

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-3000	2,076297E+08	2,076532E+08	2,871085E+09	2,870935E+09	4,152829E+08	5,742020E+09	6,157303E+09
-2999	2,076180E+08	2,076178E+08	2,870909E+09	2,870989E+09	4,152358E+08	5,741898E+09	6,157134E+09
-2998	2,076644E+08	2,076504E+08	2,870843E+09	2,870869E+09	4,153148E+08	5,741712E+09	6,157027E+09
-2997	2,076357E+08	2,076677E+08	2,870859E+09	2,870678E+09	4,153034E+08	5,741537E+09	6,156840E+09
-2996	2,076589E+08	2,076352E+08	2,870651E+09	2,870781E+09	4,152941E+08	5,741433E+09	6,156727E+09
-2995	2,076898E+08	2,076855E+08	2,870671E+09	2,870596E+09	4,153753E+08	5,741267E+09	6,156642E+09
-2994	2,076514E+08	2,076764E+08	2,870602E+09	2,870543E+09	4,153278E+08	5,741144E+09	6,156472E+09
-2993	2,076889E+08	2,076592E+08	2,870470E+09	2,870648E+09	4,153480E+08	5,741118E+09	6,156466E+09
-2992	2,076860E+08	2,077052E+08	2,870613E+09	2,870482E+09	4,153913E+08	5,741095E+09	6,156486E+09
-2991	2,076586E+08	2,076619E+08	2,870570E+09	2,870606E+09	4,153205E+08	5,741175E+09	6,156496E+09
-2990	2,076960E+08	2,076650E+08	2,870591E+09	2,870671E+09	4,153610E+08	5,741262E+09	6,156623E+09
-2989	2,076631E+08	2,076866E+08	2,870768E+09	2,870609E+09	4,153497E+08	5,741377E+09	6,156727E+09
-2988	2,076535E+08	2,076355E+08	2,870707E+09	2,870860E+09	4,152890E+08	5,741567E+09	6,156856E+09
-2987	2,076761E+08	2,076685E+08	2,870849E+09	2,870829E+09	4,153446E+08	5,741678E+09	6,157023E+09
-2986	2,076254E+08	2,076570E+08	2,870953E+09	2,870826E+09	4,152824E+08	5,741779E+09	6,157061E+09
-2985	2,076443E+08	2,076166E+08	2,870862E+09	2,871021E+09	4,152609E+08	5,741883E+09	6,157144E+09
-2984	2,076563E+08	2,076601E+08	2,870991E+09	2,870892E+09	4,153164E+08	5,741883E+09	6,157199E+09
-2983	2,076186E+08	2,076275E+08	2,870929E+09	2,870927E+09	4,152462E+08	5,741855E+09	6,157101E+09
-2982	2,076591E+08	2,076288E+08	2,870800E+09	2,870943E+09	4,152879E+08	5,741743E+09	6,157031E+09
-2981	2,076480E+08	2,076728E+08	2,870888E+09	2,870724E+09	4,153208E+08	5,741612E+09	6,156932E+09
-2980	2,076368E+08	2,076356E+08	2,870720E+09	2,870793E+09	4,152725E+08	5,741513E+09	6,156785E+09
-2979	2,076846E+08	2,076681E+08	2,870685E+09	2,870669E+09	4,153527E+08	5,741355E+09	6,156707E+09
-2978	2,076534E+08	2,076864E+08	2,870691E+09	2,870494E+09	4,153397E+08	5,741185E+09	6,156525E+09
-2977	2,076739E+08	2,076530E+08	2,870447E+09	2,870611E+09	4,153269E+08	5,741058E+09	6,156385E+09
-2976	2,077057E+08	2,077060E+08	2,870478E+09	2,870434E+09	4,154117E+08	5,740912E+09	6,156323E+09
-2975	2,076678E+08	2,076935E+08	2,870433E+09	2,870380E+09	4,153612E+08	5,740813E+09	6,156174E+09
-2974	2,077045E+08	2,076748E+08	2,870295E+09	2,870460E+09	4,153793E+08	5,740755E+09	6,156134E+09
-2973	2,077042E+08	2,077182E+08	2,870467E+09	2,870308E+09	4,154224E+08	5,740775E+09	6,156198E+09
-2972	2,076745E+08	2,076733E+08	2,870422E+09	2,870469E+09	4,153477E+08	5,740891E+09	6,156239E+09
-2971	2,077089E+08	2,076803E+08	2,870470E+09	2,870536E+09	4,153892E+08	5,741006E+09	6,156395E+09
-2970	2,076720E+08	2,077037E+08	2,870646E+09	2,870484E+09	4,153757E+08	5,741130E+09	6,156505E+09
-2969	2,076606E+08	2,076478E+08	2,870564E+09	2,870732E+09	4,153084E+08	5,741296E+09	6,156604E+09
-2968	2,076888E+08	2,076787E+08	2,870715E+09	2,870706E+09	4,153675E+08	5,741421E+09	6,156788E+09
-2967	2,076424E+08	2,076633E+08	2,870812E+09	2,870697E+09	4,153057E+08	5,741509E+09	6,156815E+09
-2966	2,076613E+08	2,076270E+08	2,870675E+09	2,870855E+09	4,152883E+08	5,741530E+09	6,156818E+09
-2965	2,076752E+08	2,076756E+08	2,870807E+09	2,870713E+09	4,153508E+08	5,741520E+09	6,156871E+09
-2964	2,076343E+08	2,076471E+08	2,870743E+09	2,870749E+09	4,152814E+08	5,741492E+09	6,156774E+09
-2963	2,076735E+08	2,076515E+08	2,870654E+09	2,870743E+09	4,153249E+08	5,741396E+09	6,156721E+09
-2962	2,076616E+08	2,076937E+08	2,870745E+09	2,870530E+09	4,153552E+08	5,741275E+09	6,156630E+09
-2961	2,076507E+08	2,076513E+08	2,870541E+09	2,870615E+09	4,153021E+08	5,741157E+09	6,156459E+09
-2960	2,077030E+08	2,076837E+08	2,870492E+09	2,870509E+09	4,153866E+08	5,741001E+09	6,156388E+09
-2959	2,076737E+08	2,077019E+08	2,870483E+09	2,870333E+09	4,153757E+08	5,740816E+09	6,156191E+09
-2958	2,076922E+08	2,076723E+08	2,870210E+09	2,870411E+09	4,153645E+08	5,740622E+09	6,155986E+09
-2957	2,077258E+08	2,077240E+08	2,870278E+09	2,870223E+09	4,154498E+08	5,740501E+09	6,155951E+09
-2956	2,076862E+08	2,077094E+08	2,870261E+09	2,870195E+09	4,153956E+08	5,740456E+09	6,155852E+09
-2955	2,077214E+08	2,076909E+08	2,870173E+09	2,870282E+09	4,154123E+08	5,740455E+09	6,155867E+09
-2954	2,077170E+08	2,077341E+08	2,870349E+09	2,870166E+09	4,154511E+08	5,740515E+09	6,155966E+09
-2953	2,076837E+08	2,076875E+08	2,870286E+09	2,870353E+09	4,153711E+08	5,740639E+09	6,156010E+09
-2952	2,077187E+08	2,076946E+08	2,870342E+09	2,870432E+09	4,154133E+08	5,740774E+09	6,156187E+09

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	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2951	2,076846E+08	2,077133E+08	2,870524E+09	2,870375E+09	4,153979E+08	5,740899E+09	6,156297E+09
-2950	2,076737E+08	2,076572E+08	2,870408E+09	2,870584E+09	4,153309E+08	5,740992E+09	6,156323E+09
-2949	2,077064E+08	2,076866E+08	2,870555E+09	2,870549E+09	4,153930E+08	5,741104E+09	6,156497E+09
-2948	2,076591E+08	2,076744E+08	2,870635E+09	2,870547E+09	4,153335E+08	5,741182E+09	6,156516E+09
-2947	2,076759E+08	2,076459E+08	2,870516E+09	2,870674E+09	4,153218E+08	5,741190E+09	6,156511E+09
-2946	2,076863E+08	2,076978E+08	2,870651E+09	2,870531E+09	4,153841E+08	5,741182E+09	6,156566E+09
-2945	2,076448E+08	2,076660E+08	2,870578E+09	2,870568E+09	4,153108E+08	5,741146E+09	6,156457E+09
-2944	2,076880E+08	2,076678E+08	2,870500E+09	2,870576E+09	4,153558E+08	5,741076E+09	6,156431E+09
-2943	2,076813E+08	2,077061E+08	2,870577E+09	2,870373E+09	4,153874E+08	5,740950E+09	6,156338E+09
-2942	2,076708E+08	2,076671E+08	2,870320E+09	2,870428E+09	4,153379E+08	5,740748E+09	6,156086E+09
-2941	2,077256E+08	2,077016E+08	2,870270E+09	2,870315E+09	4,154272E+08	5,740585E+09	6,156012E+09
-2940	2,076938E+08	2,077224E+08	2,870269E+09	2,870139E+09	4,154162E+08	5,740408E+09	6,155825E+09
-2939	2,077100E+08	2,076945E+08	2,870049E+09	2,870192E+09	4,154046E+08	5,740241E+09	6,155645E+09
-2938	2,077408E+08	2,077428E+08	2,870136E+09	2,870029E+09	4,154836E+08	5,740165E+09	6,155649E+09
-2937	2,076994E+08	2,077224E+08	2,870107E+09	2,870034E+09	4,154218E+08	5,740141E+09	6,155563E+09
-2936	2,077348E+08	2,077035E+08	2,870028E+09	2,870159E+09	4,154383E+08	5,740187E+09	6,155625E+09
-2935	2,077321E+08	2,077460E+08	2,870197E+09	2,870060E+09	4,154781E+08	5,740257E+09	6,155735E+09
-2934	2,076967E+08	2,077006E+08	2,870106E+09	2,870215E+09	4,153973E+08	5,740320E+09	6,155718E+09
-2933	2,077353E+08	2,077050E+08	2,870185E+09	2,870282E+09	4,154403E+08	5,740467E+09	6,155907E+09
-2932	2,077011E+08	2,077222E+08	2,870373E+09	2,870230E+09	4,154233E+08	5,740603E+09	6,156027E+09
-2931	2,076891E+08	2,076710E+08	2,870283E+09	2,870413E+09	4,153601E+08	5,740696E+09	6,156056E+09
-2930	2,077180E+08	2,077032E+08	2,870421E+09	2,870392E+09	4,154212E+08	5,740813E+09	6,156234E+09
-2929	2,076674E+08	2,076930E+08	2,870485E+09	2,870396E+09	4,153603E+08	5,740881E+09	6,156242E+09
-2928	2,076848E+08	2,076656E+08	2,870385E+09	2,870528E+09	4,153504E+08	5,740913E+09	6,156264E+09
-2927	2,076997E+08	2,077128E+08	2,870520E+09	2,870384E+09	4,154125E+08	5,740904E+09	6,156316E+09
-2926	2,076607E+08	2,076791E+08	2,870403E+09	2,870392E+09	4,153398E+08	5,740796E+09	6,156135E+09
-2925	2,077098E+08	2,076786E+08	2,870306E+09	2,870397E+09	4,153885E+08	5,740703E+09	6,156091E+09
-2924	2,077032E+08	2,077201E+08	2,870355E+09	2,870200E+09	4,154232E+08	5,740555E+09	6,155978E+09
-2923	2,076913E+08	2,076902E+08	2,870111E+09	2,870214E+09	4,153815E+08	5,740325E+09	6,155706E+09
-2922	2,077419E+08	2,077249E+08	2,870067E+09	2,870099E+09	4,154668E+08	5,740166E+09	6,155632E+09
-2921	2,077088E+08	2,077421E+08	2,870077E+09	2,869932E+09	4,154509E+08	5,740009E+09	6,155460E+09
-2920	2,077265E+08	2,077104E+08	2,869893E+09	2,870010E+09	4,154369E+08	5,739903E+09	6,155339E+09
-2919	2,077589E+08	2,077544E+08	2,869986E+09	2,869882E+09	4,155133E+08	5,739868E+09	6,155382E+09
-2918	2,077160E+08	2,077363E+08	2,869928E+09	2,869885E+09	4,154523E+08	5,739813E+09	6,155265E+09
-2917	2,077516E+08	2,077181E+08	2,869860E+09	2,870018E+09	4,154697E+08	5,739878E+09	6,155347E+09
-2916	2,077466E+08	2,077613E+08	2,870040E+09	2,869928E+09	4,155079E+08	5,739968E+09	6,155476E+09
-2915	2,077103E+08	2,077179E+08	2,869985E+09	2,870045E+09	4,154282E+08	5,740031E+09	6,155459E+09
-2914	2,077462E+08	2,077184E+08	2,870066E+09	2,870125E+09	4,154646E+08	5,740191E+09	6,155656E+09
-2913	2,077112E+08	2,077326E+08	2,870232E+09	2,870089E+09	4,154438E+08	5,740321E+09	6,155765E+09
-2912	2,076994E+08	2,076839E+08	2,870151E+09	2,870283E+09	4,153833E+08	5,740434E+09	6,155817E+09
-2911	2,077299E+08	2,077171E+08	2,870278E+09	2,870268E+09	4,154470E+08	5,740546E+09	6,155993E+09
-2910	2,076798E+08	2,077081E+08	2,870313E+09	2,870236E+09	4,153878E+08	5,740549E+09	6,155936E+09
-2909	2,077023E+08	2,076781E+08	2,870223E+09	2,870359E+09	4,153803E+08	5,740582E+09	6,155962E+09
-2908	2,077194E+08	2,077238E+08	2,870345E+09	2,870222E+09	4,154432E+08	5,740567E+09	6,156010E+09
-2907	2,076817E+08	2,076960E+08	2,870230E+09	2,870194E+09	4,153777E+08	5,740424E+09	6,155801E+09
-2906	2,077282E+08	2,076982E+08	2,870112E+09	2,870205E+09	4,154264E+08	5,740317E+09	6,155743E+09
-2905	2,077187E+08	2,077411E+08	2,870141E+09	2,870003E+09	4,154598E+08	5,740144E+09	6,155604E+09
-2904	2,077064E+08	2,077126E+08	2,869931E+09	2,870016E+09	4,154190E+08	5,739946E+09	6,155365E+09
-2903	2,077590E+08	2,077428E+08	2,869898E+09	2,869911E+09	4,155018E+08	5,739809E+09	6,155311E+09

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	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2902	2,077261E+08	2,077569E+08	2,869885E+09	2,869737E+09	4,154830E+08	5,739622E+09	6,155105E+09
-2901	2,077469E+08	2,077228E+08	2,869710E+09	2,869838E+09	4,154696E+08	5,739548E+09	6,155018E+09
-2900	2,077771E+08	2,077684E+08	2,869798E+09	2,869737E+09	4,155456E+08	5,739534E+09	6,155080E+09
-2899	2,077328E+08	2,077574E+08	2,869765E+09	2,869713E+09	4,154902E+08	5,739478E+09	6,154968E+09
-2898	2,077636E+08	2,077369E+08	2,869713E+09	2,869855E+09	4,155005E+08	5,739567E+09	6,155068E+09
-2897	2,077573E+08	2,077747E+08	2,869897E+09	2,869776E+09	4,155320E+08	5,739673E+09	6,155205E+09
-2896	2,077220E+08	2,077289E+08	2,869874E+09	2,869908E+09	4,154509E+08	5,739782E+09	6,155233E+09
-2895	2,077594E+08	2,077272E+08	2,869943E+09	2,870009E+09	4,154866E+08	5,739952E+09	6,155438E+09
-2894	2,077235E+08	2,077441E+08	2,870074E+09	2,869957E+09	4,154676E+08	5,740031E+09	6,155498E+09
-2893	2,077138E+08	2,076976E+08	2,870002E+09	2,870145E+09	4,154114E+08	5,740147E+09	6,155558E+09
-2892	2,077430E+08	2,077316E+08	2,870134E+09	2,870128E+09	4,154745E+08	5,740262E+09	6,155737E+09
-2891	2,076959E+08	2,077262E+08	2,870184E+09	2,870053E+09	4,154222E+08	5,740237E+09	6,155659E+09
-2890	2,077165E+08	2,076929E+08	2,870071E+09	2,870181E+09	4,154095E+08	5,740252E+09	6,155662E+09
-2889	2,077341E+08	2,077372E+08	2,870154E+09	2,870052E+09	4,154713E+08	5,740205E+09	6,155677E+09
-2888	2,076978E+08	2,077141E+08	2,870037E+09	2,870019E+09	4,154119E+08	5,740056E+09	6,155467E+09
-2887	2,077452E+08	2,077176E+08	2,869904E+09	2,870026E+09	4,154628E+08	5,739930E+09	6,155393E+09
-2886	2,077359E+08	2,077601E+08	2,869916E+09	2,869791E+09	4,154960E+08	5,739707E+09	6,155203E+09
-2885	2,077280E+08	2,077288E+08	2,869732E+09	2,869800E+09	4,154568E+08	5,739533E+09	6,154990E+09
-2884	2,077793E+08	2,077573E+08	2,869711E+09	2,869720E+09	4,155366E+08	5,739432E+09	6,154968E+09
-2883	2,077472E+08	2,077774E+08	2,869715E+09	2,869535E+09	4,155246E+08	5,739250E+09	6,154775E+09
-2882	2,077624E+08	2,077439E+08	2,869544E+09	2,869666E+09	4,155062E+08	5,739210E+09	6,154716E+09
-2881	2,077889E+08	2,077882E+08	2,869631E+09	2,869584E+09	4,155771E+08	5,739215E+09	6,154792E+09
-2880	2,077451E+08	2,077750E+08	2,869639E+09	2,869568E+09	4,155201E+08	5,739207E+09	6,154727E+09
-2879	2,077768E+08	2,077483E+08	2,869588E+09	2,869725E+09	4,155252E+08	5,739313E+09	6,154838E+09
-2878	2,077711E+08	2,077813E+08	2,869738E+09	2,869634E+09	4,155523E+08	5,739373E+09	6,154925E+09
-2877	2,077388E+08	2,077360E+08	2,869715E+09	2,869774E+09	4,154747E+08	5,739489E+09	6,154964E+09
-2876	2,077738E+08	2,077387E+08	2,869778E+09	2,869883E+09	4,155125E+08	5,739662E+09	6,155174E+09
-2875	2,077382E+08	2,077640E+08	2,869923E+09	2,869790E+09	4,155022E+08	5,739714E+09	6,155216E+09
-2874	2,077253E+08	2,077159E+08	2,869867E+09	2,869979E+09	4,154412E+08	5,739845E+09	6,155287E+09
-2873	2,077542E+08	2,077453E+08	2,869988E+09	2,869965E+09	4,154995E+08	5,739953E+09	6,155452E+09
-2872	2,077102E+08	2,077391E+08	2,870052E+09	2,869897E+09	4,154493E+08	5,739949E+09	6,155398E+09
-2871	2,077324E+08	2,077067E+08	2,869908E+09	2,870036E+09	4,154390E+08	5,739943E+09	6,155382E+09
-2870	2,077496E+08	2,077525E+08	2,869940E+09	2,869879E+09	4,155021E+08	5,739819E+09	6,155321E+09
-2869	2,077167E+08	2,077334E+08	2,869831E+09	2,869828E+09	4,154501E+08	5,739658E+09	6,155108E+09
-2868	2,077634E+08	2,077368E+08	2,869707E+09	2,869827E+09	4,155002E+08	5,739534E+09	6,155034E+09
-2867	2,077565E+08	2,077826E+08	2,869739E+09	2,869556E+09	4,155391E+08	5,739295E+09	6,154834E+09
-2866	2,077458E+08	2,077474E+08	2,869561E+09	2,869590E+09	4,154932E+08	5,739150E+09	6,154644E+09
-2865	2,077940E+08	2,077739E+08	2,869523E+09	2,869541E+09	4,155680E+08	5,739063E+09	6,154631E+09
-2864	2,077632E+08	2,077965E+08	2,869549E+09	2,869379E+09	4,155597E+08	5,738927E+09	6,154487E+09
-2863	2,077772E+08	2,077622E+08	2,869374E+09	2,869524E+09	4,155394E+08	5,738898E+09	6,154438E+09
-2862	2,078035E+08	2,078012E+08	2,869446E+09	2,869426E+09	4,156047E+08	5,738872E+09	6,154476E+09
-2861	2,077647E+08	2,077846E+08	2,869473E+09	2,869412E+09	4,155493E+08	5,738885E+09	6,154434E+09
-2860	2,077942E+08	2,077566E+08	2,869428E+09	2,869583E+09	4,155508E+08	5,739011E+09	6,154562E+09
-2859	2,077889E+08	2,077971E+08	2,869588E+09	2,869470E+09	4,155859E+08	5,739057E+09	6,154643E+09
-2858	2,077506E+08	2,077540E+08	2,869577E+09	2,869619E+09	4,155045E+08	5,739197E+09	6,154701E+09
-2857	2,077805E+08	2,077571E+08	2,869645E+09	2,869740E+09	4,155376E+08	5,739386E+09	6,154923E+09
-2856	2,077479E+08	2,077811E+08	2,869829E+09	2,869651E+09	4,155291E+08	5,739480E+09	6,155009E+09
-2855	2,077361E+08	2,077285E+08	2,869755E+09	2,869850E+09	4,154646E+08	5,739605E+09	6,155070E+09
-2854	2,077671E+08	2,077526E+08	2,869820E+09	2,869823E+09	4,155196E+08	5,739643E+09	6,155162E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2853	2,077293E+08	2,077485E+08	2,869856E+09	2,869746E+09	4,154778E+08	5,739602E+09	6,155080E+09
-2852	2,077506E+08	2,077220E+08	2,869692E+09	2,869871E+09	4,154726E+08	5,739563E+09	6,155036E+09
-2851	2,077698E+08	2,077757E+08	2,869727E+09	2,869657E+09	4,155456E+08	5,739385E+09	6,154930E+09
-2850	2,077347E+08	2,077558E+08	2,869641E+09	2,869597E+09	4,154904E+08	5,739238E+09	6,154728E+09
-2849	2,077793E+08	2,077554E+08	2,869522E+09	2,869609E+09	4,155347E+08	5,739131E+09	6,154666E+09
-2848	2,077752E+08	2,078001E+08	2,869582E+09	2,869365E+09	4,155753E+08	5,738948E+09	6,154523E+09
-2847	2,077635E+08	2,077654E+08	2,869390E+09	2,869433E+09	4,155289E+08	5,738823E+09	6,154352E+09
-2846	2,078096E+08	2,077903E+08	2,869319E+09	2,869381E+09	4,155999E+08	5,738700E+09	6,154300E+09
-2845	2,077826E+08	2,078139E+08	2,869359E+09	2,869222E+09	4,155965E+08	5,738580E+09	6,154177E+09
-2844	2,077952E+08	2,077780E+08	2,869200E+09	2,869366E+09	4,155732E+08	5,738566E+09	6,154139E+09
-2843	2,078227E+08	2,078173E+08	2,869278E+09	2,869233E+09	4,156400E+08	5,738511E+09	6,154151E+09
-2842	2,077805E+08	2,077981E+08	2,869317E+09	2,869237E+09	4,155787E+08	5,738554E+09	6,154133E+09
-2841	2,078050E+08	2,077702E+08	2,869267E+09	2,869428E+09	4,155752E+08	5,738695E+09	6,154270E+09
-2840	2,077999E+08	2,078137E+08	2,869463E+09	2,869335E+09	4,156136E+08	5,738799E+09	6,154412E+09
-2839	2,077598E+08	2,077708E+08	2,869463E+09	2,869500E+09	4,155307E+08	5,738963E+09	6,154494E+09
-2838	2,077893E+08	2,077673E+08	2,869509E+09	2,869606E+09	4,155566E+08	5,739116E+09	6,154672E+09
-2837	2,077644E+08	2,077887E+08	2,869689E+09	2,869521E+09	4,155531E+08	5,739210E+09	6,154763E+09
-2836	2,077531E+08	2,077370E+08	2,869595E+09	2,869716E+09	4,154900E+08	5,739311E+09	6,154801E+09
-2835	2,077865E+08	2,077684E+08	2,869633E+09	2,869645E+09	4,155550E+08	5,739278E+09	6,154833E+09
-2834	2,077458E+08	2,077687E+08	2,869669E+09	2,869556E+09	4,155145E+08	5,739225E+09	6,154739E+09
-2833	2,077634E+08	2,077438E+08	2,869506E+09	2,869669E+09	4,155072E+08	5,739175E+09	6,154683E+09
-2832	2,077858E+08	2,077965E+08	2,869580E+09	2,869456E+09	4,155823E+08	5,739037E+09	6,154619E+09
-2831	2,077507E+08	2,077740E+08	2,869486E+09	2,869412E+09	4,155247E+08	5,738898E+09	6,154423E+09
-2830	2,077942E+08	2,077680E+08	2,869326E+09	2,869429E+09	4,155622E+08	5,738754E+09	6,154316E+09
-2829	2,077965E+08	2,078149E+08	2,869369E+09	2,869201E+09	4,156114E+08	5,738571E+09	6,154182E+09
-2828	2,077833E+08	2,077837E+08	2,869172E+09	2,869270E+09	4,155670E+08	5,738442E+09	6,154009E+09
-2827	2,078309E+08	2,078125E+08	2,869107E+09	2,869176E+09	4,156434E+08	5,738283E+09	6,153926E+09
-2826	2,078025E+08	2,078324E+08	2,869172E+09	2,869014E+09	4,156348E+08	5,738186E+09	6,153821E+09
-2825	2,078107E+08	2,077927E+08	2,869026E+09	2,869174E+09	4,156034E+08	5,738200E+09	6,153803E+09
-2824	2,078387E+08	2,078310E+08	2,869145E+09	2,869070E+09	4,156696E+08	5,738215E+09	6,153885E+09
-2823	2,077925E+08	2,078140E+08	2,869188E+09	2,869106E+09	4,156065E+08	5,738294E+09	6,153900E+09
-2822	2,078128E+08	2,077837E+08	2,869126E+09	2,869301E+09	4,155965E+08	5,738427E+09	6,154023E+09
-2821	2,078132E+08	2,078268E+08	2,869335E+09	2,869219E+09	4,156400E+08	5,738554E+09	6,154194E+09
-2820	2,077738E+08	2,077816E+08	2,869341E+09	2,869381E+09	4,155554E+08	5,738722E+09	6,154278E+09
-2819	2,078061E+08	2,077785E+08	2,869365E+09	2,869449E+09	4,155847E+08	5,738814E+09	6,154398E+09
-2818	2,077811E+08	2,077987E+08	2,869527E+09	2,869361E+09	4,155798E+08	5,738888E+09	6,154468E+09
-2817	2,077662E+08	2,077516E+08	2,869405E+09	2,869551E+09	4,155178E+08	5,738956E+09	6,154474E+09
-2816	2,078015E+08	2,077872E+08	2,869463E+09	2,869473E+09	4,155887E+08	5,738937E+09	6,154525E+09
-2815	2,077595E+08	2,077901E+08	2,869503E+09	2,869379E+09	4,155496E+08	5,738882E+09	6,154431E+09
-2814	2,077767E+08	2,077590E+08	2,869326E+09	2,869472E+09	4,155357E+08	5,738798E+09	6,154334E+09
-2813	2,078060E+08	2,078099E+08	2,869399E+09	2,869275E+09	4,156160E+08	5,738674E+09	6,154290E+09
-2812	2,077717E+08	2,077889E+08	2,869298E+09	2,869240E+09	4,155606E+08	5,738538E+09	6,154099E+09
-2811	2,078155E+08	2,077885E+08	2,869111E+09	2,869227E+09	4,156040E+08	5,738338E+09	6,153942E+09
-2810	2,078159E+08	2,078374E+08	2,869165E+09	2,869003E+09	4,156534E+08	5,738168E+09	6,153821E+09
-2809	2,077992E+08	2,078064E+08	2,868978E+09	2,869068E+09	4,156056E+08	5,738046E+09	6,153652E+09
-2808	2,078484E+08	2,078306E+08	2,868956E+09	2,868984E+09	4,156790E+08	5,737941E+09	6,153620E+09
-2807	2,078181E+08	2,078478E+08	2,869023E+09	2,868848E+09	4,156659E+08	5,737870E+09	6,153536E+09
-2806	2,078229E+08	2,078018E+08	2,868854E+09	2,869014E+09	4,156246E+08	5,737868E+09	6,153493E+09
-2805	2,078547E+08	2,078424E+08	2,868973E+09	2,868940E+09	4,156971E+08	5,737913E+09	6,153610E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2804	2,078071E+08	2,078286E+08	2,869032E+09	2,868982E+09	4,156357E+08	5,738015E+09	6,153650E+09
-2803	2,078276E+08	2,078006E+08	2,868976E+09	2,869141E+09	4,156282E+08	5,738117E+09	6,153746E+09
-2802	2,078286E+08	2,078398E+08	2,869202E+09	2,869063E+09	4,156684E+08	5,738265E+09	6,153933E+09
-2801	2,077869E+08	2,077927E+08	2,869201E+09	2,869230E+09	4,155796E+08	5,738431E+09	6,154010E+09
-2800	2,078210E+08	2,077899E+08	2,869236E+09	2,869307E+09	4,156109E+08	5,738544E+09	6,154154E+09
-2799	2,077932E+08	2,078150E+08	2,869379E+09	2,869224E+09	4,156082E+08	5,738603E+09	6,154211E+09
-2798	2,077748E+08	2,077680E+08	2,869236E+09	2,869389E+09	4,155428E+08	5,738625E+09	6,154168E+09
-2797	2,078168E+08	2,078045E+08	2,869297E+09	2,869310E+09	4,156212E+08	5,738607E+09	6,154228E+09
-2796	2,077768E+08	2,078059E+08	2,869342E+09	2,869204E+09	4,155826E+08	5,738545E+09	6,154128E+09
-2795	2,077965E+08	2,077752E+08	2,869140E+09	2,869264E+09	4,155717E+08	5,738404E+09	6,153975E+09
-2794	2,078263E+08	2,078252E+08	2,869196E+09	2,869073E+09	4,156515E+08	5,738269E+09	6,153920E+09
-2793	2,077894E+08	2,078084E+08	2,869077E+09	2,869045E+09	4,155978E+08	5,738122E+09	6,153720E+09
-2792	2,078346E+08	2,078101E+08	2,868920E+09	2,869035E+09	4,156447E+08	5,737955E+09	6,153600E+09
-2791	2,078329E+08	2,078590E+08	2,868981E+09	2,868815E+09	4,156919E+08	5,737795E+09	6,153487E+09
-2790	2,078149E+08	2,078207E+08	2,868787E+09	2,868872E+09	4,156356E+08	5,737659E+09	6,153295E+09
-2789	2,078692E+08	2,078419E+08	2,868768E+09	2,868813E+09	4,157111E+08	5,737581E+09	6,153292E+09
-2788	2,078378E+08	2,078606E+08	2,868845E+09	2,868694E+09	4,156984E+08	5,737538E+09	6,153237E+09
-2787	2,078405E+08	2,078196E+08	2,868675E+09	2,868841E+09	4,156601E+08	5,737515E+09	6,153175E+09
-2786	2,078691E+08	2,078611E+08	2,868824E+09	2,868779E+09	4,157302E+08	5,737603E+09	6,153333E+09
-2785	2,078187E+08	2,078466E+08	2,868904E+09	2,868832E+09	4,156653E+08	5,737736E+09	6,153402E+09
-2784	2,078402E+08	2,078143E+08	2,868884E+09	2,869001E+09	4,156545E+08	5,737884E+09	6,153539E+09
-2783	2,078393E+08	2,078512E+08	2,869090E+09	2,868942E+09	4,156905E+08	5,738032E+09	6,153722E+09
-2782	2,077957E+08	2,078004E+08	2,869045E+09	2,869097E+09	4,155961E+08	5,738142E+09	6,153738E+09
-2781	2,078348E+08	2,078013E+08	2,869056E+09	2,869182E+09	4,156361E+08	5,738239E+09	6,153875E+09
-2780	2,078085E+08	2,078303E+08	2,869205E+09	2,869080E+09	4,156388E+08	5,738285E+09	6,153924E+09
-2779	2,077919E+08	2,077857E+08	2,869055E+09	2,869187E+09	4,155776E+08	5,738242E+09	6,153819E+09
-2778	2,078350E+08	2,078195E+08	2,869129E+09	2,869104E+09	4,156545E+08	5,738233E+09	6,153888E+09
-2777	2,077945E+08	2,078219E+08	2,869166E+09	2,869006E+09	4,156163E+08	5,738172E+09	6,153788E+09
-2776	2,078148E+08	2,077926E+08	2,868977E+09	2,869079E+09	4,156073E+08	5,738056E+09	6,153663E+09
-2775	2,078413E+08	2,078469E+08	2,869015E+09	2,868905E+09	4,156882E+08	5,737920E+09	6,153608E+09
-2774	2,078027E+08	2,078279E+08	2,868877E+09	2,868859E+09	4,156306E+08	5,737736E+09	6,153367E+09
-2773	2,078540E+08	2,078283E+08	2,868721E+09	2,868857E+09	4,156823E+08	5,737578E+09	6,153261E+09
-2772	2,078542E+08	2,078741E+08	2,868792E+09	2,868631E+09	4,157284E+08	5,737422E+09	6,153151E+09
-2771	2,078362E+08	2,078361E+08	2,868582E+09	2,868657E+09	4,156723E+08	5,737239E+09	6,152911E+09
-2770	2,078883E+08	2,078572E+08	2,868570E+09	2,868617E+09	4,157455E+08	5,737188E+09	6,152933E+09
-2769	2,078529E+08	2,078803E+08	2,868658E+09	2,868519E+09	4,157332E+08	5,737178E+09	6,152911E+09
-2768	2,078543E+08	2,078399E+08	2,868544E+09	2,868683E+09	4,156942E+08	5,737227E+09	6,152921E+09
-2767	2,078794E+08	2,078793E+08	2,868710E+09	2,868642E+09	4,157587E+08	5,737352E+09	6,153111E+09
-2766	2,078284E+08	2,078560E+08	2,868781E+09	2,868697E+09	4,156844E+08	5,737478E+09	6,153163E+09
-2765	2,078550E+08	2,078216E+08	2,868744E+09	2,868890E+09	4,156766E+08	5,737634E+09	6,153311E+09
-2764	2,078549E+08	2,078592E+08	2,868934E+09	2,868828E+09	4,157141E+08	5,737762E+09	6,153476E+09
-2763	2,078110E+08	2,078151E+08	2,868866E+09	2,868935E+09	4,156261E+08	5,737801E+09	6,153427E+09
-2762	2,078497E+08	2,078182E+08	2,868889E+09	2,869005E+09	4,156679E+08	5,737894E+09	6,153562E+09
-2761	2,078227E+08	2,078484E+08	2,869049E+09	2,868896E+09	4,156710E+08	5,737945E+09	6,153616E+09
-2760	2,078082E+08	2,078021E+08	2,868931E+09	2,869003E+09	4,156102E+08	5,737934E+09	6,153544E+09
-2759	2,078479E+08	2,078351E+08	2,868980E+09	2,868937E+09	4,156830E+08	5,737917E+09	6,153600E+09
-2758	2,078074E+08	2,078353E+08	2,868973E+09	2,868836E+09	4,156427E+08	5,737809E+09	6,153452E+09
-2757	2,078325E+08	2,078104E+08	2,868759E+09	2,868920E+09	4,156429E+08	5,737678E+09	6,153321E+09
-2756	2,078611E+08	2,078660E+08	2,868801E+09	2,868727E+09	4,157271E+08	5,737528E+09	6,153256E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2755	2,078250E+08	2,078481E+08	2,868653E+09	2,868631E+09	4,156732E+08	5,737283E+09	6,152956E+09
-2754	2,078771E+08	2,078453E+08	2,868513E+09	2,868628E+09	4,157223E+08	5,737141E+09	6,152863E+09
-2753	2,078746E+08	2,078917E+08	2,868590E+09	2,868420E+09	4,157663E+08	5,737010E+09	6,152777E+09
-2752	2,078549E+08	2,078559E+08	2,868423E+09	2,868465E+09	4,157108E+08	5,736888E+09	6,152599E+09
-2751	2,078988E+08	2,078800E+08	2,868427E+09	2,868459E+09	4,157788E+08	5,736886E+09	6,152665E+09
-2750	2,078619E+08	2,078984E+08	2,868521E+09	2,868372E+09	4,157603E+08	5,736894E+09	6,152654E+09
-2749	2,078673E+08	2,078540E+08	2,868417E+09	2,868564E+09	4,157213E+08	5,736980E+09	6,152702E+09
-2748	2,078950E+08	2,078877E+08	2,868583E+09	2,868530E+09	4,157827E+08	5,737113E+09	6,152895E+09
-2747	2,078457E+08	2,078629E+08	2,868610E+09	2,868549E+09	4,157086E+08	5,737159E+09	6,152868E+09
-2746	2,078713E+08	2,078306E+08	2,868560E+09	2,868739E+09	4,157019E+08	5,737299E+09	6,153001E+09
-2745	2,078689E+08	2,078742E+08	2,868749E+09	2,868672E+09	4,157431E+08	5,737421E+09	6,153164E+09
-2744	2,078250E+08	2,078339E+08	2,868729E+09	2,868761E+09	4,156589E+08	5,737490E+09	6,153149E+09
-2743	2,078597E+08	2,078372E+08	2,868766E+09	2,868836E+09	4,156969E+08	5,737601E+09	6,153298E+09
-2742	2,078340E+08	2,078610E+08	2,868906E+09	2,868727E+09	4,156950E+08	5,737633E+09	6,153328E+09
-2741	2,078242E+08	2,078151E+08	2,868767E+09	2,868859E+09	4,156393E+08	5,737626E+09	6,153266E+09
-2740	2,078652E+08	2,078495E+08	2,868797E+09	2,868791E+09	4,157147E+08	5,737588E+09	6,153303E+09
-2739	2,078261E+08	2,078549E+08	2,868755E+09	2,868643E+09	4,156811E+08	5,737398E+09	6,153079E+09
-2738	2,078524E+08	2,078318E+08	2,868549E+09	2,868709E+09	4,156842E+08	5,737258E+09	6,152942E+09
-2737	2,078810E+08	2,078865E+08	2,868597E+09	2,868509E+09	4,157676E+08	5,737107E+09	6,152874E+09
-2736	2,078465E+08	2,078680E+08	2,868483E+09	2,868408E+09	4,157145E+08	5,736891E+09	6,152606E+09
-2735	2,078924E+08	2,078643E+08	2,868336E+09	2,868428E+09	4,157568E+08	5,736764E+09	6,152521E+09
-2734	2,078880E+08	2,079078E+08	2,868395E+09	2,868240E+09	4,157958E+08	5,736636E+09	6,152431E+09
-2733	2,078708E+08	2,078746E+08	2,868239E+09	2,868321E+09	4,157454E+08	5,736560E+09	6,152305E+09
-2732	2,079146E+08	2,078956E+08	2,868265E+09	2,868319E+09	4,158102E+08	5,736584E+09	6,152394E+09
-2731	2,078810E+08	2,079110E+08	2,868350E+09	2,868207E+09	4,157920E+08	5,736557E+09	6,152349E+09
-2730	2,078872E+08	2,078635E+08	2,868254E+09	2,868402E+09	4,157507E+08	5,736656E+09	6,152407E+09
-2729	2,079122E+08	2,078974E+08	2,868411E+09	2,868381E+09	4,158096E+08	5,736792E+09	6,152602E+09
-2728	2,078618E+08	2,078781E+08	2,868468E+09	2,868396E+09	4,157399E+08	5,736863E+09	6,152603E+09
-2727	2,078791E+08	2,078505E+08	2,868426E+09	2,868590E+09	4,157296E+08	5,737016E+09	6,152746E+09
-2726	2,078761E+08	2,078909E+08	2,868616E+09	2,868520E+09	4,157670E+08	5,737136E+09	6,152903E+09
-2725	2,078370E+08	2,078496E+08	2,868608E+09	2,868624E+09	4,156866E+08	5,737232E+09	6,152919E+09
-2724	2,078731E+08	2,078486E+08	2,868638E+09	2,868698E+09	4,157217E+08	5,737336E+09	6,153058E+09
-2723	2,078512E+08	2,078719E+08	2,868723E+09	2,868560E+09	4,157232E+08	5,737283E+09	6,153006E+09
-2722	2,078426E+08	2,078298E+08	2,868562E+09	2,868682E+09	4,156724E+08	5,737244E+09	6,152917E+09
-2721	2,078830E+08	2,078686E+08	2,868578E+09	2,868607E+09	4,157516E+08	5,737184E+09	6,152936E+09
-2720	2,078467E+08	2,078776E+08	2,868570E+09	2,868429E+09	4,157243E+08	5,736999E+09	6,152724E+09
-2719	2,078685E+08	2,078541E+08	2,868373E+09	2,868494E+09	4,157226E+08	5,736867E+09	6,152590E+09
-2718	2,078978E+08	2,079020E+08	2,868406E+09	2,868301E+09	4,157998E+08	5,736706E+09	6,152506E+09
-2717	2,078659E+08	2,078847E+08	2,868289E+09	2,868229E+09	4,157506E+08	5,736518E+09	6,152269E+09
-2716	2,079101E+08	2,078814E+08	2,868150E+09	2,868264E+09	4,157916E+08	5,736414E+09	6,152205E+09
-2715	2,079065E+08	2,079264E+08	2,868191E+09	2,868057E+09	4,158329E+08	5,736248E+09	6,152081E+09
-2714	2,078898E+08	2,078925E+08	2,868063E+09	2,868143E+09	4,157823E+08	5,736206E+09	6,151988E+09
-2713	2,079322E+08	2,079108E+08	2,868103E+09	2,868154E+09	4,158430E+08	5,736257E+09	6,152100E+09
-2712	2,079001E+08	2,079249E+08	2,868213E+09	2,868041E+09	4,158250E+08	5,736254E+09	6,152079E+09
-2711	2,078984E+08	2,078781E+08	2,868107E+09	2,868250E+09	4,157765E+08	5,736357E+09	6,152134E+09
-2710	2,079212E+08	2,079097E+08	2,868240E+09	2,868237E+09	4,158309E+08	5,736477E+09	6,152308E+09
-2709	2,078728E+08	2,078949E+08	2,868312E+09	2,868267E+09	4,157677E+08	5,736579E+09	6,152347E+09
-2708	2,078904E+08	2,078654E+08	2,868298E+09	2,868453E+09	4,157558E+08	5,736751E+09	6,152507E+09
-2707	2,078916E+08	2,079024E+08	2,868469E+09	2,868356E+09	4,157940E+08	5,736825E+09	6,152619E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2706	2,078552E+08	2,078601E+08	2,868460E+09	2,868462E+09	4,157153E+08	5,736922E+09	6,152637E+09
-2705	2,078896E+08	2,078607E+08	2,868467E+09	2,868543E+09	4,157503E+08	5,737010E+09	6,152760E+09
-2704	2,078694E+08	2,078904E+08	2,868560E+09	2,868389E+09	4,157598E+08	5,736948E+09	6,152708E+09
-2703	2,078547E+08	2,078534E+08	2,868393E+09	2,868501E+09	4,157081E+08	5,736893E+09	6,152601E+09
-2702	2,078964E+08	2,078868E+08	2,868392E+09	2,868415E+09	4,157832E+08	5,736808E+09	6,152591E+09
-2701	2,078658E+08	2,078958E+08	2,868388E+09	2,868247E+09	4,157616E+08	5,736636E+09	6,152397E+09
-2700	2,078884E+08	2,078680E+08	2,868183E+09	2,868304E+09	4,157564E+08	5,736487E+09	6,152244E+09
-2699	2,079193E+08	2,079152E+08	2,868171E+09	2,868093E+09	4,158345E+08	5,736263E+09	6,152098E+09
-2698	2,078879E+08	2,079030E+08	2,868060E+09	2,868026E+09	4,157909E+08	5,736086E+09	6,151877E+09
-2697	2,079280E+08	2,079023E+08	2,867937E+09	2,868073E+09	4,158303E+08	5,736010E+09	6,151840E+09
-2696	2,079267E+08	2,079489E+08	2,868029E+09	2,867861E+09	4,158756E+08	5,735890E+09	6,151766E+09
-2695	2,079043E+08	2,079124E+08	2,867919E+09	2,867962E+09	4,158167E+08	5,735881E+09	6,151698E+09
-2694	2,079457E+08	2,079221E+08	2,867945E+09	2,867995E+09	4,158678E+08	5,735940E+09	6,151808E+09
-2693	2,079154E+08	2,079380E+08	2,868056E+09	2,867913E+09	4,158534E+08	5,735969E+09	6,151823E+09
-2692	2,079104E+08	2,078922E+08	2,867961E+09	2,868122E+09	4,158026E+08	5,736084E+09	6,151886E+09
-2691	2,079337E+08	2,079237E+08	2,868078E+09	2,868087E+09	4,158573E+08	5,736165E+09	6,152022E+09
-2690	2,078876E+08	2,079094E+08	2,868180E+09	2,868111E+09	4,157970E+08	5,736290E+09	6,152087E+09
-2689	2,079040E+08	2,078778E+08	2,868172E+09	2,868305E+09	4,157818E+08	5,736477E+09	6,152259E+09
-2688	2,079086E+08	2,079153E+08	2,868348E+09	2,868199E+09	4,158239E+08	5,736547E+09	6,152371E+09
-2687	2,078664E+08	2,078754E+08	2,868314E+09	2,868311E+09	4,157418E+08	5,736625E+09	6,152366E+09
-2686	2,079006E+08	2,078747E+08	2,868280E+09	2,868390E+09	4,157754E+08	5,736670E+09	6,152446E+09
-2685	2,078846E+08	2,079084E+08	2,868370E+09	2,868233E+09	4,157930E+08	5,736603E+09	6,152396E+09
-2684	2,078717E+08	2,078707E+08	2,868213E+09	2,868320E+09	4,157424E+08	5,736533E+09	6,152276E+09
-2683	2,079179E+08	2,078999E+08	2,868175E+09	2,868201E+09	4,158178E+08	5,736376E+09	6,152194E+09
-2682	2,078898E+08	2,079108E+08	2,868172E+09	2,868028E+09	4,158006E+08	5,736200E+09	6,152001E+09
-2681	2,079090E+08	2,078862E+08	2,867967E+09	2,868097E+09	4,157952E+08	5,736064E+09	6,151859E+09
-2680	2,079394E+08	2,079395E+08	2,867980E+09	2,867880E+09	4,158789E+08	5,735860E+09	6,151739E+09
-2679	2,079012E+08	2,079303E+08	2,867894E+09	2,867826E+09	4,158314E+08	5,735720E+09	6,151551E+09
-2678	2,079407E+08	2,079220E+08	2,867774E+09	2,867889E+09	4,158627E+08	5,735663E+09	6,151526E+09
-2677	2,079436E+08	2,079656E+08	2,867878E+09	2,867710E+09	4,159092E+08	5,735588E+09	6,151497E+09
-2676	2,079209E+08	2,079239E+08	2,867764E+09	2,867819E+09	4,158449E+08	5,735583E+09	6,151427E+09
-2675	2,079627E+08	2,079302E+08	2,867741E+09	2,867839E+09	4,158929E+08	5,735580E+09	6,151473E+09
-2674	2,079333E+08	2,079510E+08	2,867861E+09	2,867756E+09	4,158843E+08	5,735617E+09	6,151502E+09
-2673	2,079246E+08	2,079075E+08	2,867795E+09	2,867964E+09	4,158321E+08	5,735759E+09	6,151591E+09
-2672	2,079499E+08	2,079409E+08	2,867956E+09	2,867917E+09	4,158907E+08	5,735874E+09	6,151764E+09
-2671	2,078996E+08	2,079256E+08	2,868075E+09	2,867952E+09	4,158252E+08	5,736026E+09	6,151852E+09
-2670	2,079146E+08	2,078877E+08	2,868039E+09	2,868164E+09	4,158023E+08	5,736203E+09	6,152005E+09
-2669	2,079223E+08	2,079285E+08	2,868201E+09	2,868083E+09	4,158508E+08	5,736284E+09	6,152135E+09
-2668	2,078793E+08	2,078908E+08	2,868154E+09	2,868175E+09	4,157701E+08	5,736329E+09	6,152099E+09
-2667	2,079158E+08	2,078887E+08	2,868078E+09	2,868218E+09	4,158045E+08	5,736296E+09	6,152101E+09
-2666	2,079049E+08	2,079247E+08	2,868178E+09	2,868037E+09	4,158296E+08	5,736215E+09	6,152045E+09
-2665	2,078911E+08	2,078869E+08	2,868024E+09	2,868112E+09	4,157780E+08	5,736135E+09	6,151913E+09
-2664	2,079394E+08	2,079188E+08	2,867987E+09	2,867978E+09	4,158582E+08	5,735965E+09	6,151824E+09
-2663	2,079053E+08	2,079335E+08	2,867977E+09	2,867813E+09	4,158388E+08	5,735790E+09	6,151629E+09
-2662	2,079221E+08	2,079074E+08	2,867759E+09	2,867898E+09	4,158295E+08	5,735657E+09	6,151487E+09
-2661	2,079552E+08	2,079623E+08	2,867797E+09	2,867708E+09	4,159175E+08	5,735505E+09	6,151422E+09
-2660	2,079190E+08	2,079487E+08	2,867732E+09	2,867654E+09	4,158677E+08	5,735387E+09	6,151254E+09
-2659	2,079612E+08	2,079324E+08	2,867577E+09	2,867711E+09	4,158936E+08	5,735289E+09	6,151182E+09
-2658	2,079669E+08	2,079764E+08	2,867681E+09	2,867538E+09	4,159432E+08	5,735218E+09	6,151161E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2657	2,079396E+08	2,079378E+08	2,867573E+09	2,867653E+09	4,158774E+08	5,735226E+09	6,151104E+09
-2656	2,079797E+08	2,079500E+08	2,867575E+09	2,867661E+09	4,159297E+08	5,735237E+09	6,151166E+09
-2655	2,079432E+08	2,079729E+08	2,867732E+09	2,867587E+09	4,159162E+08	5,735320E+09	6,151236E+09
-2654	2,079335E+08	2,079229E+08	2,867680E+09	2,867814E+09	4,158564E+08	5,735493E+09	6,151350E+09
-2653	2,079614E+08	2,079535E+08	2,867851E+09	2,867797E+09	4,159150E+08	5,735648E+09	6,151563E+09
-2652	2,079123E+08	2,079349E+08	2,867954E+09	2,867836E+09	4,158472E+08	5,735791E+09	6,151638E+09
-2651	2,079281E+08	2,078952E+08	2,867851E+09	2,868029E+09	4,158233E+08	5,735880E+09	6,151703E+09
-2650	2,079389E+08	2,079415E+08	2,868000E+09	2,867929E+09	4,158804E+08	5,735929E+09	6,151809E+09
-2649	2,078954E+08	2,079077E+08	2,867964E+09	2,867997E+09	4,158030E+08	5,735961E+09	6,151764E+09
-2648	2,079357E+08	2,079082E+08	2,867903E+09	2,868004E+09	4,158439E+08	5,735908E+09	6,151752E+09
-2647	2,079216E+08	2,079444E+08	2,868011E+09	2,867820E+09	4,158660E+08	5,735831E+09	6,151697E+09
-2646	2,079068E+08	2,079036E+08	2,867838E+09	2,867906E+09	4,158104E+08	5,735744E+09	6,151554E+09
-2645	2,079553E+08	2,079392E+08	2,867807E+09	2,867800E+09	4,158945E+08	5,735607E+09	6,151501E+09
-2644	2,079210E+08	2,079554E+08	2,867803E+09	2,867638E+09	4,158764E+08	5,735441E+09	6,151317E+09
-2643	2,079392E+08	2,079247E+08	2,867554E+09	2,867711E+09	4,158638E+08	5,735266E+09	6,151130E+09
-2642	2,079776E+08	2,079787E+08	2,867600E+09	2,867522E+09	4,159563E+08	5,735122E+09	6,151078E+09
-2641	2,079417E+08	2,079630E+08	2,867537E+09	2,867470E+09	4,159046E+08	5,735008E+09	6,150912E+09
-2640	2,079840E+08	2,079486E+08	2,867378E+09	2,867515E+09	4,159326E+08	5,734892E+09	6,150825E+09
-2639	2,079828E+08	2,079958E+08	2,867487E+09	2,867347E+09	4,159786E+08	5,734834E+09	6,150812E+09
-2638	2,079512E+08	2,079562E+08	2,867387E+09	2,867474E+09	4,159075E+08	5,734861E+09	6,150769E+09
-2637	2,079911E+08	2,079692E+08	2,867440E+09	2,867511E+09	4,159603E+08	5,734951E+09	6,150912E+09
-2636	2,079561E+08	2,079877E+08	2,867624E+09	2,867449E+09	4,159438E+08	5,735073E+09	6,151017E+09
-2635	2,079471E+08	2,079297E+08	2,867538E+09	2,867679E+09	4,158768E+08	5,735217E+09	6,151093E+09
-2634	2,079782E+08	2,079621E+08	2,867697E+09	2,867671E+09	4,159404E+08	5,735368E+09	6,151309E+09
-2633	2,079273E+08	2,079467E+08	2,867792E+09	2,867704E+09	4,158741E+08	5,735496E+09	6,151371E+09
-2632	2,079432E+08	2,079142E+08	2,867687E+09	2,867861E+09	4,158574E+08	5,735548E+09	6,151406E+09
-2631	2,079507E+08	2,079617E+08	2,867849E+09	2,867743E+09	4,159124E+08	5,735592E+09	6,151505E+09
-2630	2,079079E+08	2,079247E+08	2,867808E+09	2,867806E+09	4,158326E+08	5,735614E+09	6,151447E+09
-2629	2,079508E+08	2,079246E+08	2,867754E+09	2,867831E+09	4,158754E+08	5,735584E+09	6,151460E+09
-2628	2,079379E+08	2,079598E+08	2,867842E+09	2,867649E+09	4,158977E+08	5,735491E+09	6,151389E+09
-2627	2,079234E+08	2,079175E+08	2,867613E+09	2,867724E+09	4,158409E+08	5,735337E+09	6,151178E+09
-2626	2,079747E+08	2,079578E+08	2,867580E+09	2,867612E+09	4,159325E+08	5,735192E+09	6,151125E+09
-2625	2,079420E+08	2,079751E+08	2,867596E+09	2,867442E+09	4,159171E+08	5,735038E+09	6,150955E+09
-2624	2,079632E+08	2,079460E+08	2,867357E+09	2,867491E+09	4,159092E+08	5,734848E+09	6,150757E+09
-2623	2,079977E+08	2,079977E+08	2,867409E+09	2,867307E+09	4,159954E+08	5,734717E+09	6,150712E+09
-2622	2,079598E+08	2,079804E+08	2,867334E+09	2,867275E+09	4,159402E+08	5,734609E+09	6,150549E+09
-2621	2,079994E+08	2,079686E+08	2,867197E+09	2,867344E+09	4,159680E+08	5,734541E+09	6,150509E+09
-2620	2,079956E+08	2,080157E+08	2,867333E+09	2,867188E+09	4,160113E+08	5,734521E+09	6,150533E+09
-2619	2,079636E+08	2,079704E+08	2,867232E+09	2,867315E+09	4,159340E+08	5,734547E+09	6,150481E+09
-2618	2,080062E+08	2,079816E+08	2,867305E+09	2,867367E+09	4,159878E+08	5,734671E+09	6,150659E+09
-2617	2,079727E+08	2,079971E+08	2,867493E+09	2,867320E+09	4,159699E+08	5,734813E+09	6,150783E+09
-2616	2,079641E+08	2,079421E+08	2,867385E+09	2,867530E+09	4,159062E+08	5,734915E+09	6,150821E+09
-2615	2,079904E+08	2,079773E+08	2,867532E+09	2,867519E+09	4,159677E+08	5,735051E+09	6,151019E+09
-2614	2,079385E+08	2,079626E+08	2,867616E+09	2,867545E+09	4,159011E+08	5,735162E+09	6,151063E+09
-2613	2,079557E+08	2,079317E+08	2,867542E+09	2,867702E+09	4,158874E+08	5,735244E+09	6,151131E+09
-2612	2,079659E+08	2,079761E+08	2,867710E+09	2,867579E+09	4,159420E+08	5,735289E+09	6,151231E+09
-2611	2,079248E+08	2,079347E+08	2,867627E+09	2,867628E+09	4,158595E+08	5,735255E+09	6,151114E+09
-2610	2,079700E+08	2,079389E+08	2,867557E+09	2,867655E+09	4,159089E+08	5,735212E+09	6,151121E+09
-2609	2,079572E+08	2,079783E+08	2,867642E+09	2,867471E+09	4,159355E+08	5,735112E+09	6,151048E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2608	2,079426E+08	2,079424E+08	2,867414E+09	2,867515E+09	4,158850E+08	5,734929E+09	6,150814E+09
-2607	2,079914E+08	2,079820E+08	2,867398E+09	2,867397E+09	4,159734E+08	5,734795E+09	6,150768E+09
-2606	2,079603E+08	2,079946E+08	2,867404E+09	2,867234E+09	4,159550E+08	5,734638E+09	6,150592E+09
-2605	2,079824E+08	2,079641E+08	2,867177E+09	2,867304E+09	4,159464E+08	5,734481E+09	6,150428E+09
-2604	2,080159E+08	2,080136E+08	2,867216E+09	2,867128E+09	4,160295E+08	5,734344E+09	6,150373E+09
-2603	2,079760E+08	2,079947E+08	2,867107E+09	2,867091E+09	4,159707E+08	5,734198E+09	6,150169E+09
-2602	2,080162E+08	2,079865E+08	2,866997E+09	2,867168E+09	4,160027E+08	5,734164E+09	6,150167E+09
-2601	2,080133E+08	2,080315E+08	2,867172E+09	2,867024E+09	4,160448E+08	5,734196E+09	6,150241E+09
-2600	2,079827E+08	2,079866E+08	2,867091E+09	2,867141E+09	4,159693E+08	5,734232E+09	6,150201E+09
-2599	2,080209E+08	2,079950E+08	2,867174E+09	2,867208E+09	4,160159E+08	5,734382E+09	6,150398E+09
-2598	2,079864E+08	2,080095E+08	2,867342E+09	2,867183E+09	4,159958E+08	5,734525E+09	6,150521E+09
-2597	2,079752E+08	2,079584E+08	2,867250E+09	2,867405E+09	4,159336E+08	5,734655E+09	6,150589E+09
-2596	2,080004E+08	2,079930E+08	2,867398E+09	2,867387E+09	4,159934E+08	5,734785E+09	6,150778E+09
-2595	2,079503E+08	2,079742E+08	2,867456E+09	2,867392E+09	4,159245E+08	5,734848E+09	6,150772E+09
-2594	2,079719E+08	2,079445E+08	2,867381E+09	2,867540E+09	4,159164E+08	5,734921E+09	6,150837E+09
-2593	2,079847E+08	2,079879E+08	2,867542E+09	2,867416E+09	4,159725E+08	5,734958E+09	6,150930E+09
-2592	2,079446E+08	2,079529E+08	2,867433E+09	2,867432E+09	4,158975E+08	5,734865E+09	6,150763E+09
-2591	2,079844E+08	2,079602E+08	2,867358E+09	2,867450E+09	4,159447E+08	5,734808E+09	6,150752E+09
-2590	2,079727E+08	2,080003E+08	2,867437E+09	2,867271E+09	4,159730E+08	5,734707E+09	6,150680E+09
-2589	2,079601E+08	2,079644E+08	2,867240E+09	2,867318E+09	4,159244E+08	5,734558E+09	6,150482E+09
-2588	2,080107E+08	2,079987E+08	2,867221E+09	2,867207E+09	4,160094E+08	5,734427E+09	6,150437E+09
-2587	2,079814E+08	2,080068E+08	2,867183E+09	2,867041E+09	4,159882E+08	5,734224E+09	6,150212E+09
-2586	2,080043E+08	2,079803E+08	2,866951E+09	2,867114E+09	4,159846E+08	5,734065E+09	6,150050E+09
-2585	2,080363E+08	2,080315E+08	2,867005E+09	2,866944E+09	4,160678E+08	5,733950E+09	6,150018E+09
-2584	2,079953E+08	2,080178E+08	2,866917E+09	2,866883E+09	4,160131E+08	5,733800E+09	6,149813E+09
-2583	2,080307E+08	2,080069E+08	2,866849E+09	2,866970E+09	4,160375E+08	5,733819E+09	6,149857E+09
-2582	2,080289E+08	2,080469E+08	2,867030E+09	2,866862E+09	4,160757E+08	5,733892E+09	6,149968E+09
-2581	2,079974E+08	2,080000E+08	2,866970E+09	2,867009E+09	4,159974E+08	5,733979E+09	6,149976E+09
-2580	2,080331E+08	2,080066E+08	2,867033E+09	2,867090E+09	4,160397E+08	5,734123E+09	6,150163E+09
-2579	2,079980E+08	2,080193E+08	2,867158E+09	2,867053E+09	4,160174E+08	5,734211E+09	6,150228E+09
-2578	2,079885E+08	2,079730E+08	2,867076E+09	2,867262E+09	4,159615E+08	5,734338E+09	6,150299E+09
-2577	2,080169E+08	2,080052E+08	2,867242E+09	2,867234E+09	4,160221E+08	5,734477E+09	6,150499E+09
-2576	2,079690E+08	2,079896E+08	2,867298E+09	2,867205E+09	4,159586E+08	5,734503E+09	6,150461E+09
-2575	2,079875E+08	2,079603E+08	2,867228E+09	2,867350E+09	4,159478E+08	5,734578E+09	6,150525E+09
-2574	2,079999E+08	2,080047E+08	2,867362E+09	2,867240E+09	4,160047E+08	5,734602E+09	6,150607E+09
-2573	2,079584E+08	2,079744E+08	2,867278E+09	2,867263E+09	4,159328E+08	5,734541E+09	6,150474E+09
-2572	2,079972E+08	2,079806E+08	2,867201E+09	2,867278E+09	4,159778E+08	5,734479E+09	6,150457E+09
-2571	2,079887E+08	2,080148E+08	2,867244E+09	2,867086E+09	4,160035E+08	5,734330E+09	6,150334E+09
-2570	2,079812E+08	2,079803E+08	2,867037E+09	2,867131E+09	4,159615E+08	5,734168E+09	6,150130E+09
-2569	2,080347E+08	2,080112E+08	2,867000E+09	2,867020E+09	4,160459E+08	5,734021E+09	6,150067E+09
-2568	2,080054E+08	2,080266E+08	2,866938E+09	2,866819E+09	4,160320E+08	5,733757E+09	6,149789E+09
-2567	2,080225E+08	2,080030E+08	2,866728E+09	2,866884E+09	4,160255E+08	5,733611E+09	6,149637E+09
-2566	2,080530E+08	2,080534E+08	2,866805E+09	2,866735E+09	4,161064E+08	5,733540E+09	6,149646E+09
-2565	2,080119E+08	2,080385E+08	2,866783E+09	2,866699E+09	4,160504E+08	5,733482E+09	6,149532E+09
-2564	2,080448E+08	2,080219E+08	2,866728E+09	2,866817E+09	4,160668E+08	5,733545E+09	6,149611E+09
-2563	2,080434E+08	2,080562E+08	2,866869E+09	2,866730E+09	4,160996E+08	5,733599E+09	6,149699E+09
-2562	2,080129E+08	2,080133E+08	2,866802E+09	2,866886E+09	4,160263E+08	5,733687E+09	6,149714E+09
-2561	2,080477E+08	2,080191E+08	2,866870E+09	2,866967E+09	4,160669E+08	5,733837E+09	6,149904E+09
-2560	2,080137E+08	2,080365E+08	2,866995E+09	2,866885E+09	4,160502E+08	5,733880E+09	6,149930E+09

