	2,121072E+23
2722	6,672319E+22	6,672340E+22	3,933087E+22	3,933244E+22	1,334466E+23	7,866331E+22	2,121099E+23
2723	6,672228E+22	6,672080E+22	3,933110E+22	3,933112E+22	1,334431E+23	7,866222E+22	2,121053E+23
2724	6,672175E+22	6,672384E+22	3,933176E+22	3,933106E+22	1,334456E+23	7,866282E+22	2,121084E+23
2725	6,672374E+22	6,672254E+22	3,933012E+22	3,933099E+22	1,334463E+23	7,866111E+22	2,121074E+23
2726	6,672270E+22	6,672155E+22	3,933059E+22	3,932930E+22	1,334442E+23	7,865989E+22	2,121041E+23
2727	6,672270E+22	6,672488E+22	3,933027E+22	3,933003E+22	1,334476E+23	7,866030E+22	2,121079E+23
2728	6,672345E+22	6,672263E+22	3,932879E+22	3,932926E+22	1,334461E+23	7,865806E+22	2,121041E+23
2729	6,672205E+22	6,672342E+22	3,932961E+22	3,932834E+22	1,334455E+23	7,865796E+22	2,121034E+23
2730	6,672365E+22	6,672476E+22	3,932850E+22	3,932959E+22	1,334484E+23	7,865809E+22	2,121065E+23
2731	6,672400E+22	6,672154E+22	3,932823E+22	3,932815E+22	1,334455E+23	7,865639E+22	2,121019E+23
2732	6,672306E+22	6,672400E+22	3,932935E+22	3,932816E+22	1,334471E+23	7,865751E+22	2,121046E+23
2733	6,672482E+22	6,672389E+22	3,932801E+22	3,932936E+22	1,334487E+23	7,865736E+22	2,121061E+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							
2734	6,672338E+22	6,672211E+22	3,932898E+22	3,932883E+22	1,334455E+23	7,865781E+22	2,121033E+23
2735	6,672207E+22	6,672507E+22	3,933038E+22	3,933027E+22	1,334471E+23	7,866065E+22	2,121078E+23
2736	6,672316E+22	6,672252E+22	3,933002E+22	3,933074E+22	1,334457E+23	7,866076E+22	2,121064E+23
2737	6,672157E+22	6,672149E+22	3,933211E+22	3,933047E+22	1,334431E+23	7,866258E+22	2,121057E+23
2738	6,672212E+22	6,672315E+22	3,933216E+22	3,933269E+22	1,334453E+23	7,866485E+22	2,121101E+23
2739	6,672236E+22	6,671996E+22	3,933209E+22	3,933245E+22	1,334423E+23	7,866454E+22	2,121069E+23
2740	6,672029E+22	6,672182E+22	3,933353E+22	3,933261E+22	1,334421E+23	7,866613E+22	2,121082E+23
2741	6,672199E+22	6,672241E+22	3,933220E+22	3,933387E+22	1,334444E+23	7,866607E+22	2,121105E+23
2742	6,672169E+22	6,671980E+22	3,933257E+22	3,933241E+22	1,334415E+23	7,866498E+22	2,121065E+23
2743	6,672065E+22	6,672274E+22	3,933345E+22	3,933235E+22	1,334434E+23	7,866580E+22	2,121092E+23
2744	6,672278E+22	6,672170E+22	3,933169E+22	3,933214E+22	1,334445E+23	7,866383E+22	2,121083E+23
2745	6,672145E+22	6,672088E+22	3,933221E+22	3,933081E+22	1,334423E+23	7,866302E+22	2,121054E+23
2746	6,672126E+22	6,672380E+22	3,933147E+22	3,933190E+22	1,334451E+23	7,866338E+22	2,121084E+23
2747	6,672245E+22	6,672127E+22	3,933027E+22	3,933085E+22	1,334437E+23	7,866111E+22	2,121048E+23
2748	6,672105E+22	6,672196E+22	3,933114E+22	3,932979E+22	1,334430E+23	7,866093E+22	2,121039E+23
2749	6,672316E+22	6,672325E+22	3,932967E+22	3,933073E+22	1,334464E+23	7,866040E+22	2,121068E+23
2750	6,672361E+22	6,672066E+22	3,932947E+22	3,932959E+22	1,334443E+23	7,865905E+22	2,121033E+23
2751	6,672149E+22	6,672342E+22	3,933090E+22	3,932991E+22	1,334449E+23	7,866081E+22	2,121057E+23
2752	6,672312E+22	6,672349E+22	3,932977E+22	3,933096E+22	1,334466E+23	7,866073E+22	2,121073E+23
2753	6,672178E+22	6,672121E+22	3,933122E+22	3,933056E+22	1,334430E+23	7,866178E+22	2,121048E+23
2754	6,672070E+22	6,672326E+22	3,933246E+22	3,933220E+22	1,334440E+23	7,866467E+22	2,121086E+23
2755	6,672238E+22	6,672067E+22	3,933216E+22	3,933258E+22	1,334431E+23	7,866474E+22	2,121078E+23
2756	6,672037E+22	6,671992E+22	3,933397E+22	3,933253E+22	1,334403E+23	7,866650E+22	2,121068E+23
2757	6,672101E+22	6,672192E+22	3,933347E+22	3,933461E+22	1,334429E+23	7,866808E+22	2,121110E+23
2758	6,672149E+22	6,671926E+22	3,933333E+22	3,933437E+22	1,334408E+23	7,866770E+22	2,121085E+23
2759	6,671891E+22	6,672085E+22	3,933517E+22	3,933429E+22	1,334398E+23	7,866945E+22	2,121092E+23
2760	6,672115E+22	6,672151E+22	3,933397E+22	3,933490E+22	1,334427E+23	7,866887E+22	2,121115E+23
2761	6,672096E+22	6,671885E+22	3,933440E+22	3,933350E+22	1,334398E+23	7,866790E+22	2,121077E+23
2762	6,671945E+22	6,672152E+22	3,933495E+22	3,933387E+22	1,334410E+23	7,866881E+22	2,121098E+23
2763	6,672150E+22	6,672081E+22	3,933317E+22	3,933370E+22	1,334423E+23	7,866687E+22	2,121092E+23
2764	6,671959E+22	6,671990E+22	3,933360E+22	3,933255E+22	1,334395E+23	7,866615E+22	2,121056E+23
2765	6,672008E+22	6,672237E+22	3,933265E+22	3,933329E+22	1,334425E+23	7,866594E+22	2,121084E+23
2766	6,672207E+22	6,672001E+22	3,933145E+22	3,933219E+22	1,334421E+23	7,866364E+22	2,121057E+23
2767	6,672023E+22	6,672075E+22	3,933255E+22	3,933120E+22	1,334410E+23	7,866375E+22	2,121047E+23
2768	6,672240E+22	6,672256E+22	3,933114E+22	3,933194E+22	1,334450E+23	7,866308E+22	2,121080E+23
2769	6,672246E+22	6,672026E+22	3,933114E+22	3,933119E+22	1,334427E+23	7,866233E+22	2,121050E+23
2770	6,671989E+22	6,672246E+22	3,933259E+22	3,933186E+22	1,334424E+23	7,866445E+22	2,121068E+23
2771	6,672190E+22	6,672210E+22	3,933188E+22	3,933271E+22	1,334440E+23	7,866459E+22	2,121086E+23
2772	6,672043E+22	6,671953E+22	3,933337E+22	3,933236E+22	1,334400E+23	7,866573E+22	2,121057E+23
2773	6,671986E+22	6,672137E+22	3,933411E+22	3,933390E+22	1,334412E+23	7,866801E+22	2,121092E+23
2774	6,672163E+22	6,671945E+22	3,933362E+22	3,933457E+22	1,334411E+23	7,866819E+22	2,121093E+23
2775	6,671878E+22	6,671907E+22	3,933551E+22	3,933464E+22	1,334379E+23	7,867015E+22	2,121080E+23
2776	6,671961E+22	6,672126E+22	3,933510E+22	3,933622E+22	1,334409E+23	7,867132E+22	2,121122E+23
2777	6,672033E+22	6,671855E+22	3,933530E+22	3,933584E+22	1,334389E+23	7,867114E+22	2,121100E+23
2778	6,671788E+22	6,671951E+22	3,933696E+22	3,933574E+22	1,334374E+23	7,867269E+22	2,121101E+23
2779	6,672035E+22	6,672013E+22	3,933588E+22	3,933624E+22	1,334405E+23	7,867213E+22	2,121126E+23
2780	6,671950E+22	6,671778E+22	3,933610E+22	3,933515E+22	1,334373E+23	7,867126E+22	2,121085E+23
2781	6,671806E+22	6,672034E+22	3,933603E+22	3,933555E+22	1,334384E+23	7,867158E+22	2,121100E+23
2782	6,672038E+22	6,671990E+22	3,933421E+22	3,933546E+22	1,334403E+23	7,866966E+22	2,121099E+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							
2783	6,671839E+22	6,671861E+22	3,933489E+22	3,933407E+22	1,334370E+23	7,866896E+22	2,121060E+23
2784	6,671961E+22	6,672112E+22	3,933402E+22	3,933421E+22	1,334407E+23	7,866823E+22	2,121089E+23
2785	6,672171E+22	6,671917E+22	3,933293E+22	3,933325E+22	1,334409E+23	7,866618E+22	2,121071E+23
2786	6,671930E+22	6,671983E+22	3,933391E+22	3,933269E+22	1,334391E+23	7,866660E+22	2,121057E+23
2787	6,672117E+22	6,672192E+22	3,933285E+22	3,933352E+22	1,334431E+23	7,866637E+22	2,121095E+23
2788	6,672057E+22	6,671949E+22	3,933306E+22	3,933301E+22	1,334401E+23	7,866607E+22	2,121061E+23
2789	6,671848E+22	6,672091E+22	3,933437E+22	3,933357E+22	1,334394E+23	7,866794E+22	2,121073E+23
2790	6,672104E+22	6,672065E+22	3,933365E+22	3,933454E+22	1,334417E+23	7,866819E+22	2,121099E+23