1	14	15	16	17	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	2,080015E+08	2,079887E+08	2,866939E+09	2,867075E+09	4,159901E+08	5,734014E+09	6,150004E+09
-2558	2,080314E+08	2,080180E+08	2,867096E+09	2,867068E+09	4,160494E+08	5,734164E+09	6,150213E+09
-2557	2,079840E+08	2,080039E+08	2,867167E+09	2,867046E+09	4,159879E+08	5,734213E+09	6,150200E+09
-2556	2,079990E+08	2,079755E+08	2,867073E+09	2,867197E+09	4,159745E+08	5,734271E+09	6,150245E+09
-2555	2,080123E+08	2,080190E+08	2,867163E+09	2,867081E+09	4,160313E+08	5,734244E+09	6,150275E+09
-2554	2,079754E+08	2,079924E+08	2,867080E+09	2,867090E+09	4,159678E+08	5,734170E+09	6,150138E+09
-2553	2,080191E+08	2,079943E+08	2,867006E+09	2,867098E+09	4,160133E+08	5,734104E+09	6,150117E+09
-2552	2,080140E+08	2,080317E+08	2,867024E+09	2,866865E+09	4,160457E+08	5,733888E+09	6,149934E+09
-2551	2,080037E+08	2,079996E+08	2,866819E+09	2,866897E+09	4,160033E+08	5,733715E+09	6,149719E+09
-2550	2,080549E+08	2,080326E+08	2,866769E+09	2,866804E+09	4,160875E+08	5,733572E+09	6,149660E+09
-2549	2,080224E+08	2,080525E+08	2,866757E+09	2,866609E+09	4,160749E+08	5,733366E+09	6,149441E+09
-2548	2,080353E+08	2,080265E+08	2,866576E+09	2,866691E+09	4,160618E+08	5,733267E+09	6,149329E+09
-2547	2,080665E+08	2,080688E+08	2,866643E+09	2,866562E+09	4,161354E+08	5,733206E+09	6,149341E+09
-2546	2,080297E+08	2,080529E+08	2,866629E+09	2,866554E+09	4,160826E+08	5,733183E+09	6,149265E+09
-2545	2,080636E+08	2,080311E+08	2,866564E+09	2,866690E+09	4,160947E+08	5,733254E+09	6,149348E+09
-2544	2,080618E+08	2,080703E+08	2,866671E+09	2,866574E+09	4,161321E+08	5,733245E+09	6,149377E+09
-2543	2,080273E+08	2,080301E+08	2,866623E+09	2,866711E+09	4,160573E+08	5,733335E+09	6,149392E+09
-2542	2,080614E+08	2,080339E+08	2,866697E+09	2,866799E+09	4,160953E+08	5,733496E+09	6,149591E+09
-2541	2,080281E+08	2,080512E+08	2,866877E+09	2,866720E+09	4,160794E+08	5,733598E+09	6,149677E+09
-2540	2,080135E+08	2,080014E+08	2,866828E+09	2,866923E+09	4,160150E+08	5,733751E+09	6,149766E+09
-2539	2,080430E+08	2,080274E+08	2,866941E+09	2,866926E+09	4,160704E+08	5,733867E+09	6,149937E+09
-2538	2,079985E+08	2,080199E+08	2,867002E+09	2,866909E+09	4,160184E+08	5,733911E+09	6,149930E+09
-2537	2,080141E+08	2,079908E+08	2,866904E+09	2,867053E+09	4,160049E+08	5,733957E+09	6,149961E+09
-2536	2,080301E+08	2,080381E+08	2,866970E+09	2,866889E+09	4,160682E+08	5,733858E+09	6,149926E+09
-2535	2,079943E+08	2,080113E+08	2,866896E+09	2,866873E+09	4,160056E+08	5,733769E+09	6,149775E+09
-2534	2,080396E+08	2,080107E+08	2,866796E+09	2,866891E+09	4,160503E+08	5,733687E+09	6,149738E+09
-2533	2,080348E+08	2,080510E+08	2,866829E+09	2,866655E+09	4,160857E+08	5,733484E+09	6,149570E+09
-2532	2,080195E+08	2,080218E+08	2,866617E+09	2,866686E+09	4,160413E+08	5,733304E+09	6,149345E+09
-2531	2,080687E+08	2,080525E+08	2,866548E+09	2,866599E+09	4,161212E+08	5,733146E+09	6,149268E+09
-2530	2,080403E+08	2,080742E+08	2,866566E+09	2,866418E+09	4,161145E+08	5,732984E+09	6,149099E+09
-2529	2,080555E+08	2,080408E+08	2,866410E+09	2,866523E+09	4,160963E+08	5,732933E+09	6,149029E+09
-2528	2,080886E+08	2,080836E+08	2,866457E+09	2,866383E+09	4,161722E+08	5,732840E+09	6,149012E+09
-2527	2,080502E+08	2,080676E+08	2,866447E+09	2,866376E+09	4,161178E+08	5,732823E+09	6,148941E+09
-2526	2,080806E+08	2,080463E+08	2,866372E+09	2,866534E+09	4,161269E+08	5,732906E+09	6,149033E+09
-2525	2,080764E+08	2,080884E+08	2,866526E+09	2,866412E+09	4,161648E+08	5,732938E+09	6,149103E+09
-2524	2,080369E+08	2,080471E+08	2,866502E+09	2,866551E+09	4,160840E+08	5,733052E+09	6,149136E+09
-2523	2,080712E+08	2,080447E+08	2,866558E+09	2,866651E+09	4,161159E+08	5,733209E+09	6,149325E+09
-2522	2,080426E+08	2,080630E+08	2,866738E+09	2,866590E+09	4,161056E+08	5,733327E+09	6,149433E+09
-2521	2,080292E+08	2,080107E+08	2,866678E+09	2,866799E+09	4,160398E+08	5,733477E+09	6,149516E+09
-2520	2,080586E+08	2,080430E+08	2,866748E+09	2,866763E+09	4,161016E+08	5,733510E+09	6,149612E+09
-2519	2,080140E+08	2,080388E+08	2,866822E+09	2,866719E+09	4,160528E+08	5,733541E+09	6,149594E+09
-2518	2,080302E+08	2,080086E+08	2,866717E+09	2,866865E+09	4,160388E+08	5,733583E+09	6,149621E+09
-2517	2,080487E+08	2,080557E+08	2,866815E+09	2,866690E+09	4,161044E+08	5,733505E+09	6,149609E+09
-2516	2,080109E+08	2,080296E+08	2,866729E+09	2,866675E+09	4,160405E+08	5,733405E+09	6,149445E+09
-2515	2,080558E+08	2,080268E+08	2,866581E+09	2,866699E+09	4,160826E+08	5,733280E+09	6,149362E+09
-2514	2,080529E+08	2,080731E+08	2,866617E+09	2,866468E+09	4,161260E+08	5,733085E+09	6,149211E+09
-2513	2,080384E+08	2,080416E+08	2,866425E+09	2,866498E+09	4,160800E+08	5,732923E+09	6,149003E+09
-2512	2,080877E+08	2,080727E+08	2,866346E+09	2,866383E+09	4,161604E+08	5,732729E+09	6,148890E+09
-2511	2,080618E+08	2,080923E+08	2,866390E+09	2,866209E+09	4,161541E+08	5,732599E+09	6,148753E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2510	2,080762E+08	2,080551E+08	2,866216E+09	2,866346E+09	4,161312E+08	5,732561E+09	6,148693E+09
-2509	2,081079E+08	2,080995E+08	2,866282E+09	2,866214E+09	4,162074E+08	5,732496E+09	6,148703E+09
-2508	2,080640E+08	2,080863E+08	2,866271E+09	2,866213E+09	4,161504E+08	5,732484E+09	6,148635E+09
-2507	2,080911E+08	2,080613E+08	2,866182E+09	2,866373E+09	4,161524E+08	5,732555E+09	6,148708E+09
-2506	2,080905E+08	2,081040E+08	2,866368E+09	2,866261E+09	4,161945E+08	5,732630E+09	6,148824E+09
-2505	2,080532E+08	2,080568E+08	2,866370E+09	2,866408E+09	4,161100E+08	5,732778E+09	6,148888E+09
-2504	2,080872E+08	2,080567E+08	2,866401E+09	2,866490E+09	4,161440E+08	5,732891E+09	6,149034E+09
-2503	2,080590E+08	2,080782E+08	2,866586E+09	2,866428E+09	4,161372E+08	5,733014E+09	6,149151E+09
-2502	2,080424E+08	2,080278E+08	2,866513E+09	2,866651E+09	4,160702E+08	5,733164E+09	6,149234E+09
-2501	2,080712E+08	2,080628E+08	2,866616E+09	2,866599E+09	4,161339E+08	5,733215E+09	6,149349E+09
-2500	2,080254E+08	2,080576E+08	2,866691E+09	2,866546E+09	4,160830E+08	5,733236E+09	6,149319E+09
-2499	2,080430E+08	2,080218E+08	2,866545E+09	2,866693E+09	4,160648E+08	5,733237E+09	6,149302E+09
-2498	2,080677E+08	2,080698E+08	2,866622E+09	2,866522E+09	4,161375E+08	5,733144E+09	6,149282E+09
-2497	2,080318E+08	2,080434E+08	2,866518E+09	2,866499E+09	4,160752E+08	5,733018E+09	6,149093E+09
-2496	2,080761E+08	2,080469E+08	2,866331E+09	2,866481E+09	4,161230E+08	5,732812E+09	6,148935E+09
-2495	2,080745E+08	2,080952E+08	2,866390E+09	2,866231E+09	4,161697E+08	5,732622E+09	6,148791E+09
-2494	2,080594E+08	2,080614E+08	2,866216E+09	2,866282E+09	4,161208E+08	5,732498E+09	6,148618E+09
-2493	2,081089E+08	2,080917E+08	2,866181E+09	2,866174E+09	4,162007E+08	5,732355E+09	6,148556E+09
-2492	2,080800E+08	2,081110E+08	2,866223E+09	2,866023E+09	4,161910E+08	5,732246E+09	6,148437E+09
-2491	2,080912E+08	2,080716E+08	2,866016E+09	2,866182E+09	4,161628E+08	5,732198E+09	6,148361E+09
-2490	2,081234E+08	2,081188E+08	2,866093E+09	2,866064E+09	4,162422E+08	5,732157E+09	6,148399E+09
-2489	2,080797E+08	2,081023E+08	2,866108E+09	2,866062E+09	4,161820E+08	5,732170E+09	6,148352E+09
-2488	2,081061E+08	2,080768E+08	2,866012E+09	2,866193E+09	4,161829E+08	5,732205E+09	6,148388E+09
-2487	2,081078E+08	2,081173E+08	2,866227E+09	2,866086E+09	4,162251E+08	5,732313E+09	6,148538E+09
-2486	2,080688E+08	2,080684E+08	2,866223E+09	2,866262E+09	4,161372E+08	5,732486E+09	6,148623E+09
-2485	2,081004E+08	2,080720E+08	2,866273E+09	2,866341E+09	4,161724E+08	5,732614E+09	6,148786E+09
-2484	2,080687E+08	2,080965E+08	2,866450E+09	2,866283E+09	4,161653E+08	5,732733E+09	6,148899E+09
-2483	2,080510E+08	2,080431E+08	2,866350E+09	2,866502E+09	4,160941E+08	5,732852E+09	6,148946E+09
-2482	2,080855E+08	2,080769E+08	2,866458E+09	2,866453E+09	4,161625E+08	5,732912E+09	6,149074E+09
-2481	2,080452E+08	2,080676E+08	2,866527E+09	2,866392E+09	4,161128E+08	5,732918E+09	6,149031E+09
-2480	2,080638E+08	2,080349E+08	2,866326E+09	2,866497E+09	4,160987E+08	5,732823E+09	6,148922E+09
-2479	2,080904E+08	2,080874E+08	2,866402E+09	2,866311E+09	4,161779E+08	5,732713E+09	6,148890E+09
-2478	2,080514E+08	2,080653E+08	2,866295E+09	2,866287E+09	4,161168E+08	5,732582E+09	6,148699E+09
-2477	2,080931E+08	2,080719E+08	2,866154E+09	2,866251E+09	4,161650E+08	5,732406E+09	6,148571E+09
-2476	2,080900E+08	2,081193E+08	2,866228E+09	2,866018E+09	4,162093E+08	5,732246E+09	6,148456E+09
-2475	2,080746E+08	2,080789E+08	2,866028E+09	2,866092E+09	4,161535E+08	5,732120E+09	6,148274E+09
-2474	2,081277E+08	2,081083E+08	2,865987E+09	2,866012E+09	4,162360E+08	5,731999E+09	6,148235E+09
-2473	2,081010E+08	2,081257E+08	2,866017E+09	2,865867E+09	4,162267E+08	5,731884E+09	6,148111E+09
-2472	2,081095E+08	2,080899E+08	2,865782E+09	2,865990E+09	4,161994E+08	5,731772E+09	6,147971E+09
-2471	2,081428E+08	2,081363E+08	2,865894E+09	2,865862E+09	4,162791E+08	5,731756E+09	6,148035E+09
-2470	2,080975E+08	2,081175E+08	2,865938E+09	2,865879E+09	4,162150E+08	5,731817E+09	6,148032E+09
-2469	2,081223E+08	2,080920E+08	2,865893E+09	2,866015E+09	4,162143E+08	5,731908E+09	6,148122E+09
-2468	2,081208E+08	2,081328E+08	2,866109E+09	2,865939E+09	4,162536E+08	5,732047E+09	6,148301E+09
-2467	2,080784E+08	2,080825E+08	2,866080E+09	2,866136E+09	4,161609E+08	5,732217E+09	6,148378E+09
-2466	2,081110E+08	2,080882E+08	2,866135E+09	2,866228E+09	4,161993E+08	5,732362E+09	6,148561E+09
-2465	2,080828E+08	2,081084E+08	2,866313E+09	2,866160E+09	4,161912E+08	5,732473E+09	6,148664E+09
-2464	2,080667E+08	2,080556E+08	2,866172E+09	2,866334E+09	4,161223E+08	5,732507E+09	6,148629E+09
-2463	2,081066E+08	2,080877E+08	2,866270E+09	2,866267E+09	4,161943E+08	5,732537E+09	6,148731E+09
-2462	2,080657E+08	2,080809E+08	2,866314E+09	2,866208E+09	4,161466E+08	5,732521E+09	6,148668E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2461	2,080825E+08	2,080561E+08	2,866130E+09	2,866282E+09	4,161385E+08	5,732412E+09	6,148550E+09
-2460	2,081049E+08	2,081125E+08	2,866207E+09	2,866093E+09	4,162174E+08	5,732300E+09	6,148518E+09
-2459	2,080645E+08	2,080878E+08	2,866098E+09	2,866075E+09	4,161523E+08	5,732173E+09	6,148326E+09
-2458	2,081097E+08	2,080918E+08	2,865978E+09	2,866061E+09	4,162015E+08	5,732040E+09	6,148241E+09
-2457	2,081115E+08	2,081338E+08	2,866050E+09	2,865845E+09	4,162453E+08	5,731896E+09	6,148141E+09
-2456	2,080965E+08	2,080953E+08	2,865801E+09	2,865900E+09	4,161919E+08	5,731702E+09	6,147893E+09
-2455	2,081510E+08	2,081261E+08	2,865764E+09	2,865816E+09	4,162771E+08	5,731580E+09	6,147857E+09
-2454	2,081212E+08	2,081456E+08	2,865804E+09	2,865679E+09	4,162668E+08	5,731483E+09	6,147749E+09
-2453	2,081266E+08	2,081116E+08	2,865624E+09	2,865779E+09	4,162382E+08	5,731403E+09	6,147641E+09
-2452	2,081562E+08	2,081551E+08	2,865761E+09	2,865675E+09	4,163113E+08	5,731436E+09	6,147747E+09
-2451	2,081093E+08	2,081307E+08	2,865797E+09	2,865725E+09	4,162399E+08	5,731521E+09	6,147761E+09
-2450	2,081344E+08	2,081046E+08	2,865758E+09	2,865896E+09	4,162390E+08	5,731655E+09	6,147894E+09
-2449	2,081356E+08	2,081443E+08	2,865962E+09	2,865833E+09	4,162799E+08	5,731795E+09	6,148075E+09
-2448	2,080920E+08	2,080961E+08	2,865893E+09	2,865991E+09	4,161881E+08	5,731883E+09	6,148072E+09
-2447	2,081283E+08	2,081003E+08	2,865962E+09	2,866062E+09	4,162286E+08	5,732024E+09	6,148253E+09
-2446	2,081013E+08	2,081195E+08	2,866139E+09	2,865992E+09	4,162207E+08	5,732131E+09	6,148352E+09
-2445	2,080845E+08	2,080713E+08	2,866018E+09	2,866135E+09	4,161558E+08	5,732154E+09	6,148309E+09
-2444	2,081216E+08	2,081065E+08	2,866101E+09	2,866079E+09	4,162281E+08	5,732180E+09	6,148408E+09
-2443	2,080779E+08	2,081016E+08	2,866122E+09	2,866021E+09	4,161794E+08	5,732143E+09	6,148323E+09
-2442	2,080950E+08	2,080792E+08	2,865959E+09	2,866101E+09	4,161741E+08	5,732060E+09	6,148234E+09
-2441	2,081216E+08	2,081310E+08	2,866043E+09	2,865914E+09	4,162526E+08	5,731957E+09	6,148209E+09
-2440	2,080836E+08	2,081046E+08	2,865898E+09	2,865871E+09	4,161882E+08	5,731769E+09	6,147957E+09
-2439	2,081337E+08	2,081056E+08	2,865770E+09	2,865861E+09	4,162392E+08	5,731631E+09	6,147870E+09
-2438	2,081355E+08	2,081490E+08	2,865817E+09	2,865658E+09	4,162845E+08	5,731474E+09	6,147759E+09
-2437	2,081185E+08	2,081182E+08	2,865583E+09	2,865682E+09	4,162367E+08	5,731266E+09	6,147503E+09
-2436	2,081680E+08	2,081496E+08	2,865556E+09	2,865603E+09	4,163177E+08	5,731159E+09	6,147477E+09
-2435	2,081356E+08	2,081654E+08	2,865611E+09	2,865477E+09	4,163010E+08	5,731088E+09	6,147389E+09
-2434	2,081422E+08	2,081281E+08	2,865476E+09	2,865607E+09	4,162703E+08	5,731083E+09	6,147353E+09
-2433	2,081737E+08	2,081657E+08	2,865621E+09	2,865535E+09	4,163395E+08	5,731156E+09	6,147496E+09
-2432	2,081259E+08	2,081431E+08	2,865625E+09	2,865580E+09	4,162690E+08	5,731205E+09	6,147474E+09
-2431	2,081512E+08	2,081184E+08	2,865592E+09	2,865752E+09	4,162696E+08	5,731344E+09	6,147614E+09
-2430	2,081500E+08	2,081593E+08	2,865798E+09	2,865696E+09	4,163093E+08	5,731494E+09	6,147804E+09
-2429	2,081060E+08	2,081145E+08	2,865764E+09	2,865814E+09	4,162205E+08	5,731579E+09	6,147799E+09
-2428	2,081402E+08	2,081156E+08	2,865829E+09	2,865891E+09	4,162557E+08	5,731720E+09	6,147976E+09
-2427	2,081132E+08	2,081317E+08	2,865978E+09	2,865829E+09	4,162448E+08	5,731807E+09	6,148052E+09
-2426	2,080977E+08	2,080865E+08	2,865856E+09	2,865979E+09	4,161842E+08	5,731835E+09	6,148019E+09
-2425	2,081370E+08	2,081225E+08	2,865923E+09	2,865921E+09	4,162594E+08	5,731843E+09	6,148103E+09
-2424	2,080937E+08	2,081204E+08	2,865911E+09	2,865825E+09	4,162141E+08	5,731735E+09	6,147949E+09
-2423	2,081151E+08	2,080959E+08	2,865763E+09	2,865894E+09	4,162110E+08	5,731657E+09	6,147868E+09
-2422	2,081434E+08	2,081460E+08	2,865843E+09	2,865719E+09	4,162894E+08	5,731562E+09	6,147851E+09
-2421	2,081071E+08	2,081244E+08	2,865708E+09	2,865650E+09	4,162315E+08	5,731357E+09	6,147589E+09
-2420	2,081537E+08	2,081269E+08	2,865563E+09	2,865655E+09	4,162807E+08	5,731218E+09	6,147499E+09
-2419	2,081524E+08	2,081714E+08	2,865594E+09	2,865457E+09	4,163238E+08	5,731051E+09	6,147375E+09
-2418	2,081341E+08	2,081418E+08	2,865397E+09	2,865488E+09	4,162759E+08	5,730885E+09	6,147161E+09
-2417	2,081853E+08	2,081676E+08	2,865388E+09	2,865422E+09	4,163529E+08	5,730810E+09	6,147163E+09
-2416	2,081532E+08	2,081798E+08	2,865421E+09	2,865287E+09	4,163331E+08	5,730708E+09	6,147041E+09
-2415	2,081621E+08	2,081393E+08	2,865302E+09	2,865437E+09	4,163014E+08	5,730738E+09	6,147040E+09
-2414	2,081916E+08	2,081784E+08	2,865441E+09	2,865392E+09	4,163700E+08	5,730833E+09	6,147203E+09
-2413	2,081421E+08	2,081627E+08	2,865466E+09	2,865410E+09	4,163047E+08	5,730876E+09	6,147181E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2412	2,081624E+08	2,081374E+08	2,865444E+09	2,865590E+09	4,162998E+08	5,731034E+09	6,147334E+09
-2411	2,081603E+08	2,081732E+08	2,865648E+09	2,865538E+09	4,163336E+08	5,731186E+09	6,147520E+09
-2410	2,081185E+08	2,081270E+08	2,865638E+09	2,865666E+09	4,162455E+08	5,731304E+09	6,147549E+09
-2409	2,081560E+08	2,081251E+08	2,865682E+09	2,865756E+09	4,162811E+08	5,731438E+09	6,147719E+09
-2408	2,081292E+08	2,081445E+08	2,865785E+09	2,865667E+09	4,162737E+08	5,731452E+09	6,147725E+09
-2407	2,081159E+08	2,081029E+08	2,865670E+09	2,865802E+09	4,162187E+08	5,731472E+09	6,147691E+09
-2406	2,081535E+08	2,081404E+08	2,865739E+09	2,865740E+09	4,162940E+08	5,731479E+09	6,147773E+09
-2405	2,081126E+08	2,081429E+08	2,865749E+09	2,865605E+09	4,162554E+08	5,731355E+09	6,147610E+09
-2404	2,081321E+08	2,081157E+08	2,865590E+09	2,865687E+09	4,162478E+08	5,731277E+09	6,147525E+09
-2403	2,081601E+08	2,081630E+08	2,865634E+09	2,865528E+09	4,163231E+08	5,731162E+09	6,147485E+09
-2402	2,081258E+08	2,081449E+08	2,865501E+09	2,865465E+09	4,162708E+08	5,730965E+09	6,147236E+09
-2401	2,081734E+08	2,081467E+08	2,865339E+09	2,865469E+09	4,163201E+08	5,730808E+09	6,147128E+09
-2400	2,081715E+08	2,081908E+08	2,865353E+09	2,865239E+09	4,163623E+08	5,730592E+09	6,146954E+09
-2399	2,081566E+08	2,081585E+08	2,865191E+09	2,865265E+09	4,163151E+08	5,730457E+09	6,146772E+09
-2398	2,082057E+08	2,081815E+08	2,865200E+09	2,865228E+09	4,163872E+08	5,730429E+09	6,146816E+09
-2397	2,081740E+08	2,081993E+08	2,865261E+09	2,865090E+09	4,163732E+08	5,730351E+09	6,146724E+09
-2396	2,081766E+08	2,081590E+08	2,865147E+09	2,865272E+09	4,163357E+08	5,730419E+09	6,146755E+09
-2395	2,082018E+08	2,081972E+08	2,865283E+09	2,865248E+09	4,163990E+08	5,730531E+09	6,146930E+09
-2394	2,081531E+08	2,081801E+08	2,865346E+09	2,865274E+09	4,163332E+08	5,730619E+09	6,146953E+09
-2393	2,081749E+08	2,081489E+08	2,865321E+09	2,865461E+09	4,163238E+08	5,730782E+09	6,147106E+09
-2392	2,081745E+08	2,081808E+08	2,865482E+09	2,865389E+09	4,163553E+08	5,730871E+09	6,147227E+09
-2391	2,081367E+08	2,081353E+08	2,865464E+09	2,865510E+09	4,162719E+08	5,730975E+09	6,147247E+09
-2390	2,081725E+08	2,081380E+08	2,865491E+09	2,865603E+09	4,163105E+08	5,731094E+09	6,147404E+09
-2389	2,081465E+08	2,081673E+08	2,865604E+09	2,865467E+09	4,163138E+08	5,731071E+09	6,147385E+09
-2388	2,081294E+08	2,081256E+08	2,865503E+09	2,865600E+09	4,162550E+08	5,731104E+09	6,147359E+09
-2387	2,081665E+08	2,081589E+08	2,865567E+09	2,865545E+09	4,163255E+08	5,731111E+09	6,147437E+09
-2386	2,081294E+08	2,081599E+08	2,865593E+09	2,865422E+09	4,162893E+08	5,731015E+09	6,147305E+09
-2385	2,081516E+08	2,081314E+08	2,865402E+09	2,865519E+09	4,162829E+08	5,730921E+09	6,147204E+09
-2384	2,081799E+08	2,081797E+08	2,865391E+09	2,865332E+09	4,163596E+08	5,730723E+09	6,147083E+09
-2383	2,081483E+08	2,081653E+08	2,865265E+09	2,865254E+09	4,163135E+08	5,730519E+09	6,146832E+09
-2382	2,081941E+08	2,081672E+08	2,865119E+09	2,865255E+09	4,163614E+08	5,730375E+09	6,146736E+09
-2381	2,081934E+08	2,082141E+08	2,865164E+09	2,864995E+09	4,164075E+08	5,730159E+09	6,146567E+09
-2380	2,081747E+08	2,081779E+08	2,865021E+09	2,865052E+09	4,163526E+08	5,730073E+09	6,146426E+09
-2379	2,082200E+08	2,081975E+08	2,865020E+09	2,865051E+09	4,164176E+08	5,730071E+09	6,146489E+09
-2378	2,081894E+08	2,082174E+08	2,865104E+09	2,864943E+09	4,164068E+08	5,730047E+09	6,146454E+09
-2377	2,081909E+08	2,081758E+08	2,864985E+09	2,865141E+09	4,163667E+08	5,730126E+09	6,146493E+09
-2376	2,082157E+08	2,082098E+08	2,865100E+09	2,865095E+09	4,164255E+08	5,730195E+09	6,146621E+09
-2375	2,081720E+08	2,081899E+08	2,865180E+09	2,865116E+09	4,163619E+08	5,730297E+09	6,146658E+09
-2374	2,081927E+08	2,081575E+08	2,865155E+09	2,865310E+09	4,163502E+08	5,730465E+09	6,146815E+09
-2373	2,081933E+08	2,081970E+08	2,865319E+09	2,865209E+09	4,163903E+08	5,730528E+09	6,146918E+09
-2372	2,081503E+08	2,081554E+08	2,865309E+09	2,865335E+09	4,163057E+08	5,730644E+09	6,146950E+09
-2371	2,081810E+08	2,081592E+08	2,865334E+09	2,865434E+09	4,163402E+08	5,730768E+09	6,147108E+09
-2370	2,081583E+08	2,081883E+08	2,865483E+09	2,865303E+09	4,163465E+08	5,730787E+09	6,147133E+09
-2369	2,081432E+08	2,081413E+08	2,865364E+09	2,865443E+09	4,162845E+08	5,730807E+09	6,147092E+09
-2368	2,081828E+08	2,081694E+08	2,865371E+09	2,865372E+09	4,163522E+08	5,730743E+09	6,147095E+09
-2367	2,081525E+08	2,081721E+08	2,865371E+09	2,865241E+09	4,163246E+08	5,730612E+09	6,146936E+09
-2366	2,081734E+08	2,081484E+08	2,865156E+09	2,865328E+09	4,163218E+08	5,730484E+09	6,146806E+09
-2365	2,082029E+08	2,082051E+08	2,865152E+09	2,865090E+09	4,164080E+08	5,730241E+09	6,146649E+09
-2364	2,081679E+08	2,081901E+08	2,865053E+09	2,865005E+09	4,163580E+08	5,730058E+09	6,146416E+09