2791	6,671920E+22	6,671792E+22	3,933520E+22	3,933438E+22	1,334371E+23	7,866958E+22	2,121067E+23
2792	6,671885E+22	6,672025E+22	3,933581E+22	3,933570E+22	1,334391E+23	7,867151E+22	2,121106E+23
2793	6,672048E+22	6,671884E+22	3,933525E+22	3,933655E+22	1,334393E+23	7,867180E+22	2,121111E+23
2794	6,671737E+22	6,671797E+22	3,933712E+22	3,933666E+22	1,334353E+23	7,867378E+22	2,121091E+23
2795	6,671872E+22	6,671997E+22	3,933714E+22	3,933770E+22	1,334387E+23	7,867483E+22	2,121135E+23
2796	6,671918E+22	6,671722E+22	3,933730E+22	3,933720E+22	1,334364E+23	7,867451E+22	2,121109E+23
2797	6,671699E+22	6,671800E+22	3,933847E+22	3,933708E+22	1,334350E+23	7,867555E+22	2,121105E+23
2798	6,671929E+22	6,671926E+22	3,933717E+22	3,933785E+22	1,334385E+23	7,867502E+22	2,121136E+23
2799	6,671763E+22	6,671693E+22	3,933743E+22	3,933699E+22	1,334346E+23	7,867441E+22	2,121090E+23
2800	6,671665E+22	6,671939E+22	3,933738E+22	3,933691E+22	1,334360E+23	7,867429E+22	2,121103E+23
2801	6,671951E+22	6,671888E+22	3,933571E+22	3,933676E+22	1,334384E+23	7,867246E+22	2,121108E+23
2802	6,671777E+22	6,671717E+22	3,933624E+22	3,933539E+22	1,334349E+23	7,867164E+22	2,121066E+23
2803	6,671931E+22	6,671989E+22	3,933559E+22	3,933539E+22	1,334392E+23	7,867099E+22	2,121102E+23
2804	6,672055E+22	6,671853E+22	3,933449E+22	3,933473E+22	1,334391E+23	7,866922E+22	2,121083E+23
2805	6,671805E+22	6,671902E+22	3,933516E+22	3,933435E+22	1,334371E+23	7,866951E+22	2,121066E+23
2806	6,671985E+22	6,672114E+22	3,933435E+22	3,933532E+22	1,334410E+23	7,866967E+22	2,121107E+23
2807	6,671904E+22	6,671814E+22	3,933495E+22	3,933486E+22	1,334372E+23	7,866981E+22	2,121070E+23
2808	6,671758E+22	6,671929E+22	3,933622E+22	3,933503E+22	1,334369E+23	7,867125E+22	2,121081E+23
2809	6,672017E+22	6,671942E+22	3,933547E+22	3,933633E+22	1,334396E+23	7,867179E+22	2,121114E+23
2810	6,671795E+22	6,671668E+22	3,933673E+22	3,933644E+22	1,334346E+23	7,867317E+22	2,121078E+23
2811	6,671762E+22	6,671915E+22	3,933759E+22	3,933760E+22	1,334368E+23	7,867519E+22	2,121120E+23
2812	6,671882E+22	6,671794E+22	3,933725E+22	3,933834E+22	1,334368E+23	7,867559E+22	2,121124E+23
2813	6,671636E+22	6,671649E+22	3,933887E+22	3,933819E+22	1,334329E+23	7,867706E+22	2,121099E+23
2814	6,671795E+22	6,671875E+22	3,933891E+22	3,933919E+22	1,334367E+23	7,867810E+22	2,121148E+23
2815	6,671786E+22	6,671600E+22	3,933910E+22	3,933891E+22	1,334339E+23	7,867801E+22	2,121119E+23
2816	6,671566E+22	6,671701E+22	3,933999E+22	3,933861E+22	1,334327E+23	7,867860E+22	2,121113E+23
2817	6,671784E+22	6,671866E+22	3,933855E+22	3,933965E+22	1,334365E+23	7,867820E+22	2,121147E+23
2818	6,671627E+22	6,671565E+22	3,933873E+22	3,933875E+22	1,334319E+23	7,867748E+22	2,121094E+23
2819	6,671615E+22	6,671782E+22	3,933899E+22	3,933815E+22	1,334340E+23	7,867714E+22	2,121111E+23
2820	6,671888E+22	6,671766E+22	3,933726E+22	3,933786E+22	1,334365E+23	7,867512E+22	2,121117E+23
2821	6,671735E+22	6,671597E+22	3,933734E+22	3,933659E+22	1,334333E+23	7,867393E+22	2,121072E+23
2822	6,671844E+22	6,671947E+22	3,933673E+22	3,933682E+22	1,334379E+23	7,867355E+22	2,121115E+23
2823	6,671874E+22	6,671801E+22	3,933595E+22	3,933646E+22	1,334368E+23	7,867241E+22	2,121092E+23
2824	6,671649E+22	6,671816E+22	3,933688E+22	3,933579E+22	1,334347E+23	7,867268E+22	2,121073E+23
2825	6,671862E+22	6,672007E+22	3,933622E+22	3,933691E+22	1,334387E+23	7,867312E+22	2,121118E+23
2826	6,671790E+22	6,671634E+22	3,933675E+22	3,933671E+22	1,334342E+23	7,867347E+22	2,121077E+23
2827	6,671691E+22	6,671756E+22	3,933814E+22	3,933682E+22	1,334345E+23	7,867496E+22	2,121094E+23
2828	6,671886E+22	6,671829E+22	3,933723E+22	3,933829E+22	1,334372E+23	7,867552E+22	2,121127E+23
2829	6,671684E+22	6,671551E+22	3,933809E+22	3,933842E+22	1,334324E+23	7,867651E+22	2,121089E+23
2830	6,671664E+22	6,671822E+22	3,933918E+22	3,933936E+22	1,334349E+23	7,867854E+22	2,121134E+23
2831	6,671756E+22	6,671668E+22	3,933922E+22	3,933996E+22	1,334342E+23	7,867918E+22	2,121134E+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							
2832	6,671546E+22	6,671525E+22	3,934078E+22	3,933943E+22	1,334307E+23	7,868021E+22	2,121109E+23
2833	6,671676E+22	6,671791E+22	3,934070E+22	3,934080E+22	1,334347E+23	7,868150E+22	2,121162E+23
2834	6,671615E+22	6,671494E+22	3,934068E+22	3,934089E+22	1,334311E+23	7,868157E+22	2,121127E+23
2835	6,671427E+22	6,671581E+22	3,934165E+22	3,934039E+22	1,334301E+23	7,868204E+22	2,121121E+23
2836	6,671632E+22	6,671751E+22	3,934024E+22	3,934122E+22	1,334338E+23	7,868146E+22	2,121153E+23
2837	6,671571E+22	6,671408E+22	3,933995E+22	3,934009E+22	1,334298E+23	7,868003E+22	2,121098E+23
2838	6,671591E+22	6,671669E+22	3,934018E+22	3,933937E+22	1,334326E+23	7,867955E+22	2,121121E+23
2839	6,671800E+22	6,671685E+22	3,933862E+22	3,933925E+22	1,334348E+23	7,867788E+22	2,121127E+23
2840	6,671632E+22	6,671548E+22	3,933857E+22	3,933784E+22	1,334318E+23	7,867641E+22	2,121082E+23
2841	6,671695E+22	6,671917E+22	3,933814E+22	3,933841E+22	1,334361E+23	7,867655E+22	2,121127E+23
2842	6,671718E+22	6,671683E+22	3,933759E+22	3,933816E+22	1,334340E+23	7,867575E+22	2,121098E+23
2843	6,671568E+22	6,671628E+22	3,933885E+22	3,933722E+22	1,334320E+23	7,867607E+22	2,121080E+23
2844	6,671758E+22	6,671847E+22	3,933816E+22	3,933842E+22	1,334361E+23	7,867658E+22	2,121126E+23
2845	6,671720E+22	6,671476E+22	3,933809E+22	3,933849E+22	1,334320E+23	7,867658E+22	2,121085E+23
2846	6,671592E+22	6,671669E+22	3,933946E+22	3,933873E+22	1,334326E+23	7,867819E+22	2,121108E+23
2847	6,671719E+22	6,671751E+22	3,933890E+22	3,934028E+22	1,334347E+23	7,867918E+22	2,121139E+23
2848	6,671553E+22	6,671458E+22	3,933994E+22	3,933992E+22	1,334301E+23	7,867986E+22	2,121100E+23
2849	6,671552E+22	6,671735E+22	3,934121E+22	3,934093E+22	1,334329E+23	7,868213E+22	2,121150E+23
2850	6,671630E+22	6,671527E+22	3,934127E+22	3,934175E+22	1,334316E+23	7,868303E+22	2,121146E+23
2851	6,671442E+22	6,671379E+22	3,934286E+22	3,934123E+22	1,334282E+23	7,868410E+22	2,121123E+23
2852	6,671501E+22	6,671695E+22	3,934251E+22	3,934274E+22	1,334320E+23	7,868524E+22	2,121172E+23
2853	6,671484E+22	6,671360E+22	3,934192E+22	3,934289E+22	1,334284E+23	7,868481E+22	2,121132E+23
2854	6,671351E+22	6,671453E+22	3,934291E+22	3,934200E+22	1,334280E+23	7,868492E+22	2,121130E+23
2855	6,671559E+22	6,671603E+22	3,934168E+22	3,934255E+22	1,334316E+23	7,868424E+22	2,121159E+23
2856	6,671534E+22	6,671307E+22	3,934120E+22	3,934095E+22	1,334284E+23	7,868215E+22	2,121106E+23
2857	6,671521E+22	6,671636E+22	3,934132E+22	3,934050E+22	1,334316E+23	7,868183E+22	2,121134E+23
2858	6,671644E+22	6,671626E+22	3,933993E+22	3,934073E+22	1,334327E+23	7,868066E+22	2,121134E+23
2859	6,671492E+22	6,671460E+22	3,934029E+22	3,933928E+22	1,334295E+23	7,867957E+22	2,121091E+23
2860	6,671523E+22	6,671806E+22	3,934007E+22	3,933980E+22	1,334333E+23	7,867987E+22	2,121132E+23