1	14	15	16	17	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	2,082107E+08	2,081877E+08	2,864921E+09	2,865025E+09	4,163984E+08	5,729946E+09	6,146344E+09
-2362	2,082124E+08	2,082326E+08	2,865005E+09	2,864801E+09	4,164450E+08	5,729806E+09	6,146251E+09
-2361	2,081927E+08	2,081949E+08	2,864856E+09	2,864897E+09	4,163876E+08	5,729753E+09	6,146141E+09
-2360	2,082352E+08	2,082132E+08	2,864824E+09	2,864898E+09	4,164483E+08	5,729722E+09	6,146170E+09
-2359	2,082080E+08	2,082339E+08	2,864923E+09	2,864792E+09	4,164419E+08	5,729715E+09	6,146157E+09
-2358	2,082074E+08	2,081908E+08	2,864818E+09	2,864990E+09	4,163982E+08	5,729809E+09	6,146207E+09
-2357	2,082338E+08	2,082262E+08	2,864941E+09	2,864909E+09	4,164600E+08	5,729850E+09	6,146310E+09
-2356	2,081870E+08	2,082040E+08	2,865029E+09	2,864942E+09	4,163910E+08	5,729971E+09	6,146362E+09
-2355	2,082038E+08	2,081718E+08	2,864990E+09	2,865151E+09	4,163756E+08	5,730141E+09	6,146516E+09
-2354	2,082057E+08	2,082143E+08	2,865178E+09	2,865061E+09	4,164201E+08	5,730239E+09	6,146659E+09
-2353	2,081620E+08	2,081734E+08	2,865167E+09	2,865194E+09	4,163354E+08	5,730361E+09	6,146696E+09
-2352	2,081926E+08	2,081722E+08	2,865164E+09	2,865267E+09	4,163648E+08	5,730431E+09	6,146795E+09
-2351	2,081777E+08	2,081989E+08	2,865310E+09	2,865136E+09	4,163767E+08	5,730446E+09	6,146823E+09
-2350	2,081639E+08	2,081527E+08	2,865172E+09	2,865277E+09	4,163166E+08	5,730449E+09	6,146765E+09
-2349	2,082062E+08	2,081878E+08	2,865152E+09	2,865164E+09	4,163940E+08	5,730316E+09	6,146710E+09
-2348	2,081730E+08	2,081951E+08	2,865150E+09	2,865023E+09	4,163682E+08	5,730173E+09	6,146542E+09
-2347	2,081897E+08	2,081730E+08	2,864936E+09	2,865101E+09	4,163627E+08	5,730038E+09	6,146400E+09
-2346	2,082211E+08	2,082285E+08	2,864977E+09	2,864868E+09	4,164497E+08	5,729845E+09	6,146295E+09
-2345	2,081859E+08	2,082103E+08	2,864882E+09	2,864804E+09	4,163962E+08	5,729686E+09	6,146082E+09
-2344	2,082270E+08	2,082017E+08	2,864718E+09	2,864832E+09	4,164287E+08	5,729549E+09	6,145978E+09
-2343	2,082342E+08	2,082476E+08	2,864796E+09	2,864633E+09	4,164819E+08	5,729428E+09	6,145910E+09
-2342	2,082127E+08	2,082126E+08	2,864646E+09	2,864738E+09	4,164253E+08	5,729384E+09	6,145809E+09
-2341	2,082550E+08	2,082352E+08	2,864625E+09	2,864702E+09	4,164902E+08	5,729326E+09	6,145816E+09
-2340	2,082259E+08	2,082526E+08	2,864752E+09	2,864599E+09	4,164785E+08	5,729351E+09	6,145830E+09
-2339	2,082209E+08	2,082052E+08	2,864657E+09	2,864811E+09	4,164261E+08	5,729468E+09	6,145894E+09
-2338	2,082491E+08	2,082389E+08	2,864813E+09	2,864757E+09	4,164879E+08	5,729570E+09	6,146058E+09
-2337	2,082000E+08	2,082182E+08	2,864892E+09	2,864809E+09	4,164181E+08	5,729701E+09	6,146119E+09
-2336	2,082133E+08	2,081853E+08	2,864829E+09	2,865009E+09	4,163986E+08	5,729838E+09	6,146237E+09
-2335	2,082209E+08	2,082292E+08	2,865027E+09	2,864921E+09	4,164501E+08	5,729948E+09	6,146398E+09
-2334	2,081775E+08	2,081869E+08	2,865021E+09	2,865046E+09	4,163645E+08	5,730067E+09	6,146431E+09
-2333	2,082111E+08	2,081874E+08	2,864999E+09	2,865080E+09	4,163985E+08	5,730078E+09	6,146477E+09
-2332	2,081965E+08	2,082128E+08	2,865126E+09	2,864947E+09	4,164093E+08	5,730073E+09	6,146482E+09
-2331	2,081799E+08	2,081705E+08	2,864954E+09	2,865084E+09	4,163504E+08	5,730038E+09	6,146388E+09
-2330	2,082246E+08	2,082093E+08	2,864949E+09	2,864966E+09	4,164339E+08	5,729915E+09	6,146349E+09
-2329	2,081901E+08	2,082191E+08	2,864948E+09	2,864817E+09	4,164092E+08	5,729766E+09	6,146175E+09
-2328	2,082059E+08	2,081913E+08	2,864724E+09	2,864875E+09	4,163972E+08	5,729599E+09	6,145996E+09
-2327	2,082436E+08	2,082444E+08	2,864774E+09	2,864658E+09	4,164880E+08	5,729432E+09	6,145921E+09
-2326	2,082086E+08	2,082265E+08	2,864681E+09	2,864616E+09	4,164350E+08	5,729297E+09	6,145732E+09
-2325	2,082493E+08	2,082234E+08	2,864506E+09	2,864625E+09	4,164727E+08	5,729131E+09	6,145603E+09
-2324	2,082534E+08	2,082708E+08	2,864598E+09	2,864440E+09	4,165242E+08	5,729038E+09	6,145563E+09
-2323	2,082278E+08	2,082351E+08	2,864461E+09	2,864552E+09	4,164629E+08	5,729014E+09	6,145477E+09
-2322	2,082715E+08	2,082521E+08	2,864483E+09	2,864526E+09	4,165236E+08	5,729009E+09	6,145533E+09
-2321	2,082412E+08	2,082659E+08	2,864610E+09	2,864445E+09	4,165071E+08	5,729055E+09	6,145562E+09
-2320	2,082335E+08	2,082129E+08	2,864485E+09	2,864654E+09	4,164465E+08	5,729138E+09	6,145585E+09
-2319	2,082658E+08	2,082490E+08	2,864633E+09	2,864620E+09	4,165147E+08	5,729253E+09	6,145768E+09
-2318	2,082158E+08	2,082329E+08	2,864722E+09	2,864674E+09	4,164486E+08	5,729396E+09	6,145844E+09
-2317	2,082290E+08	2,082042E+08	2,864662E+09	2,864829E+09	4,164332E+08	5,729491E+09	6,145924E+09
-2316	2,082369E+08	2,082452E+08	2,864876E+09	2,864741E+09	4,164821E+08	5,729616E+09	6,146098E+09
-2315	2,081923E+08	2,082011E+08	2,864859E+09	2,864869E+09	4,163935E+08	5,729728E+09	6,146121E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2314	2,082284E+08	2,082013E+08	2,864846E+09	2,864912E+09	4,164296E+08	5,729758E+09	6,146187E+09
-2313	2,082124E+08	2,082312E+08	2,864947E+09	2,864783E+09	4,164435E+08	5,729730E+09	6,146174E+09
-2312	2,081928E+08	2,081898E+08	2,864746E+09	2,864890E+09	4,163826E+08	5,729636E+09	6,146018E+09
-2311	2,082433E+08	2,082295E+08	2,864745E+09	2,864770E+09	4,164728E+08	5,729514E+09	6,145987E+09
-2310	2,082104E+08	2,082385E+08	2,864756E+09	2,864612E+09	4,164489E+08	5,729368E+09	6,145817E+09
-2309	2,082276E+08	2,082113E+08	2,864521E+09	2,864641E+09	4,164389E+08	5,729162E+09	6,145601E+09
-2308	2,082652E+08	2,082624E+08	2,864568E+09	2,864444E+09	4,165276E+08	5,729012E+09	6,145539E+09
-2307	2,082272E+08	2,082468E+08	2,864461E+09	2,864418E+09	4,164740E+08	5,728879E+09	6,145353E+09
-2306	2,082684E+08	2,082450E+08	2,864318E+09	2,864440E+09	4,165134E+08	5,728758E+09	6,145271E+09
-2305	2,082704E+08	2,082916E+08	2,864415E+09	2,864261E+09	4,165620E+08	5,728677E+09	6,145239E+09
-2304	2,082427E+08	2,082485E+08	2,864272E+09	2,864364E+09	4,164912E+08	5,728637E+09	6,145128E+09
-2303	2,082914E+08	2,082622E+08	2,864300E+09	2,864363E+09	4,165536E+08	5,728664E+09	6,145217E+09
-2302	2,082605E+08	2,082768E+08	2,864434E+09	2,864296E+09	4,165373E+08	5,728730E+09	6,145268E+09
-2301	2,082509E+08	2,082303E+08	2,864308E+09	2,864479E+09	4,164812E+08	5,728787E+09	6,145268E+09
-2300	2,082799E+08	2,082680E+08	2,864480E+09	2,864453E+09	4,165479E+08	5,728933E+09	6,145481E+09
-2299	2,082270E+08	2,082523E+08	2,864585E+09	2,864511E+09	4,164794E+08	5,729096E+09	6,145575E+09
-2298	2,082417E+08	2,082201E+08	2,864557E+09	2,864674E+09	4,164618E+08	5,729231E+09	6,145693E+09
-2297	2,082489E+08	2,082587E+08	2,864747E+09	2,864598E+09	4,165076E+08	5,729345E+09	6,145853E+09
-2296	2,082039E+08	2,082113E+08	2,864678E+09	2,864711E+09	4,164151E+08	5,729389E+09	6,145805E+09
-2295	2,082462E+08	2,082148E+08	2,864634E+09	2,864756E+09	4,164610E+08	5,729390E+09	6,145851E+09
-2294	2,082315E+08	2,082492E+08	2,864734E+09	2,864605E+09	4,164807E+08	5,729339E+09	6,145819E+09
-2293	2,082135E+08	2,082121E+08	2,864530E+09	2,864652E+09	4,164256E+08	5,729182E+09	6,145608E+09
-2292	2,082642E+08	2,082486E+08	2,864547E+09	2,864531E+09	4,165128E+08	5,729078E+09	6,145590E+09
-2291	2,082306E+08	2,082575E+08	2,864556E+09	2,864390E+09	4,164882E+08	5,728946E+09	6,145434E+09
-2290	2,082487E+08	2,082299E+08	2,864339E+09	2,864439E+09	4,164786E+08	5,728778E+09	6,145256E+09
-2289	2,082827E+08	2,082845E+08	2,864373E+09	2,864266E+09	4,165672E+08	5,728638E+09	6,145205E+09
-2288	2,082428E+08	2,082670E+08	2,864250E+09	2,864228E+09	4,165098E+08	5,728478E+09	6,144988E+09
-2287	2,082882E+08	2,082630E+08	2,864115E+09	2,864263E+09	4,165512E+08	5,728378E+09	6,144929E+09
-2286	2,082914E+08	2,083066E+08	2,864229E+09	2,864085E+09	4,165980E+08	5,728314E+09	6,144912E+09
-2285	2,082633E+08	2,082637E+08	2,864076E+09	2,864157E+09	4,165270E+08	5,728233E+09	6,144760E+09
-2284	2,083094E+08	2,082766E+08	2,864112E+09	2,864175E+09	4,165861E+08	5,728287E+09	6,144874E+09
-2283	2,082749E+08	2,082955E+08	2,864253E+09	2,864127E+09	4,165704E+08	5,728379E+09	6,144950E+09
-2282	2,082640E+08	2,082501E+08	2,864179E+09	2,864319E+09	4,165141E+08	5,728498E+09	6,145012E+09
-2281	2,082896E+08	2,082868E+08	2,864363E+09	2,864309E+09	4,165764E+08	5,728672E+09	6,145248E+09
-2280	2,082371E+08	2,082631E+08	2,864453E+09	2,864360E+09	4,165002E+08	5,728812E+09	6,145313E+09
-2279	2,082574E+08	2,082287E+08	2,864404E+09	2,864544E+09	4,164862E+08	5,728948E+09	6,145434E+09
-2278	2,082669E+08	2,082686E+08	2,864572E+09	2,864464E+09	4,165355E+08	5,729035E+09	6,145571E+09
-2277	2,082220E+08	2,082293E+08	2,864474E+09	2,864523E+09	4,164513E+08	5,728997E+09	6,145449E+09
-2276	2,082642E+08	2,082353E+08	2,864437E+09	2,864552E+09	4,164995E+08	5,728990E+09	6,145489E+09
-2275	2,082486E+08	2,082706E+08	2,864543E+09	2,864390E+09	4,165192E+08	5,728933E+09	6,145452E+09
-2274	2,082326E+08	2,082316E+08	2,864376E+09	2,864436E+09	4,164642E+08	5,728812E+09	6,145276E+09
-2273	2,082800E+08	2,082669E+08	2,864371E+09	2,864333E+09	4,165469E+08	5,728704E+09	6,145251E+09
-2272	2,082463E+08	2,082731E+08	2,864340E+09	2,864194E+09	4,165194E+08	5,728534E+09	6,145054E+09
-2271	2,082688E+08	2,082492E+08	2,864105E+09	2,864264E+09	4,165180E+08	5,728370E+09	6,144888E+09
-2270	2,083039E+08	2,083048E+08	2,864145E+09	2,864081E+09	4,166087E+08	5,728226E+09	6,144835E+09
-2269	2,082657E+08	2,082887E+08	2,864022E+09	2,863998E+09	4,165544E+08	5,728019E+09	6,144574E+09
-2268	2,083109E+08	2,082799E+08	2,863909E+09	2,864036E+09	4,165908E+08	5,727945E+09	6,144536E+09
-2267	2,083110E+08	2,083230E+08	2,864032E+09	2,863880E+09	4,166341E+08	5,727912E+09	6,144546E+09
-2266	2,082814E+08	2,082817E+08	2,863924E+09	2,863972E+09	4,165631E+08	5,727896E+09	6,144459E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2265	2,083198E+08	2,082980E+08	2,863972E+09	2,864021E+09	4,166177E+08	5,727993E+09	6,144610E+09
-2264	2,082835E+08	2,083132E+08	2,864114E+09	2,863980E+09	4,165967E+08	5,728094E+09	6,144691E+09
-2263	2,082769E+08	2,082647E+08	2,864050E+09	2,864195E+09	4,165416E+08	5,728245E+09	6,144787E+09
-2262	2,083050E+08	2,082964E+08	2,864232E+09	2,864187E+09	4,166013E+08	5,728420E+09	6,145021E+09
-2261	2,082553E+08	2,082725E+08	2,864279E+09	2,864199E+09	4,165278E+08	5,728478E+09	6,145006E+09
-2260	2,082755E+08	2,082394E+08	2,864208E+09	2,864377E+09	4,165148E+08	5,728585E+09	6,145100E+09
-2259	2,082838E+08	2,082853E+08	2,864360E+09	2,864287E+09	4,165691E+08	5,728647E+09	6,145216E+09
-2258	2,082396E+08	2,082504E+08	2,864299E+09	2,864319E+09	4,164900E+08	5,728618E+09	6,145108E+09
-2257	2,082777E+08	2,082573E+08	2,864271E+09	2,864347E+09	4,165350E+08	5,728618E+09	6,145153E+09
-2256	2,082635E+08	2,082870E+08	2,864361E+09	2,864182E+09	4,165505E+08	5,728543E+09	6,145093E+09
-2255	2,082520E+08	2,082473E+08	2,864181E+09	2,864256E+09	4,164992E+08	5,728437E+09	6,144936E+09
-2254	2,083003E+08	2,082839E+08	2,864164E+09	2,864161E+09	4,165842E+08	5,728324E+09	6,144909E+09
-2253	2,082680E+08	2,082956E+08	2,864105E+09	2,863982E+09	4,165636E+08	5,728087E+09	6,144651E+09
-2252	2,082902E+08	2,082725E+08	2,863884E+09	2,864044E+09	4,165628E+08	5,727929E+09	6,144491E+09
-2251	2,083243E+08	2,083268E+08	2,863935E+09	2,863861E+09	4,166511E+08	5,727796E+09	6,144447E+09
-2250	2,082871E+08	2,083086E+08	2,863853E+09	2,863777E+09	4,165958E+08	5,727630E+09	6,144226E+09
-2249	2,083260E+08	2,082982E+08	2,863737E+09	2,863843E+09	4,166242E+08	5,727580E+09	6,144205E+09
-2248	2,083242E+08	2,083378E+08	2,863843E+09	2,863704E+09	4,166621E+08	5,727548E+09	6,144210E+09
-2247	2,082965E+08	2,082992E+08	2,863747E+09	2,863833E+09	4,165956E+08	5,727580E+09	6,144176E+09
-2246	2,083344E+08	2,083140E+08	2,863819E+09	2,863886E+09	4,166484E+08	5,727705E+09	6,144353E+09
-2245	2,083009E+08	2,083274E+08	2,863954E+09	2,863815E+09	4,166283E+08	5,727769E+09	6,144398E+09
-2244	2,082955E+08	2,082751E+08	2,863896E+09	2,864034E+09	4,165706E+08	5,727930E+09	6,144500E+09
-2243	2,083223E+08	2,083062E+08	2,864056E+09	2,864033E+09	4,166285E+08	5,728089E+09	6,144718E+09
-2242	2,082730E+08	2,082875E+08	2,864122E+09	2,864034E+09	4,165605E+08	5,728155E+09	6,144716E+09
-2241	2,082863E+08	2,082606E+08	2,864044E+09	2,864207E+09	4,165469E+08	5,728251E+09	6,144798E+09
-2240	2,082939E+08	2,083041E+08	2,864189E+09	2,864103E+09	4,165981E+08	5,728292E+09	6,144890E+09
-2239	2,082546E+08	2,082696E+08	2,864140E+09	2,864146E+09	4,165242E+08	5,728286E+09	6,144811E+09
-2238	2,082942E+08	2,082723E+08	2,864107E+09	2,864172E+09	4,165665E+08	5,728279E+09	6,144845E+09
-2237	2,082838E+08	2,083023E+08	2,864150E+09	2,863978E+09	4,165861E+08	5,728128E+09	6,144714E+09
-2236	2,082737E+08	2,082648E+08	2,863951E+09	2,864051E+09	4,165385E+08	5,728002E+09	6,144541E+09
-2235	2,083208E+08	2,083055E+08	2,863921E+09	2,863953E+09	4,166264E+08	5,727875E+09	6,144501E+09
-2234	2,082908E+08	2,083202E+08	2,863901E+09	2,863754E+09	4,166110E+08	5,727655E+09	6,144266E+09
-2233	2,083081E+08	2,082962E+08	2,863691E+09	2,863819E+09	4,166043E+08	5,727510E+09	6,144115E+09
-2232	2,083419E+08	2,083425E+08	2,863733E+09	2,863645E+09	4,166844E+08	5,727378E+09	6,144062E+09
-2231	2,083075E+08	2,083249E+08	2,863655E+09	2,863598E+09	4,166324E+08	5,727254E+09	6,143886E+09
-2230	2,083440E+08	2,083147E+08	2,863553E+09	2,863683E+09	4,166587E+08	5,727236E+09	6,143895E+09
-2229	2,083428E+08	2,083569E+08	2,863650E+09	2,863529E+09	4,166997E+08	5,727179E+09	6,143879E+09
-2228	2,083144E+08	2,083167E+08	2,863583E+09	2,863663E+09	4,166312E+08	5,727247E+09	6,143878E+09
-2227	2,083506E+08	2,083291E+08	2,863667E+09	2,863728E+09	4,166796E+08	5,727395E+09	6,144075E+09
-2226	2,083192E+08	2,083405E+08	2,863823E+09	2,863651E+09	4,166598E+08	5,727474E+09	6,144134E+09
-2225	2,083067E+08	2,082892E+08	2,863745E+09	2,863881E+09	4,165959E+08	5,727625E+09	6,144221E+09
-2224	2,083327E+08	2,083187E+08	2,863872E+09	2,863879E+09	4,166514E+08	5,727751E+09	6,144402E+09
-2223	2,082863E+08	2,083052E+08	2,863940E+09	2,863887E+09	4,165915E+08	5,727828E+09	6,144419E+09
-2222	2,083003E+08	2,082782E+08	2,863884E+09	2,864043E+09	4,165784E+08	5,727927E+09	6,144505E+09
-2221	2,083121E+08	2,083195E+08	2,864009E+09	2,863903E+09	4,166316E+08	5,727912E+09	6,144543E+09
-2220	2,082753E+08	2,082836E+08	2,863962E+09	2,863946E+09	4,165589E+08	5,727908E+09	6,144467E+09
-2219	2,083133E+08	2,082878E+08	2,863908E+09	2,863983E+09	4,166010E+08	5,727891E+09	6,144492E+09
-2218	2,083048E+08	2,083235E+08	2,863961E+09	2,863778E+09	4,166283E+08	5,727738E+09	6,144367E+09
-2217	2,082887E+08	2,082914E+08	2,863756E+09	2,863849E+09	4,165801E+08	5,727605E+09	6,144185E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2216	2,083366E+08	2,083267E+08	2,863714E+09	2,863742E+09	4,166633E+08	5,727456E+09	6,144119E+09
-2215	2,083115E+08	2,083407E+08	2,863703E+09	2,863558E+09	4,166522E+08	5,727261E+09	6,143914E+09
-2214	2,083292E+08	2,083121E+08	2,863496E+09	2,863623E+09	4,166413E+08	5,727119E+09	6,143760E+09
-2213	2,083638E+08	2,083567E+08	2,863500E+09	2,863435E+09	4,167205E+08	5,726935E+09	6,143656E+09
-2212	2,083294E+08	2,083427E+08	2,863434E+09	2,863400E+09	4,166721E+08	5,726834E+09	6,143506E+09
-2211	2,083614E+08	2,083349E+08	2,863346E+09	2,863497E+09	4,166963E+08	5,726843E+09	6,143539E+09
-2210	2,083618E+08	2,083783E+08	2,863496E+09	2,863340E+09	4,167401E+08	5,726836E+09	6,143576E+09
-2209	2,083279E+08	2,083359E+08	2,863447E+09	2,863490E+09	4,166638E+08	5,726937E+09	6,143601E+09
-2208	2,083627E+08	2,083394E+08	2,863513E+09	2,863571E+09	4,167020E+08	5,727084E+09	6,143786E+09
-2207	2,083344E+08	2,083526E+08	2,863664E+09	2,863525E+09	4,166870E+08	5,727189E+09	6,143876E+09
-2206	2,083199E+08	2,083031E+08	2,863586E+09	2,863747E+09	4,166231E+08	5,727332E+09	6,143955E+09
-2205	2,083471E+08	2,083343E+08	2,863687E+09	2,863713E+09	4,166814E+08	5,727400E+09	6,144081E+09
-2204	2,083032E+08	2,083221E+08	2,863779E+09	2,863705E+09	4,166253E+08	5,727485E+09	6,144110E+09
-2203	2,083162E+08	2,082939E+08	2,863728E+09	2,863860E+09	4,166101E+08	5,727588E+09	6,144198E+09
-2202	2,083316E+08	2,083355E+08	2,863860E+09	2,863710E+09	4,166671E+08	5,727570E+09	6,144238E+09
-2201	2,082899E+08	2,083019E+08	2,863787E+09	2,863760E+09	4,165918E+08	5,727547E+09	6,144139E+09
-2200	2,083273E+08	2,083049E+08	2,863691E+09	2,863798E+09	4,166323E+08	5,727488E+09	6,144121E+09
-2199	2,083234E+08	2,083454E+08	2,863742E+09	2,863598E+09	4,166688E+08	5,727340E+09	6,144009E+09
-2198	2,083086E+08	2,083126E+08	2,863550E+09	2,863648E+09	4,166212E+08	5,727198E+09	6,143819E+09
-2197	2,083605E+08	2,083431E+08	2,863479E+09	2,863512E+09	4,167037E+08	5,726991E+09	6,143694E+09
-2196	2,083374E+08	2,083567E+08	2,863473E+09	2,863326E+09	4,166941E+08	5,726800E+09	6,143494E+09
-2195	2,083513E+08	2,083302E+08	2,863271E+09	2,863408E+09	4,166815E+08	5,726679E+09	6,143360E+09
-2194	2,083850E+08	2,083802E+08	2,863307E+09	2,863220E+09	4,167652E+08	5,726527E+09	6,143293E+09
-2193	2,083427E+08	2,083692E+08	2,863270E+09	2,863205E+09	4,167119E+08	5,726475E+09	6,143187E+09
-2192	2,083727E+08	2,083544E+08	2,863193E+09	2,863322E+09	4,167270E+08	5,726515E+09	6,143242E+09
-2191	2,083770E+08	2,083944E+08	2,863357E+09	2,863201E+09	4,167714E+08	5,726558E+09	6,143329E+09
-2190	2,083432E+08	2,083466E+08	2,863305E+09	2,863357E+09	4,166898E+08	5,726662E+09	6,143352E+09
-2189	2,083793E+08	2,083466E+08	2,863316E+09	2,863420E+09	4,167259E+08	5,726736E+09	6,143461E+09
-2188	2,083524E+08	2,083648E+08	2,863467E+09	2,863364E+09	4,167172E+08	5,726831E+09	6,143548E+09
-2187	2,083348E+08	2,083198E+08	2,863404E+09	2,863576E+09	4,166546E+08	5,726980E+09	6,143634E+09
-2186	2,083642E+08	2,083533E+08	2,863545E+09	2,863518E+09	4,167175E+08	5,727063E+09	6,143781E+09
-2185	2,083164E+08	2,083411E+08	2,863648E+09	2,863517E+09	4,166575E+08	5,727166E+09	6,143823E+09
-2184	2,083286E+08	2,083070E+08	2,863569E+09	2,863685E+09	4,166356E+08	5,727253E+09	6,143889E+09
-2183	2,083475E+08	2,083518E+08	2,863686E+09	2,863564E+09	4,166993E+08	5,727249E+09	6,143949E+09
-2182	2,083063E+08	2,083212E+08	2,863601E+09	2,863600E+09	4,166275E+08	5,727201E+09	6,143828E+09
-2181	2,083460E+08	2,083228E+08	2,863463E+09	2,863601E+09	4,166688E+08	5,727064E+09	6,143732E+09
-2180	2,083468E+08	2,083647E+08	2,863524E+09	2,863380E+09	4,167115E+08	5,726904E+09	6,143615E+09
-2179	2,083310E+08	2,083314E+08	2,863332E+09	2,863416E+09	4,166624E+08	5,726748E+09	6,143411E+09
-2178	2,083843E+08	2,083628E+08	2,863270E+09	2,863269E+09	4,167472E+08	5,726539E+09	6,143286E+09
-2177	2,083550E+08	2,083800E+08	2,863264E+09	2,863099E+09	4,167351E+08	5,726362E+09	6,143097E+09
-2176	2,083655E+08	2,083514E+08	2,863055E+09	2,863201E+09	4,167169E+08	5,726256E+09	6,142973E+09
-2175	2,084010E+08	2,084032E+08	2,863123E+09	2,863050E+09	4,168042E+08	5,726174E+09	6,142978E+09
-2174	2,083603E+08	2,083875E+08	2,863114E+09	2,863041E+09	4,167478E+08	5,726155E+09	6,142903E+09
-2173	2,083921E+08	2,083644E+08	2,863008E+09	2,863151E+09	4,167564E+08	5,726159E+09	6,142916E+09
-2172	2,083991E+08	2,084036E+08	2,863169E+09	2,863039E+09	4,168028E+08	5,726207E+09	6,143010E+09
-2171	2,083615E+08	2,083591E+08	2,863116E+09	2,863196E+09	4,167206E+08	5,726312E+09	6,143033E+09
-2170	2,083966E+08	2,083654E+08	2,863146E+09	2,863242E+09	4,167620E+08	5,726389E+09	6,143151E+09
-2169	2,083633E+08	2,083871E+08	2,863325E+09	2,863186E+09	4,167505E+08	5,726510E+09	6,143261E+09
-2168	2,083442E+08	2,083371E+08	2,863272E+09	2,863404E+09	4,166813E+08	5,726676E+09	6,143357E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2167	2,083768E+08	2,083691E+08	2,863423E+09	2,863375E+09	4,167459E+08	5,726798E+09	6,143544E+09
-2166	2,083307E+08	2,083538E+08	2,863510E+09	2,863377E+09	4,166845E+08	5,726888E+09	6,143572E+09
-2165	2,083448E+08	2,083178E+08	2,863361E+09	2,863524E+09	4,166626E+08	5,726886E+09	6,143548E+09
-2164	2,083674E+08	2,083674E+08	2,863458E+09	2,863383E+09	4,167348E+08	5,726840E+09	6,143575E+09
-2163	2,083261E+08	2,083413E+08	2,863377E+09	2,863394E+09	4,166674E+08	5,726771E+09	6,143439E+09
-2162	2,083696E+08	2,083448E+08	2,863256E+09	2,863358E+09	4,167144E+08	5,726614E+09	6,143328E+09
-2161	2,083662E+08	2,083866E+08	2,863326E+09	2,863134E+09	4,167528E+08	5,726460E+09	6,143213E+09
-2160	2,083489E+08	2,083500E+08	2,863122E+09	2,863186E+09	4,166988E+08	5,726309E+09	6,143007E+09
-2159	2,084021E+08	2,083843E+08	2,863070E+09	2,863076E+09	4,167864E+08	5,726146E+09	6,142932E+09
-2158	2,083722E+08	2,084032E+08	2,863079E+09	2,862918E+09	4,167754E+08	5,725997E+09	6,142772E+09
-2157	2,083832E+08	2,083697E+08	2,862852E+09	2,863014E+09	4,167529E+08	5,725865E+09	6,142618E+09
-2156	2,084223E+08	2,084200E+08	2,862937E+09	2,862868E+09	4,168423E+08	5,725805E+09	6,142648E+09
-2155	2,083815E+08	2,084016E+08	2,862933E+09	2,862866E+09	4,167831E+08	5,725799E+09	6,142582E+09
-2154	2,084133E+08	2,083788E+08	2,862824E+09	2,862964E+09	4,167921E+08	5,725788E+09	6,142580E+09
-2153	2,084137E+08	2,084213E+08	2,862983E+09	2,862858E+09	4,168350E+08	5,725841E+09	6,142676E+09
-2152	2,083723E+08	2,083772E+08	2,862932E+09	2,863019E+09	4,167495E+08	5,725951E+09	6,142701E+09
-2151	2,084076E+08	2,083856E+08	2,863004E+09	2,863090E+09	4,167932E+08	5,726094E+09	6,142887E+09
-2150	2,083766E+08	2,084039E+08	2,863207E+09	2,863037E+09	4,167804E+08	5,726245E+09	6,143025E+09
-2149	2,083591E+08	2,083458E+08	2,863117E+09	2,863248E+09	4,167049E+08	5,726365E+09	6,143070E+09
-2148	2,083954E+08	2,083790E+08	2,863250E+09	2,863225E+09	4,167743E+08	5,726476E+09	6,143250E+09
-2147	2,083490E+08	2,083677E+08	2,863320E+09	2,863216E+09	4,167167E+08	5,726535E+09	6,143252E+09
-2146	2,083634E+08	2,083387E+08	2,863165E+09	2,863327E+09	4,167021E+08	5,726492E+09	6,143194E+09
-2145	2,083830E+08	2,083910E+08	2,863272E+09	2,863169E+09	4,167739E+08	5,726440E+09	6,143214E+09
-2144	2,083420E+08	2,083617E+08	2,863186E+09	2,863170E+09	4,167036E+08	5,726356E+09	6,143060E+09
-2143	2,083881E+08	2,083643E+08	2,863072E+09	2,863156E+09	4,167524E+08	5,726228E+09	6,142981E+09
-2142	2,083860E+08	2,084041E+08	2,863128E+09	2,862937E+09	4,167900E+08	5,726065E+09	6,142855E+09
-2141	2,083686E+08	2,083656E+08	2,862877E+09	2,862980E+09	4,167342E+08	5,725857E+09	6,142592E+09
-2140	2,084233E+08	2,084045E+08	2,862830E+09	2,862873E+09	4,168279E+08	5,725703E+09	6,142531E+09
-2139	2,083940E+08	2,084247E+08	2,862866E+09	2,862714E+09	4,168188E+08	5,725580E+09	6,142398E+09
-2138	2,084068E+08	2,083914E+08	2,862660E+09	2,862794E+09	4,167983E+08	5,725454E+09	6,142252E+09
-2137	2,084416E+08	2,084388E+08	2,862756E+09	2,862661E+09	4,168804E+08	5,725417E+09	6,142298E+09
-2136	2,083983E+08	2,084176E+08	2,862742E+09	2,862680E+09	4,168159E+08	5,725423E+09	6,142238E+09
-2135	2,084278E+08	2,083976E+08	2,862655E+09	2,862810E+09	4,168254E+08	5,725464E+09	6,142290E+09
-2134	2,084259E+08	2,084403E+08	2,862835E+09	2,862711E+09	4,168662E+08	5,725547E+09	6,142413E+09
-2133	2,083846E+08	2,083914E+08	2,862779E+09	2,862863E+09	4,167760E+08	5,725642E+09	6,142418E+09
-2132	2,084228E+08	2,083985E+08	2,862863E+09	2,862936E+09	4,168213E+08	5,725799E+09	6,142620E+09
-2131	2,083938E+08	2,084146E+08	2,863065E+09	2,862892E+09	4,168084E+08	5,725956E+09	6,142765E+09
-2130	2,083775E+08	2,083594E+08	2,862951E+09	2,863079E+09	4,167369E+08	5,726030E+09	6,142767E+09
-2129	2,084091E+08	2,083959E+08	2,863064E+09	2,863049E+09	4,168050E+08	5,726113E+09	6,142918E+09
-2128	2,083625E+08	2,083866E+08	2,863118E+09	2,863031E+09	4,167491E+08	5,726148E+09	6,142897E+09
-2127	2,083788E+08	2,083598E+08	2,862986E+09	2,863142E+09	4,167385E+08	5,726128E+09	6,142866E+09
-2126	2,084011E+08	2,084089E+08	2,863098E+09	2,862973E+09	4,168100E+08	5,726072E+09	6,142882E+09
-2125	2,083622E+08	2,083749E+08	2,862971E+09	2,862958E+09	4,167371E+08	5,725929E+09	6,142666E+09
-2124	2,084105E+08	2,083808E+08	2,862845E+09	2,862947E+09	4,167912E+08	5,725792E+09	6,142583E+09
-2123	2,084080E+08	2,084251E+08	2,862902E+09	2,862732E+09	4,168331E+08	5,725633E+09	6,142466E+09
-2122	2,083902E+08	2,083923E+08	2,862663E+09	2,862751E+09	4,167825E+08	5,725414E+09	6,142197E+09
-2121	2,084404E+08	2,084308E+08	2,862642E+09	2,862649E+09	4,168712E+08	5,725290E+09	6,142161E+09
-2120	2,084122E+08	2,084460E+08	2,862679E+09	2,862505E+09	4,168582E+08	5,725185E+09	6,142043E+09
-2119	2,084249E+08	2,084099E+08	2,862490E+09	2,862618E+09	4,168348E+08	5,725108E+09	6,141943E+09

1	14	15	16	17	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							
-2118	2,084591E+08	2,084537E+08	2,862576E+09	2,862498E+09	4,169128E+08	5,725074E+09	6,141987E+09
-2117	2,084145E+08	2,084298E+08	2,862521E+09	2,862509E+09	4,168444E+08	5,725031E+09	6,141875E+09
-2116	2,084447E+08	2,084138E+08	2,862454E+09	2,862641E+09	4,168585E+08	5,725095E+09	6,141953E+09
-2115	2,084440E+08	2,084558E+08	2,862669E+09	2,862544E+09	4,168998E+08	5,725213E+09	6,142113E+09
-2114	2,084037E+08	2,084073E+08	2,862633E+09	2,862678E+09	4,168110E+08	5,725311E+09	6,142122E+09
-2113	2,084374E+08	2,084129E+08	2,862724E+09	2,862765E+09	4,168502E+08	5,725489E+09	6,142339E+09
-2112	2,084081E+08	2,084279E+08	2,862901E+09	2,862736E+09	4,168359E+08	5,725637E+09	6,142473E+09
-2111	2,083905E+08	2,083775E+08	2,862796E+09	2,862937E+09	4,167680E+08	5,725733E+09	6,142500E+09
-2110	2,084222E+08	2,084141E+08	2,862903E+09	2,862896E+09	4,168363E+08	5,725799E+09	6,142636E+09
-2109	2,083778E+08	2,084015E+08	2,862926E+09	2,862848E+09	4,167793E+08	5,725773E+09	6,142553E+09
-2108	2,083984E+08	2,083762E+08	2,862792E+09	2,862947E+09	4,167746E+08	5,725738E+09	6,142513E+09
-2107	2,084232E+08	2,084240E+08	2,862895E+09	2,862773E+09	4,168472E+08	5,725668E+09	6,142515E+09
-2106	2,083850E+08	2,083957E+08	2,862747E+09	2,862728E+09	4,167807E+08	5,725475E+09	6,142256E+09
-2105	2,084276E+08	2,084052E+08	2,862622E+09	2,862714E+09	4,168328E+08	5,725335E+09	6,142168E+09
-2104	2,084251E+08	2,084503E+08	2,862681E+09	2,862511E+09	4,168754E+08	5,725192E+09	6,142067E+09
-2103	2,084088E+08	2,084170E+08	2,862483E+09	2,862550E+09	4,168259E+08	5,725033E+09	6,141859E+09
-2102	2,084600E+08	2,084488E+08	2,862467E+09	2,862460E+09	4,169088E+08	5,724927E+09	6,141836E+09
-2101	2,084337E+08	2,084576E+08	2,862464E+09	2,862319E+09	4,168913E+08	5,724784E+09	6,141675E+09
-2100	2,084470E+08	2,084243E+08	2,862265E+09	2,862438E+09	4,168713E+08	5,724703E+09	6,141574E+09
-2099	2,084793E+08	2,084699E+08	2,862365E+09	2,862324E+09	4,169491E+08	5,724689E+09	6,141638E+09
-2098	2,084334E+08	2,084518E+08	2,862337E+09	2,862308E+09	4,168852E+08	5,724645E+09	6,141530E+09
-2097	2,084579E+08	2,084341E+08	2,862312E+09	2,862445E+09	4,168919E+08	5,724757E+09	6,141649E+09
-2096	2,084581E+08	2,084717E+08	2,862533E+09	2,862380E+09	4,169298E+08	5,724913E+09	6,141843E+09
-2095	2,084176E+08	2,084211E+08	2,862514E+09	2,862543E+09	4,168387E+08	5,725057E+09	6,141895E+09
-2094	2,084495E+08	2,084250E+08	2,862579E+09	2,862639E+09	4,168745E+08	5,725218E+09	6,142092E+09
-2093	2,084211E+08	2,084388E+08	2,862702E+09	2,862592E+09	4,168599E+08	5,725293E+09	6,142153E+09
-2092	2,084060E+08	2,083943E+08	2,862596E+09	2,862771E+09	4,168003E+08	5,725367E+09	6,142167E+09
-2091	2,084415E+08	2,084294E+08	2,862715E+09	2,862714E+09	4,168708E+08	5,725429E+09	6,142300E+09
-2090	2,083999E+08	2,084200E+08	2,862733E+09	2,862623E+09	4,168199E+08	5,725357E+09	6,142177E+09
-2089	2,084170E+08	2,083952E+08	2,862603E+09	2,862718E+09	4,168122E+08	5,725321E+09	6,142133E+09
-2088	2,084414E+08	2,084443E+08	2,862685E+09	2,862562E+09	4,168857E+08	5,725247E+09	6,142133E+09
-2087	2,084017E+08	2,084205E+08	2,862566E+09	2,862533E+09	4,168221E+08	5,725099E+09	6,141921E+09
-2086	2,084429E+08	2,084288E+08	2,862446E+09	2,862525E+09	4,168718E+08	5,724970E+09	6,141842E+09
-2085	2,084436E+08	2,084672E+08	2,862472E+09	2,862313E+09	4,169107E+08	5,724785E+09	6,141695E+09
-2084	2,084321E+08	2,084339E+08	2,862269E+09	2,862357E+09	4,168660E+08	5,724626E+09	6,141492E+09
-2083	2,084855E+08	2,084614E+08	2,862241E+09	2,862270E+09	4,169469E+08	5,724511E+09	6,141458E+09
-2082	2,084586E+08	2,084759E+08	2,862217E+09	2,862099E+09	4,169345E+08	5,724316E+09	6,141250E+09
-2081	2,084651E+08	2,084463E+08	2,862043E+09	2,862214E+09	4,169114E+08	5,724257E+09	6,141168E+09
-2080	2,084950E+08	2,084914E+08	2,862167E+09	2,862119E+09	4,169864E+08	5,724287E+09	6,141273E+09
-2079	2,084486E+08	2,084725E+08	2,862208E+09	2,862131E+09	4,169211E+08	5,724339E+09	6,141260E+09
-2078	2,084709E+08	2,084491E+08	2,862198E+09	2,862295E+09	4,169200E+08	5,724493E+09	6,141413E+09
-2077	2,084720E+08	2,084805E+08	2,862376E+09	2,862244E+09	4,169525E+08	5,724621E+09	6,141573E+09
-2076	2,084334E+08	2,084341E+08	2,862342E+09	2,862415E+09	4,168675E+08	5,724757E+09	6,141625E+09
-2075	2,084654E+08	2,084382E+08	2,862404E+09	2,862502E+09	4,169037E+08	5,724906E+09	6,141810E+09
-2074	2,084383E+08	2,084576E+08	2,862521E+09	2,862406E+09	4,168960E+08	5,724927E+09	6,141823E+09
-2073	2,084208E+08	2,084138E+08	2,862436E+09	2,862561E+09	4,168346E+08	5,724997E+09	6,141832E+09
-2072	2,084578E+08	2,084460E+08	2,862543E+09	2,862517E+09	4,169038E+08	5,725060E+09	6,141964E+09
-2071	2,084173E+08	2,084379E+08	2,862576E+09	2,862437E+09	4,168551E+08	5,725013E+09	6,141868E+09
-2070	2,084316E+08	2,084131E+08	2,862420E+09	2,862536E+09	4,168447E+08	5,724956E+09	6,141800E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2069	2,084571E+08	2,084611E+08	2,862456E+09	2,862373E+09	4,169183E+08	5,724829E+09	6,141748E+09
-2068	2,084220E+08	2,084414E+08	2,862339E+09	2,862335E+09	4,168634E+08	5,724674E+09	6,141537E+09
-2067	2,084669E+08	2,084452E+08	2,862229E+09	2,862323E+09	4,169121E+08	5,724552E+09	6,141464E+09
-2066	2,084706E+08	2,084860E+08	2,862240E+09	2,862079E+09	4,169567E+08	5,724318E+09	6,141275E+09
-2065	2,084554E+08	2,084538E+08	2,862042E+09	2,862117E+09	4,169092E+08	5,724159E+09	6,141068E+09
-2064	2,085060E+08	2,084823E+08	2,862005E+09	2,862053E+09	4,169883E+08	5,724059E+09	6,141047E+09
-2063	2,084758E+08	2,085008E+08	2,862035E+09	2,861897E+09	4,169766E+08	5,723932E+09	6,140908E+09
-2062	2,084774E+08	2,084692E+08	2,861897E+09	2,862028E+09	4,169466E+08	5,723925E+09	6,140871E+09
-2061	2,085077E+08	2,085064E+08	2,862014E+09	2,861952E+09	4,170141E+08	5,723966E+09	6,140980E+09
-2060	2,084653E+08	2,084864E+08	2,862063E+09	2,861989E+09	4,169517E+08	5,724051E+09	6,141003E+09
-2059	2,084886E+08	2,084578E+08	2,862042E+09	2,862168E+09	4,169464E+08	5,724210E+09	6,141156E+09
-2058	2,084903E+08	2,084942E+08	2,862181E+09	2,862085E+09	4,169845E+08	5,724266E+09	6,141250E+09
-2057	2,084479E+08	2,084518E+08	2,862157E+09	2,862233E+09	4,168997E+08	5,724390E+09	6,141290E+09
-2056	2,084802E+08	2,084552E+08	2,862218E+09	2,862322E+09	4,169354E+08	5,724540E+09	6,141476E+09
-2055	2,084545E+08	2,084745E+08	2,862382E+09	2,862223E+09	4,169290E+08	5,724606E+09	6,141535E+09
-2054	2,084357E+08	2,084290E+08	2,862297E+09	2,862383E+09	4,168647E+08	5,724680E+09	6,141545E+09
-2053	2,084733E+08	2,084572E+08	2,862350E+09	2,862340E+09	4,169304E+08	5,724690E+09	6,141620E+09
-2052	2,084359E+08	2,084561E+08	2,862370E+09	2,862264E+09	4,168920E+08	5,724634E+09	6,141526E+09
-2051	2,084509E+08	2,084318E+08	2,862215E+09	2,862356E+09	4,168826E+08	5,724570E+09	6,141453E+09
-2050	2,084781E+08	2,084838E+08	2,862235E+09	2,862150E+09	4,169619E+08	5,724385E+09	6,141347E+09
-2049	2,084435E+08	2,084642E+08	2,862135E+09	2,862096E+09	4,169077E+08	5,724231E+09	6,141139E+09
-2048	2,084892E+08	2,084641E+08	2,862005E+09	2,862101E+09	4,169533E+08	5,724106E+09	6,141059E+09
-2047	2,084925E+08	2,085062E+08	2,862036E+09	2,861863E+09	4,169987E+08	5,723899E+09	6,140898E+09
-2046	2,084724E+08	2,084761E+08	2,861834E+09	2,861905E+09	4,169485E+08	5,723739E+09	6,140688E+09
-2045	2,085205E+08	2,085017E+08	2,861780E+09	2,861848E+09	4,170222E+08	5,723628E+09	6,140650E+09
-2044	2,084935E+08	2,085224E+08	2,861844E+09	2,861710E+09	4,170159E+08	5,723554E+09	6,140570E+09
-2043	2,084969E+08	2,084833E+08	2,861740E+09	2,861861E+09	4,169803E+08	5,723601E+09	6,140581E+09
-2042	2,085281E+08	2,085206E+08	2,861842E+09	2,861777E+09	4,170487E+08	5,723619E+09	6,140668E+09
-2041	2,084842E+08	2,085009E+08	2,861898E+09	2,861818E+09	4,169850E+08	5,723715E+09	6,140701E+09
-2040	2,085038E+08	2,084729E+08	2,861861E+09	2,862018E+09	4,169767E+08	5,723879E+09	6,140856E+09
-2039	2,085042E+08	2,085125E+08	2,862040E+09	2,861930E+09	4,170166E+08	5,723970E+09	6,140986E+09
-2038	2,084582E+08	2,084696E+08	2,862026E+09	2,862068E+09	4,169278E+08	5,724094E+09	6,141021E+09
-2037	2,084918E+08	2,084671E+08	2,862058E+09	2,862158E+09	4,169589E+08	5,724216E+09	6,141175E+09
-2036	2,084716E+08	2,084882E+08	2,862213E+09	2,862065E+09	4,169598E+08	5,724278E+09	6,141238E+09
-2035	2,084542E+08	2,084403E+08	2,862114E+09	2,862222E+09	4,168946E+08	5,724336E+09	6,141231E+09
-2034	2,084918E+08	2,084757E+08	2,862125E+09	2,862141E+09	4,169675E+08	5,724265E+09	6,141233E+09
-2033	2,084541E+08	2,084790E+08	2,862157E+09	2,862040E+09	4,169332E+08	5,724196E+09	6,141130E+09
-2032	2,084695E+08	2,084538E+08	2,862000E+09	2,862138E+09	4,169232E+08	5,724138E+09	6,141061E+09
-2031	2,084992E+08	2,085048E+08	2,862056E+09	2,861929E+09	4,170039E+08	5,723985E+09	6,140988E+09
-2030	2,084628E+08	2,084847E+08	2,861947E+09	2,861879E+09	4,169475E+08	5,723826E+09	6,140774E+09
-2029	2,085080E+08	2,084807E+08	2,861769E+09	2,861894E+09	4,169888E+08	5,723663E+09	6,140652E+09
-2028	2,085129E+08	2,085283E+08	2,861805E+09	2,861665E+09	4,170412E+08	5,723469E+09	6,140511E+09
-2027	2,084925E+08	2,084962E+08	2,861631E+09	2,861710E+09	4,169888E+08	5,723341E+09	6,140330E+09
-2026	2,085400E+08	2,085229E+08	2,861580E+09	2,861631E+09	4,170629E+08	5,723211E+09	6,140274E+09
-2025	2,085139E+08	2,085416E+08	2,861679E+09	2,861505E+09	4,170554E+08	5,723184E+09	6,140240E+09
-2024	2,085160E+08	2,084978E+08	2,861566E+09	2,861694E+09	4,170138E+08	5,723260E+09	6,140274E+09
-2023	2,085457E+08	2,085352E+08	2,861685E+09	2,861623E+09	4,170809E+08	5,723308E+09	6,140388E+09
-2022	2,084974E+08	2,085179E+08	2,861731E+09	2,861668E+09	4,170154E+08	5,723399E+09	6,140414E+09
-2021	2,085147E+08	2,084867E+08	2,861665E+09	2,861859E+09	4,170014E+08	5,723524E+09	6,140526E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2020	2,085190E+08	2,085279E+08	2,861866E+09	2,861772E+09	4,170470E+08	5,723638E+09	6,140685E+09
-2019	2,084761E+08	2,084810E+08	2,861875E+09	2,861906E+09	4,169571E+08	5,723781E+09	6,140738E+09
-2018	2,085099E+08	2,084809E+08	2,861876E+09	2,861969E+09	4,169908E+08	5,723845E+09	6,140836E+09
-2017	2,084903E+08	2,085058E+08	2,862035E+09	2,861872E+09	4,169962E+08	5,723906E+09	6,140902E+09
-2016	2,084702E+08	2,084603E+08	2,861920E+09	2,862041E+09	4,169305E+08	5,723962E+09	6,140892E+09
-2015	2,085067E+08	2,084987E+08	2,861966E+09	2,861948E+09	4,170054E+08	5,723914E+09	6,140919E+09
-2014	2,084682E+08	2,085019E+08	2,862001E+09	2,861840E+09	4,169701E+08	5,723841E+09	6,140811E+09
-2013	2,084851E+08	2,084703E+08	2,861802E+09	2,861939E+09	4,169554E+08	5,723741E+09	6,140696E+09
-2012	2,085207E+08	2,085215E+08	2,861839E+09	2,861740E+09	4,170422E+08	5,723579E+09	6,140621E+09
-2011	2,084866E+08	2,085002E+08	2,861715E+09	2,861682E+09	4,169868E+08	5,723397E+09	6,140384E+09
-2010	2,085304E+08	2,085022E+08	2,861503E+09	2,861660E+09	4,170326E+08	5,723163E+09	6,140195E+09
-2009	2,085352E+08	2,085525E+08	2,861572E+09	2,861421E+09	4,170877E+08	5,722993E+09	6,140080E+09
-2008	2,085131E+08	2,085175E+08	2,861427E+09	2,861493E+09	4,170306E+08	5,722920E+09	6,139950E+09
-2007	2,085598E+08	2,085421E+08	2,861430E+09	2,861430E+09	4,171020E+08	5,722861E+09	6,139963E+09
-2006	2,085311E+08	2,085590E+08	2,861526E+09	2,861331E+09	4,170901E+08	5,722857E+09	6,139947E+09
-2005	2,085302E+08	2,085116E+08	2,861376E+09	2,861542E+09	4,170418E+08	5,722918E+09	6,139960E+09
-2004	2,085610E+08	2,085526E+08	2,861498E+09	2,861483E+09	4,171136E+08	5,722982E+09	6,140095E+09
-2003	2,085130E+08	2,085326E+08	2,861566E+09	2,861519E+09	4,170457E+08	5,723085E+09	6,140131E+09
-2002	2,085300E+08	2,085028E+08	2,861489E+09	2,861676E+09	4,170328E+08	5,723165E+09	6,140198E+09
-2001	2,085367E+08	2,085428E+08	2,861712E+09	2,861584E+09	4,170795E+08	5,723295E+09	6,140375E+09
-2000	2,084926E+08	2,084945E+08	2,861712E+09	2,861738E+09	4,169872E+08	5,723449E+09	6,140436E+09
-1999	2,085248E+08	2,084978E+08	2,861727E+09	2,861794E+09	4,170226E+08	5,723521E+09	6,140543E+09
-1998	2,085025E+08	2,085268E+08	2,861870E+09	2,861697E+09	4,170293E+08	5,723567E+09	6,140596E+09
-1997	2,084818E+08	2,084786E+08	2,861725E+09	2,861862E+09	4,169604E+08	5,723586E+09	6,140547E+09
-1996	2,085244E+08	2,085165E+08	2,861775E+09	2,861770E+09	4,170409E+08	5,723545E+09	6,140586E+09
-1995	2,084916E+08	2,085153E+08	2,861805E+09	2,861655E+09	4,170069E+08	5,723460E+09	6,140467E+09
-1994	2,085097E+08	2,084867E+08	2,861555E+09	2,861716E+09	4,169964E+08	5,723272E+09	6,140268E+09
-1993	2,085461E+08	2,085418E+08	2,861594E+09	2,861504E+09	4,170879E+08	5,723098E+09	6,140186E+09
-1992	2,085087E+08	2,085245E+08	2,861474E+09	2,861454E+09	4,170331E+08	5,722928E+09	6,139961E+09
-1991	2,085490E+08	2,085284E+08	2,861315E+09	2,861422E+09	4,170774E+08	5,722737E+09	6,139814E+09
-1990	2,085517E+08	2,085776E+08	2,861408E+09	2,861205E+09	4,171293E+08	5,722613E+09	6,139743E+09
-1989	2,085287E+08	2,085348E+08	2,861243E+09	2,861305E+09	4,170635E+08	5,722548E+09	6,139611E+09
-1988	2,085777E+08	2,085577E+08	2,861244E+09	2,861277E+09	4,171354E+08	5,722521E+09	6,139656E+09
-1987	2,085514E+08	2,085721E+08	2,861334E+09	2,861186E+09	4,171235E+08	5,722520E+09	6,139644E+09
-1986	2,085476E+08	2,085284E+08	2,861150E+09	2,861361E+09	4,170761E+08	5,722512E+09	6,139588E+09
-1985	2,085792E+08	2,085698E+08	2,861305E+09	2,861289E+09	4,171490E+08	5,722594E+09	6,139743E+09
-1984	2,085302E+08	2,085479E+08	2,861395E+09	2,861337E+09	4,170781E+08	5,722732E+09	6,139810E+09
-1983	2,085459E+08	2,085183E+08	2,861365E+09	2,861491E+09	4,170642E+08	5,722856E+09	6,139920E+09
-1982	2,085503E+08	2,085591E+08	2,861582E+09	2,861421E+09	4,171094E+08	5,723003E+09	6,140112E+09
-1981	2,085037E+08	2,085096E+08	2,861548E+09	2,861588E+09	4,170133E+08	5,723135E+09	6,140149E+09
-1980	2,085370E+08	2,085166E+08	2,861562E+09	2,861655E+09	4,170535E+08	5,723217E+09	6,140271E+09
-1979	2,085191E+08	2,085423E+08	2,861708E+09	2,861543E+09	4,170613E+08	5,723251E+09	6,140313E+09
-1978	2,085002E+08	2,084955E+08	2,861522E+09	2,861665E+09	4,169957E+08	5,723187E+09	6,140183E+09
-1977	2,085481E+08	2,085319E+08	2,861565E+09	2,861557E+09	4,170800E+08	5,723122E+09	6,140202E+09
-1976	2,085151E+08	2,085318E+08	2,861569E+09	2,861445E+09	4,170468E+08	5,723014E+09	6,140061E+09
-1975	2,085314E+08	2,085095E+08	2,861334E+09	2,861481E+09	4,170409E+08	5,722814E+09	6,139855E+09
-1974	2,085635E+08	2,085684E+08	2,861371E+09	2,861265E+09	4,171319E+08	5,722636E+09	6,139768E+09
-1973	2,085240E+08	2,085481E+08	2,861252E+09	2,861223E+09	4,170721E+08	5,722475E+09	6,139548E+09
-1972	2,085670E+08	2,085500E+08	2,861126E+09	2,861220E+09	4,171170E+08	5,722347E+09	6,139464E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1971	2,085739E+08	2,085925E+08	2,861228E+09	2,861027E+09	4,171664E+08	5,722255E+09	6,139422E+09
-1970	2,085509E+08	2,085507E+08	2,861023E+09	2,861118E+09	4,171016E+08	5,722141E+09	6,139242E+09
-1969	2,086004E+08	2,085742E+08	2,861030E+09	2,861090E+09	4,171746E+08	5,722120E+09	6,139295E+09
-1968	2,085707E+08	2,085906E+08	2,861128E+09	2,861010E+09	4,171613E+08	5,722138E+09	6,139300E+09
-1967	2,085636E+08	2,085490E+08	2,860999E+09	2,861162E+09	4,171126E+08	5,722161E+09	6,139274E+09
-1966	2,085920E+08	2,085883E+08	2,861173E+09	2,861106E+09	4,171803E+08	5,722279E+09	6,139459E+09
-1965	2,085418E+08	2,085610E+08	2,861249E+09	2,861177E+09	4,171028E+08	5,722426E+09	6,139529E+09
-1964	2,085589E+08	2,085316E+08	2,861219E+09	2,861358E+09	4,170905E+08	5,722576E+09	6,139667E+09
-1963	2,085664E+08	2,085716E+08	2,861419E+09	2,861294E+09	4,171379E+08	5,722713E+09	6,139851E+09
-1962	2,085194E+08	2,085262E+08	2,861342E+09	2,861419E+09	4,170456E+08	5,722761E+09	6,139807E+09
-1961	2,085557E+08	2,085328E+08	2,861370E+09	2,861464E+09	4,170885E+08	5,722834E+09	6,139923E+09
-1960	2,085398E+08	2,085576E+08	2,861514E+09	2,861351E+09	4,170973E+08	5,722865E+09	6,139962E+09
-1959	2,085211E+08	2,085140E+08	2,861341E+09	2,861441E+09	4,170351E+08	5,722782E+09	6,139817E+09
-1958	2,085669E+08	2,085525E+08	2,861364E+09	2,861342E+09	4,171194E+08	5,722706E+09	6,139825E+09
-1957	2,085313E+08	2,085540E+08	2,861340E+09	2,861228E+09	4,170853E+08	5,722568E+09	6,139653E+09
-1956	2,085472E+08	2,085347E+08	2,861128E+09	2,861273E+09	4,170819E+08	5,722401E+09	6,139482E+09
-1955	2,085826E+08	2,085893E+08	2,861185E+09	2,861064E+09	4,171719E+08	5,722249E+09	6,139421E+09
-1954	2,085446E+08	2,085674E+08	2,861043E+09	2,861005E+09	4,171120E+08	5,722047E+09	6,139159E+09
-1953	2,085909E+08	2,085658E+08	2,860922E+09	2,861014E+09	4,171567E+08	5,721936E+09	6,139093E+09
-1952	2,085975E+08	2,086079E+08	2,861004E+09	2,860844E+09	4,172054E+08	5,721848E+09	6,139054E+09
-1951	2,085719E+08	2,085721E+08	2,860816E+09	2,860912E+09	4,171440E+08	5,721728E+09	6,138872E+09
-1950	2,086161E+08	2,085965E+08	2,860832E+09	2,860891E+09	4,172126E+08	5,721722E+09	6,138935E+09
-1949	2,085839E+08	2,086089E+08	2,860939E+09	2,860818E+09	4,171928E+08	5,721757E+09	6,138950E+09
-1948	2,085779E+08	2,085652E+08	2,860853E+09	2,860995E+09	4,171431E+08	5,721848E+09	6,138991E+09
-1947	2,086091E+08	2,085988E+08	2,861035E+09	2,860963E+09	4,172079E+08	5,721998E+09	6,139206E+09
-1946	2,085583E+08	2,085739E+08	2,861075E+09	2,861023E+09	4,171322E+08	5,722098E+09	6,139230E+09
-1945	2,085759E+08	2,085471E+08	2,861048E+09	2,861201E+09	4,171231E+08	5,722250E+09	6,139373E+09
-1944	2,085817E+08	2,085884E+08	2,861244E+09	2,861141E+09	4,171701E+08	5,722384E+09	6,139554E+09
-1943	2,085352E+08	2,085467E+08	2,861195E+09	2,861226E+09	4,170819E+08	5,722421E+09	6,139503E+09
-1942	2,085704E+08	2,085507E+08	2,861210E+09	2,861269E+09	4,171211E+08	5,722479E+09	6,139600E+09
-1941	2,085549E+08	2,085719E+08	2,861318E+09	2,861158E+09	4,171268E+08	5,722477E+09	6,139604E+09
-1940	2,085383E+08	2,085320E+08	2,861141E+09	2,861253E+09	4,170702E+08	5,722395E+09	6,139465E+09
-1939	2,085864E+08	2,085704E+08	2,861145E+09	2,861150E+09	4,171568E+08	5,722295E+09	6,139452E+09
-1938	2,085508E+08	2,085759E+08	2,861092E+09	2,861000E+09	4,171266E+08	5,722092E+09	6,139219E+09
-1937	2,085702E+08	2,085547E+08	2,860906E+09	2,861036E+09	4,171249E+08	5,721943E+09	6,139068E+09
-1936	2,086062E+08	2,086070E+08	2,860970E+09	2,860850E+09	4,172131E+08	5,721820E+09	6,139033E+09
-1935	2,085695E+08	2,085883E+08	2,860847E+09	2,860777E+09	4,171578E+08	5,721624E+09	6,138782E+09
-1934	2,086115E+08	2,085871E+08	2,860715E+09	2,860808E+09	4,171986E+08	5,721523E+09	6,138722E+09
-1933	2,086143E+08	2,086293E+08	2,860782E+09	2,860650E+09	4,172436E+08	5,721432E+09	6,138676E+09
-1932	2,085873E+08	2,085951E+08	2,860632E+09	2,860728E+09	4,171824E+08	5,721360E+09	6,138543E+09
-1931	2,086325E+08	2,086136E+08	2,860670E+09	2,860720E+09	4,172461E+08	5,721389E+09	6,138635E+09
-1930	2,086008E+08	2,086235E+08	2,860761E+09	2,860636E+09	4,172243E+08	5,721398E+09	6,138622E+09
-1929	2,085965E+08	2,085767E+08	2,860692E+09	2,860828E+09	4,171733E+08	5,721520E+09	6,138693E+09
-1928	2,086262E+08	2,086113E+08	2,860863E+09	2,860821E+09	4,172375E+08	5,721684E+09	6,138921E+09
-1927	2,085747E+08	2,085930E+08	2,860914E+09	2,860847E+09	4,171678E+08	5,721761E+09	6,138929E+09
-1926	2,085877E+08	2,085669E+08	2,860889E+09	2,861027E+09	4,171546E+08	5,721916E+09	6,139070E+09
-1925	2,085933E+08	2,086041E+08	2,861073E+09	2,860964E+09	4,171974E+08	5,722037E+09	6,139235E+09
-1924	2,085498E+08	2,085618E+08	2,861042E+09	2,861055E+09	4,171116E+08	5,722097E+09	6,139208E+09
-1923	2,085893E+08	2,085624E+08	2,861034E+09	2,861107E+09	4,171517E+08	5,722141E+09	6,139293E+09