2861	6,671629E+22	6,671503E+22	3,933915E+22	3,933976E+22	1,334313E+23	7,867891E+22	2,121102E+23
2862	6,671516E+22	6,671475E+22	3,934031E+22	3,933887E+22	1,334299E+23	7,867918E+22	2,121091E+23
2863	6,671650E+22	6,671715E+22	3,933972E+22	3,934034E+22	1,334336E+23	7,868005E+22	2,121137E+23
2864	6,671606E+22	6,671405E+22	3,933943E+22	3,934021E+22	1,334301E+23	7,867964E+22	2,121098E+23
2865	6,671465E+22	6,671628E+22	3,934094E+22	3,934062E+22	1,334309E+23	7,868155E+22	2,121125E+23
2866	6,671578E+22	6,671633E+22	3,934088E+22	3,934210E+22	1,334321E+23	7,868298E+22	2,121151E+23
2867	6,671477E+22	6,671302E+22	3,934225E+22	3,934145E+22	1,334278E+23	7,868369E+22	2,121115E+23
2868	6,671417E+22	6,671609E+22	3,934347E+22	3,934251E+22	1,334303E+23	7,868597E+22	2,121162E+23
2869	6,671513E+22	6,671386E+22	3,934290E+22	3,934373E+22	1,334290E+23	7,868663E+22	2,121156E+23
2870	6,671307E+22	6,671272E+22	3,934432E+22	3,934326E+22	1,334258E+23	7,868758E+22	2,121134E+23
2871	6,671331E+22	6,671577E+22	3,934412E+22	3,934469E+22	1,334291E+23	7,868881E+22	2,121179E+23
2872	6,671385E+22	6,671240E+22	3,934331E+22	3,934419E+22	1,334263E+23	7,868750E+22	2,121138E+23
2873	6,671294E+22	6,671357E+22	3,934423E+22	3,934325E+22	1,334265E+23	7,868748E+22	2,121140E+23
2874	6,671486E+22	6,671488E+22	3,934315E+22	3,934382E+22	1,334297E+23	7,868697E+22	2,121167E+23
2875	6,671467E+22	6,671214E+22	3,934273E+22	3,934216E+22	1,334268E+23	7,868488E+22	2,121117E+23
2876	6,671359E+22	6,671596E+22	3,934288E+22	3,934184E+22	1,334295E+23	7,868472E+22	2,121143E+23
2877	6,671510E+22	6,671526E+22	3,934118E+22	3,934234E+22	1,334304E+23	7,868352E+22	2,121139E+23
2878	6,671393E+22	6,671327E+22	3,934177E+22	3,934077E+22	1,334272E+23	7,868253E+22	2,121097E+23
2879	6,671417E+22	6,671639E+22	3,934175E+22	3,934133E+22	1,334306E+23	7,868307E+22	2,121136E+23
2880	6,671556E+22	6,671372E+22	3,934051E+22	3,934112E+22	1,334293E+23	7,868163E+22	2,121109E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2881	6,671426E+22	6,671413E+22	3,934151E+22	3,934062E+22	1,334284E+23	7,868213E+22	2,121105E+23
2882	6,671501E+22	6,671631E+22	3,934123E+22	3,934228E+22	1,334313E+23	7,868351E+22	2,121148E+23
2883	6,671487E+22	6,671311E+22	3,934137E+22	3,934189E+22	1,334280E+23	7,868326E+22	2,121112E+23
2884	6,671319E+22	6,671531E+22	3,934318E+22	3,934210E+22	1,334285E+23	7,868528E+22	2,121138E+23
2885	6,671488E+22	6,671472E+22	3,934284E+22	3,934386E+22	1,334296E+23	7,868670E+22	2,121163E+23
2886	6,671394E+22	6,671163E+22	3,934420E+22	3,934331E+22	1,334256E+23	7,868751E+22	2,121131E+23
2887	6,671264E+22	6,671470E+22	3,934533E+22	3,934462E+22	1,334273E+23	7,868995E+22	2,121173E+23
2888	6,671358E+22	6,671288E+22	3,934434E+22	3,934564E+22	1,334265E+23	7,868999E+22	2,121164E+23
2889	6,671184E+22	6,671192E+22	3,934557E+22	3,934511E+22	1,334238E+23	7,869068E+22	2,121144E+23
2890	6,671223E+22	6,671413E+22	3,934574E+22	3,934623E+22	1,334264E+23	7,869197E+22	2,121183E+23
2891	6,671352E+22	6,671097E+22	3,934503E+22	3,934525E+22	1,334245E+23	7,869028E+22	2,121148E+23
2892	6,671209E+22	6,671279E+22	3,934584E+22	3,934425E+22	1,334249E+23	7,869009E+22	2,121150E+23
2893	6,671387E+22	6,671404E+22	3,934434E+22	3,934526E+22	1,334279E+23	7,868960E+22	2,121175E+23
2894	6,671334E+22	6,671162E+22	3,934400E+22	3,934367E+22	1,334250E+23	7,868767E+22	2,121126E+23
2895	6,671174E+22	6,671494E+22	3,934447E+22	3,934343E+22	1,334267E+23	7,868790E+22	2,121146E+23