1	14	15	16	17	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	2,085746E+08	2,085871E+08	2,861090E+09	2,860964E+09	4,171617E+08	5,722054E+09	6,139216E+09
-1921	2,085596E+08	2,085516E+08	2,860921E+09	2,861040E+09	4,171113E+08	5,721961E+09	6,139073E+09
-1920	2,086059E+08	2,085918E+08	2,860930E+09	2,860936E+09	4,171976E+08	5,721866E+09	6,139064E+09
-1919	2,085718E+08	2,086016E+08	2,860908E+09	2,860753E+09	4,171735E+08	5,721661E+09	6,138834E+09
-1918	2,085888E+08	2,085776E+08	2,860720E+09	2,860810E+09	4,171664E+08	5,721530E+09	6,138697E+09
-1917	2,086240E+08	2,086257E+08	2,860753E+09	2,860645E+09	4,172497E+08	5,721398E+09	6,138648E+09
-1916	2,085890E+08	2,086095E+08	2,860635E+09	2,860591E+09	4,171985E+08	5,721226E+09	6,138424E+09
-1915	2,086317E+08	2,086067E+08	2,860492E+09	2,860626E+09	4,172383E+08	5,721119E+09	6,138357E+09
-1914	2,086331E+08	2,086488E+08	2,860544E+09	2,860440E+09	4,172819E+08	5,720985E+09	6,138267E+09
-1913	2,086088E+08	2,086121E+08	2,860437E+09	2,860515E+09	4,172209E+08	5,720952E+09	6,138173E+09
-1912	2,086521E+08	2,086268E+08	2,860490E+09	2,860534E+09	4,172789E+08	5,721025E+09	6,138304E+09
-1911	2,086210E+08	2,086412E+08	2,860608E+09	2,860446E+09	4,172623E+08	5,721054E+09	6,138316E+09
-1910	2,086111E+08	2,085950E+08	2,860538E+09	2,860662E+09	4,172061E+08	5,721200E+09	6,138407E+09
-1909	2,086363E+08	2,086291E+08	2,860697E+09	2,860671E+09	4,172654E+08	5,721368E+09	6,138633E+09
-1908	2,085864E+08	2,086115E+08	2,860782E+09	2,860704E+09	4,171979E+08	5,721486E+09	6,138684E+09
-1907	2,086016E+08	2,085797E+08	2,860749E+09	2,860884E+09	4,171812E+08	5,721633E+09	6,138815E+09
-1906	2,086098E+08	2,086141E+08	2,860886E+09	2,860795E+09	4,172239E+08	5,721681E+09	6,138905E+09
-1905	2,085708E+08	2,085730E+08	2,860842E+09	2,860871E+09	4,171438E+08	5,721714E+09	6,138857E+09
-1904	2,086095E+08	2,085776E+08	2,860809E+09	2,860921E+09	4,171871E+08	5,721730E+09	6,138917E+09
-1903	2,085954E+08	2,086124E+08	2,860872E+09	2,860731E+09	4,172078E+08	5,721603E+09	6,138811E+09
-1902	2,085763E+08	2,085778E+08	2,860719E+09	2,860802E+09	4,171542E+08	5,721521E+09	6,138675E+09
-1901	2,086210E+08	2,086138E+08	2,860729E+09	2,860708E+09	4,172348E+08	5,721437E+09	6,138671E+09
-1900	2,085911E+08	2,086224E+08	2,860731E+09	2,860547E+09	4,172135E+08	5,721279E+09	6,138492E+09
-1899	2,086102E+08	2,085951E+08	2,860521E+09	2,860628E+09	4,172053E+08	5,721150E+09	6,138355E+09
-1898	2,086455E+08	2,086440E+08	2,860506E+09	2,860447E+09	4,172894E+08	5,720952E+09	6,138242E+09
-1897	2,086124E+08	2,086303E+08	2,860400E+09	2,860382E+09	4,172427E+08	5,720782E+09	6,138025E+09
-1896	2,086526E+08	2,086267E+08	2,860274E+09	2,860423E+09	4,172793E+08	5,720697E+09	6,137976E+09
-1895	2,086547E+08	2,086709E+08	2,860360E+09	2,860206E+09	4,173256E+08	5,720565E+09	6,137891E+09
-1894	2,086260E+08	2,086305E+08	2,860275E+09	2,860309E+09	4,172564E+08	5,720583E+09	6,137840E+09
-1893	2,086652E+08	2,086418E+08	2,860320E+09	2,860362E+09	4,173070E+08	5,720683E+09	6,137990E+09
-1892	2,086352E+08	2,086583E+08	2,860457E+09	2,860304E+09	4,172936E+08	5,720762E+09	6,138055E+09
-1891	2,086247E+08	2,086111E+08	2,860380E+09	2,860534E+09	4,172358E+08	5,720914E+09	6,138150E+09
-1890	2,086499E+08	2,086423E+08	2,860510E+09	2,860514E+09	4,172922E+08	5,721024E+09	6,138317E+09
-1889	2,086054E+08	2,086228E+08	2,860610E+09	2,860534E+09	4,172282E+08	5,721144E+09	6,138372E+09
-1888	2,086207E+08	2,085901E+08	2,860566E+09	2,860717E+09	4,172107E+08	5,721283E+09	6,138494E+09
-1887	2,086308E+08	2,086315E+08	2,860699E+09	2,860590E+09	4,172623E+08	5,721289E+09	6,138551E+09
-1886	2,085873E+08	2,085953E+08	2,860654E+09	2,860664E+09	4,171827E+08	5,721319E+09	6,138501E+09
-1885	2,086212E+08	2,086016E+08	2,860614E+09	2,860714E+09	4,172228E+08	5,721328E+09	6,138551E+09
-1884	2,086099E+08	2,086374E+08	2,860715E+09	2,860532E+09	4,172473E+08	5,721247E+09	6,138494E+09
-1883	2,085932E+08	2,085976E+08	2,860555E+09	2,860615E+09	4,171908E+08	5,721170E+09	6,138361E+09
-1882	2,086395E+08	2,086285E+08	2,860515E+09	2,860512E+09	4,172680E+08	5,721027E+09	6,138295E+09
-1881	2,086165E+08	2,086375E+08	2,860500E+09	2,860350E+09	4,172541E+08	5,720850E+09	6,138104E+09
-1880	2,086346E+08	2,086128E+08	2,860261E+09	2,860428E+09	4,172474E+08	5,720689E+09	6,137937E+09
-1879	2,086704E+08	2,086690E+08	2,860254E+09	2,860199E+09	4,173394E+08	5,720453E+09	6,137792E+09
-1878	2,086335E+08	2,086552E+08	2,860177E+09	2,860131E+09	4,172886E+08	5,720308E+09	6,137596E+09
-1877	2,086693E+08	2,086466E+08	2,860070E+09	2,860192E+09	4,173159E+08	5,720261E+09	6,137577E+09
-1876	2,086734E+08	2,086891E+08	2,860203E+09	2,860018E+09	4,173625E+08	5,720221E+09	6,137583E+09
-1875	2,086436E+08	2,086459E+08	2,860118E+09	2,860160E+09	4,172894E+08	5,720277E+09	6,137567E+09
-1874	2,086796E+08	2,086566E+08	2,860133E+09	2,860214E+09	4,173362E+08	5,720347E+09	6,137683E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1873	2,086531E+08	2,086745E+08	2,860285E+09	2,860156E+09	4,173276E+08	5,720440E+09	6,137768E+09
-1872	2,086405E+08	2,086261E+08	2,860216E+09	2,860383E+09	4,172666E+08	5,720599E+09	6,137865E+09
-1871	2,086680E+08	2,086594E+08	2,860350E+09	2,860324E+09	4,173274E+08	5,720674E+09	6,138001E+09
-1870	2,086213E+08	2,086383E+08	2,860448E+09	2,860346E+09	4,172596E+08	5,720794E+09	6,138054E+09
-1869	2,086333E+08	2,086059E+08	2,860380E+09	2,860536E+09	4,172391E+08	5,720917E+09	6,138156E+09
-1868	2,086457E+08	2,086513E+08	2,860530E+09	2,860416E+09	4,172971E+08	5,720946E+09	6,138243E+09
-1867	2,086016E+08	2,086165E+08	2,860482E+09	2,860491E+09	4,172181E+08	5,720973E+09	6,138191E+09
-1866	2,086355E+08	2,086191E+08	2,860416E+09	2,860516E+09	4,172546E+08	5,720932E+09	6,138186E+09
-1865	2,086319E+08	2,086524E+08	2,860519E+09	2,860333E+09	4,172843E+08	5,720852E+09	6,138136E+09
-1864	2,086169E+08	2,086119E+08	2,860340E+09	2,860425E+09	4,172288E+08	5,720765E+09	6,137994E+09
-1863	2,086660E+08	2,086486E+08	2,860274E+09	2,860283E+09	4,173146E+08	5,720557E+09	6,137872E+09
-1862	2,086396E+08	2,086618E+08	2,860257E+09	2,860116E+09	4,173015E+08	5,720374E+09	6,137675E+09
-1861	2,086527E+08	2,086386E+08	2,860024E+09	2,860193E+09	4,172912E+08	5,720216E+09	6,137508E+09
-1860	2,086892E+08	2,086932E+08	2,860068E+09	2,859974E+09	4,173824E+08	5,720042E+09	6,137424E+09
-1859	2,086516E+08	2,086756E+08	2,860005E+09	2,859931E+09	4,173272E+08	5,719936E+09	6,137263E+09
-1858	2,086854E+08	2,086606E+08	2,859873E+09	2,860002E+09	4,173460E+08	5,719875E+09	6,137221E+09
-1857	2,086944E+08	2,087034E+08	2,860007E+09	2,859854E+09	4,173978E+08	5,719862E+09	6,137259E+09
-1856	2,086627E+08	2,086621E+08	2,859919E+09	2,860010E+09	4,173248E+08	5,719929E+09	6,137254E+09
-1855	2,086981E+08	2,086777E+08	2,859943E+09	2,860024E+09	4,173758E+08	5,719967E+09	6,137342E+09
-1854	2,086696E+08	2,086929E+08	2,860119E+09	2,859965E+09	4,173626E+08	5,720084E+09	6,137446E+09
-1853	2,086536E+08	2,086410E+08	2,860051E+09	2,860199E+09	4,172945E+08	5,720251E+09	6,137545E+09
-1852	2,086836E+08	2,086728E+08	2,860210E+09	2,860163E+09	4,173564E+08	5,720373E+09	6,137730E+09
-1851	2,086363E+08	2,086535E+08	2,860293E+09	2,860199E+09	4,172898E+08	5,720492E+09	6,137782E+09
-1850	2,086455E+08	2,086215E+08	2,860193E+09	2,860371E+09	4,172670E+08	5,720564E+09	6,137831E+09
-1849	2,086638E+08	2,086691E+08	2,860350E+09	2,860246E+09	4,173329E+08	5,720596E+09	6,137929E+09
-1848	2,086207E+08	2,086329E+08	2,860301E+09	2,860310E+09	4,172536E+08	5,720611E+09	6,137865E+09
-1847	2,086571E+08	2,086377E+08	2,860221E+09	2,860296E+09	4,172948E+08	5,720516E+09	6,137811E+09
-1846	2,086539E+08	2,086700E+08	2,860307E+09	2,860115E+09	4,173239E+08	5,720422E+09	6,137746E+09
-1845	2,086360E+08	2,086321E+08	2,860095E+09	2,860208E+09	4,172681E+08	5,720302E+09	6,137571E+09
-1844	2,086872E+08	2,086722E+08	2,860047E+09	2,860068E+09	4,173594E+08	5,720115E+09	6,137474E+09
-1843	2,086593E+08	2,086871E+08	2,860032E+09	2,859898E+09	4,173465E+08	5,719930E+09	6,137276E+09
-1842	2,086705E+08	2,086587E+08	2,859795E+09	2,859955E+09	4,173292E+08	5,719751E+09	6,137080E+09
-1841	2,087123E+08	2,087101E+08	2,859860E+09	2,859758E+09	4,174224E+08	5,719618E+09	6,137040E+09
-1840	2,086744E+08	2,086914E+08	2,859808E+09	2,859742E+09	4,173658E+08	5,719550E+09	6,136916E+09
-1839	2,087071E+08	2,086814E+08	2,859673E+09	2,859800E+09	4,173885E+08	5,719473E+09	6,136862E+09
-1838	2,087126E+08	2,087255E+08	2,859823E+09	2,859670E+09	4,174381E+08	5,719492E+09	6,136931E+09
-1837	2,086760E+08	2,086835E+08	2,859746E+09	2,859835E+09	4,173595E+08	5,719582E+09	6,136941E+09
-1836	2,087128E+08	2,086947E+08	2,859814E+09	2,859861E+09	4,174075E+08	5,719675E+09	6,137082E+09
-1835	2,086837E+08	2,087063E+08	2,859985E+09	2,859819E+09	4,173900E+08	5,719804E+09	6,137194E+09
-1834	2,086661E+08	2,086498E+08	2,859880E+09	2,860043E+09	4,173158E+08	5,719924E+09	6,137239E+09
-1833	2,087014E+08	2,086834E+08	2,860019E+09	2,860015E+09	4,173847E+08	5,720035E+09	6,137419E+09
-1832	2,086542E+08	2,086689E+08	2,860099E+09	2,860043E+09	4,173232E+08	5,720142E+09	6,137465E+09
-1831	2,086638E+08	2,086427E+08	2,859995E+09	2,860160E+09	4,173066E+08	5,720155E+09	6,137462E+09
-1830	2,086818E+08	2,086883E+08	2,860167E+09	2,860030E+09	4,173701E+08	5,720197E+09	6,137567E+09
-1829	2,086379E+08	2,086510E+08	2,860111E+09	2,860101E+09	4,172888E+08	5,720212E+09	6,137501E+09
-1828	2,086770E+08	2,086547E+08	2,860041E+09	2,860100E+09	4,173317E+08	5,720141E+09	6,137472E+09
-1827	2,086731E+08	2,086908E+08	2,860101E+09	2,859926E+09	4,173639E+08	5,720027E+09	6,137391E+09
-1826	2,086527E+08	2,086539E+08	2,859856E+09	2,859992E+09	4,173066E+08	5,719848E+09	6,137155E+09
-1825	2,087088E+08	2,086944E+08	2,859816E+09	2,859851E+09	4,174031E+08	5,719667E+09	6,137070E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1824	2,086818E+08	2,087081E+08	2,859820E+09	2,859677E+09	4,173899E+08	5,719497E+09	6,136887E+09
-1823	2,086936E+08	2,086800E+08	2,859584E+09	2,859708E+09	4,173736E+08	5,719292E+09	6,136665E+09
-1822	2,087340E+08	2,087286E+08	2,859656E+09	2,859538E+09	4,174626E+08	5,719194E+09	6,136657E+09
-1821	2,086929E+08	2,087114E+08	2,859597E+09	2,859548E+09	4,174043E+08	5,719144E+09	6,136549E+09
-1820	2,087248E+08	2,087024E+08	2,859499E+09	2,859625E+09	4,174272E+08	5,719124E+09	6,136551E+09
-1819	2,087283E+08	2,087458E+08	2,859654E+09	2,859508E+09	4,174740E+08	5,719162E+09	6,136636E+09
-1818	2,086897E+08	2,086964E+08	2,859567E+09	2,859661E+09	4,173861E+08	5,719228E+09	6,136614E+09
-1817	2,087322E+08	2,087038E+08	2,859636E+09	2,859707E+09	4,174360E+08	5,719343E+09	6,136779E+09
-1816	2,087039E+08	2,087157E+08	2,859801E+09	2,859668E+09	4,174196E+08	5,719470E+09	6,136889E+09
-1815	2,086851E+08	2,086668E+08	2,859688E+09	2,859854E+09	4,173519E+08	5,719542E+09	6,136894E+09
-1814	2,087173E+08	2,087037E+08	2,859845E+09	2,859826E+09	4,174211E+08	5,719671E+09	6,137092E+09
-1813	2,086670E+08	2,086908E+08	2,859936E+09	2,859853E+09	4,173578E+08	5,719789E+09	6,137146E+09
-1812	2,086781E+08	2,086621E+08	2,859868E+09	2,859977E+09	4,173403E+08	5,719845E+09	6,137185E+09
-1811	2,086961E+08	2,087052E+08	2,860015E+09	2,859862E+09	4,174013E+08	5,719876E+09	6,137278E+09
-1810	2,086525E+08	2,086645E+08	2,859906E+09	2,859917E+09	4,173170E+08	5,719822E+09	6,137139E+09
-1809	2,086984E+08	2,086706E+08	2,859802E+09	2,859918E+09	4,173690E+08	5,719721E+09	6,137090E+09
-1808	2,086958E+08	2,087108E+08	2,859856E+09	2,859722E+09	4,174066E+08	5,719579E+09	6,136985E+09
-1807	2,086762E+08	2,086790E+08	2,859612E+09	2,859728E+09	4,173553E+08	5,719340E+09	6,136696E+09
-1806	2,087316E+08	2,087161E+08	2,859596E+09	2,859589E+09	4,174477E+08	5,719185E+09	6,136633E+09
-1805	2,087028E+08	2,087290E+08	2,859607E+09	2,859439E+09	4,174318E+08	5,719047E+09	6,136478E+09
-1804	2,087150E+08	2,086998E+08	2,859405E+09	2,859503E+09	4,174148E+08	5,718908E+09	6,136323E+09
-1803	2,087511E+08	2,087508E+08	2,859471E+09	2,859367E+09	4,175019E+08	5,718838E+09	6,136340E+09
-1802	2,087081E+08	2,087312E+08	2,859399E+09	2,859373E+09	4,174392E+08	5,718772E+09	6,136212E+09
-1801	2,087435E+08	2,087189E+08	2,859309E+09	2,859463E+09	4,174624E+08	5,718771E+09	6,136234E+09
-1800	2,087482E+08	2,087590E+08	2,859476E+09	2,859346E+09	4,175072E+08	5,718822E+09	6,136329E+09
-1799	2,087097E+08	2,087109E+08	2,859377E+09	2,859460E+09	4,174205E+08	5,718837E+09	6,136257E+09
-1798	2,087498E+08	2,087173E+08	2,859447E+09	2,859518E+09	4,174671E+08	5,718965E+09	6,136432E+09
-1797	2,087185E+08	2,087341E+08	2,859611E+09	2,859492E+09	4,174526E+08	5,719103E+09	6,136556E+09
-1796	2,086988E+08	2,086875E+08	2,859543E+09	2,859679E+09	4,173863E+08	5,719223E+09	6,136609E+09
-1795	2,087280E+08	2,087244E+08	2,859708E+09	2,859660E+09	4,174524E+08	5,719368E+09	6,136820E+09
-1794	2,086789E+08	2,087046E+08	2,859780E+09	2,859675E+09	4,173836E+08	5,719455E+09	6,136838E+09
-1793	2,086963E+08	2,086735E+08	2,859690E+09	2,859818E+09	4,173698E+08	5,719508E+09	6,136878E+09
-1792	2,087175E+08	2,087174E+08	2,859810E+09	2,859699E+09	4,174349E+08	5,719509E+09	6,136943E+09
-1791	2,086750E+08	2,086854E+08	2,859667E+09	2,859697E+09	4,173604E+08	5,719364E+09	6,136724E+09
-1790	2,087201E+08	2,086938E+08	2,859569E+09	2,859684E+09	4,174140E+08	5,719254E+09	6,136668E+09
-1789	2,087160E+08	2,087355E+08	2,859634E+09	2,859479E+09	4,174515E+08	5,719113E+09	6,136564E+09
-1788	2,086973E+08	2,087018E+08	2,859437E+09	2,859488E+09	4,173991E+08	5,718926E+09	6,136325E+09
-1787	2,087492E+08	2,087371E+08	2,859412E+09	2,859378E+09	4,174862E+08	5,718789E+09	6,136276E+09
-1786	2,087200E+08	2,087459E+08	2,859388E+09	2,859238E+09	4,174658E+08	5,718626E+09	6,136092E+09
-1785	2,087362E+08	2,087187E+08	2,859174E+09	2,859332E+09	4,174549E+08	5,718506E+09	6,135960E+09
-1784	2,087728E+08	2,087702E+08	2,859244E+09	2,859190E+09	4,175431E+08	5,718434E+09	6,135977E+09
-1783	2,087305E+08	2,087521E+08	2,859176E+09	2,859151E+09	4,174827E+08	5,718327E+09	6,135809E+09
-1782	2,087648E+08	2,087350E+08	2,859112E+09	2,859247E+09	4,174999E+08	5,718359E+09	6,135859E+09
-1781	2,087665E+08	2,087738E+08	2,859287E+09	2,859150E+09	4,175403E+08	5,718436E+09	6,135977E+09
-1780	2,087268E+08	2,087275E+08	2,859231E+09	2,859281E+09	4,174543E+08	5,718512E+09	6,135966E+09
-1779	2,087604E+08	2,087379E+08	2,859303E+09	2,859364E+09	4,174982E+08	5,718667E+09	6,136165E+09
-1778	2,087276E+08	2,087525E+08	2,859463E+09	2,859335E+09	4,174801E+08	5,718799E+09	6,136279E+09
-1777	2,087124E+08	2,087036E+08	2,859402E+09	2,859540E+09	4,174160E+08	5,718942E+09	6,136358E+09
-1776	2,087443E+08	2,087363E+08	2,859561E+09	2,859517E+09	4,174806E+08	5,719077E+09	6,136558E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1775	2,086989E+08	2,087174E+08	2,859590E+09	2,859488E+09	4,174163E+08	5,719078E+09	6,136494E+09
-1774	2,087169E+08	2,086871E+08	2,859473E+09	2,859623E+09	4,174039E+08	5,719096E+09	6,136500E+09
-1773	2,087371E+08	2,087369E+08	2,859570E+09	2,859493E+09	4,174740E+08	5,719063E+09	6,136537E+09
-1772	2,086955E+08	2,087101E+08	2,859463E+09	2,859467E+09	4,174056E+08	5,718930E+09	6,136336E+09
-1771	2,087365E+08	2,087192E+08	2,859373E+09	2,859454E+09	4,174556E+08	5,718827E+09	6,136282E+09
-1770	2,087334E+08	2,087549E+08	2,859426E+09	2,859246E+09	4,174883E+08	5,718672E+09	6,136161E+09
-1769	2,087195E+08	2,087189E+08	2,859221E+09	2,859287E+09	4,174384E+08	5,718508E+09	6,135947E+09
-1768	2,087716E+08	2,087544E+08	2,859190E+09	2,859191E+09	4,175260E+08	5,718381E+09	6,135907E+09
-1767	2,087436E+08	2,087693E+08	2,859147E+09	2,859019E+09	4,175129E+08	5,718166E+09	6,135679E+09
-1766	2,087579E+08	2,087419E+08	2,858952E+09	2,859113E+09	4,174997E+08	5,718065E+09	6,135565E+09
-1765	2,087925E+08	2,087920E+08	2,859040E+09	2,858979E+09	4,175844E+08	5,718019E+09	6,135603E+09
-1764	2,087508E+08	2,087711E+08	2,859017E+09	2,858943E+09	4,175218E+08	5,717960E+09	6,135482E+09
-1763	2,087789E+08	2,087521E+08	2,858950E+09	2,859067E+09	4,175310E+08	5,718017E+09	6,135548E+09
-1762	2,087793E+08	2,087871E+08	2,859102E+09	2,858982E+09	4,175664E+08	5,718084E+09	6,135650E+09
-1761	2,087420E+08	2,087437E+08	2,859053E+09	2,859140E+09	4,174857E+08	5,718193E+09	6,135679E+09
-1760	2,087753E+08	2,087540E+08	2,859141E+09	2,859221E+09	4,175293E+08	5,718362E+09	6,135891E+09
-1759	2,087457E+08	2,087686E+08	2,859291E+09	2,859152E+09	4,175143E+08	5,718443E+09	6,135958E+09
-1758	2,087316E+08	2,087162E+08	2,859234E+09	2,859357E+09	4,174478E+08	5,718591E+09	6,136039E+09
-1757	2,087632E+08	2,087488E+08	2,859369E+09	2,859341E+09	4,175120E+08	5,718710E+09	6,136222E+09
-1756	2,087189E+08	2,087349E+08	2,859413E+09	2,859301E+09	4,174538E+08	5,718714E+09	6,136168E+09
-1755	2,087312E+08	2,087112E+08	2,859282E+09	2,859433E+09	4,174424E+08	5,718714E+09	6,136157E+09
-1754	2,087509E+08	2,087584E+08	2,859363E+09	2,859282E+09	4,175093E+08	5,718645E+09	6,136154E+09
-1753	2,087141E+08	2,087319E+08	2,859269E+09	2,859263E+09	4,174460E+08	5,718532E+09	6,135978E+09
-1752	2,087566E+08	2,087370E+08	2,859176E+09	2,859247E+09	4,174936E+08	5,718423E+09	6,135917E+09
-1751	2,087566E+08	2,087730E+08	2,859192E+09	2,859015E+09	4,175296E+08	5,718207E+09	6,135736E+09
-1750	2,087433E+08	2,087382E+08	2,858981E+09	2,859065E+09	4,174815E+08	5,718046E+09	6,135528E+09
-1749	2,087931E+08	2,087771E+08	2,858941E+09	2,858976E+09	4,175702E+08	5,717918E+09	6,135488E+09
-1748	2,087666E+08	2,087945E+08	2,858945E+09	2,858793E+09	4,175611E+08	5,717738E+09	6,135299E+09
-1747	2,087752E+08	2,087655E+08	2,858763E+09	2,858897E+09	4,175407E+08	5,717661E+09	6,135201E+09
-1746	2,088089E+08	2,088069E+08	2,858845E+09	2,858772E+09	4,176158E+08	5,717617E+09	6,135233E+09
-1745	2,087702E+08	2,087855E+08	2,858827E+09	2,858776E+09	4,175558E+08	5,717603E+09	6,135159E+09
-1744	2,087966E+08	2,087667E+08	2,858769E+09	2,858913E+09	4,175633E+08	5,717682E+09	6,135246E+09
-1743	2,087974E+08	2,088057E+08	2,858912E+09	2,858807E+09	4,176032E+08	5,717719E+09	6,135322E+09
-1742	2,087594E+08	2,087618E+08	2,858893E+09	2,858966E+09	4,175212E+08	5,717859E+09	6,135380E+09
-1741	2,087900E+08	2,087708E+08	2,858990E+09	2,859055E+09	4,175608E+08	5,718045E+09	6,135606E+09
-1740	2,087635E+08	2,087838E+08	2,859163E+09	2,858980E+09	4,175473E+08	5,718143E+09	6,135690E+09
-1739	2,087437E+08	2,087321E+08	2,859075E+09	2,859195E+09	4,174758E+08	5,718269E+09	6,135745E+09
-1738	2,087761E+08	2,087626E+08	2,859164E+09	2,859171E+09	4,175386E+08	5,718335E+09	6,135874E+09
-1737	2,087361E+08	2,087542E+08	2,859196E+09	2,859129E+09	4,174903E+08	5,718325E+09	6,135815E+09
-1736	2,087492E+08	2,087311E+08	2,859077E+09	2,859235E+09	4,174803E+08	5,718313E+09	6,135793E+09
-1735	2,087729E+08	2,087776E+08	2,859144E+09	2,859042E+09	4,175505E+08	5,718186E+09	6,135736E+09
-1734	2,087378E+08	2,087492E+08	2,859057E+09	2,859024E+09	4,174870E+08	5,718082E+09	6,135569E+09
-1733	2,087783E+08	2,087554E+08	2,858952E+09	2,859028E+09	4,175336E+08	5,717980E+09	6,135513E+09
-1732	2,087801E+08	2,087962E+08	2,858985E+09	2,858795E+09	4,175763E+08	5,717780E+09	6,135356E+09
-1731	2,087607E+08	2,087662E+08	2,858772E+09	2,858855E+09	4,175269E+08	5,717627E+09	6,135154E+09
-1730	2,088100E+08	2,087992E+08	2,858726E+09	2,858763E+09	4,176093E+08	5,717488E+09	6,135098E+09
-1729	2,087880E+08	2,088150E+08	2,858743E+09	2,858600E+09	4,176030E+08	5,717343E+09	6,134946E+09
-1728	2,087963E+08	2,087810E+08	2,858569E+09	2,858708E+09	4,175773E+08	5,717277E+09	6,134854E+09
-1727	2,088307E+08	2,088206E+08	2,858618E+09	2,858567E+09	4,176513E+08	5,717186E+09	6,134837E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1726	2,087913E+08	2,088021E+08	2,858614E+09	2,858583E+09	4,175934E+08	5,717197E+09	6,134791E+09
-1725	2,088130E+08	2,087870E+08	2,858573E+09	2,858733E+09	4,176000E+08	5,717306E+09	6,134906E+09
-1724	2,088149E+08	2,088274E+08	2,858769E+09	2,858623E+09	4,176423E+08	5,717391E+09	6,135034E+09
-1723	2,087719E+08	2,087815E+08	2,858764E+09	2,858796E+09	4,175534E+08	5,717560E+09	6,135114E+09
-1722	2,088021E+08	2,087812E+08	2,858834E+09	2,858892E+09	4,175833E+08	5,717727E+09	6,135310E+09
-1721	2,087801E+08	2,087954E+08	2,858991E+09	2,858844E+09	4,175755E+08	5,717835E+09	6,135411E+09
-1720	2,087600E+08	2,087469E+08	2,858890E+09	2,859043E+09	4,175069E+08	5,717933E+09	6,135440E+09
-1719	2,087939E+08	2,087802E+08	2,858946E+09	2,858977E+09	4,175741E+08	5,717923E+09	6,135497E+09
-1718	2,087561E+08	2,087742E+08	2,859000E+09	2,858915E+09	4,175303E+08	5,717915E+09	6,135446E+09
-1717	2,087679E+08	2,087506E+08	2,858887E+09	2,859016E+09	4,175185E+08	5,717903E+09	6,135422E+09
-1716	2,087947E+08	2,087972E+08	2,858970E+09	2,858816E+09	4,175919E+08	5,717785E+09	6,135377E+09
-1715	2,087550E+08	2,087706E+08	2,858860E+09	2,858813E+09	4,175256E+08	5,717673E+09	6,135199E+09
-1714	2,087945E+08	2,087748E+08	2,858717E+09	2,858821E+09	4,175693E+08	5,717538E+09	6,135107E+09
-1713	2,088006E+08	2,088201E+08	2,858748E+09	2,858604E+09	4,176207E+08	5,717352E+09	6,134973E+09
-1712	2,087824E+08	2,087889E+08	2,858550E+09	2,858647E+09	4,175713E+08	5,717196E+09	6,134768E+09
-1711	2,088345E+08	2,088169E+08	2,858484E+09	2,858527E+09	4,176515E+08	5,717010E+09	6,134662E+09
-1710	2,088140E+08	2,088313E+08	2,858516E+09	2,858369E+09	4,176452E+08	5,716885E+09	6,134530E+09
-1709	2,088177E+08	2,087987E+08	2,858351E+09	2,858498E+09	4,176164E+08	5,716849E+09	6,134466E+09
-1708	2,088511E+08	2,088431E+08	2,858440E+09	2,858364E+09	4,176942E+08	5,716804E+09	6,134498E+09
-1707	2,088037E+08	2,088276E+08	2,858461E+09	2,858400E+09	4,176313E+08	5,716861E+09	6,134492E+09
-1706	2,088231E+08	2,088056E+08	2,858428E+09	2,858565E+09	4,176287E+08	5,716994E+09	6,134622E+09
-1705	2,088296E+08	2,088429E+08	2,858631E+09	2,858486E+09	4,176724E+08	5,717117E+09	6,134790E+09
-1704	2,087875E+08	2,087918E+08	2,858617E+09	2,858660E+09	4,175793E+08	5,717277E+09	6,134856E+09
-1703	2,088201E+08	2,087890E+08	2,858628E+09	2,858731E+09	4,176091E+08	5,717360E+09	6,134969E+09
-1702	2,088001E+08	2,088080E+08	2,858774E+09	2,858666E+09	4,176082E+08	5,717440E+09	6,135048E+09
-1701	2,087774E+08	2,087660E+08	2,858679E+09	2,858847E+09	4,175433E+08	5,717526E+09	6,135069E+09
-1700	2,088138E+08	2,088021E+08	2,858769E+09	2,858752E+09	4,176159E+08	5,717521E+09	6,135137E+09
-1699	2,087720E+08	2,087968E+08	2,858833E+09	2,858693E+09	4,175687E+08	5,717526E+09	6,135095E+09
-1698	2,087832E+08	2,087671E+08	2,858696E+09	2,858805E+09	4,175502E+08	5,717501E+09	6,135051E+09
-1697	2,088137E+08	2,088162E+08	2,858765E+09	2,858637E+09	4,176299E+08	5,717402E+09	6,135032E+09
-1696	2,087750E+08	2,087924E+08	2,858647E+09	2,858628E+09	4,175674E+08	5,717275E+09	6,134843E+09
-1695	2,088163E+08	2,087958E+08	2,858469E+09	2,858603E+09	4,176121E+08	5,717072E+09	6,134684E+09
-1694	2,088255E+08	2,088419E+08	2,858518E+09	2,858371E+09	4,176673E+08	5,716890E+09	6,134557E+09
-1693	2,088056E+08	2,088102E+08	2,858329E+09	2,858412E+09	4,176158E+08	5,716741E+09	6,134356E+09
-1692	2,088583E+08	2,088370E+08	2,858280E+09	2,858288E+09	4,176954E+08	5,716568E+09	6,134263E+09
-1691	2,088316E+08	2,088536E+08	2,858314E+09	2,858153E+09	4,176852E+08	5,716467E+09	6,134152E+09
-1690	2,088318E+08	2,088180E+08	2,858143E+09	2,858299E+09	4,176498E+08	5,716442E+09	6,134091E+09
-1689	2,088664E+08	2,088644E+08	2,858261E+09	2,858203E+09	4,177308E+08	5,716465E+09	6,134196E+09
-1688	2,088205E+08	2,088452E+08	2,858312E+09	2,858243E+09	4,176657E+08	5,716555E+09	6,134221E+09
-1687	2,088410E+08	2,088154E+08	2,858251E+09	2,858396E+09	4,176565E+08	5,716648E+09	6,134304E+09
-1686	2,088504E+08	2,088518E+08	2,858449E+09	2,858325E+09	4,177022E+08	5,716774E+09	6,134476E+09
-1685	2,088057E+08	2,088043E+08	2,858423E+09	2,858496E+09	4,176100E+08	5,716919E+09	6,134529E+09
-1684	2,088384E+08	2,088081E+08	2,858447E+09	2,858544E+09	4,176465E+08	5,716991E+09	6,134637E+09
-1683	2,088129E+08	2,088320E+08	2,858609E+09	2,858471E+09	4,176448E+08	5,717080E+09	6,134725E+09
-1682	2,087888E+08	2,087858E+08	2,858519E+09	2,858644E+09	4,175746E+08	5,717163E+09	6,134738E+09
-1681	2,088286E+08	2,088210E+08	2,858616E+09	2,858576E+09	4,176496E+08	5,717193E+09	6,134842E+09
-1680	2,087893E+08	2,088129E+08	2,858664E+09	2,858517E+09	4,176022E+08	5,717182E+09	6,134784E+09
-1679	2,088023E+08	2,087812E+08	2,858462E+09	2,858611E+09	4,175835E+08	5,717073E+09	6,134656E+09
-1678	2,088366E+08	2,088354E+08	2,858514E+09	2,858430E+09	4,176719E+08	5,716945E+09	6,134617E+09

1	14	15	16	17	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	2,087974E+08	2,088162E+08	2,858402E+09	2,858403E+09	4,176137E+08	5,716805E+09	6,134418E+09
-1676	2,088419E+08	2,088204E+08	2,858248E+09	2,858348E+09	4,176623E+08	5,716596E+09	6,134258E+09
-1675	2,088467E+08	2,088648E+08	2,858306E+09	2,858118E+09	4,177115E+08	5,716424E+09	6,134135E+09
-1674	2,088250E+08	2,088282E+08	2,858108E+09	2,858175E+09	4,176532E+08	5,716283E+09	6,133936E+09
-1673	2,088777E+08	2,088573E+08	2,858070E+09	2,858094E+09	4,177350E+08	5,716164E+09	6,133899E+09
-1672	2,088498E+08	2,088754E+08	2,858123E+09	2,857975E+09	4,177252E+08	5,716098E+09	6,133823E+09
-1671	2,088496E+08	2,088361E+08	2,857945E+09	2,858116E+09	4,176857E+08	5,716061E+09	6,133747E+09
-1670	2,088866E+08	2,088807E+08	2,858085E+09	2,858028E+09	4,177672E+08	5,716113E+09	6,133881E+09
-1669	2,088403E+08	2,088593E+08	2,858144E+09	2,858076E+09	4,176996E+08	5,716220E+09	6,133919E+09
-1668	2,088611E+08	2,088291E+08	2,858080E+09	2,858215E+09	4,176901E+08	5,716295E+09	6,133985E+09
-1667	2,088647E+08	2,088685E+08	2,858266E+09	2,858147E+09	4,177331E+08	5,716412E+09	6,134145E+09
-1666	2,088171E+08	2,088225E+08	2,858229E+09	2,858312E+09	4,176396E+08	5,716541E+09	6,134181E+09
-1665	2,088511E+08	2,088296E+08	2,858279E+09	2,858375E+09	4,176807E+08	5,716654E+09	6,134335E+09
-1664	2,088281E+08	2,088511E+08	2,858463E+09	2,858295E+09	4,176791E+08	5,716758E+09	6,134437E+09
-1663	2,088062E+08	2,087981E+08	2,858339E+09	2,858453E+09	4,176044E+08	5,716792E+09	6,134396E+09
-1662	2,088491E+08	2,088340E+08	2,858421E+09	2,858391E+09	4,176831E+08	5,716812E+09	6,134495E+09
-1661	2,088104E+08	2,088307E+08	2,858452E+09	2,858328E+09	4,176411E+08	5,716781E+09	6,134422E+09
-1660	2,088241E+08	2,088050E+08	2,858245E+09	2,858392E+09	4,176291E+08	5,716637E+09	6,134266E+09
-1659	2,088549E+08	2,088618E+08	2,858304E+09	2,858200E+09	4,177167E+08	5,716504E+09	6,134221E+09
-1658	2,088162E+08	2,088389E+08	2,858185E+09	2,858160E+09	4,176551E+08	5,716345E+09	6,134000E+09
-1657	2,088628E+08	2,088411E+08	2,858041E+09	2,858132E+09	4,177038E+08	5,716173E+09	6,133877E+09
-1656	2,088684E+08	2,088829E+08	2,858095E+09	2,857910E+09	4,177513E+08	5,716005E+09	6,133756E+09
-1655	2,088460E+08	2,088438E+08	2,857858E+09	2,857961E+09	4,176898E+08	5,715819E+09	6,133509E+09
-1654	2,088989E+08	2,088774E+08	2,857834E+09	2,857890E+09	4,177763E+08	5,715724E+09	6,133501E+09
-1653	2,088709E+08	2,088974E+08	2,857917E+09	2,857777E+09	4,177683E+08	5,715694E+09	6,133462E+09
-1652	2,088714E+08	2,088573E+08	2,857768E+09	2,857906E+09	4,177287E+08	5,715674E+09	6,133403E+09
-1651	2,089037E+08	2,088988E+08	2,857920E+09	2,857834E+09	4,178025E+08	5,715753E+09	6,133556E+09
-1650	2,088557E+08	2,088733E+08	2,857963E+09	2,857897E+09	4,177290E+08	5,715861E+09	6,133590E+09
-1649	2,088753E+08	2,088462E+08	2,857909E+09	2,858067E+09	4,177215E+08	5,715976E+09	6,133697E+09
-1648	2,088780E+08	2,088870E+08	2,858106E+09	2,857995E+09	4,177650E+08	5,716102E+09	6,133867E+09
-1647	2,088306E+08	2,088383E+08	2,858058E+09	2,858138E+09	4,176689E+08	5,716196E+09	6,133865E+09
-1646	2,088677E+08	2,088454E+08	2,858120E+09	2,858199E+09	4,177131E+08	5,716319E+09	6,134032E+09
-1645	2,088469E+08	2,088655E+08	2,858300E+09	2,858123E+09	4,177125E+08	5,716422E+09	6,134135E+09
-1644	2,088271E+08	2,088144E+08	2,858154E+09	2,858258E+09	4,176415E+08	5,716413E+09	6,134054E+09
-1643	2,088660E+08	2,088530E+08	2,858208E+09	2,858189E+09	4,177190E+08	5,716397E+09	6,134116E+09
-1642	2,088276E+08	2,088519E+08	2,858218E+09	2,858115E+09	4,176794E+08	5,716333E+09	6,134013E+09
-1641	2,088434E+08	2,088291E+08	2,858029E+09	2,858182E+09	4,176725E+08	5,716210E+09	6,133883E+09
-1640	2,088765E+08	2,088823E+08	2,858096E+09	2,857978E+09	4,177587E+08	5,716075E+09	6,133833E+09
-1639	2,088395E+08	2,088546E+08	2,857944E+09	2,857924E+09	4,176941E+08	5,715868E+09	6,133562E+09
-1638	2,088876E+08	2,088586E+08	2,857794E+09	2,857904E+09	4,177462E+08	5,715699E+09	6,133445E+09
-1637	2,088922E+08	2,089049E+08	2,857857E+09	2,857694E+09	4,177971E+08	5,715551E+09	6,133348E+09
-1636	2,088685E+08	2,088708E+08	2,857645E+09	2,857730E+09	4,177393E+08	5,715375E+09	6,133114E+09
-1635	2,089152E+08	2,089039E+08	2,857654E+09	2,857672E+09	4,178191E+08	5,715326E+09	6,133145E+09
-1634	2,088875E+08	2,089183E+08	2,857746E+09	2,857579E+09	4,178058E+08	5,715324E+09	6,133130E+09
-1633	2,088879E+08	2,088746E+08	2,857614E+09	2,857744E+09	4,177625E+08	5,715358E+09	6,133120E+09
-1632	2,089199E+08	2,089119E+08	2,857751E+09	2,857684E+09	4,178318E+08	5,715436E+09	6,133267E+09
-1631	2,088717E+08	2,088844E+08	2,857751E+09	2,857734E+09	4,177562E+08	5,715485E+09	6,133241E+09
-1630	2,088918E+08	2,088624E+08	2,857708E+09	2,857899E+09	4,177542E+08	5,715607E+09	6,133361E+09
-1629	2,088962E+08	2,089043E+08	2,857933E+09	2,857822E+09	4,178005E+08	5,715755E+09	6,133556E+09