2896	6,671379E+22	6,671407E+22	3,934265E+22	3,934362E+22	1,334279E+23	7,868627E+22	2,121141E+23
2897	6,671318E+22	6,671214E+22	3,934308E+22	3,934228E+22	1,334253E+23	7,868536E+22	2,121107E+23
2898	6,671329E+22	6,671484E+22	3,934331E+22	3,934304E+22	1,334281E+23	7,868635E+22	2,121145E+23
2899	6,671487E+22	6,671264E+22	3,934207E+22	3,934279E+22	1,334275E+23	7,868486E+22	2,121124E+23
2900	6,671287E+22	6,671360E+22	3,934311E+22	3,934231E+22	1,334265E+23	7,868542E+22	2,121119E+23
2901	6,671397E+22	6,671517E+22	3,934278E+22	3,934412E+22	1,334291E+23	7,868689E+22	2,121160E+23
2902	6,671411E+22	6,671177E+22	3,934328E+22	3,934348E+22	1,334259E+23	7,868676E+22	2,121126E+23
2903	6,671206E+22	6,671377E+22	3,934534E+22	3,934376E+22	1,334258E+23	7,868910E+22	2,121149E+23
2904	6,671371E+22	6,671356E+22	3,934458E+22	3,934544E+22	1,334273E+23	7,869002E+22	2,121173E+23
2905	6,671247E+22	6,671087E+22	3,934569E+22	3,934535E+22	1,334233E+23	7,869104E+22	2,121144E+23
2906	6,671075E+22	6,671346E+22	3,934708E+22	3,934675E+22	1,334242E+23	7,869383E+22	2,121180E+23
2907	6,671231E+22	6,671153E+22	3,934619E+22	3,934735E+22	1,334238E+23	7,869354E+22	2,121174E+23
2908	6,671068E+22	6,671076E+22	3,934744E+22	3,934647E+22	1,334214E+23	7,869390E+22	2,121153E+23
2909	6,671177E+22	6,671261E+22	3,934721E+22	3,934769E+22	1,334244E+23	7,869490E+22	2,121193E+23
2910	6,671300E+22	6,670998E+22	3,934649E+22	3,934661E+22	1,334230E+23	7,869310E+22	2,121161E+23
2911	6,671074E+22	6,671204E+22	3,934731E+22	3,934581E+22	1,334228E+23	7,869312E+22	2,121159E+23
2912	6,671230E+22	6,671355E+22	3,934550E+22	3,934668E+22	1,334258E+23	7,869218E+22	2,121180E+23
2913	6,671202E+22	6,671097E+22	3,934521E+22	3,934525E+22	1,334230E+23	7,869045E+22	2,121134E+23
2914	6,671059E+22	6,671322E+22	3,934613E+22	3,934491E+22	1,334238E+23	7,869104E+22	2,121148E+23
2915	6,671329E+22	6,671247E+22	3,934431E+22	3,934487E+22	1,334258E+23	7,868918E+22	2,121149E+23
2916	6,671236E+22	6,671120E+22	3,934456E+22	3,934359E+22	1,334236E+23	7,868815E+22	2,121117E+23
2917	6,671249E+22	6,671371E+22	3,934449E+22	3,934481E+22	1,334262E+23	7,868930E+22	2,121155E+23
2918	6,671386E+22	6,671198E+22	3,934350E+22	3,934448E+22	1,334258E+23	7,868798E+22	2,121138E+23
2919	6,671143E+22	6,671257E+22	3,934494E+22	3,934395E+22	1,334240E+23	7,868889E+22	2,121129E+23
2920	6,671273E+22	6,671403E+22	3,934460E+22	3,934549E+22	1,334268E+23	7,869009E+22	2,121169E+23
2921	6,671314E+22	6,671082E+22	3,934504E+22	3,934518E+22	1,334240E+23	7,869022E+22	2,121142E+23
2922	6,671061E+22	6,671215E+22	3,934739E+22	3,934577E+22	1,334228E+23	7,869316E+22	2,121159E+23
2923	6,671227E+22	6,671237E+22	3,934652E+22	3,934746E+22	1,334246E+23	7,869398E+22	2,121186E+23
2924	6,671071E+22	6,671003E+22	3,934746E+22	3,934733E+22	1,334207E+23	7,869479E+22	2,121155E+23
2925	6,670968E+22	6,671176E+22	3,934866E+22	3,934875E+22	1,334214E+23	7,869742E+22	2,121189E+23
2926	6,671180E+22	6,670998E+22	3,934790E+22	3,934886E+22	1,334218E+23	7,869675E+22	2,121185E+23
2927	6,670994E+22	6,670938E+22	3,934912E+22	3,934787E+22	1,334193E+23	7,869700E+22	2,121163E+23
2928	6,671084E+22	6,671184E+22	3,934851E+22	3,934892E+22	1,334227E+23	7,869743E+22	2,121201E+23
2929	6,671173E+22	6,670980E+22	3,934761E+22	3,934816E+22	1,334215E+23	7,869577E+22	2,121173E+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							
2930	6,670892E+22	6,671113E+22	3,934890E+22	3,934744E+22	1,334201E+23	7,869634E+22	2,121164E+23