1	14	15	16	17	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	2,088504E+08	2,088559E+08	2,857901E+09	2,857936E+09	4,177062E+08	5,715838E+09	6,133544E+09
-1627	2,088833E+08	2,088617E+08	2,857964E+09	2,858005E+09	4,177449E+08	5,715970E+09	6,133715E+09
-1626	2,088632E+08	2,088806E+08	2,858111E+09	2,857938E+09	4,177439E+08	5,716050E+09	6,133793E+09
-1625	2,088431E+08	2,088344E+08	2,857967E+09	2,858090E+09	4,176775E+08	5,716057E+09	6,133735E+09
-1624	2,088827E+08	2,088743E+08	2,858016E+09	2,858010E+09	4,177569E+08	5,716026E+09	6,133783E+09
-1623	2,088465E+08	2,088701E+08	2,857994E+09	2,857903E+09	4,177166E+08	5,715897E+09	6,133614E+09
-1622	2,088661E+08	2,088488E+08	2,857805E+09	2,857959E+09	4,177149E+08	5,715764E+09	6,133479E+09
-1621	2,089012E+08	2,089003E+08	2,857867E+09	2,857752E+09	4,178015E+08	5,715620E+09	6,133421E+09
-1620	2,088645E+08	2,088769E+08	2,857704E+09	2,857672E+09	4,177414E+08	5,715375E+09	6,133117E+09
-1619	2,089062E+08	2,088842E+08	2,857559E+09	2,857659E+09	4,177905E+08	5,715218E+09	6,133008E+09
-1618	2,089101E+08	2,089310E+08	2,857629E+09	2,857465E+09	4,178411E+08	5,715094E+09	6,132935E+09
-1617	2,088871E+08	2,088959E+08	2,857465E+09	2,857532E+09	4,177830E+08	5,714997E+09	6,132780E+09
-1616	2,089341E+08	2,089220E+08	2,857489E+09	2,857489E+09	4,178561E+08	5,714978E+09	6,132834E+09
-1615	2,089078E+08	2,089289E+08	2,857544E+09	2,857402E+09	4,178367E+08	5,714946E+09	6,132782E+09
-1614	2,089090E+08	2,088875E+08	2,857402E+09	2,857578E+09	4,177965E+08	5,714981E+09	6,132777E+09
-1613	2,089397E+08	2,089268E+08	2,857546E+09	2,857523E+09	4,178665E+08	5,715068E+09	6,132935E+09
-1612	2,088909E+08	2,089055E+08	2,857567E+09	2,857539E+09	4,177963E+08	5,715106E+09	6,132902E+09
-1611	2,089057E+08	2,088830E+08	2,857555E+09	2,857699E+09	4,177887E+08	5,715254E+09	6,133042E+09
-1610	2,089109E+08	2,089211E+08	2,857783E+09	2,857640E+09	4,178320E+08	5,715423E+09	6,133255E+09
-1609	2,088657E+08	2,088715E+08	2,857766E+09	2,857781E+09	4,177372E+08	5,715546E+09	6,133284E+09
-1608	2,088971E+08	2,088755E+08	2,857799E+09	2,857855E+09	4,177727E+08	5,715654E+09	6,133427E+09
-1607	2,088789E+08	2,088942E+08	2,857889E+09	2,857768E+09	4,177731E+08	5,715657E+09	6,133430E+09
-1606	2,088617E+08	2,088545E+08	2,857736E+09	2,857899E+09	4,177163E+08	5,715635E+09	6,133351E+09
-1605	2,089052E+08	2,088934E+08	2,857796E+09	2,857799E+09	4,177986E+08	5,715594E+09	6,133393E+09
-1604	2,088720E+08	2,088919E+08	2,857773E+09	2,857649E+09	4,177638E+08	5,715422E+09	6,133186E+09
-1603	2,088876E+08	2,088702E+08	2,857589E+09	2,857701E+09	4,177578E+08	5,715290E+09	6,133048E+09
-1602	2,089217E+08	2,089221E+08	2,857634E+09	2,857515E+09	4,178438E+08	5,715149E+09	6,132993E+09
-1601	2,088836E+08	2,089030E+08	2,857503E+09	2,857460E+09	4,177866E+08	5,714963E+09	6,132749E+09
-1600	2,089226E+08	2,089094E+08	2,857374E+09	2,857461E+09	4,178320E+08	5,714835E+09	6,132667E+09
-1599	2,089289E+08	2,089497E+08	2,857425E+09	2,857268E+09	4,178786E+08	5,714693E+09	6,132572E+09
-1598	2,089095E+08	2,089135E+08	2,857265E+09	2,857349E+09	4,178230E+08	5,714613E+09	6,132436E+09
-1597	2,089582E+08	2,089343E+08	2,857282E+09	2,857315E+09	4,178925E+08	5,714598E+09	6,132490E+09
-1596	2,089318E+08	2,089447E+08	2,857313E+09	2,857198E+09	4,178766E+08	5,714511E+09	6,132388E+09
-1595	2,089262E+08	2,089074E+08	2,857188E+09	2,857368E+09	4,178335E+08	5,714556E+09	6,132389E+09
-1594	2,089548E+08	2,089474E+08	2,857346E+09	2,857322E+09	4,179022E+08	5,714668E+09	6,132570E+09
-1593	2,089054E+08	2,089260E+08	2,857430E+09	2,857359E+09	4,178314E+08	5,714789E+09	6,132620E+09
-1592	2,089186E+08	2,088991E+08	2,857434E+09	2,857537E+09	4,178177E+08	5,714971E+09	6,132789E+09
-1591	2,089255E+08	2,089307E+08	2,857615E+09	2,857485E+09	4,178562E+08	5,715100E+09	6,132957E+09
-1590	2,088832E+08	2,088856E+08	2,857578E+09	2,857632E+09	4,177688E+08	5,715210E+09	6,132979E+09
-1589	2,089156E+08	2,088910E+08	2,857600E+09	2,857696E+09	4,178067E+08	5,715296E+09	6,133103E+09
-1588	2,088992E+08	2,089157E+08	2,857681E+09	2,857556E+09	4,178150E+08	5,715237E+09	6,133052E+09
-1587	2,088797E+08	2,088776E+08	2,857544E+09	2,857662E+09	4,177573E+08	5,715205E+09	6,132963E+09
-1586	2,089248E+08	2,089132E+08	2,857588E+09	2,857568E+09	4,178380E+08	5,715156E+09	6,132994E+09
-1585	2,088924E+08	2,089123E+08	2,857582E+09	2,857432E+09	4,178047E+08	5,715014E+09	6,132818E+09
-1584	2,089057E+08	2,088905E+08	2,857380E+09	2,857490E+09	4,177962E+08	5,714870E+09	6,132666E+09
-1583	2,089401E+08	2,089412E+08	2,857385E+09	2,857303E+09	4,178813E+08	5,714689E+09	6,132570E+09
-1582	2,089058E+08	2,089267E+08	2,857266E+09	2,857253E+09	4,178325E+08	5,714518E+09	6,132351E+09
-1581	2,089473E+08	2,089280E+08	2,857155E+09	2,857257E+09	4,178752E+08	5,714412E+09	6,132287E+09
-1580	2,089562E+08	2,089690E+08	2,857198E+09	2,857039E+09	4,179252E+08	5,714237E+09	6,132162E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1579	2,089328E+08	2,089322E+08	2,857042E+09	2,857118E+09	4,178650E+08	5,714160E+09	6,132025E+09
-1578	2,089782E+08	2,089527E+08	2,857050E+09	2,857108E+09	4,179309E+08	5,714159E+09	6,132090E+09
-1577	2,089488E+08	2,089678E+08	2,857134E+09	2,857009E+09	4,179166E+08	5,714143E+09	6,132060E+09
-1576	2,089379E+08	2,089292E+08	2,857044E+09	2,857189E+09	4,178671E+08	5,714233E+09	6,132100E+09
-1575	2,089668E+08	2,089624E+08	2,857196E+09	2,857155E+09	4,179293E+08	5,714351E+09	6,132280E+09
-1574	2,089216E+08	2,089405E+08	2,857286E+09	2,857212E+09	4,178621E+08	5,714498E+09	6,132360E+09
-1573	2,089360E+08	2,089088E+08	2,857276E+09	2,857399E+09	4,178449E+08	5,714676E+09	6,132521E+09
-1572	2,089446E+08	2,089451E+08	2,857413E+09	2,857313E+09	4,178898E+08	5,714726E+09	6,132616E+09
-1571	2,088994E+08	2,089050E+08	2,857374E+09	2,857433E+09	4,178044E+08	5,714807E+09	6,132612E+09
-1570	2,089325E+08	2,089106E+08	2,857388E+09	2,857492E+09	4,178430E+08	5,714880E+09	6,132723E+09
-1569	2,089181E+08	2,089359E+08	2,857511E+09	2,857345E+09	4,178540E+08	5,714856E+09	6,132710E+09
-1568	2,088971E+08	2,088964E+08	2,857373E+09	2,857450E+09	4,177935E+08	5,714823E+09	6,132617E+09
-1567	2,089433E+08	2,089276E+08	2,857367E+09	2,857359E+09	4,178709E+08	5,714726E+09	6,132597E+09
-1566	2,089138E+08	2,089333E+08	2,857349E+09	2,857232E+09	4,178471E+08	5,714581E+09	6,132428E+09
-1565	2,089278E+08	2,089119E+08	2,857154E+09	2,857290E+09	4,178398E+08	5,714444E+09	6,132284E+09
-1564	2,089634E+08	2,089660E+08	2,857149E+09	2,857066E+09	4,179294E+08	5,714215E+09	6,132144E+09
-1563	2,089287E+08	2,089510E+08	2,857054E+09	2,857007E+09	4,178797E+08	5,714061E+09	6,131941E+09
-1562	2,089700E+08	2,089476E+08	2,856931E+09	2,857032E+09	4,179176E+08	5,713963E+09	6,131881E+09
-1561	2,089777E+08	2,089881E+08	2,856998E+09	2,856830E+09	4,179658E+08	5,713827E+09	6,131793E+09
-1560	2,089493E+08	2,089530E+08	2,856840E+09	2,856918E+09	4,179023E+08	5,713758E+09	6,131660E+09
-1559	2,089925E+08	2,089704E+08	2,856827E+09	2,856913E+09	4,179629E+08	5,713740E+09	6,131703E+09
-1558	2,089659E+08	2,089885E+08	2,856946E+09	2,856830E+09	4,179544E+08	5,713775E+09	6,131730E+09
-1557	2,089567E+08	2,089434E+08	2,856891E+09	2,857022E+09	4,179001E+08	5,713914E+09	6,131814E+09
-1556	2,089866E+08	2,089763E+08	2,857029E+09	2,856974E+09	4,179630E+08	5,714003E+09	6,131966E+09
-1555	2,089402E+08	2,089549E+08	2,857119E+09	2,857034E+09	4,178951E+08	5,714153E+09	6,132048E+09
-1554	2,089522E+08	2,089242E+08	2,857085E+09	2,857236E+09	4,178763E+08	5,714320E+09	6,132197E+09
-1553	2,089599E+08	2,089646E+08	2,857252E+09	2,857144E+09	4,179245E+08	5,714396E+09	6,132320E+09
-1552	2,089122E+08	2,089261E+08	2,857220E+09	2,857249E+09	4,178382E+08	5,714468E+09	6,132307E+09
-1551	2,089469E+08	2,089259E+08	2,857201E+09	2,857301E+09	4,178728E+08	5,714502E+09	6,132375E+09
-1550	2,089383E+08	2,089531E+08	2,857314E+09	2,857159E+09	4,178914E+08	5,714472E+09	6,132364E+09
-1549	2,089191E+08	2,089106E+08	2,857160E+09	2,857256E+09	4,178298E+08	5,714416E+09	6,132246E+09
-1548	2,089654E+08	2,089482E+08	2,857113E+09	2,857128E+09	4,179136E+08	5,714241E+09	6,132155E+09
-1547	2,089353E+08	2,089592E+08	2,857106E+09	2,856981E+09	4,178944E+08	5,714087E+09	6,131981E+09
-1546	2,089486E+08	2,089367E+08	2,856916E+09	2,857051E+09	4,178853E+08	5,713967E+09	6,131852E+09
-1545	2,089857E+08	2,089894E+08	2,856959E+09	2,856834E+09	4,179751E+08	5,713792E+09	6,131768E+09
-1544	2,089491E+08	2,089722E+08	2,856861E+09	2,856787E+09	4,179213E+08	5,713648E+09	6,131570E+09
-1543	2,089895E+08	2,089631E+08	2,856696E+09	2,856828E+09	4,179526E+08	5,713523E+09	6,131476E+09
-1542	2,089985E+08	2,090086E+08	2,856766E+09	2,856641E+09	4,180071E+08	5,713407E+09	6,131414E+09
-1541	2,089692E+08	2,089722E+08	2,856641E+09	2,856731E+09	4,179414E+08	5,713371E+09	6,131313E+09
-1540	2,090112E+08	2,089912E+08	2,856635E+09	2,856704E+09	4,180024E+08	5,713340E+09	6,131342E+09
-1539	2,089849E+08	2,090077E+08	2,856791E+09	2,856629E+09	4,179926E+08	5,713419E+09	6,131412E+09
-1538	2,089741E+08	2,089578E+08	2,856729E+09	2,856856E+09	4,179319E+08	5,713585E+09	6,131517E+09
-1537	2,090029E+08	2,089906E+08	2,856882E+09	2,856820E+09	4,179935E+08	5,713701E+09	6,131695E+09
-1536	2,089529E+08	2,089721E+08	2,856955E+09	2,856880E+09	4,179250E+08	5,713835E+09	6,131760E+09
-1535	2,089636E+08	2,089395E+08	2,856882E+09	2,857071E+09	4,179031E+08	5,713952E+09	6,131855E+09
-1534	2,089761E+08	2,089823E+08	2,857059E+09	2,856973E+09	4,179584E+08	5,714032E+09	6,131991E+09
-1533	2,089325E+08	2,089404E+08	2,857043E+09	2,857063E+09	4,178728E+08	5,714106E+09	6,131979E+09
-1532	2,089687E+08	2,089418E+08	2,856986E+09	2,857079E+09	4,179105E+08	5,714064E+09	6,131975E+09
-1531	2,089605E+08	2,089727E+08	2,857097E+09	2,856928E+09	4,179332E+08	5,714026E+09	6,131959E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1530	2,089389E+08	2,089332E+08	2,856932E+09	2,857038E+09	4,178721E+08	5,713970E+09	6,131842E+09
-1529	2,089831E+08	2,089739E+08	2,856923E+09	2,856906E+09	4,179570E+08	5,713829E+09	6,131786E+09
-1528	2,089519E+08	2,089855E+08	2,856928E+09	2,856760E+09	4,179375E+08	5,713688E+09	6,131626E+09
-1527	2,089666E+08	2,089556E+08	2,856702E+09	2,856837E+09	4,179222E+08	5,713539E+09	6,131461E+09
-1526	2,090088E+08	2,090076E+08	2,856732E+09	2,856637E+09	4,180165E+08	5,713369E+09	6,131385E+09
-1525	2,089746E+08	2,089876E+08	2,856624E+09	2,856587E+09	4,179623E+08	5,713211E+09	6,131173E+09
-1524	2,090131E+08	2,089835E+08	2,856425E+09	2,856595E+09	4,179966E+08	5,713020E+09	6,131017E+09
-1523	2,090208E+08	2,090323E+08	2,856532E+09	2,856401E+09	4,180530E+08	5,712933E+09	6,130986E+09
-1522	2,089891E+08	2,089935E+08	2,856440E+09	2,856515E+09	4,179826E+08	5,712955E+09	6,130938E+09
-1521	2,090291E+08	2,090104E+08	2,856496E+09	2,856508E+09	4,180395E+08	5,713005E+09	6,131044E+09
-1520	2,090005E+08	2,090253E+08	2,856654E+09	2,856462E+09	4,180258E+08	5,713116E+09	6,131142E+09
-1519	2,089871E+08	2,089707E+08	2,856551E+09	2,856710E+09	4,179578E+08	5,713261E+09	6,131219E+09
-1518	2,090181E+08	2,090077E+08	2,856698E+09	2,856687E+09	4,180257E+08	5,713385E+09	6,131411E+09
-1517	2,089698E+08	2,089870E+08	2,856781E+09	2,856728E+09	4,179568E+08	5,713509E+09	6,131466E+09
-1516	2,089809E+08	2,089567E+08	2,856688E+09	2,856874E+09	4,179376E+08	5,713562E+09	6,131500E+09
-1515	2,089962E+08	2,089993E+08	2,856879E+09	2,856760E+09	4,179954E+08	5,713640E+09	6,131635E+09
-1514	2,089514E+08	2,089563E+08	2,856850E+09	2,856862E+09	4,179078E+08	5,713711E+09	6,131619E+09
-1513	2,089861E+08	2,089611E+08	2,856807E+09	2,856872E+09	4,179473E+08	5,713679E+09	6,131626E+09
-1512	2,089757E+08	2,089965E+08	2,856902E+09	2,856722E+09	4,179722E+08	5,713624E+09	6,131597E+09
-1511	2,089535E+08	2,089547E+08	2,856707E+09	2,856830E+09	4,179082E+08	5,713538E+09	6,131446E+09
-1510	2,090031E+08	2,089956E+08	2,856707E+09	2,856706E+09	4,179987E+08	5,713412E+09	6,131411E+09
-1509	2,089776E+08	2,090020E+08	2,856715E+09	2,856554E+09	4,179795E+08	5,713269E+09	6,131249E+09
-1508	2,089932E+08	2,089736E+08	2,856442E+09	2,856601E+09	4,179668E+08	5,713043E+09	6,131010E+09
-1507	2,090356E+08	2,090281E+08	2,856475E+09	2,856392E+09	4,180637E+08	5,712867E+09	6,130931E+09
-1506	2,089975E+08	2,090118E+08	2,856374E+09	2,856355E+09	4,180093E+08	5,712729E+09	6,130738E+09
-1505	2,090317E+08	2,090099E+08	2,856239E+09	2,856361E+09	4,180416E+08	5,712600E+09	6,130641E+09
-1504	2,090361E+08	2,090579E+08	2,856379E+09	2,856193E+09	4,180940E+08	5,712572E+09	6,130666E+09
-1503	2,090033E+08	2,090108E+08	2,856277E+09	2,856339E+09	4,180141E+08	5,712616E+09	6,130630E+09
-1502	2,090452E+08	2,090252E+08	2,856329E+09	2,856368E+09	4,180703E+08	5,712697E+09	6,130767E+09
-1501	2,090200E+08	2,090364E+08	2,856475E+09	2,856327E+09	4,180564E+08	5,712802E+09	6,130858E+09
-1500	2,090049E+08	2,089861E+08	2,856325E+09	2,856533E+09	4,179910E+08	5,712858E+09	6,130849E+09
-1499	2,090368E+08	2,090246E+08	2,856492E+09	2,856488E+09	4,180614E+08	5,712981E+09	6,131042E+09
-1498	2,089883E+08	2,090036E+08	2,856593E+09	2,856531E+09	4,179919E+08	5,713124E+09	6,131116E+09
-1497	2,089985E+08	2,089737E+08	2,856540E+09	2,856667E+09	4,179723E+08	5,713206E+09	6,131179E+09
-1496	2,090120E+08	2,090176E+08	2,856722E+09	2,856569E+09	4,180297E+08	5,713291E+09	6,131321E+09
-1495	2,089656E+08	2,089734E+08	2,856652E+09	2,856679E+09	4,179390E+08	5,713331E+09	6,131270E+09
-1494	2,090015E+08	2,089829E+08	2,856607E+09	2,856701E+09	4,179844E+08	5,713308E+09	6,131292E+09
-1493	2,089956E+08	2,090160E+08	2,856708E+09	2,856538E+09	4,180116E+08	5,713246E+09	6,131258E+09
-1492	2,089754E+08	2,089755E+08	2,856478E+09	2,856605E+09	4,179509E+08	5,713082E+09	6,131033E+09
-1491	2,090294E+08	2,090145E+08	2,856476E+09	2,856469E+09	4,180439E+08	5,712945E+09	6,130989E+09
-1490	2,090036E+08	2,090210E+08	2,856462E+09	2,856324E+09	4,180246E+08	5,712787E+09	6,130811E+09
-1489	2,090163E+08	2,089973E+08	2,856208E+09	2,856355E+09	4,180136E+08	5,712563E+09	6,130577E+09
-1488	2,090539E+08	2,090558E+08	2,856246E+09	2,856151E+09	4,181097E+08	5,712398E+09	6,130507E+09
-1487	2,090128E+08	2,090362E+08	2,856152E+09	2,856127E+09	4,180490E+08	5,712279E+09	6,130328E+09
-1486	2,090491E+08	2,090321E+08	2,856058E+09	2,856168E+09	4,180812E+08	5,712226E+09	6,130307E+09
-1485	2,090580E+08	2,090718E+08	2,856212E+09	2,856023E+09	4,181298E+08	5,712234E+09	6,130364E+09
-1484	2,090249E+08	2,090243E+08	2,856070E+09	2,856162E+09	4,180493E+08	5,712232E+09	6,130281E+09
-1483	2,090669E+08	2,090399E+08	2,856125E+09	2,856190E+09	4,181067E+08	5,712316E+09	6,130422E+09
-1482	2,090384E+08	2,090534E+08	2,856272E+09	2,856158E+09	4,180918E+08	5,712430E+09	6,130521E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1481	2,090201E+08	2,090067E+08	2,856172E+09	2,856339E+09	4,180268E+08	5,712511E+09	6,130538E+09
-1480	2,090496E+08	2,090442E+08	2,856351E+09	2,856301E+09	4,180938E+08	5,712652E+09	6,130746E+09
-1479	2,090007E+08	2,090183E+08	2,856432E+09	2,856355E+09	4,180190E+08	5,712787E+09	6,130806E+09
-1478	2,090131E+08	2,089891E+08	2,856372E+09	2,856511E+09	4,180022E+08	5,712883E+09	6,130886E+09
-1477	2,090305E+08	2,090318E+08	2,856535E+09	2,856410E+09	4,180622E+08	5,712945E+09	6,131007E+09
-1476	2,089843E+08	2,089928E+08	2,856417E+09	2,856478E+09	4,179771E+08	5,712895E+09	6,130873E+09
-1475	2,090228E+08	2,090033E+08	2,856384E+09	2,856477E+09	4,180261E+08	5,712861E+09	6,130887E+09
-1474	2,090185E+08	2,090357E+08	2,856486E+09	2,856315E+09	4,180542E+08	5,712801E+09	6,130855E+09
-1473	2,089990E+08	2,089976E+08	2,856276E+09	2,856358E+09	4,179966E+08	5,712634E+09	6,130631E+09
-1472	2,090506E+08	2,090373E+08	2,856257E+09	2,856235E+09	4,180879E+08	5,712491E+09	6,130579E+09
-1471	2,090224E+08	2,090442E+08	2,856215E+09	2,856096E+09	4,180666E+08	5,712311E+09	6,130378E+09
-1470	2,090346E+08	2,090231E+08	2,855983E+09	2,856140E+09	4,180577E+08	5,712124E+09	6,130181E+09
-1469	2,090747E+08	2,090769E+08	2,856050E+09	2,855946E+09	4,181515E+08	5,711995E+09	6,130147E+09
-1468	2,090346E+08	2,090557E+08	2,855940E+09	2,855907E+09	4,180904E+08	5,711847E+09	6,129938E+09
-1467	2,090724E+08	2,090477E+08	2,855861E+09	2,855963E+09	4,181201E+08	5,711824E+09	6,129945E+09
-1466	2,090806E+08	2,090863E+08	2,856001E+09	2,855849E+09	4,181670E+08	5,711850E+09	6,130017E+09
-1465	2,090449E+08	2,090434E+08	2,855875E+09	2,855970E+09	4,180882E+08	5,711845E+09	6,129933E+09
-1464	2,090816E+08	2,090609E+08	2,855934E+09	2,856003E+09	4,181424E+08	5,711937E+09	6,130079E+09
-1463	2,090511E+08	2,090712E+08	2,856081E+09	2,855970E+09	4,181223E+08	5,712051E+09	6,130173E+09
-1462	2,090342E+08	2,090238E+08	2,856017E+09	2,856167E+09	4,180580E+08	5,712184E+09	6,130242E+09
-1461	2,090677E+08	2,090557E+08	2,856200E+09	2,856143E+09	4,181234E+08	5,712342E+09	6,130466E+09
-1460	2,090191E+08	2,090324E+08	2,856237E+09	2,856175E+09	4,180515E+08	5,712412E+09	6,130463E+09
-1459	2,090322E+08	2,090066E+08	2,856178E+09	2,856324E+09	4,180389E+08	5,712502E+09	6,130541E+09
-1458	2,090482E+08	2,090520E+08	2,856334E+09	2,856226E+09	4,181003E+08	5,712560E+09	6,130660E+09
-1457	2,090022E+08	2,090172E+08	2,856248E+09	2,856259E+09	4,180193E+08	5,712507E+09	6,130526E+09
-1456	2,090398E+08	2,090258E+08	2,856207E+09	2,856260E+09	4,180655E+08	5,712467E+09	6,130532E+09
-1455	2,090361E+08	2,090533E+08	2,856271E+09	2,856102E+09	4,180895E+08	5,712373E+09	6,130462E+09
-1454	2,090192E+08	2,090178E+08	2,856052E+09	2,856155E+09	4,180370E+08	5,712207E+09	6,130244E+09
-1453	2,090737E+08	2,090558E+08	2,856011E+09	2,856024E+09	4,181295E+08	5,712035E+09	6,130164E+09
-1452	2,090448E+08	2,090668E+08	2,855942E+09	2,855851E+09	4,181117E+08	5,711793E+09	6,129904E+09
-1451	2,090589E+08	2,090452E+08	2,855750E+09	2,855890E+09	4,181041E+08	5,711639E+09	6,129743E+09
-1450	2,090981E+08	2,090958E+08	2,855834E+09	2,855724E+09	4,181940E+08	5,711558E+09	6,129752E+09
-1449	2,090585E+08	2,090766E+08	2,855757E+09	2,855685E+09	4,181351E+08	5,711442E+09	6,129577E+09
-1448	2,090914E+08	2,090679E+08	2,855670E+09	2,855769E+09	4,181593E+08	5,711439E+09	6,129599E+09
-1447	2,090958E+08	2,091059E+08	2,855791E+09	2,855670E+09	4,182017E+08	5,711461E+09	6,129663E+09
-1446	2,090590E+08	2,090652E+08	2,855698E+09	2,855802E+09	4,181243E+08	5,711500E+09	6,129625E+09
-1445	2,090974E+08	2,090768E+08	2,855774E+09	2,855840E+09	4,181742E+08	5,711614E+09	6,129788E+09
-1444	2,090679E+08	2,090857E+08	2,855901E+09	2,855787E+09	4,181536E+08	5,711688E+09	6,129841E+09
-1443	2,090532E+08	2,090365E+08	2,855851E+09	2,855985E+09	4,180897E+08	5,711835E+09	6,129925E+09
-1442	2,090852E+08	2,090693E+08	2,856016E+09	2,855979E+09	4,181545E+08	5,711995E+09	6,130149E+09
-1441	2,090368E+08	2,090534E+08	2,856062E+09	2,855980E+09	4,180902E+08	5,712041E+09	6,130132E+09
-1440	2,090454E+08	2,090296E+08	2,855998E+09	2,856128E+09	4,180751E+08	5,712126E+09	6,130201E+09
-1439	2,090620E+08	2,090713E+08	2,856140E+09	2,856027E+09	4,181333E+08	5,712167E+09	6,130300E+09
-1438	2,090202E+08	2,090357E+08	2,856063E+09	2,856064E+09	4,180559E+08	5,712127E+09	6,130183E+09
-1437	2,090630E+08	2,090391E+08	2,855999E+09	2,856070E+09	4,181021E+08	5,712068E+09	6,130170E+09
-1436	2,090606E+08	2,090700E+08	2,856005E+09	2,855877E+09	4,181305E+08	5,711883E+09	6,130013E+09
-1435	2,090443E+08	2,090393E+08	2,855796E+09	2,855910E+09	4,180836E+08	5,711706E+09	6,129790E+09
-1434	2,090960E+08	2,090797E+08	2,855767E+09	2,855787E+09	4,181757E+08	5,711554E+09	6,129730E+09
-1433	2,090675E+08	2,090947E+08	2,855742E+09	2,855589E+09	4,181622E+08	5,711331E+09	6,129494E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1432	2,090780E+08	2,090700E+08	2,855564E+09	2,855657E+09	4,181480E+08	5,711221E+09	6,129369E+09
-1431	2,091156E+08	2,091151E+08	2,855626E+09	2,855522E+09	4,182307E+08	5,711149E+09	6,129379E+09
-1430	2,090775E+08	2,090967E+08	2,855557E+09	2,855511E+09	4,181742E+08	5,711068E+09	6,129242E+09
-1429	2,091108E+08	2,090852E+08	2,855460E+09	2,855602E+09	4,181960E+08	5,711062E+09	6,129258E+09
-1428	2,091139E+08	2,091237E+08	2,855559E+09	2,855472E+09	4,182377E+08	5,711032E+09	6,129269E+09
-1427	2,090791E+08	2,090819E+08	2,855508E+09	2,855594E+09	4,181610E+08	5,711102E+09	6,129263E+09
-1426	2,091162E+08	2,090905E+08	2,855600E+09	2,855655E+09	4,182067E+08	5,711254E+09	6,129461E+09
-1425	2,090873E+08	2,091034E+08	2,855751E+09	2,855592E+09	4,181907E+08	5,711343E+09	6,129534E+09
-1424	2,090679E+08	2,090555E+08	2,855697E+09	2,855811E+09	4,181234E+08	5,711508E+09	6,129631E+09
-1423	2,090960E+08	2,090879E+08	2,855838E+09	2,855816E+09	4,181838E+08	5,711654E+09	6,129837E+09
-1422	2,090500E+08	2,090741E+08	2,855909E+09	2,855821E+09	4,181242E+08	5,711730E+09	6,129854E+09
-1421	2,090621E+08	2,090449E+08	2,855833E+09	2,855962E+09	4,181070E+08	5,711795E+09	6,129902E+09
-1420	2,090816E+08	2,090842E+08	2,855924E+09	2,855830E+09	4,181658E+08	5,711753E+09	6,129919E+09
-1419	2,090446E+08	2,090503E+08	2,855837E+09	2,855849E+09	4,180949E+08	5,711685E+09	6,129780E+09
-1418	2,090866E+08	2,090564E+08	2,855742E+09	2,855854E+09	4,181430E+08	5,711595E+09	6,129738E+09
-1417	2,090842E+08	2,090972E+08	2,855758E+09	2,855617E+09	4,181814E+08	5,711375E+09	6,129556E+09
-1416	2,090633E+08	2,090683E+08	2,855568E+09	2,855648E+09	4,181317E+08	5,711216E+09	6,129347E+09
-1415	2,091122E+08	2,091044E+08	2,855549E+09	2,855539E+09	4,182166E+08	5,711088E+09	6,129304E+09
-1414	2,090876E+08	2,091178E+08	2,855559E+09	2,855375E+09	4,182054E+08	5,710934E+09	6,129139E+09
-1413	2,091003E+08	2,090873E+08	2,855367E+09	2,855473E+09	4,181876E+08	5,710840E+09	6,129027E+09
-1412	2,091374E+08	2,091323E+08	2,855383E+09	2,855329E+09	4,182697E+08	5,710712E+09	6,128981E+09
-1411	2,091010E+08	2,091165E+08	2,855329E+09	2,855310E+09	4,182174E+08	5,710639E+09	6,128856E+09
-1410	2,091306E+08	2,091043E+08	2,855248E+09	2,855410E+09	4,182349E+08	5,710658E+09	6,128893E+09
-1409	2,091342E+08	2,091454E+08	2,855387E+09	2,855251E+09	4,182796E+08	5,710639E+09	6,128918E+09
-1408	2,090950E+08	2,091005E+08	2,855357E+09	2,855396E+09	4,181954E+08	5,710753E+09	6,128949E+09
-1407	2,091288E+08	2,091052E+08	2,855434E+09	2,855485E+09	4,182340E+08	5,710919E+09	6,129153E+09
-1406	2,091024E+08	2,091200E+08	2,855593E+09	2,855445E+09	4,182224E+08	5,711038E+09	6,129260E+09
-1405	2,090831E+08	2,090712E+08	2,855523E+09	2,855669E+09	4,181544E+08	5,711192E+09	6,129346E+09
-1404	2,091116E+08	2,091031E+08	2,855628E+09	2,855639E+09	4,182147E+08	5,711267E+09	6,129482E+09
-1403	2,090710E+08	2,090887E+08	2,855713E+09	2,855623E+09	4,181596E+08	5,711336E+09	6,129496E+09
-1402	2,090837E+08	2,090587E+08	2,855625E+09	2,855767E+09	4,181424E+08	5,711392E+09	6,129534E+09
-1401	2,091057E+08	2,091039E+08	2,855708E+09	2,855595E+09	4,182096E+08	5,711304E+09	6,129513E+09
-1400	2,090645E+08	2,090752E+08	2,855617E+09	2,855611E+09	4,181397E+08	5,711228E+09	6,129367E+09
-1399	2,091018E+08	2,090828E+08	2,855512E+09	2,855617E+09	4,181846E+08	5,711129E+09	6,129313E+09
-1398	2,091016E+08	2,091252E+08	2,855571E+09	2,855392E+09	4,182268E+08	5,710962E+09	6,129189E+09
-1397	2,090826E+08	2,090906E+08	2,855386E+09	2,855440E+09	4,181732E+08	5,710826E+09	6,128999E+09
-1396	2,091324E+08	2,091215E+08	2,855327E+09	2,855327E+09	4,182538E+08	5,710654E+09	6,128907E+09
-1395	2,091135E+08	2,091343E+08	2,855329E+09	2,855171E+09	4,182478E+08	5,710500E+09	6,128748E+09
-1394	2,091249E+08	2,091050E+08	2,855115E+09	2,855278E+09	4,182299E+08	5,710394E+09	6,128624E+09
-1393	2,091613E+08	2,091566E+08	2,855142E+09	2,855095E+09	4,183180E+08	5,710237E+09	6,128555E+09
-1392	2,091206E+08	2,091411E+08	2,855118E+09	2,855077E+09	4,182617E+08	5,710195E+09	6,128457E+09
-1391	2,091459E+08	2,091232E+08	2,855053E+09	2,855193E+09	4,182690E+08	5,710245E+09	6,128514E+09
-1390	2,091518E+08	2,091624E+08	2,855237E+09	2,855074E+09	4,183142E+08	5,710311E+09	6,128625E+09
-1389	2,091125E+08	2,091141E+08	2,855203E+09	2,855247E+09	4,182266E+08	5,710450E+09	6,128677E+09
-1388	2,091432E+08	2,091191E+08	2,855242E+09	2,855330E+09	4,182623E+08	5,710571E+09	6,128834E+09
-1387	2,091205E+08	2,091370E+08	2,855413E+09	2,855285E+09	4,182575E+08	5,710698E+09	6,128956E+09
-1386	2,090997E+08	2,090878E+08	2,855345E+09	2,855504E+09	4,181875E+08	5,710849E+09	6,129036E+09
-1385	2,091309E+08	2,091225E+08	2,855454E+09	2,855431E+09	4,182534E+08	5,710885E+09	6,129138E+09
-1384	2,090891E+08	2,091072E+08	2,855531E+09	2,855413E+09	4,181962E+08	5,710944E+09	6,129141E+09

1	14	15	16	17	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	2,090990E+08	2,090768E+08	2,855411E+09	2,855559E+09	4,181758E+08	5,710970E+09	6,129145E+09
-1382	2,091239E+08	2,091259E+08	2,855503E+09	2,855393E+09	4,182498E+08	5,710896E+09	6,129146E+09
-1381	2,090827E+08	2,090986E+08	2,855405E+09	2,855402E+09	4,181813E+08	5,710807E+09	6,128989E+09
-1380	2,091194E+08	2,091038E+08	2,855278E+09	2,855384E+09	4,182231E+08	5,710662E+09	6,128885E+09
-1379	2,091262E+08	2,091443E+08	2,855352E+09	2,855162E+09	4,182705E+08	5,710514E+09	6,128784E+09
-1378	2,091083E+08	2,091076E+08	2,855159E+09	2,855231E+09	4,182158E+08	5,710390E+09	6,128606E+09
-1377	2,091600E+08	2,091431E+08	2,855086E+09	2,855093E+09	4,183031E+08	5,710179E+09	6,128482E+09
-1376	2,091376E+08	2,091588E+08	2,855087E+09	2,854942E+09	4,182964E+08	5,710029E+09	6,128325E+09
-1375	2,091433E+08	2,091301E+08	2,854877E+09	2,855054E+09	4,182734E+08	5,709930E+09	6,128204E+09
-1374	2,091802E+08	2,091799E+08	2,854954E+09	2,854881E+09	4,183602E+08	5,709836E+09	6,128196E+09
-1373	2,091386E+08	2,091599E+08	2,854949E+09	2,854885E+09	4,182986E+08	5,709834E+09	6,128133E+09
-1372	2,091617E+08	2,091368E+08	2,854864E+09	2,855007E+09	4,182985E+08	5,709871E+09	6,128170E+09
-1371	2,091719E+08	2,091758E+08	2,855051E+09	2,854911E+09	4,183477E+08	5,709961E+09	6,128309E+09
-1370	2,091309E+08	2,091295E+08	2,855011E+09	2,855098E+09	4,182604E+08	5,710109E+09	6,128369E+09
-1369	2,091610E+08	2,091403E+08	2,855052E+09	2,855137E+09	4,183013E+08	5,710189E+09	6,128491E+09
-1368	2,091366E+08	2,091570E+08	2,855243E+09	2,855086E+09	4,182936E+08	5,710329E+09	6,128623E+09
-1367	2,091134E+08	2,091047E+08	2,855168E+09	2,855308E+09	4,182181E+08	5,710476E+09	6,128694E+09
-1366	2,091484E+08	2,091376E+08	2,855294E+09	2,855250E+09	4,182860E+08	5,710545E+09	6,128831E+09
-1365	2,091072E+08	2,091236E+08	2,855348E+09	2,855240E+09	4,182308E+08	5,710588E+09	6,128819E+09
-1364	2,091152E+08	2,090948E+08	2,855186E+09	2,855360E+09	4,182101E+08	5,710546E+09	6,128756E+09
-1363	2,091447E+08	2,091472E+08	2,855287E+09	2,855186E+09	4,182919E+08	5,710474E+09	6,128766E+09
-1362	2,091042E+08	2,091196E+08	2,855198E+09	2,855191E+09	4,182238E+08	5,710389E+09	6,128613E+09
-1361	2,091426E+08	2,091267E+08	2,855068E+09	2,855139E+09	4,182693E+08	5,710208E+09	6,128477E+09
-1360	2,091497E+08	2,091656E+08	2,855134E+09	2,854930E+09	4,183153E+08	5,710064E+09	6,128379E+09
-1359	2,091292E+08	2,091287E+08	2,854906E+09	2,855007E+09	4,182579E+08	5,709912E+09	6,128170E+09
-1358	2,091826E+08	2,091663E+08	2,854850E+09	2,854878E+09	4,183489E+08	5,709728E+09	6,128077E+09
-1357	2,091587E+08	2,091834E+08	2,854854E+09	2,854725E+09	4,183421E+08	5,709579E+09	6,127921E+09
-1356	2,091611E+08	2,091501E+08	2,854642E+09	2,854819E+09	4,183112E+08	5,709460E+09	6,127772E+09
-1355	2,092025E+08	2,091968E+08	2,854752E+09	2,854669E+09	4,183993E+08	5,709420E+09	6,127819E+09
-1354	2,091605E+08	2,091746E+08	2,854761E+09	2,854701E+09	4,183351E+08	5,709462E+09	6,127797E+09
-1353	2,091823E+08	2,091562E+08	2,854677E+09	2,854810E+09	4,183385E+08	5,709487E+09	6,127826E+09
-1352	2,091893E+08	2,091970E+08	2,854874E+09	2,854731E+09	4,183863E+08	5,709605E+09	6,127991E+09
-1351	2,091436E+08	2,091503E+08	2,854839E+09	2,854925E+09	4,182939E+08	5,709764E+09	6,128058E+09
-1350	2,091753E+08	2,091580E+08	2,854919E+09	2,854973E+09	4,183332E+08	5,709892E+09	6,128225E+09
-1349	2,091518E+08	2,091711E+08	2,855097E+09	2,854929E+09	4,183229E+08	5,710027E+09	6,128350E+09
-1348	2,091278E+08	2,091155E+08	2,854976E+09	2,855132E+09	4,182433E+08	5,710108E+09	6,128351E+09
-1347	2,091691E+08	2,091504E+08	2,855079E+09	2,855076E+09	4,183195E+08	5,710155E+09	6,128475E+09
-1346	2,091281E+08	2,091417E+08	2,855121E+09	2,855054E+09	4,182698E+08	5,710175E+09	6,128445E+09
-1345	2,091366E+08	2,091200E+08	2,854959E+09	2,855118E+09	4,182566E+08	5,710076E+09	6,128333E+09
-1344	2,091654E+08	2,091706E+08	2,855076E+09	2,854939E+09	4,183360E+08	5,710015E+09	6,128351E+09
-1343	2,091240E+08	2,091411E+08	2,854983E+09	2,854955E+09	4,182651E+08	5,709938E+09	6,128203E+09
-1342	2,091652E+08	2,091462E+08	2,854866E+09	2,854922E+09	4,183114E+08	5,709788E+09	6,128100E+09
-1341	2,091716E+08	2,091872E+08	2,854908E+09	2,854726E+09	4,183587E+08	5,709634E+09	6,127993E+09
-1340	2,091486E+08	2,091516E+08	2,854650E+09	2,854783E+09	4,183002E+08	5,709433E+09	6,127733E+09
-1339	2,092055E+08	2,091888E+08	2,854609E+09	2,854657E+09	4,183943E+08	5,709266E+09	6,127660E+09
-1338	2,091816E+08	2,092044E+08	2,854639E+09	2,854507E+09	4,183860E+08	5,709146E+09	6,127532E+09
-1337	2,091839E+08	2,091714E+08	2,854438E+09	2,854577E+09	4,183553E+08	5,709015E+09	6,127370E+09
-1336	2,092228E+08	2,092150E+08	2,854563E+09	2,854456E+09	4,184378E+08	5,709019E+09	6,127457E+09
-1335	2,091775E+08	2,091933E+08	2,854565E+09	2,854517E+09	4,183707E+08	5,709082E+09	6,127453E+09