2931	6,671095E+22	6,671242E+22	3,934723E+22	3,934799E+22	1,334234E+23	7,869522E+22	2,121186E+23
2932	6,671085E+22	6,670978E+22	3,934694E+22	3,934648E+22	1,334206E+23	7,869342E+22	2,121141E+23
2933	6,671017E+22	6,671141E+22	3,934750E+22	3,934649E+22	1,334216E+23	7,869399E+22	2,121156E+23
2934	6,671292E+22	6,671115E+22	3,934564E+22	3,934642E+22	1,334241E+23	7,869206E+22	2,121161E+23
2935	6,671125E+22	6,671036E+22	3,934587E+22	3,934532E+22	1,334216E+23	7,869119E+22	2,121128E+23
2936	6,671125E+22	6,671319E+22	3,934559E+22	3,934628E+22	1,334244E+23	7,869187E+22	2,121163E+23
2937	6,671274E+22	6,671135E+22	3,934489E+22	3,934602E+22	1,334241E+23	7,869090E+22	2,121150E+23
2938	6,671023E+22	6,671102E+22	3,934705E+22	3,934548E+22	1,334213E+23	7,869253E+22	2,121138E+23
2939	6,671172E+22	6,671266E+22	3,934673E+22	3,934695E+22	1,334244E+23	7,869367E+22	2,121180E+23
2940	6,671161E+22	6,670989E+22	3,934707E+22	3,934698E+22	1,334215E+23	7,869405E+22	2,121155E+23
2941	6,670916E+22	6,671068E+22	3,934903E+22	3,934808E+22	1,334198E+23	7,869712E+22	2,121170E+23
2942	6,671087E+22	6,671105E+22	3,934827E+22	3,934955E+22	1,334219E+23	7,869782E+22	2,121197E+23
2943	6,670933E+22	6,670856E+22	3,934931E+22	3,934920E+22	1,334179E+23	7,869851E+22	2,121164E+23
2944	6,670886E+22	6,671040E+22	3,935019E+22	3,935017E+22	1,334193E+23	7,870036E+22	2,121196E+23
2945	6,671124E+22	6,670916E+22	3,934932E+22	3,935036E+22	1,334204E+23	7,869968E+22	2,121201E+23
2946	6,670888E+22	6,670826E+22	3,935086E+22	3,934948E+22	1,334171E+23	7,870033E+22	2,121175E+23
2947	6,670951E+22	6,671123E+22	3,935013E+22	3,935039E+22	1,334207E+23	7,870052E+22	2,121213E+23
2948	6,671006E+22	6,670936E+22	3,934922E+22	3,934963E+22	1,334194E+23	7,869885E+22	2,121183E+23
2949	6,670789E+22	6,670939E+22	3,935038E+22	3,934908E+22	1,334173E+23	7,869946E+22	2,121167E+23
2950	6,671040E+22	6,671076E+22	3,934881E+22	3,934929E+22	1,334212E+23	7,869810E+22	2,121193E+23
2951	6,671016E+22	6,670835E+22	3,934829E+22	3,934785E+22	1,334185E+23	7,869614E+22	2,121147E+23
2952	6,670934E+22	6,671046E+22	3,934842E+22	3,934783E+22	1,334198E+23	7,869624E+22	2,121160E+23
2953	6,671187E+22	6,671095E+22	3,934654E+22	3,934798E+22	1,334228E+23	7,869452E+22	2,121173E+23
2954	6,670974E+22	6,670946E+22	3,934743E+22	3,934689E+22	1,334192E+23	7,869433E+22	2,121135E+23
2955	6,670998E+22	6,671225E+22	3,934751E+22	3,934752E+22	1,334222E+23	7,869504E+22	2,121173E+23
2956	6,671149E+22	6,671045E+22	3,934698E+22	3,934737E+22	1,334219E+23	7,869435E+22	2,121163E+23
2957	6,670931E+22	6,670921E+22	3,934898E+22	3,934744E+22	1,334185E+23	7,869642E+22	2,121149E+23
2958	6,671061E+22	6,671122E+22	3,934865E+22	3,934899E+22	1,334218E+23	7,869764E+22	2,121195E+23
2959	6,670995E+22	6,670867E+22	3,934881E+22	3,934927E+22	1,334186E+23	7,869808E+22	2,121167E+23
2960	6,670777E+22	6,670943E+22	3,935041E+22	3,935009E+22	1,334172E+23	7,870050E+22	2,121177E+23
2961	6,671004E+22	6,670987E+22	3,934975E+22	3,935133E+22	1,334199E+23	7,870108E+22	2,121210E+23
2962	6,670860E+22	6,670691E+22	3,935124E+22	3,935072E+22	1,334155E+23	7,870196E+22	2,121175E+23
2963	6,670823E+22	6,670940E+22	3,935200E+22	3,935138E+22	1,334176E+23	7,870338E+22	2,121210E+23
2964	6,670995E+22	6,670882E+22	3,935109E+22	3,935176E+22	1,334188E+23	7,870285E+22	2,121216E+23
2965	6,670745E+22	6,670731E+22	3,935241E+22	3,935135E+22	1,334148E+23	7,870376E+22	2,121185E+23