1	14	15	16	17	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	2,091984E+08	2,091758E+08	2,854514E+09	2,854645E+09	4,183742E+08	5,709159E+09	6,127533E+09
-1333	2,092035E+08	2,092164E+08	2,854711E+09	2,854576E+09	4,184199E+08	5,709287E+09	6,127707E+09
-1332	2,091567E+08	2,091640E+08	2,854660E+09	2,854749E+09	4,183207E+08	5,709409E+09	6,127730E+09
-1331	2,091943E+08	2,091683E+08	2,854738E+09	2,854810E+09	4,183626E+08	5,709548E+09	6,127911E+09
-1330	2,091728E+08	2,091819E+08	2,854905E+09	2,854767E+09	4,183547E+08	5,709672E+09	6,128027E+09
-1329	2,091485E+08	2,091345E+08	2,854766E+09	2,854923E+09	4,182830E+08	5,709689E+09	6,127972E+09
-1328	2,091876E+08	2,091731E+08	2,854877E+09	2,854862E+09	4,183607E+08	5,709739E+09	6,128100E+09
-1327	2,091439E+08	2,091662E+08	2,854922E+09	2,854832E+09	4,183101E+08	5,709754E+09	6,128064E+09
-1326	2,091537E+08	2,091425E+08	2,854799E+09	2,854903E+09	4,182961E+08	5,709701E+09	6,127998E+09
-1325	2,091828E+08	2,091909E+08	2,854897E+09	2,854740E+09	4,183737E+08	5,709637E+09	6,128011E+09
-1324	2,091419E+08	2,091576E+08	2,854753E+09	2,854745E+09	4,182995E+08	5,709498E+09	6,127797E+09
-1323	2,091892E+08	2,091642E+08	2,854609E+09	2,854722E+09	4,183534E+08	5,709331E+09	6,127684E+09
-1322	2,091968E+08	2,092084E+08	2,854642E+09	2,854510E+09	4,184052E+08	5,709152E+09	6,127557E+09
-1321	2,091738E+08	2,091782E+08	2,854391E+09	2,854510E+09	4,183520E+08	5,708901E+09	6,127253E+09
-1320	2,092291E+08	2,092116E+08	2,854381E+09	2,854390E+09	4,184407E+08	5,708771E+09	6,127212E+09
-1319	2,092027E+08	2,092252E+08	2,854426E+09	2,854268E+09	4,184279E+08	5,708694E+09	6,127122E+09
-1318	2,092047E+08	2,091902E+08	2,854268E+09	2,854377E+09	4,183949E+08	5,708644E+09	6,127039E+09
-1317	2,092395E+08	2,092353E+08	2,854387E+09	2,854292E+09	4,184749E+08	5,708679E+09	6,127154E+09
-1316	2,091917E+08	2,092120E+08	2,854376E+09	2,854351E+09	4,184037E+08	5,708726E+09	6,127130E+09
-1315	2,092157E+08	2,091925E+08	2,854336E+09	2,854491E+09	4,184083E+08	5,708826E+09	6,127235E+09
-1314	2,092222E+08	2,092299E+08	2,854542E+09	2,854420E+09	4,184521E+08	5,708963E+09	6,127415E+09
-1313	2,091764E+08	2,091797E+08	2,854476E+09	2,854551E+09	4,183561E+08	5,709027E+09	6,127383E+09
-1312	2,092129E+08	2,091822E+08	2,854542E+09	2,854615E+09	4,183951E+08	5,709157E+09	6,127552E+09
-1311	2,091894E+08	2,092003E+08	2,854695E+09	2,854575E+09	4,183897E+08	5,709270E+09	6,127659E+09
-1310	2,091649E+08	2,091566E+08	2,854592E+09	2,854722E+09	4,183216E+08	5,709314E+09	6,127635E+09
-1309	2,092006E+08	2,091962E+08	2,854706E+09	2,854663E+09	4,183968E+08	5,709369E+09	6,127766E+09
-1308	2,091584E+08	2,091842E+08	2,854736E+09	2,854620E+09	4,183427E+08	5,709356E+09	6,127699E+09
-1307	2,091745E+08	2,091574E+08	2,854595E+09	2,854712E+09	4,183318E+08	5,709307E+09	6,127639E+09
-1306	2,092069E+08	2,092059E+08	2,854669E+09	2,854552E+09	4,184128E+08	5,709221E+09	6,127634E+09
-1305	2,091677E+08	2,091809E+08	2,854492E+09	2,854506E+09	4,183487E+08	5,708997E+09	6,127346E+09
-1304	2,092136E+08	2,091892E+08	2,854354E+09	2,854472E+09	4,184027E+08	5,708826E+09	6,127229E+09
-1303	2,092185E+08	2,092346E+08	2,854402E+09	2,854255E+09	4,184531E+08	5,708657E+09	6,127110E+09
-1302	2,091957E+08	2,092021E+08	2,854207E+09	2,854261E+09	4,183978E+08	5,708468E+09	6,126866E+09
-1301	2,092467E+08	2,092331E+08	2,854197E+09	2,854176E+09	4,184797E+08	5,708373E+09	6,126853E+09
-1300	2,092197E+08	2,092423E+08	2,854216E+09	2,854071E+09	4,184620E+08	5,708287E+09	6,126749E+09
-1299	2,092246E+08	2,092083E+08	2,854053E+09	2,854214E+09	4,184328E+08	5,708267E+09	6,126700E+09
-1298	2,092596E+08	2,092542E+08	2,854178E+09	2,854132E+09	4,185138E+08	5,708309E+09	6,126823E+09
-1297	2,092125E+08	2,092326E+08	2,854168E+09	2,854143E+09	4,184451E+08	5,708311E+09	6,126756E+09
-1296	2,092356E+08	2,092080E+08	2,854150E+09	2,854285E+09	4,184436E+08	5,708435E+09	6,126879E+09
-1295	2,092403E+08	2,092436E+08	2,854351E+09	2,854225E+09	4,184839E+08	5,708576E+09	6,127060E+09
-1294	2,091942E+08	2,091954E+08	2,854319E+09	2,854363E+09	4,183896E+08	5,708682E+09	6,127072E+09
-1293	2,092256E+08	2,092030E+08	2,854376E+09	2,854445E+09	4,184286E+08	5,708821E+09	6,127250E+09
-1292	2,092008E+08	2,092203E+08	2,854516E+09	2,854392E+09	4,184211E+08	5,708908E+09	6,127329E+09
-1291	2,091808E+08	2,091756E+08	2,854422E+09	2,854552E+09	4,183564E+08	5,708974E+09	6,127331E+09
-1290	2,092194E+08	2,092114E+08	2,854530E+09	2,854489E+09	4,184307E+08	5,709019E+09	6,127449E+09
-1289	2,091812E+08	2,092012E+08	2,854522E+09	2,854403E+09	4,183825E+08	5,708925E+09	6,127307E+09
-1288	2,091983E+08	2,091741E+08	2,854355E+09	2,854490E+09	4,183724E+08	5,708845E+09	6,127218E+09
-1287	2,092298E+08	2,092276E+08	2,854401E+09	2,854322E+09	4,184575E+08	5,708723E+09	6,127180E+09
-1286	2,091912E+08	2,092079E+08	2,854260E+09	2,854254E+09	4,183991E+08	5,708514E+09	6,126913E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1285	2,092326E+08	2,092168E+08	2,854132E+09	2,854222E+09	4,184494E+08	5,708354E+09	6,126803E+09
-1284	2,092371E+08	2,092561E+08	2,854178E+09	2,854006E+09	4,184931E+08	5,708184E+09	6,126677E+09
-1283	2,092185E+08	2,092209E+08	2,853992E+09	2,854053E+09	4,184394E+08	5,708045E+09	6,126484E+09
-1282	2,092689E+08	2,092505E+08	2,853985E+09	2,853993E+09	4,185194E+08	5,707977E+09	6,126497E+09
-1281	2,092431E+08	2,092654E+08	2,853991E+09	2,853863E+09	4,185086E+08	5,707854E+09	6,126363E+09
-1280	2,092455E+08	2,092299E+08	2,853846E+09	2,854010E+09	4,184755E+08	5,707855E+09	6,126331E+09
-1279	2,092778E+08	2,092742E+08	2,853985E+09	2,853936E+09	4,185521E+08	5,707920E+09	6,126472E+09
-1278	2,092316E+08	2,092502E+08	2,854020E+09	2,853947E+09	4,184818E+08	5,707967E+09	6,126449E+09
-1277	2,092488E+08	2,092239E+08	2,853991E+09	2,854112E+09	4,184727E+08	5,708103E+09	6,126575E+09
-1276	2,092529E+08	2,092565E+08	2,854164E+09	2,854056E+09	4,185094E+08	5,708220E+09	6,126729E+09
-1275	2,092101E+08	2,092117E+08	2,854129E+09	2,854210E+09	4,184219E+08	5,708340E+09	6,126761E+09
-1274	2,092416E+08	2,092208E+08	2,854195E+09	2,854282E+09	4,184624E+08	5,708477E+09	6,126939E+09
-1273	2,092205E+08	2,092400E+08	2,854323E+09	2,854182E+09	4,184604E+08	5,708504E+09	6,126965E+09
-1272	2,092016E+08	2,091916E+08	2,854233E+09	2,854340E+09	4,183932E+08	5,708573E+09	6,126966E+09
-1271	2,092401E+08	2,092271E+08	2,854316E+09	2,854285E+09	4,184672E+08	5,708601E+09	6,127068E+09
-1270	2,092042E+08	2,092212E+08	2,854320E+09	2,854187E+09	4,184254E+08	5,708507E+09	6,126933E+09
-1269	2,092158E+08	2,092006E+08	2,854133E+09	2,854275E+09	4,184165E+08	5,708409E+09	6,126825E+09
-1268	2,092468E+08	2,092521E+08	2,854166E+09	2,854086E+09	4,184989E+08	5,708252E+09	6,126751E+09
-1267	2,092120E+08	2,092325E+08	2,854043E+09	2,854029E+09	4,184445E+08	5,708072E+09	6,126516E+09
-1266	2,092547E+08	2,092371E+08	2,853923E+09	2,854002E+09	4,184918E+08	5,707925E+09	6,126416E+09
-1265	2,092618E+08	2,092759E+08	2,853940E+09	2,853766E+09	4,185377E+08	5,707706E+09	6,126243E+09
-1264	2,092432E+08	2,092399E+08	2,853754E+09	2,853832E+09	4,184831E+08	5,707586E+09	6,126069E+09
-1263	2,092905E+08	2,092723E+08	2,853740E+09	2,853782E+09	4,185628E+08	5,707522E+09	6,126085E+09
-1262	2,092653E+08	2,092892E+08	2,853795E+09	2,853646E+09	4,185545E+08	5,707441E+09	6,125996E+09
-1261	2,092618E+08	2,092526E+08	2,853665E+09	2,853807E+09	4,185144E+08	5,707473E+09	6,125987E+09
-1260	2,092931E+08	2,092879E+08	2,853795E+09	2,853740E+09	4,185810E+08	5,707535E+09	6,126116E+09
-1259	2,092504E+08	2,092632E+08	2,853834E+09	2,853787E+09	4,185137E+08	5,707621E+09	6,126135E+09
-1258	2,092670E+08	2,092375E+08	2,853805E+09	2,853959E+09	4,185044E+08	5,707764E+09	6,126268E+09
-1257	2,092720E+08	2,092756E+08	2,853963E+09	2,853870E+09	4,185476E+08	5,707833E+09	6,126380E+09
-1256	2,092285E+08	2,092315E+08	2,853954E+09	2,854018E+09	4,184599E+08	5,707973E+09	6,126432E+09
-1255	2,092573E+08	2,092400E+08	2,854025E+09	2,854091E+09	4,184973E+08	5,708117E+09	6,126614E+09
-1254	2,092394E+08	2,092582E+08	2,854177E+09	2,853984E+09	4,184976E+08	5,708161E+09	6,126659E+09
-1253	2,092162E+08	2,092108E+08	2,854054E+09	2,854152E+09	4,184271E+08	5,708207E+09	6,126634E+09
-1252	2,092556E+08	2,092437E+08	2,854088E+09	2,854089E+09	4,184992E+08	5,708178E+09	6,126677E+09
-1251	2,092247E+08	2,092436E+08	2,854078E+09	2,853994E+09	4,184682E+08	5,708072E+09	6,126540E+09
-1250	2,092372E+08	2,092234E+08	2,853898E+09	2,854057E+09	4,184606E+08	5,707955E+09	6,126415E+09
-1249	2,092717E+08	2,092745E+08	2,853920E+09	2,853823E+09	4,185462E+08	5,707743E+09	6,126289E+09
-1248	2,092382E+08	2,092518E+08	2,853810E+09	2,853767E+09	4,184901E+08	5,707577E+09	6,126067E+09
-1247	2,092780E+08	2,092564E+08	2,853685E+09	2,853766E+09	4,185344E+08	5,707451E+09	6,125985E+09
-1246	2,092865E+08	2,092994E+08	2,853730E+09	2,853539E+09	4,185859E+08	5,707270E+09	6,125856E+09
-1245	2,092609E+08	2,092674E+08	2,853547E+09	2,853626E+09	4,185283E+08	5,707173E+09	6,125701E+09
-1244	2,093063E+08	2,092942E+08	2,853533E+09	2,853579E+09	4,186005E+08	5,707112E+09	6,125713E+09
-1243	2,092852E+08	2,093088E+08	2,853604E+09	2,853469E+09	4,185940E+08	5,707073E+09	6,125667E+09
-1242	2,092813E+08	2,092670E+08	2,853483E+09	2,853633E+09	4,185483E+08	5,707116E+09	6,125665E+09
-1241	2,093138E+08	2,093009E+08	2,853580E+09	2,853545E+09	4,186147E+08	5,707126E+09	6,125740E+09
-1240	2,092708E+08	2,092784E+08	2,853627E+09	2,853596E+09	4,185492E+08	5,707223E+09	6,125772E+09
-1239	2,092830E+08	2,092576E+08	2,853605E+09	2,853774E+09	4,185406E+08	5,707379E+09	6,125919E+09
-1238	2,092895E+08	2,092982E+08	2,853810E+09	2,853672E+09	4,185877E+08	5,707482E+09	6,126069E+09
-1237	2,092411E+08	2,092533E+08	2,853812E+09	2,853830E+09	4,184944E+08	5,707642E+09	6,126137E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1236	2,092701E+08	2,092536E+08	2,853857E+09	2,853908E+09	4,185236E+08	5,707764E+09	6,126288E+09
-1235	2,092576E+08	2,092725E+08	2,853989E+09	2,853827E+09	4,185301E+08	5,707816E+09	6,126346E+09
-1234	2,092359E+08	2,092281E+08	2,853845E+09	2,853981E+09	4,184639E+08	5,707826E+09	6,126290E+09
-1233	2,092779E+08	2,092638E+08	2,853836E+09	2,853869E+09	4,185417E+08	5,707705E+09	6,126247E+09
-1232	2,092488E+08	2,092659E+08	2,853844E+09	2,853751E+09	4,185147E+08	5,707595E+09	6,126109E+09
-1231	2,092596E+08	2,092459E+08	2,853672E+09	2,853805E+09	4,185055E+08	5,707477E+09	6,125982E+09
-1230	2,092959E+08	2,092965E+08	2,853719E+09	2,853567E+09	4,185924E+08	5,707286E+09	6,125879E+09
-1229	2,092576E+08	2,092755E+08	2,853598E+09	2,853537E+09	4,185330E+08	5,707135E+09	6,125668E+09
-1228	2,092955E+08	2,092770E+08	2,853442E+09	2,853549E+09	4,185724E+08	5,706991E+09	6,125563E+09
-1227	2,093077E+08	2,093240E+08	2,853492E+09	2,853350E+09	4,186317E+08	5,706841E+09	6,125473E+09
-1226	2,092829E+08	2,092902E+08	2,853326E+09	2,853426E+09	4,185731E+08	5,706752E+09	6,125325E+09
-1225	2,093301E+08	2,093118E+08	2,853299E+09	2,853351E+09	4,186419E+08	5,706651E+09	6,125293E+09
-1224	2,093101E+08	2,093238E+08	2,853389E+09	2,853249E+09	4,186339E+08	5,706637E+09	6,125271E+09
-1223	2,093017E+08	2,092832E+08	2,853274E+09	2,853430E+09	4,185849E+08	5,706704E+09	6,125289E+09
-1222	2,093332E+08	2,093217E+08	2,853408E+09	2,853346E+09	4,186549E+08	5,706754E+09	6,125409E+09
-1221	2,092828E+08	2,093038E+08	2,853476E+09	2,853415E+09	4,185866E+08	5,706890E+09	6,125477E+09
-1220	2,092921E+08	2,092772E+08	2,853460E+09	2,853600E+09	4,185694E+08	5,707060E+09	6,125630E+09
-1219	2,093038E+08	2,093155E+08	2,853672E+09	2,853530E+09	4,186193E+08	5,707202E+09	6,125821E+09
-1218	2,092577E+08	2,092654E+08	2,853657E+09	2,853685E+09	4,185231E+08	5,707342E+09	6,125865E+09
-1217	2,092902E+08	2,092634E+08	2,853637E+09	2,853731E+09	4,185536E+08	5,707368E+09	6,125921E+09
-1216	2,092809E+08	2,092865E+08	2,853746E+09	2,853625E+09	4,185675E+08	5,707372E+09	6,125939E+09
-1215	2,092566E+08	2,092495E+08	2,853597E+09	2,853756E+09	4,185061E+08	5,707353E+09	6,125859E+09
-1214	2,093010E+08	2,092888E+08	2,853624E+09	2,853612E+09	4,185897E+08	5,707236E+09	6,125826E+09
-1213	2,092672E+08	2,092918E+08	2,853644E+09	2,853495E+09	4,185590E+08	5,707139E+09	6,125698E+09
-1212	2,092769E+08	2,092654E+08	2,853456E+09	2,853564E+09	4,185424E+08	5,707020E+09	6,125563E+09
-1211	2,093170E+08	2,093175E+08	2,853496E+09	2,853369E+09	4,186345E+08	5,706865E+09	6,125499E+09
-1210	2,092798E+08	2,092985E+08	2,853373E+09	2,853342E+09	4,185783E+08	5,706715E+09	6,125293E+09
-1209	2,093186E+08	2,092995E+08	2,853190E+09	2,853327E+09	4,186181E+08	5,706516E+09	6,125135E+09
-1208	2,093327E+08	2,093461E+08	2,853262E+09	2,853119E+09	4,186788E+08	5,706381E+09	6,125060E+09
-1207	2,093055E+08	2,093114E+08	2,853110E+09	2,853199E+09	4,186169E+08	5,706308E+09	6,124925E+09
-1206	2,093529E+08	2,093309E+08	2,853106E+09	2,853122E+09	4,186838E+08	5,706228E+09	6,124912E+09
-1205	2,093263E+08	2,093447E+08	2,853197E+09	2,853044E+09	4,186709E+08	5,706241E+09	6,124912E+09
-1204	2,093145E+08	2,093017E+08	2,853078E+09	2,853240E+09	4,186162E+08	5,706318E+09	6,124934E+09
-1203	2,093476E+08	2,093426E+08	2,853236E+09	2,853193E+09	4,186901E+08	5,706428E+09	6,125119E+09
-1202	2,092993E+08	2,093216E+08	2,853328E+09	2,853260E+09	4,186209E+08	5,706588E+09	6,125209E+09
-1201	2,093106E+08	2,092880E+08	2,853278E+09	2,853422E+09	4,185986E+08	5,706700E+09	6,125298E+09
-1200	2,093256E+08	2,093248E+08	2,853479E+09	2,853353E+09	4,186504E+08	5,706832E+09	6,125483E+09
-1199	2,092782E+08	2,092794E+08	2,853443E+09	2,853502E+09	4,185576E+08	5,706944E+09	6,125502E+09
-1198	2,093113E+08	2,092837E+08	2,853427E+09	2,853520E+09	4,185950E+08	5,706947E+09	6,125542E+09
-1197	2,092968E+08	2,093132E+08	2,853547E+09	2,853404E+09	4,186100E+08	5,706951E+09	6,125561E+09
-1196	2,092709E+08	2,092728E+08	2,853401E+09	2,853520E+09	4,185438E+08	5,706921E+09	6,125465E+09
-1195	2,093187E+08	2,093112E+08	2,853438E+09	2,853404E+09	4,186298E+08	5,706842E+09	6,125472E+09
-1194	2,092875E+08	2,093114E+08	2,853448E+09	2,853291E+09	4,185989E+08	5,706739E+09	6,125338E+09
-1193	2,092990E+08	2,092823E+08	2,853205E+09	2,853344E+09	4,185813E+08	5,706549E+09	6,125130E+09
-1192	2,093417E+08	2,093385E+08	2,853233E+09	2,853146E+09	4,186802E+08	5,706379E+09	6,125060E+09
-1191	2,093039E+08	2,093240E+08	2,853117E+09	2,853108E+09	4,186280E+08	5,706225E+09	6,124853E+09
-1190	2,093443E+08	2,093247E+08	2,852967E+09	2,853070E+09	4,186690E+08	5,706037E+09	6,124706E+09
-1189	2,093534E+08	2,093696E+08	2,853056E+09	2,852872E+09	4,187230E+08	5,705928E+09	6,124651E+09
-1188	2,093234E+08	2,093290E+08	2,852901E+09	2,852972E+09	4,186524E+08	5,705872E+09	6,124525E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1187	2,093713E+08	2,093499E+08	2,852909E+09	2,852946E+09	4,187211E+08	5,705855E+09	6,124576E+09
-1186	2,093441E+08	2,093646E+08	2,853015E+09	2,852881E+09	4,187087E+08	5,705896E+09	6,124605E+09
-1185	2,093318E+08	2,093188E+08	2,852888E+09	2,853065E+09	4,186506E+08	5,705953E+09	6,124603E+09
-1184	2,093668E+08	2,093583E+08	2,853065E+09	2,853017E+09	4,187251E+08	5,706082E+09	6,124807E+09
-1183	2,093183E+08	2,093359E+08	2,853161E+09	2,853087E+09	4,186541E+08	5,706248E+09	6,124902E+09
-1182	2,093303E+08	2,093023E+08	2,853108E+09	2,853234E+09	4,186326E+08	5,706341E+09	6,124974E+09
-1181	2,093406E+08	2,093420E+08	2,853285E+09	2,853165E+09	4,186826E+08	5,706450E+09	6,125133E+09
-1180	2,092913E+08	2,092991E+08	2,853228E+09	2,853299E+09	4,185904E+08	5,706527E+09	6,125118E+09
-1179	2,093269E+08	2,093074E+08	2,853226E+09	2,853328E+09	4,186343E+08	5,706554E+09	6,125189E+09
-1178	2,093150E+08	2,093351E+08	2,853365E+09	2,853196E+09	4,186501E+08	5,706561E+09	6,125211E+09
-1177	2,092916E+08	2,092888E+08	2,853188E+09	2,853291E+09	4,185804E+08	5,706479E+09	6,125059E+09
-1176	2,093420E+08	2,093269E+08	2,853215E+09	2,853181E+09	4,186689E+08	5,706395E+09	6,125064E+09
-1175	2,093114E+08	2,093319E+08	2,853210E+09	2,853073E+09	4,186433E+08	5,706283E+09	6,124926E+09
-1174	2,093236E+08	2,093085E+08	2,852970E+09	2,853105E+09	4,186321E+08	5,706075E+09	6,124707E+09
-1173	2,093615E+08	2,093674E+08	2,853010E+09	2,852906E+09	4,187289E+08	5,705916E+09	6,124645E+09
-1172	2,093236E+08	2,093486E+08	2,852896E+09	2,852864E+09	4,186722E+08	5,705760E+09	6,124433E+09
-1171	2,093656E+08	2,093458E+08	2,852760E+09	2,852862E+09	4,187114E+08	5,705621E+09	6,124332E+09
-1170	2,093756E+08	2,093867E+08	2,852848E+09	2,852674E+09	4,187623E+08	5,705523E+09	6,124285E+09
-1169	2,093451E+08	2,093430E+08	2,852655E+09	2,852763E+09	4,186881E+08	5,705418E+09	6,124106E+09
-1168	2,093924E+08	2,093681E+08	2,852678E+09	2,852747E+09	4,187605E+08	5,705424E+09	6,124185E+09
-1167	2,093647E+08	2,093864E+08	2,852814E+09	2,852688E+09	4,187511E+08	5,705502E+09	6,124253E+09
-1166	2,093522E+08	2,093395E+08	2,852720E+09	2,852856E+09	4,186917E+08	5,705577E+09	6,124268E+09
-1165	2,093823E+08	2,093767E+08	2,852907E+09	2,852826E+09	4,187589E+08	5,705733E+09	6,124491E+09
-1164	2,093329E+08	2,093498E+08	2,852983E+09	2,852906E+09	4,186827E+08	5,705888E+09	6,124571E+09
-1163	2,093452E+08	2,093195E+08	2,852927E+09	2,853080E+09	4,186647E+08	5,706008E+09	6,124672E+09
-1162	2,093561E+08	2,093613E+08	2,853106E+09	2,853001E+09	4,187174E+08	5,706106E+09	6,124824E+09
-1161	2,093077E+08	2,093171E+08	2,853029E+09	2,853099E+09	4,186248E+08	5,706129E+09	6,124753E+09
-1160	2,093461E+08	2,093260E+08	2,853037E+09	2,853120E+09	4,186722E+08	5,706156E+09	6,124829E+09
-1159	2,093366E+08	2,093535E+08	2,853170E+09	2,852987E+09	4,186901E+08	5,706158E+09	6,124848E+09
-1158	2,093146E+08	2,093084E+08	2,852981E+09	2,853063E+09	4,186230E+08	5,706044E+09	6,124667E+09
-1157	2,093607E+08	2,093496E+08	2,852985E+09	2,852956E+09	4,187103E+08	5,705941E+09	6,124651E+09
-1156	2,093302E+08	2,093563E+08	2,852962E+09	2,852842E+09	4,186866E+08	5,705804E+09	6,124491E+09
-1155	2,093447E+08	2,093351E+08	2,852741E+09	2,852888E+09	4,186799E+08	5,705629E+09	6,124309E+09
-1154	2,093849E+08	2,093891E+08	2,852789E+09	2,852679E+09	4,187740E+08	5,705468E+09	6,124242E+09
-1153	2,093485E+08	2,093646E+08	2,852646E+09	2,852623E+09	4,187131E+08	5,705269E+09	6,123982E+09
-1152	2,093914E+08	2,093625E+08	2,852508E+09	2,852632E+09	4,187539E+08	5,705139E+09	6,123893E+09
-1151	2,093995E+08	2,094075E+08	2,852609E+09	2,852460E+09	4,188069E+08	5,705069E+09	6,123876E+09
-1150	2,093671E+08	2,093690E+08	2,852451E+09	2,852539E+09	4,187360E+08	5,704990E+09	6,123726E+09
-1149	2,094070E+08	2,093940E+08	2,852510E+09	2,852537E+09	4,188010E+08	5,705047E+09	6,123848E+09
-1148	2,093792E+08	2,094068E+08	2,852658E+09	2,852497E+09	4,187860E+08	5,705155E+09	6,123941E+09
-1147	2,093673E+08	2,093562E+08	2,852576E+09	2,852705E+09	4,187235E+08	5,705281E+09	6,124004E+09
-1146	2,093980E+08	2,093889E+08	2,852742E+09	2,852681E+09	4,187869E+08	5,705423E+09	6,124210E+09
-1145	2,093498E+08	2,093607E+08	2,852765E+09	2,852737E+09	4,187105E+08	5,705502E+09	6,124213E+09
-1144	2,093636E+08	2,093362E+08	2,852707E+09	2,852897E+09	4,186998E+08	5,705603E+09	6,124303E+09
-1143	2,093762E+08	2,093807E+08	2,852903E+09	2,852802E+09	4,187569E+08	5,705705E+09	6,124462E+09
-1142	2,093297E+08	2,093381E+08	2,852846E+09	2,852864E+09	4,186678E+08	5,705710E+09	6,124378E+09
-1141	2,093635E+08	2,093460E+08	2,852855E+09	2,852892E+09	4,187095E+08	5,705747E+09	6,124457E+09
-1140	2,093551E+08	2,093724E+08	2,852959E+09	2,852774E+09	4,187275E+08	5,705733E+09	6,124461E+09
-1139	2,093339E+08	2,093311E+08	2,852768E+09	2,852873E+09	4,186650E+08	5,705641E+09	6,124306E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1138	2,093810E+08	2,093733E+08	2,852767E+09	2,852758E+09	4,187543E+08	5,705525E+09	6,124279E+09
-1137	2,093531E+08	2,093770E+08	2,852713E+09	2,852609E+09	4,187301E+08	5,705322E+09	6,124052E+09
-1136	2,093700E+08	2,093563E+08	2,852496E+09	2,852649E+09	4,187263E+08	5,705145E+09	6,123871E+09
-1135	2,094113E+08	2,094086E+08	2,852547E+09	2,852441E+09	4,188199E+08	5,704989E+09	6,123809E+09
-1134	2,093743E+08	2,093868E+08	2,852402E+09	2,852366E+09	4,187611E+08	5,704769E+09	6,123530E+09
-1133	2,094100E+08	2,093878E+08	2,852277E+09	2,852390E+09	4,187977E+08	5,704666E+09	6,123464E+09
-1132	2,094167E+08	2,094331E+08	2,852389E+09	2,852238E+09	4,188498E+08	5,704627E+09	6,123477E+09
-1131	2,093843E+08	2,093933E+08	2,852284E+09	2,852353E+09	4,187777E+08	5,704637E+09	6,123414E+09
-1130	2,094240E+08	2,094114E+08	2,852360E+09	2,852367E+09	4,188354E+08	5,704727E+09	6,123563E+09
-1129	2,093981E+08	2,094162E+08	2,852470E+09	2,852328E+09	4,188143E+08	5,704797E+09	6,123612E+09
-1128	2,093873E+08	2,093677E+08	2,852372E+09	2,852544E+09	4,187550E+08	5,704916E+09	6,123671E+09
-1127	2,094180E+08	2,094035E+08	2,852533E+09	2,852518E+09	4,188215E+08	5,705051E+09	6,123872E+09
-1126	2,093694E+08	2,093824E+08	2,852570E+09	2,852533E+09	4,187518E+08	5,705103E+09	6,123855E+09
-1125	2,093782E+08	2,093596E+08	2,852540E+09	2,852682E+09	4,187378E+08	5,705222E+09	6,123960E+09
-1124	2,093918E+08	2,094005E+08	2,852736E+09	2,852596E+09	4,187923E+08	5,705332E+09	6,124124E+09
-1123	2,093469E+08	2,093567E+08	2,852690E+09	2,852686E+09	4,187036E+08	5,705376E+09	6,124079E+09
-1122	2,093802E+08	2,093622E+08	2,852665E+09	2,852714E+09	4,187424E+08	5,705379E+09	6,124121E+09
-1121	2,093744E+08	2,093883E+08	2,852709E+09	2,852574E+09	4,187626E+08	5,705283E+09	6,124046E+09
-1120	2,093564E+08	2,093541E+08	2,852507E+09	2,852655E+09	4,187105E+08	5,705162E+09	6,123872E+09
-1119	2,094064E+08	2,093955E+08	2,852516E+09	2,852522E+09	4,188019E+08	5,705038E+09	6,123839E+09
-1118	2,093809E+08	2,094014E+08	2,852470E+09	2,852335E+09	4,187823E+08	5,704805E+09	6,123587E+09
-1117	2,093932E+08	2,093794E+08	2,852262E+09	2,852377E+09	4,187726E+08	5,704639E+09	6,123411E+09
-1116	2,094327E+08	2,094308E+08	2,852304E+09	2,852194E+09	4,188635E+08	5,704498E+09	6,123361E+09
-1115	2,093943E+08	2,094128E+08	2,852196E+09	2,852155E+09	4,188071E+08	5,704351E+09	6,123158E+09
-1114	2,094266E+08	2,094125E+08	2,852095E+09	2,852195E+09	4,188392E+08	5,704290E+09	6,123129E+09
-1113	2,094351E+08	2,094514E+08	2,852195E+09	2,852049E+09	4,188865E+08	5,704243E+09	6,123130E+09
-1112	2,094057E+08	2,094100E+08	2,852096E+09	2,852179E+09	4,188157E+08	5,704275E+09	6,123090E+09
-1111	2,094463E+08	2,094230E+08	2,852167E+09	2,852203E+09	4,188693E+08	5,704370E+09	6,123239E+09
-1110	2,094210E+08	2,094310E+08	2,852255E+09	2,852134E+09	4,188520E+08	5,704388E+09	6,123240E+09
-1109	2,094034E+08	2,093875E+08	2,852162E+09	2,852341E+09	4,187909E+08	5,704503E+09	6,123294E+09
-1108	2,094331E+08	2,094249E+08	2,852329E+09	2,852317E+09	4,188580E+08	5,704646E+09	6,123504E+09
-1107	2,093850E+08	2,094042E+08	2,852416E+09	2,852343E+09	4,187892E+08	5,704759E+09	6,123549E+09
-1106	2,093930E+08	2,093773E+08	2,852398E+09	2,852499E+09	4,187703E+08	5,704896E+09	6,123666E+09
-1105	2,094091E+08	2,094121E+08	2,852542E+09	2,852410E+09	4,188212E+08	5,704953E+09	6,123774E+09
-1104	2,093672E+08	2,093727E+08	2,852473E+09	2,852506E+09	4,187399E+08	5,704979E+09	6,123719E+09
-1103	2,094018E+08	2,093808E+08	2,852437E+09	2,852527E+09	4,187827E+08	5,704965E+09	6,123747E+09
-1102	2,093977E+08	2,094129E+08	2,852474E+09	2,852336E+09	4,188107E+08	5,704811E+09	6,123621E+09
-1101	2,093769E+08	2,093807E+08	2,852289E+09	2,852397E+09	4,187577E+08	5,704686E+09	6,123444E+09
-1100	2,094284E+08	2,094180E+08	2,852286E+09	2,852271E+09	4,188464E+08	5,704557E+09	6,123403E+09
-1099	2,094033E+08	2,094236E+08	2,852261E+09	2,852103E+09	4,188268E+08	5,704364E+09	6,123191E+09
-1098	2,094130E+08	2,094005E+08	2,852042E+09	2,852155E+09	4,188135E+08	5,704197E+09	6,123010E+09
-1097	2,094524E+08	2,094501E+08	2,852050E+09	2,851974E+09	4,189024E+08	5,704023E+09	6,122926E+09
-1096	2,094166E+08	2,094366E+08	2,851961E+09	2,851947E+09	4,188532E+08	5,703908E+09	6,122761E+09
-1095	2,094502E+08	2,094319E+08	2,851887E+09	2,851995E+09	4,188821E+08	5,703883E+09	6,122765E+09
-1094	2,094600E+08	2,094706E+08	2,851988E+09	2,851831E+09	4,189306E+08	5,703819E+09	6,122749E+09
-1093	2,094267E+08	2,094280E+08	2,851895E+09	2,851968E+09	4,188547E+08	5,703863E+09	6,122718E+09
-1092	2,094645E+08	2,094395E+08	2,851950E+09	2,852013E+09	4,189041E+08	5,703963E+09	6,122867E+09
-1091	2,094376E+08	2,094520E+08	2,852079E+09	2,851958E+09	4,188896E+08	5,704038E+09	6,122927E+09
-1090	2,094159E+08	2,094086E+08	2,852010E+09	2,852161E+09	4,188245E+08	5,704171E+09	6,122995E+09