2966	6,670802E+22	6,671014E+22	3,935182E+22	3,935197E+22	1,334182E+23	7,870379E+22	2,121219E+23
2967	6,670856E+22	6,670795E+22	3,935094E+22	3,935118E+22	1,334165E+23	7,870212E+22	2,121186E+23
2968	6,670707E+22	6,670788E+22	3,935154E+22	3,935035E+22	1,334150E+23	7,870189E+22	2,121168E+23
2969	6,670988E+22	6,670966E+22	3,934981E+22	3,935071E+22	1,334195E+23	7,870051E+22	2,121201E+23
2970	6,670924E+22	6,670725E+22	3,934960E+22	3,934938E+22	1,334165E+23	7,869898E+22	2,121155E+23
2971	6,670827E+22	6,671003E+22	3,934962E+22	3,934916E+22	1,334183E+23	7,869878E+22	2,121171E+23
2972	6,671050E+22	6,671065E+22	3,934808E+22	3,934930E+22	1,334211E+23	7,869738E+22	2,121185E+23
2973	6,670887E+22	6,670794E+22	3,934916E+22	3,934846E+22	1,334168E+23	7,869762E+22	2,121144E+23
2974	6,670922E+22	6,671066E+22	3,934951E+22	3,934889E+22	1,334199E+23	7,869840E+22	2,121183E+23
2975	6,671029E+22	6,670908E+22	3,934890E+22	3,934911E+22	1,334194E+23	7,869802E+22	2,121174E+23
2976	6,670797E+22	6,670799E+22	3,935038E+22	3,934936E+22	1,334160E+23	7,869974E+22	2,121157E+23
2977	6,670917E+22	6,671041E+22	3,935001E+22	3,935111E+22	1,334196E+23	7,870113E+22	2,121207E+23
2978	6,670841E+22	6,670726E+22	3,935067E+22	3,935128E+22	1,334157E+23	7,870195E+22	2,121176E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude ☉	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2979	6,670675E+22	6,670819E+22	3,935230E+22	3,935160E+22	1,334149E+23	7,870390E+22	2,121188E+23
2980	6,670920E+22	6,670898E+22	3,935176E+22	3,935275E+22	1,334182E+23	7,870451E+22	2,121227E+23
2981	6,670795E+22	6,670541E+22	3,935307E+22	3,935254E+22	1,334134E+23	7,870561E+22	2,121190E+23
2982	6,670715E+22	6,670846E+22	3,935386E+22	3,935307E+22	1,334156E+23	7,870693E+22	2,121225E+23
2983	6,670819E+22	6,670813E+22	3,935273E+22	3,935362E+22	1,334163E+23	7,870635E+22	2,121227E+23
2984	6,670585E+22	6,670612E+22	3,935368E+22	3,935301E+22	1,334120E+23	7,870669E+22	2,121187E+23
2985	6,670700E+22	6,670886E+22	3,935312E+22	3,935342E+22	1,334159E+23	7,870654E+22	2,121224E+23
2986	6,670773E+22	6,670618E+22	3,935247E+22	3,935253E+22	1,334139E+23	7,870500E+22	2,121189E+23
2987	6,670646E+22	6,670684E+22	3,935277E+22	3,935148E+22	1,334133E+23	7,870425E+22	2,121176E+23
2988	6,670890E+22	6,670933E+22	3,935106E+22	3,935197E+22	1,334182E+23	7,870302E+22	2,121213E+23
2989	6,670817E+22	6,670638E+22	3,935083E+22	3,935100E+22	1,334145E+23	7,870183E+22	2,121164E+23
2990	6,670718E+22	6,670913E+22	3,935127E+22	3,935042E+22	1,334163E+23	7,870169E+22	2,121180E+23
2991	6,670921E+22	6,670954E+22	3,934995E+22	3,935065E+22	1,334188E+23	7,870060E+22	2,121194E+23
2992	6,670793E+22	6,670654E+22	3,935072E+22	3,934994E+22	1,334145E+23	7,870066E+22	2,121151E+23
2993	6,670829E+22	6,670953E+22	3,935103E+22	3,935067E+22	1,334178E+23	7,870171E+22	2,121195E+23
2994	6,670883E+22	6,670777E+22	3,935069E+22	3,935124E+22	1,334166E+23	7,870193E+22	2,121185E+23
2995	6,670656E+22	6,670717E+22	3,935190E+22	3,935128E+22	1,334137E+23	7,870318E+22	2,121169E+23
2996	6,670787E+22	6,670950E+22	3,935184E+22	3,935290E+22	1,334174E+23	7,870474E+22	2,121221E+23
2997	6,670774E+22	6,670551E+22	3,935257E+22	3,935311E+22	1,334132E+23	7,870568E+22	2,121189E+23
2998	6,670631E+22	6,670671E+22	3,935426E+22	3,935303E+22	1,334130E+23	7,870729E+22	2,121203E+23
2999	6,670802E+22	6,670798E+22	3,935369E+22	3,935442E+22	1,334160E+23	7,870811E+22	2,121241E+23