1	14	15	16	17	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	2,094462E+08	2,094401E+08	2,852163E+09	2,852135E+09	4,188864E+08	5,704298E+09	6,123184E+09
-1088	2,094026E+08	2,094205E+08	2,852254E+09	2,852174E+09	4,188231E+08	5,704428E+09	6,123251E+09
-1087	2,094119E+08	2,093894E+08	2,852218E+09	2,852334E+09	4,188013E+08	5,704552E+09	6,123354E+09
-1086	2,094302E+08	2,094290E+08	2,852321E+09	2,852211E+09	4,188591E+08	5,704532E+09	6,123391E+09
-1085	2,093862E+08	2,093951E+08	2,852242E+09	2,852283E+09	4,187813E+08	5,704525E+09	6,123306E+09
-1084	2,094216E+08	2,094036E+08	2,852197E+09	2,852296E+09	4,188252E+08	5,704493E+09	6,123319E+09
-1083	2,094198E+08	2,094363E+08	2,852273E+09	2,852101E+09	4,188560E+08	5,704374E+09	6,123230E+09
-1082	2,093977E+08	2,094022E+08	2,852088E+09	2,852158E+09	4,187999E+08	5,704246E+09	6,123046E+09
-1081	2,094500E+08	2,094341E+08	2,852037E+09	2,852036E+09	4,188841E+08	5,704073E+09	6,122957E+09
-1080	2,094274E+08	2,094458E+08	2,852004E+09	2,851882E+09	4,188733E+08	5,703887E+09	6,122760E+09
-1079	2,094367E+08	2,094236E+08	2,851803E+09	2,851941E+09	4,188603E+08	5,703744E+09	6,122604E+09
-1078	2,094762E+08	2,094766E+08	2,851819E+09	2,851734E+09	4,189528E+08	5,703553E+09	6,122506E+09
-1077	2,094386E+08	2,094619E+08	2,851764E+09	2,851711E+09	4,189005E+08	5,703475E+09	6,122375E+09
-1076	2,094711E+08	2,094514E+08	2,851685E+09	2,851787E+09	4,189226E+08	5,703472E+09	6,122395E+09
-1075	2,094802E+08	2,094877E+08	2,851804E+09	2,851643E+09	4,189680E+08	5,703446E+09	6,122414E+09
-1074	2,094424E+08	2,094460E+08	2,851704E+09	2,851786E+09	4,188884E+08	5,703490E+09	6,122378E+09
-1073	2,094789E+08	2,094553E+08	2,851727E+09	2,851827E+09	4,189342E+08	5,703554E+09	6,122488E+09
-1072	2,094545E+08	2,094719E+08	2,851884E+09	2,851779E+09	4,189264E+08	5,703662E+09	6,122589E+09
-1071	2,094347E+08	2,094239E+08	2,851851E+09	2,851983E+09	4,188586E+08	5,703834E+09	6,122693E+09
-1070	2,094662E+08	2,094553E+08	2,851988E+09	2,851936E+09	4,189214E+08	5,703925E+09	6,122846E+09
-1069	2,094216E+08	2,094367E+08	2,852076E+09	2,851977E+09	4,188583E+08	5,704053E+09	6,122911E+09
-1068	2,094294E+08	2,094068E+08	2,852009E+09	2,852149E+09	4,188362E+08	5,704159E+09	6,122995E+09
-1067	2,094475E+08	2,094508E+08	2,852136E+09	2,852022E+09	4,188983E+08	5,704158E+09	6,123056E+09
-1066	2,094019E+08	2,094193E+08	2,852061E+09	2,852075E+09	4,188212E+08	5,704136E+09	6,122958E+09
-1065	2,094396E+08	2,094217E+08	2,851979E+09	2,852076E+09	4,188612E+08	5,704055E+09	6,122916E+09
-1064	2,094428E+08	2,094561E+08	2,852046E+09	2,851885E+09	4,188989E+08	5,703931E+09	6,122829E+09
-1063	2,094226E+08	2,094195E+08	2,851852E+09	2,851936E+09	4,188421E+08	5,703788E+09	6,122630E+09
-1062	2,094741E+08	2,094569E+08	2,851768E+09	2,851784E+09	4,189311E+08	5,703551E+09	6,122483E+09
-1061	2,094502E+08	2,094741E+08	2,851754E+09	2,851623E+09	4,189243E+08	5,703376E+09	6,122301E+09
-1060	2,094581E+08	2,094498E+08	2,851564E+09	2,851699E+09	4,189079E+08	5,703263E+09	6,122171E+09
-1059	2,094984E+08	2,095003E+08	2,851632E+09	2,851509E+09	4,189987E+08	5,703141E+09	6,122140E+09
-1058	2,094591E+08	2,094820E+08	2,851578E+09	2,851500E+09	4,189412E+08	5,703078E+09	6,122019E+09
-1057	2,094901E+08	2,094643E+08	2,851456E+09	2,851593E+09	4,189544E+08	5,703049E+09	6,122003E+09
-1056	2,095006E+08	2,095058E+08	2,851577E+09	2,851467E+09	4,190065E+08	5,703044E+09	6,122050E+09
-1055	2,094619E+08	2,094638E+08	2,851506E+09	2,851606E+09	4,189257E+08	5,703112E+09	6,122037E+09
-1054	2,094973E+08	2,094758E+08	2,851537E+09	2,851621E+09	4,189731E+08	5,703158E+09	6,122131E+09
-1053	2,094731E+08	2,094917E+08	2,851726E+09	2,851575E+09	4,189648E+08	5,703301E+09	6,122265E+09
-1052	2,094519E+08	2,094394E+08	2,851686E+09	2,851805E+09	4,188913E+08	5,703491E+09	6,122382E+09
-1051	2,094828E+08	2,094705E+08	2,851833E+09	2,851769E+09	4,189532E+08	5,703602E+09	6,122555E+09
-1050	2,094360E+08	2,094552E+08	2,851896E+09	2,851804E+09	4,188912E+08	5,703700E+09	6,122591E+09
-1049	2,094434E+08	2,094242E+08	2,851782E+09	2,851961E+09	4,188676E+08	5,703743E+09	6,122611E+09
-1048	2,094668E+08	2,094718E+08	2,851913E+09	2,851824E+09	4,189386E+08	5,703737E+09	6,122676E+09
-1047	2,094251E+08	2,094376E+08	2,851854E+09	2,851858E+09	4,188627E+08	5,703712E+09	6,122574E+09
-1046	2,094645E+08	2,094413E+08	2,851738E+09	2,851825E+09	4,189058E+08	5,703563E+09	6,122469E+09
-1045	2,094675E+08	2,094784E+08	2,851805E+09	2,851629E+09	4,189459E+08	5,703434E+09	6,122380E+09
-1044	2,094451E+08	2,094441E+08	2,851603E+09	2,851697E+09	4,188891E+08	5,703300E+09	6,122189E+09
-1043	2,094940E+08	2,094840E+08	2,851561E+09	2,851547E+09	4,189781E+08	5,703108E+09	6,122086E+09
-1042	2,094685E+08	2,095017E+08	2,851566E+09	2,851395E+09	4,189702E+08	5,702961E+09	6,121932E+09
-1041	2,094771E+08	2,094694E+08	2,851349E+09	2,851485E+09	4,189465E+08	5,702834E+09	6,121780E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1040	2,095209E+08	2,095184E+08	2,851410E+09	2,851320E+09	4,190393E+08	5,702729E+09	6,121769E+09
-1039	2,094839E+08	2,094965E+08	2,851351E+09	2,851313E+09	4,189804E+08	5,702664E+09	6,121645E+09
-1038	2,095129E+08	2,094827E+08	2,851197E+09	2,851375E+09	4,189956E+08	5,702571E+09	6,121567E+09
-1037	2,095215E+08	2,095282E+08	2,851352E+09	2,851239E+09	4,190497E+08	5,702591E+09	6,121641E+09
-1036	2,094804E+08	2,094848E+08	2,851313E+09	2,851395E+09	4,189652E+08	5,702708E+09	6,121674E+09
-1035	2,095138E+08	2,094948E+08	2,851404E+09	2,851425E+09	4,190086E+08	5,702828E+09	6,121837E+09
-1034	2,094879E+08	2,095095E+08	2,851591E+09	2,851402E+09	4,189974E+08	5,702994E+09	6,121991E+09
-1033	2,094653E+08	2,094523E+08	2,851501E+09	2,851647E+09	4,189176E+08	5,703147E+09	6,122065E+09
-1032	2,094987E+08	2,094885E+08	2,851634E+09	2,851622E+09	4,189872E+08	5,703256E+09	6,122243E+09
-1031	2,094550E+08	2,094728E+08	2,851706E+09	2,851633E+09	4,189278E+08	5,703339E+09	6,122266E+09
-1030	2,094630E+08	2,094447E+08	2,851568E+09	2,851743E+09	4,189078E+08	5,703311E+09	6,122218E+09
-1029	2,094894E+08	2,094922E+08	2,851710E+09	2,851588E+09	4,189817E+08	5,703297E+09	6,122279E+09
-1028	2,094472E+08	2,094565E+08	2,851630E+09	2,851627E+09	4,189037E+08	5,703257E+09	6,122161E+09
-1027	2,094853E+08	2,094624E+08	2,851527E+09	2,851591E+09	4,189477E+08	5,703118E+09	6,122066E+09
-1026	2,094863E+08	2,095043E+08	2,851578E+09	2,851395E+09	4,189907E+08	5,702973E+09	6,121964E+09
-1025	2,094627E+08	2,094673E+08	2,851352E+09	2,851464E+09	4,189300E+08	5,702816E+09	6,121746E+09
-1024	2,095158E+08	2,095082E+08	2,851329E+09	2,851332E+09	4,190240E+08	5,702661E+09	6,121685E+09
-1023	2,094954E+08	2,095197E+08	2,851347E+09	2,851181E+09	4,190151E+08	5,702528E+09	6,121543E+09
-1022	2,095042E+08	2,094876E+08	2,851091E+09	2,851251E+09	4,189919E+08	5,702342E+09	6,121334E+09
-1021	2,095475E+08	2,095379E+08	2,851156E+09	2,851083E+09	4,190854E+08	5,702240E+09	6,121325E+09
-1020	2,095063E+08	2,095193E+08	2,851106E+09	2,851091E+09	4,190256E+08	5,702197E+09	6,121223E+09
-1019	2,095307E+08	2,095079E+08	2,851017E+09	2,851153E+09	4,190386E+08	5,702170E+09	6,121208E+09
-1018	2,095360E+08	2,095530E+08	2,851206E+09	2,851038E+09	4,190890E+08	5,702244E+09	6,121333E+09
-1017	2,094934E+08	2,095014E+08	2,851158E+09	2,851220E+09	4,189949E+08	5,702379E+09	6,121374E+09
-1016	2,095288E+08	2,095100E+08	2,851244E+09	2,851284E+09	4,190388E+08	5,702528E+09	6,121567E+09
-1015	2,095065E+08	2,095210E+08	2,851417E+09	2,851263E+09	4,190275E+08	5,702680E+09	6,121708E+09
-1014	2,094836E+08	2,094690E+08	2,851274E+09	2,851466E+09	4,189527E+08	5,702740E+09	6,121693E+09
-1013	2,095187E+08	2,095073E+08	2,851417E+09	2,851414E+09	4,190260E+08	5,702830E+09	6,121856E+09
-1012	2,094758E+08	2,094919E+08	2,851496E+09	2,851418E+09	4,189676E+08	5,702914E+09	6,121882E+09
-1011	2,094836E+08	2,094639E+08	2,851389E+09	2,851510E+09	4,189475E+08	5,702899E+09	6,121846E+09
-1010	2,095083E+08	2,095125E+08	2,851518E+09	2,851364E+09	4,190208E+08	5,702882E+09	6,121903E+09
-1009	2,094647E+08	2,094759E+08	2,851399E+09	2,851410E+09	4,189406E+08	5,702808E+09	6,121749E+09
-1008	2,095035E+08	2,094868E+08	2,851295E+09	2,851389E+09	4,189903E+08	5,702684E+09	6,121675E+09
-1007	2,095087E+08	2,095271E+08	2,851362E+09	2,851187E+09	4,190358E+08	5,702549E+09	6,121585E+09
-1006	2,094869E+08	2,094908E+08	2,851110E+09	2,851224E+09	4,189777E+08	5,702334E+09	6,121311E+09
-1005	2,095429E+08	2,095292E+08	2,851095E+09	2,851087E+09	4,190721E+08	5,702182E+09	6,121254E+09
-1004	2,095220E+08	2,095394E+08	2,851096E+09	2,850951E+09	4,190614E+08	5,702047E+09	6,121108E+09
-1003	2,095274E+08	2,095101E+08	2,850861E+09	2,851011E+09	4,190374E+08	5,701872E+09	6,120909E+09
-1002	2,095654E+08	2,095642E+08	2,850931E+09	2,850852E+09	4,191295E+08	5,701784E+09	6,120913E+09
-1001	2,095212E+08	2,095425E+08	2,850887E+09	2,850870E+09	4,190637E+08	5,701757E+09	6,120821E+09
-1000	2,095466E+08	2,095299E+08	2,850843E+09	2,850966E+09	4,190765E+08	5,701809E+09	6,120885E+09
-999	2,095566E+08	2,095671E+08	2,851053E+09	2,850873E+09	4,191237E+08	5,701927E+09	6,121051E+09
-998	2,095139E+08	2,095145E+08	2,850966E+09	2,851048E+09	4,190284E+08	5,702014E+09	6,121042E+09
-997	2,095497E+08	2,095243E+08	2,851047E+09	2,851110E+09	4,190740E+08	5,702157E+09	6,121231E+09
-996	2,095257E+08	2,095377E+08	2,851208E+09	2,851089E+09	4,190635E+08	5,702297E+09	6,121361E+09
-995	2,095004E+08	2,094900E+08	2,851104E+09	2,851263E+09	4,189904E+08	5,702367E+09	6,121357E+09
-994	2,095341E+08	2,095287E+08	2,851250E+09	2,851207E+09	4,190628E+08	5,702457E+09	6,121520E+09
-993	2,094910E+08	2,095087E+08	2,851302E+09	2,851213E+09	4,189997E+08	5,702515E+09	6,121515E+09
-992	2,095013E+08	2,094823E+08	2,851188E+09	2,851322E+09	4,189836E+08	5,702511E+09	6,121494E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-991	2,095301E+08	2,095292E+08	2,851297E+09	2,851171E+09	4,190593E+08	5,702468E+09	6,121528E+09
-990	2,094867E+08	2,094985E+08	2,851135E+09	2,851177E+09	4,189852E+08	5,702312E+09	6,121297E+09
-989	2,095273E+08	2,095111E+08	2,851048E+09	2,851139E+09	4,190384E+08	5,702187E+09	6,121225E+09
-988	2,095336E+08	2,095504E+08	2,851123E+09	2,850942E+09	4,190840E+08	5,702065E+09	6,121149E+09
-987	2,095121E+08	2,095149E+08	2,850897E+09	2,850968E+09	4,190269E+08	5,701865E+09	6,120892E+09
-986	2,095654E+08	2,095524E+08	2,850868E+09	2,850847E+09	4,191178E+08	5,701715E+09	6,120833E+09
-985	2,095416E+08	2,095617E+08	2,850843E+09	2,850722E+09	4,191033E+08	5,701566E+09	6,120669E+09
-984	2,095459E+08	2,095358E+08	2,850636E+09	2,850804E+09	4,190817E+08	5,701440E+09	6,120521E+09
-983	2,095854E+08	2,095850E+08	2,850744E+09	2,850656E+09	4,191704E+08	5,701400E+09	6,120570E+09
-982	2,095418E+08	2,095622E+08	2,850694E+09	2,850664E+09	4,191039E+08	5,701358E+09	6,120462E+09
-981	2,095680E+08	2,095452E+08	2,850666E+09	2,850773E+09	4,191132E+08	5,701439E+09	6,120553E+09
-980	2,095777E+08	2,095805E+08	2,850860E+09	2,850710E+09	4,191581E+08	5,701570E+09	6,120728E+09
-979	2,095332E+08	2,095316E+08	2,850780E+09	2,850863E+09	4,190648E+08	5,701642E+09	6,120707E+09
-978	2,095640E+08	2,095444E+08	2,850853E+09	2,850923E+09	4,191084E+08	5,701776E+09	6,120884E+09
-977	2,095390E+08	2,095560E+08	2,851006E+09	2,850895E+09	4,190949E+08	5,701901E+09	6,120996E+09
-976	2,095156E+08	2,095091E+08	2,850928E+09	2,851076E+09	4,190247E+08	5,702003E+09	6,121028E+09
-975	2,095542E+08	2,095423E+08	2,851073E+09	2,851025E+09	4,190965E+08	5,702098E+09	6,121195E+09
-974	2,095122E+08	2,095251E+08	2,851076E+09	2,851003E+09	4,190373E+08	5,702080E+09	6,121117E+09
-973	2,095233E+08	2,095024E+08	2,850963E+09	2,851101E+09	4,190257E+08	5,702064E+09	6,121089E+09
-972	2,095508E+08	2,095527E+08	2,851067E+09	2,850954E+09	4,191035E+08	5,702021E+09	6,121124E+09
-971	2,095076E+08	2,095258E+08	2,850940E+09	2,850931E+09	4,190334E+08	5,701871E+09	6,120904E+09
-970	2,095465E+08	2,095368E+08	2,850851E+09	2,850900E+09	4,190833E+08	5,701752E+09	6,120835E+09
-969	2,095533E+08	2,095707E+08	2,850891E+09	2,850713E+09	4,191241E+08	5,701605E+09	6,120729E+09
-968	2,095337E+08	2,095368E+08	2,850660E+09	2,850756E+09	4,190704E+08	5,701417E+09	6,120487E+09
-967	2,095899E+08	2,095714E+08	2,850617E+09	2,850636E+09	4,191613E+08	5,701253E+09	6,120414E+09
-966	2,095651E+08	2,095843E+08	2,850567E+09	2,850481E+09	4,191494E+08	5,701048E+09	6,120197E+09
-965	2,095704E+08	2,095578E+08	2,850407E+09	2,850558E+09	4,191282E+08	5,700965E+09	6,120093E+09
-964	2,096087E+08	2,096034E+08	2,850536E+09	2,850438E+09	4,192120E+08	5,700974E+09	6,120186E+09
-963	2,095647E+08	2,095812E+08	2,850522E+09	2,850450E+09	4,191459E+08	5,700973E+09	6,120118E+09
-962	2,095858E+08	2,095640E+08	2,850487E+09	2,850588E+09	4,191498E+08	5,701075E+09	6,120225E+09
-961	2,095917E+08	2,095982E+08	2,850654E+09	2,850538E+09	4,191899E+08	5,701193E+09	6,120382E+09
-960	2,095469E+08	2,095533E+08	2,850600E+09	2,850702E+09	4,191002E+08	5,701303E+09	6,120403E+09
-959	2,095805E+08	2,095604E+08	2,850686E+09	2,850758E+09	4,191410E+08	5,701444E+09	6,120585E+09
-958	2,095571E+08	2,095716E+08	2,850814E+09	2,850699E+09	4,191287E+08	5,701512E+09	6,120641E+09
-957	2,095362E+08	2,095241E+08	2,850744E+09	2,850871E+09	4,190603E+08	5,701614E+09	6,120675E+09
-956	2,095739E+08	2,095578E+08	2,850867E+09	2,850831E+09	4,191317E+08	5,701698E+09	6,120829E+09
-955	2,095321E+08	2,095482E+08	2,850875E+09	2,850779E+09	4,190804E+08	5,701654E+09	6,120734E+09
-954	2,095392E+08	2,095287E+08	2,850755E+09	2,850874E+09	4,190679E+08	5,701629E+09	6,120697E+09
-953	2,095666E+08	2,095757E+08	2,850846E+09	2,850727E+09	4,191423E+08	5,701573E+09	6,120715E+09
-952	2,095280E+08	2,095486E+08	2,850735E+09	2,850716E+09	4,190767E+08	5,701452E+09	6,120528E+09
-951	2,095719E+08	2,095527E+08	2,850629E+09	2,850695E+09	4,191246E+08	5,701324E+09	6,120448E+09
-950	2,095799E+08	2,095888E+08	2,850614E+09	2,850480E+09	4,191687E+08	5,701094E+09	6,120263E+09
-949	2,095607E+08	2,095588E+08	2,850391E+09	2,850505E+09	4,191195E+08	5,700896E+09	6,120016E+09
-948	2,096137E+08	2,095952E+08	2,850363E+09	2,850396E+09	4,192089E+08	5,700759E+09	6,119968E+09
-947	2,095883E+08	2,096118E+08	2,850366E+09	2,850221E+09	4,192001E+08	5,700587E+09	6,119787E+09
-946	2,095887E+08	2,095822E+08	2,850229E+09	2,850330E+09	4,191709E+08	5,700559E+09	6,119730E+09
-945	2,096244E+08	2,096219E+08	2,850344E+09	2,850247E+09	4,192462E+08	5,700591E+09	6,119837E+09
-944	2,095820E+08	2,095997E+08	2,850338E+09	2,850291E+09	4,191818E+08	5,700629E+09	6,119810E+09
-943	2,096038E+08	2,095793E+08	2,850290E+09	2,850434E+09	4,191831E+08	5,700724E+09	6,119907E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-942	2,096092E+08	2,096151E+08	2,850426E+09	2,850350E+09	4,192243E+08	5,700775E+09	6,120000E+09
-941	2,095666E+08	2,095704E+08	2,850407E+09	2,850492E+09	4,191370E+08	5,700899E+09	6,120036E+09
-940	2,096001E+08	2,095751E+08	2,850500E+09	2,850561E+09	4,191752E+08	5,701061E+09	6,120237E+09
-939	2,095780E+08	2,095898E+08	2,850645E+09	2,850483E+09	4,191678E+08	5,701128E+09	6,120296E+09
-938	2,095527E+08	2,095446E+08	2,850566E+09	2,850669E+09	4,190973E+08	5,701235E+09	6,120332E+09
-937	2,095869E+08	2,095788E+08	2,850661E+09	2,850637E+09	4,191657E+08	5,701298E+09	6,120464E+09
-936	2,095477E+08	2,095728E+08	2,850694E+09	2,850593E+09	4,191205E+08	5,701287E+09	6,120408E+09
-935	2,095587E+08	2,095480E+08	2,850568E+09	2,850685E+09	4,191067E+08	5,701254E+09	6,120360E+09
-934	2,095894E+08	2,095924E+08	2,850608E+09	2,850508E+09	4,191817E+08	5,701116E+09	6,120298E+09
-933	2,095558E+08	2,095662E+08	2,850488E+09	2,850481E+09	4,191220E+08	5,700969E+09	6,120091E+09
-932	2,095991E+08	2,095710E+08	2,850348E+09	2,850459E+09	4,191702E+08	5,700807E+09	6,119977E+09
-931	2,096062E+08	2,096159E+08	2,850346E+09	2,850204E+09	4,192220E+08	5,700549E+09	6,119771E+09
-930	2,095815E+08	2,095891E+08	2,850149E+09	2,850232E+09	4,191705E+08	5,700381E+09	6,119551E+09
-929	2,096301E+08	2,096207E+08	2,850140E+09	2,850142E+09	4,192508E+08	5,700282E+09	6,119533E+09
-928	2,096079E+08	2,096357E+08	2,850188E+09	2,850013E+09	4,192435E+08	5,700201E+09	6,119444E+09
-927	2,096101E+08	2,095984E+08	2,850047E+09	2,850157E+09	4,192085E+08	5,700204E+09	6,119412E+09
-926	2,096450E+08	2,096373E+08	2,850116E+09	2,850068E+09	4,192823E+08	5,700184E+09	6,119467E+09
-925	2,096043E+08	2,096178E+08	2,850124E+09	2,850104E+09	4,192221E+08	5,700228E+09	6,119450E+09
-924	2,096227E+08	2,095969E+08	2,850086E+09	2,850252E+09	4,192196E+08	5,700338E+09	6,119558E+09
-923	2,096286E+08	2,096357E+08	2,850257E+09	2,850134E+09	4,192643E+08	5,700392E+09	6,119656E+09
-922	2,095822E+08	2,095899E+08	2,850254E+09	2,850288E+09	4,191721E+08	5,700541E+09	6,119713E+09
-921	2,096125E+08	2,095912E+08	2,850325E+09	2,850378E+09	4,192037E+08	5,700703E+09	6,119906E+09
-920	2,095938E+08	2,096088E+08	2,850474E+09	2,850321E+09	4,192026E+08	5,700795E+09	6,119997E+09
-919	2,095696E+08	2,095623E+08	2,850375E+09	2,850507E+09	4,191319E+08	5,700882E+09	6,120014E+09
-918	2,096047E+08	2,095970E+08	2,850431E+09	2,850438E+09	4,192017E+08	5,700869E+09	6,120071E+09
-917	2,095715E+08	2,095908E+08	2,850473E+09	2,850368E+09	4,191623E+08	5,700841E+09	6,120003E+09
-916	2,095835E+08	2,095646E+08	2,850332E+09	2,850463E+09	4,191481E+08	5,700796E+09	6,119944E+09
-915	2,096168E+08	2,096140E+08	2,850365E+09	2,850249E+09	4,192308E+08	5,700613E+09	6,119844E+09
-914	2,095787E+08	2,095927E+08	2,850238E+09	2,850219E+09	4,191714E+08	5,700457E+09	6,119628E+09
-913	2,096171E+08	2,095990E+08	2,850091E+09	2,850204E+09	4,192160E+08	5,700295E+09	6,119511E+09
-912	2,096253E+08	2,096454E+08	2,850137E+09	2,849967E+09	4,192708E+08	5,700104E+09	6,119375E+09
-911	2,096020E+08	2,096122E+08	2,849962E+09	2,850017E+09	4,192142E+08	5,699979E+09	6,119193E+09
-910	2,096504E+08	2,096386E+08	2,849922E+09	2,849931E+09	4,192890E+08	5,699853E+09	6,119142E+09
-909	2,096332E+08	2,096519E+08	2,849973E+09	2,849814E+09	4,192850E+08	5,699787E+09	6,119072E+09
-908	2,096337E+08	2,096144E+08	2,849810E+09	2,849975E+09	4,192481E+08	5,699785E+09	6,119033E+09
-907	2,096680E+08	2,096594E+08	2,849887E+09	2,849848E+09	4,193274E+08	5,699735E+09	6,119062E+09
-906	2,096226E+08	2,096412E+08	2,849920E+09	2,849882E+09	4,192638E+08	5,699802E+09	6,119066E+09
-905	2,096369E+08	2,096159E+08	2,849895E+09	2,850041E+09	4,192528E+08	5,699936E+09	6,119188E+09
-904	2,096453E+08	2,096533E+08	2,850106E+09	2,849957E+09	4,192986E+08	5,700063E+09	6,119362E+09
-903	2,096001E+08	2,096041E+08	2,850096E+09	2,850132E+09	4,192042E+08	5,700228E+09	6,119433E+09
-902	2,096284E+08	2,096059E+08	2,850117E+09	2,850207E+09	4,192343E+08	5,700324E+09	6,119559E+09
-901	2,096141E+08	2,096276E+08	2,850274E+09	2,850138E+09	4,192417E+08	5,700413E+09	6,119654E+09
-900	2,095892E+08	2,095813E+08	2,850171E+09	2,850316E+09	4,191706E+08	5,700487E+09	6,119657E+09
-899	2,096266E+08	2,096189E+08	2,850231E+09	2,850203E+09	4,192455E+08	5,700434E+09	6,119680E+09
-898	2,095925E+08	2,096130E+08	2,850268E+09	2,850132E+09	4,192055E+08	5,700400E+09	6,119606E+09
-897	2,096018E+08	2,095851E+08	2,850091E+09	2,850231E+09	4,191869E+08	5,700322E+09	6,119509E+09
-896	2,096377E+08	2,096380E+08	2,850132E+09	2,850025E+09	4,192757E+08	5,700157E+09	6,119433E+09
-895	2,095999E+08	2,096177E+08	2,850000E+09	2,849990E+09	4,192176E+08	5,699990E+09	6,119207E+09
-894	2,096369E+08	2,096221E+08	2,849837E+09	2,849952E+09	4,192590E+08	5,699789E+09	6,119048E+09

1	14	15	16	17	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	2,096511E+08	2,096668E+08	2,849911E+09	2,849724E+09	4,193179E+08	5,699635E+09	6,118953E+09
-892	2,096282E+08	2,096298E+08	2,849738E+09	2,849803E+09	4,192581E+08	5,699540E+09	6,118798E+09
-891	2,096771E+08	2,096594E+08	2,849694E+09	2,849702E+09	4,193365E+08	5,699396E+09	6,118732E+09
-890	2,096561E+08	2,096755E+08	2,849746E+09	2,849597E+09	4,193316E+08	5,699343E+09	6,118674E+09
-889	2,096500E+08	2,096382E+08	2,849585E+09	2,849767E+09	4,192882E+08	5,699352E+09	6,118640E+09
-888	2,096849E+08	2,096822E+08	2,849714E+09	2,849656E+09	4,193671E+08	5,699370E+09	6,118737E+09
-887	2,096396E+08	2,096589E+08	2,849764E+09	2,849705E+09	4,192985E+08	5,699469E+09	6,118767E+09
-886	2,096525E+08	2,096291E+08	2,849711E+09	2,849862E+09	4,192816E+08	5,699573E+09	6,118855E+09
-885	2,096660E+08	2,096662E+08	2,849917E+09	2,849787E+09	4,193322E+08	5,699704E+09	6,119036E+09
-884	2,096196E+08	2,096190E+08	2,849892E+09	2,849968E+09	4,192386E+08	5,699860E+09	6,119099E+09
-883	2,096474E+08	2,096283E+08	2,849911E+09	2,849996E+09	4,192758E+08	5,699907E+09	6,119183E+09
-882	2,096313E+08	2,096504E+08	2,850081E+09	2,849916E+09	4,192817E+08	5,699998E+09	6,119279E+09
-881	2,096047E+08	2,096017E+08	2,849971E+09	2,850095E+09	4,192064E+08	5,700066E+09	6,119272E+09
-880	2,096469E+08	2,096370E+08	2,850044E+09	2,849999E+09	4,192839E+08	5,700042E+09	6,119326E+09
-879	2,096144E+08	2,096313E+08	2,850054E+09	2,849932E+09	4,192458E+08	5,699986E+09	6,119232E+09
-878	2,096222E+08	2,096053E+08	2,849830E+09	2,850004E+09	4,192275E+08	5,699833E+09	6,119061E+09
-877	2,096621E+08	2,096616E+08	2,849883E+09	2,849788E+09	4,193237E+08	5,699671E+09	6,118995E+09
-876	2,096241E+08	2,096411E+08	2,849767E+09	2,849754E+09	4,192652E+08	5,699521E+09	6,118786E+09
-875	2,096619E+08	2,096474E+08	2,849615E+09	2,849689E+09	4,193093E+08	5,699304E+09	6,118613E+09
-874	2,096750E+08	2,096903E+08	2,849693E+09	2,849484E+09	4,193653E+08	5,699177E+09	6,118542E+09
-873	2,096491E+08	2,096517E+08	2,849495E+09	2,849584E+09	4,193008E+08	5,699079E+09	6,118380E+09
-872	2,096986E+08	2,096821E+08	2,849472E+09	2,849502E+09	4,193807E+08	5,698974E+09	6,118355E+09
-871	2,096765E+08	2,096985E+08	2,849526E+09	2,849402E+09	4,193750E+08	5,698928E+09	6,118303E+09
-870	2,096672E+08	2,096568E+08	2,849357E+09	2,849549E+09	4,193241E+08	5,698906E+09	6,118230E+09
-869	2,097064E+08	2,096978E+08	2,849517E+09	2,849453E+09	4,194042E+08	5,698970E+09	6,118374E+09
-868	2,096612E+08	2,096724E+08	2,849577E+09	2,849523E+09	4,193336E+08	5,699100E+09	6,118433E+09
-867	2,096728E+08	2,096473E+08	2,849524E+09	2,849659E+09	4,193201E+08	5,699183E+09	6,118503E+09
-866	2,096833E+08	2,096877E+08	2,849737E+09	2,849598E+09	4,193710E+08	5,699334E+09	6,118705E+09
-865	2,096327E+08	2,096408E+08	2,849710E+09	2,849783E+09	4,192735E+08	5,699493E+09	6,118766E+09
-864	2,096623E+08	2,096482E+08	2,849764E+09	2,849818E+09	4,193105E+08	5,699583E+09	6,118893E+09
-863	2,096484E+08	2,096669E+08	2,849919E+09	2,849742E+09	4,193153E+08	5,699661E+09	6,118976E+09
-862	2,096219E+08	2,096156E+08	2,849755E+09	2,849897E+09	4,192374E+08	5,699651E+09	6,118889E+09
-861	2,096708E+08	2,096523E+08	2,849801E+09	2,849797E+09	4,193230E+08	5,699598E+09	6,118921E+09
-860	2,096389E+08	2,096513E+08	2,849794E+09	2,849714E+09	4,192903E+08	5,699508E+09	6,118798E+09
-859	2,096464E+08	2,096330E+08	2,849572E+09	2,849730E+09	4,192795E+08	5,699302E+09	6,118581E+09
-858	2,096847E+08	2,096888E+08	2,849650E+09	2,849513E+09	4,193735E+08	5,699163E+09	6,118537E+09
-857	2,096448E+08	2,096658E+08	2,849541E+09	2,849500E+09	4,193106E+08	5,699041E+09	6,118352E+09
-856	2,096848E+08	2,096693E+08	2,849415E+09	2,849469E+09	4,193542E+08	5,698883E+09	6,118238E+09
-855	2,096975E+08	2,097117E+08	2,849471E+09	2,849286E+09	4,194092E+08	5,698757E+09	6,118166E+09
-854	2,096695E+08	2,096733E+08	2,849241E+09	2,849372E+09	4,193428E+08	5,698613E+09	6,117956E+09
-853	2,097219E+08	2,097029E+08	2,849233E+09	2,849291E+09	4,194248E+08	5,698524E+09	6,117948E+09
-852	2,096991E+08	2,097174E+08	2,849313E+09	2,849194E+09	4,194166E+08	5,698507E+09	6,117923E+09
-851	2,096892E+08	2,096773E+08	2,849163E+09	2,849315E+09	4,193665E+08	5,698478E+09	6,117844E+09
-850	2,097254E+08	2,097153E+08	2,849336E+09	2,849245E+09	4,194407E+08	5,698582E+09	6,118022E+09
-849	2,096770E+08	2,096903E+08	2,849388E+09	2,849341E+09	4,193672E+08	5,698729E+09	6,118096E+09
-848	2,096884E+08	2,096666E+08	2,849360E+09	2,849493E+09	4,193550E+08	5,698853E+09	6,118208E+09
-847	2,096979E+08	2,097074E+08	2,849566E+09	2,849436E+09	4,194052E+08	5,699002E+09	6,118407E+09
-846	2,096473E+08	2,096563E+08	2,849516E+09	2,849594E+09	4,193036E+08	5,699110E+09	6,118413E+09
-845	2,096833E+08	2,096606E+08	2,849564E+09	2,849634E+09	4,193440E+08	5,699198E+09	6,118542E+09

1	14	15	16	17	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	2,096721E+08	2,096796E+08	2,849701E+09	2,849554E+09	4,193517E+08	5,699255E+09	6,118606E+09
-843	2,096460E+08	2,096371E+08	2,849513E+09	2,849657E+09	4,192831E+08	5,699170E+09	6,118453E+09
-842	2,096922E+08	2,096781E+08	2,849564E+09	2,849550E+09	4,193703E+08	5,699114E+09	6,118485E+09
-841	2,096574E+08	2,096798E+08	2,849566E+09	2,849463E+09	4,193371E+08	5,699030E+09	6,118367E+09
-840	2,096657E+08	2,096591E+08	2,849392E+09	2,849492E+09	4,193248E+08	5,698884E+09	6,118209E+09
-839	2,097043E+08	2,097118E+08	2,849460E+09	2,849300E+09	4,194161E+08	5,698760E+09	6,118176E+09
-838	2,096653E+08	2,096838E+08	2,849302E+09	2,849281E+09	4,193491E+08	5,698583E+09	6,117932E+09
-837	2,097104E+08	2,096872E+08	2,849154E+09	2,849266E+09	4,193975E+08	5,698419E+09	6,117817E+09
-836	2,097239E+08	2,097323E+08	2,849201E+09	2,849073E+09	4,194562E+08	5,698275E+09	6,117731E+09
-835	2,096946E+08	2,096994E+08	2,848981E+09	2,849106E+09	4,193940E+08	5,698087E+09	6,117481E+09
-834	2,097444E+08	2,097255E+08	2,849011E+09	2,849034E+09	4,194699E+08	5,698045E+09	6,117515E+09
-833	2,097187E+08	2,097372E+08	2,849110E+09	2,848965E+09	4,194559E+08	5,698075E+09	6,117531E+09
-832	2,097084E+08	2,096948E+08	2,849007E+09	2,849124E+09	4,194031E+08	5,698131E+09	6,117534E+09
-831	2,097411E+08	2,097339E+08	2,849171E+09	2,849088E+09	4,194750E+08	5,698259E+09	6,117734E+09
-830	2,096906E+08	2,097082E+08	2,849202E+09	2,849176E+09	4,193988E+08	5,698378E+09	6,117777E+09
-829	2,097052E+08	2,096838E+08	2,849181E+09	2,849335E+09	4,193889E+08	5,698517E+09	6,117906E+09
-828	2,097169E+08	2,097218E+08	2,849390E+09	2,849271E+09	4,194387E+08	5,698660E+09	6,118099E+09
-827	2,096679E+08	2,096742E+08	2,849320E+09	2,849380E+09	4,193421E+08	5,698700E+09	6,118042E+09
-826	2,097038E+08	2,096772E+08	2,849353E+09	2,849419E+09	4,193810E+08	5,698773E+09	6,118154E+09
-825	2,096907E+08	2,097001E+08	2,849468E+09	2,849338E+09	4,193909E+08	5,698805E+09	6,118196E+09
-824	2,096650E+08	2,096621E+08	2,849312E+09	2,849431E+09	4,193271E+08	5,698742E+09	6,118069E+09
-823	2,097085E+08	2,097038E+08	2,849360E+09	2,849323E+09	4,194122E+08	5,698683E+09	6,118095E+09
-822	2,096752E+08	2,097011E+08	2,849347E+09	2,849223E+09	4,193762E+08	5,698570E+09	6,117947E+09
-821	2,096898E+08	2,096768E+08	2,849164E+09	2,849274E+09	4,193666E+08	5,698438E+09	6,117805E+09
-820	2,097310E+08	2,097282E+08	2,849212E+09	2,849093E+09	4,194592E+08	5,698304E+09	6,117764E+09
-819	2,096936E+08	2,097083E+08	2,849029E+09	2,849032E+09	4,194019E+08	5,698061E+09	6,117463E+09
-818	2,097360E+08	2,097124E+08	2,848890E+09	2,849013E+09	4,194484E+08	5,697903E+09	6,117351E+09
-817	2,097457E+08	2,097584E+08	2,848958E+09	2,848823E+09	4,195041E+08	5,697780E+09	6,117285E+09
-816	2,097160E+08	2,097231E+08	2,848800E+09	2,848866E+09	4,194391E+08	5,697666E+09	6,117105E+09
-815	2,097614E+08	2,097462E+08	2,848836E+09	2,848830E+09	4,195077E+08	5,697666E+09	6,117174E+09
-814	2,097350E+08	2,097534E+08	2,848912E+09	2,848777E+09	4,194884E+08	5,697689E+09	6,117177E+09
-813	2,097274E+08	2,097112E+08	2,848805E+09	2,848966E+09	4,194386E+08	5,697771E+09	6,117210E+09
-812	2,097601E+08	2,097515E+08	2,848969E+09	2,848932E+09	4,195116E+08	5,697901E+09	6,117412E+09
-811	2,097107E+08	2,097294E+08	2,848999E+09	2,848967E+09	4,194402E+08	5,697966E+09	6,117407E+09
-810	2,097240E+08	2,097008E+08	2,848996E+09	2,849125E+09	4,194248E+08	5,698122E+09	6,117546E+09
-809	2,097350E+08	2,097372E+08	2,849196E+09	2,849069E+09	4,194722E+08	5,698265E+09	6,117737E+09
-808	2,096870E+08	2,096912E+08	2,849150E+09	2,849180E+09	4,193782E+08	5,698330E+09	6,117709E+09
-807	2,097196E+08	2,096989E+08	2,849162E+09	2,849231E+09	4,194185E+08	5,698393E+09	6,117811E+09
-806	2,097061E+08	2,097219E+08	2,849251E+09	2,849126E+09	4,194279E+08	5,698377E+09	6,117805E+09
-805	2,096843E+08	2,096835E+08	2,849106E+09	2,849227E+09	4,193678E+08	5,698333E+09	6,117701E+09
-804	2,097301E+08	2,097224E+08	2,849155E+09	2,849117E+09	4,194525E+08	5,698272E+09	6,117724E+09
-803	2,097003E+08	2,097219E+08	2,849113E+09	2,848978E+09	4,194222E+08	5,698092E+09	6,117514E+09
-802	2,097154E+08	2,096966E+08	2,848912E+09	2,849035E+09	4,194120E+08	5,697948E+09	6,117360E+09
-801	2,097554E+08	2,097513E+08	2,848934E+09	2,848853E+09	4,195067E+08	5,697787E+09	6,117293E+09
-800	2,097183E+08	2,097358E+08	2,848789E+09	2,848778E+09	4,194540E+08	5,697567E+09	6,117021E+09
-799	2,097559E+08	2,097401E+08	2,848661E+09	2,848766E+09	4,194959E+08	5,697427E+09	6,116923E+09
-798	2,097644E+08	2,097796E+08	2,848732E+09	2,848576E+09	4,195439E+08	5,697308E+09	6,116852E+09
-797	2,097381E+08	2,097411E+08	2,848593E+09	2,848662E+09	4,194792E+08	5,697255E+09	6,116734E+09
-796	2,097829E+08	2,097622E+08	2,848634E+09	2,848652E+09	4,195451E+08	5,697286E+09	6,116831E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-795	2,097573E+08	2,097755E+08	2,848699E+09	2,848576E+09	4,195328E+08	5,697275E+09	6,116808E+09
-794	2,097469E+08	2,097326E+08	2,848612E+09	2,848772E+09	4,194795E+08	5,697384E+09	6,116864E+09
-793	2,097765E+08	2,097715E+08	2,848787E+09	2,848745E+09	4,195480E+08	5,697533E+09	6,117081E+09
-792	2,097290E+08	2,097472E+08	2,848860E+09	2,848778E+09	4,194762E+08	5,697638E+09	6,117114E+09
-791	2,097381E+08	2,097168E+08	2,848831E+09	2,848950E+09	4,194549E+08	5,697781E+09	6,117236E+09
-790	2,097498E+08	2,097500E+08	2,848989E+09	2,848886E+09	4,194998E+08	5,697876E+09	6,117376E+09
-789	2,097061E+08	2,097087E+08	2,848930E+09	2,849002E+09	4,194148E+08	5,697932E+09	6,117347E+09
-788	2,097389E+08	2,097185E+08	2,848941E+09	2,849034E+09	4,194574E+08	5,697976E+09	6,117433E+09
-787	2,097288E+08	2,097456E+08	2,849023E+09	2,848879E+09	4,194745E+08	5,697903E+09	6,117377E+09
-786	2,097078E+08	2,097035E+08	2,848888E+09	2,848980E+09	4,194114E+08	5,697868E+09	6,117280E+09
-785	2,097529E+08	2,097417E+08	2,848919E+09	2,848885E+09	4,194946E+08	5,697804E+09	6,117299E+09
-784	2,097257E+08	2,097444E+08	2,848892E+09	2,848743E+09	4,194702E+08	5,697635E+09	6,117105E+09
-783	2,097359E+08	2,097245E+08	2,848671E+09	2,848806E+09	4,194603E+08	5,697477E+09	6,116938E+09
-782	2,097746E+08	2,097770E+08	2,848680E+09	2,848607E+09	4,195516E+08	5,697287E+09	6,116839E+09
-781	2,097408E+08	2,097611E+08	2,848559E+09	2,848545E+09	4,195019E+08	5,697104E+09	6,116606E+09
-780	2,097785E+08	2,097607E+08	2,848447E+09	2,848544E+09	4,195392E+08	5,696991E+09	6,116530E+09
-779	2,097890E+08	2,098002E+08	2,848505E+09	2,848339E+09	4,195892E+08	5,696843E+09	6,116433E+09
-778	2,097613E+08	2,097596E+08	2,848376E+09	2,848450E+09	4,195209E+08	5,696826E+09	6,116347E+09
-777	2,098023E+08	2,097832E+08	2,848413E+09	2,848459E+09	4,195855E+08	5,696871E+09	6,116457E+09
-776	2,097774E+08	2,097979E+08	2,848522E+09	2,848378E+09	4,195753E+08	5,696900E+09	6,116475E+09
-775	2,097618E+08	2,097540E+08	2,848443E+09	2,848585E+09	4,195158E+08	5,697029E+09	6,116544E+09
-774	2,097913E+08	2,097844E+08	2,848599E+09	2,848554E+09	4,195757E+08	5,697154E+09	6,116729E+09
-773	2,097482E+08	2,097594E+08	2,848667E+09	2,848614E+09	4,195075E+08	5,697281E+09	6,116789E+09
-772	2,097578E+08	2,097304E+08	2,848629E+09	2,848786E+09	4,194882E+08	5,697415E+09	6,116904E+09
-771	2,097708E+08	2,097705E+08	2,848764E+09	2,848679E+09	4,195413E+08	5,697442E+09	6,116984E+09
-770	2,097263E+08	2,097311E+08	2,848729E+09	2,848782E+09	4,194574E+08	5,697511E+09	6,116969E+09
-769	2,097565E+08	2,097411E+08	2,848746E+09	2,848813E+09	4,194976E+08	5,697559E+09	6,117057E+09
-768	2,097497E+08	2,097675E+08	2,848856E+09	2,848652E+09	4,195173E+08	5,697509E+09	6,117026E+09
-767	2,097253E+08	2,097259E+08	2,848690E+09	2,848769E+09	4,194512E+08	5,697458E+09	6,116910E+09
-766	2,097714E+08	2,097604E+08	2,848670E+09	2,848666E+09	4,195318E+08	5,697336E+09	6,116868E+09
-765	2,097492E+08	2,097684E+08	2,848627E+09	2,848531E+09	4,195176E+08	5,697158E+09	6,116675E+09
-764	2,097601E+08	2,097490E+08	2,848411E+09	2,848572E+09	4,195091E+08	5,696983E+09	6,116492E+09
-763	2,098007E+08	2,098017E+08	2,848418E+09	2,848329E+09	4,196024E+08	5,696747E+09	6,116350E+09
-762	2,097676E+08	2,097823E+08	2,848324E+09	2,848277E+09	4,195499E+08	5,696602E+09	6,116152E+09
-761	2,098017E+08	2,097803E+08	2,848217E+09	2,848309E+09	4,195820E+08	5,696526E+09	6,116108E+09
-760	2,098134E+08	2,098224E+08	2,848308E+09	2,848124E+09	4,196358E+08	5,696432E+09	6,116068E+09
-759	2,097790E+08	2,097849E+08	2,848177E+09	2,848259E+09	4,195640E+08	5,696436E+09	6,116000E+09
-758	2,098171E+08	2,098032E+08	2,848213E+09	2,848269E+09	4,196203E+08	5,696482E+09	6,116102E+09
-757	2,097965E+08	2,098162E+08	2,848339E+09	2,848212E+09	4,196127E+08	5,696550E+09	6,116163E+09
-756	2,097805E+08	2,097677E+08	2,848263E+09	2,848417E+09	4,195482E+08	5,696681E+09	6,116229E+09
-755	2,098121E+08	2,097978E+08	2,848385E+09	2,848359E+09	4,196099E+08	5,696745E+09	6,116355E+09
-754	2,097693E+08	2,097746E+08	2,848453E+09	2,848415E+09	4,195439E+08	5,696867E+09	6,116411E+09
-753	2,097751E+08	2,097515E+08	2,848413E+09	2,848584E+09	4,195266E+08	5,696997E+09	6,116523E+09
-752	2,097897E+08	2,097951E+08	2,848589E+09	2,848457E+09	4,195848E+08	5,697046E+09	6,116631E+09
-751	2,097408E+08	2,097559E+08	2,848563E+09	2,848566E+09	4,194967E+08	5,697129E+09	6,116626E+09
-750	2,097711E+08	2,097581E+08	2,848553E+09	2,848601E+09	4,195292E+08	5,697154E+09	6,116683E+09
-749	2,097707E+08	2,097847E+08	2,848643E+09	2,848468E+09	4,195554E+08	5,697111E+09	6,116666E+09
-748	2,097482E+08	2,097454E+08	2,848453E+09	2,848574E+09	4,194936E+08	5,697027E+09	6,116520E+09
-747	2,097973E+08	2,097836E+08	2,848395E+09	2,848425E+09	4,195809E+08	5,696819E+09	6,116400E+09

1	14	15	16	17	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	2,097757E+08	2,097934E+08	2,848374E+09	2,848271E+09	4,195691E+08	5,696645E+09	6,116214E+09
-745	2,097840E+08	2,097740E+08	2,848172E+09	2,848311E+09	4,195579E+08	5,696483E+09	6,116041E+09
-744	2,098259E+08	2,098247E+08	2,848212E+09	2,848069E+09	4,196506E+08	5,696281E+09	6,115931E+09
-743	2,097875E+08	2,098059E+08	2,848115E+09	2,848049E+09	4,195934E+08	5,696164E+09	6,115758E+09
-742	2,098192E+08	2,097999E+08	2,847981E+09	2,848096E+09	4,196191E+08	5,696077E+09	6,115696E+09
-741	2,098339E+08	2,098453E+08	2,848078E+09	2,847944E+09	4,196792E+08	5,696021E+09	6,115701E+09
-740	2,098000E+08	2,098064E+08	2,847967E+09	2,848074E+09	4,196064E+08	5,696041E+09	6,115648E+09
-739	2,098392E+08	2,098201E+08	2,847992E+09	2,848053E+09	4,196593E+08	5,696045E+09	6,115704E+09
-738	2,098196E+08	2,098302E+08	2,848136E+09	2,848001E+09	4,196498E+08	5,696137E+09	6,115786E+09
-737	2,098000E+08	2,097831E+08	2,848058E+09	2,848219E+09	4,195830E+08	5,696277E+09	6,115860E+09
-736	2,098316E+08	2,098176E+08	2,848208E+09	2,848157E+09	4,196492E+08	5,696365E+09	6,116014E+09
-735	2,097823E+08	2,098004E+08	2,848286E+09	2,848222E+09	4,195827E+08	5,696508E+09	6,116090E+09
-734	2,097857E+08	2,097727E+08	2,848246E+09	2,848387E+09	4,195584E+08	5,696633E+09	6,116192E+09
-733	2,098055E+08	2,098148E+08	2,848428E+09	2,848288E+09	4,196203E+08	5,696717E+09	6,116337E+09
-732	2,097600E+08	2,097714E+08	2,848385E+09	2,848395E+09	4,195314E+08	5,696779E+09	6,116311E+09
-731	2,097936E+08	2,097718E+08	2,848314E+09	2,848397E+09	4,195654E+08	5,696711E+09	6,116276E+09
-730	2,097968E+08	2,098020E+08	2,848382E+09	2,848244E+09	4,195988E+08	5,696626E+09	6,116225E+09
-729	2,097723E+08	2,097697E+08	2,848177E+09	2,848329E+09	4,195420E+08	5,696507E+09	6,116049E+09
-728	2,098236E+08	2,098107E+08	2,848154E+09	2,848148E+09	4,196343E+08	5,696303E+09	6,115937E+09
-727	2,097971E+08	2,098212E+08	2,848145E+09	2,847995E+09	4,196183E+08	5,696140E+09	6,115759E+09
-726	2,098034E+08	2,097947E+08	2,847938E+09	2,848051E+09	4,195981E+08	5,695988E+09	6,115586E+09
-725	2,098484E+08	2,098463E+08	2,847981E+09	2,847861E+09	4,196947E+08	5,695842E+09	6,115537E+09
-724	2,098105E+08	2,098284E+08	2,847888E+09	2,847854E+09	4,196390E+08	5,695742E+09	6,115381E+09
-723	2,098420E+08	2,098225E+08	2,847738E+09	2,847881E+09	4,196646E+08	5,695619E+09	6,115284E+09
-722	2,098577E+08	2,098667E+08	2,847862E+09	2,847727E+09	4,197244E+08	5,695589E+09	6,115313E+09
-721	2,098210E+08	2,098266E+08	2,847767E+09	2,847863E+09	4,196476E+08	5,695630E+09	6,115277E+09
-720	2,098605E+08	2,098377E+08	2,847815E+09	2,847839E+09	4,196982E+08	5,695654E+09	6,115352E+09
-719	2,098350E+08	2,098491E+08	2,847954E+09	2,847807E+09	4,196841E+08	5,695761E+09	6,115445E+09
-718	2,098123E+08	2,098004E+08	2,847862E+09	2,848030E+09	4,196127E+08	5,695892E+09	6,115504E+09
-717	2,098463E+08	2,098386E+08	2,848024E+09	2,847995E+09	4,196849E+08	5,696019E+09	6,115704E+09
-716	2,097992E+08	2,098199E+08	2,848122E+09	2,848050E+09	4,196191E+08	5,696172E+09	6,115792E+09
-715	2,098049E+08	2,097872E+08	2,848053E+09	2,848187E+09	4,195922E+08	5,696241E+09	6,115833E+09
-714	2,098283E+08	2,098272E+08	2,848225E+09	2,848091E+09	4,196555E+08	5,696315E+09	6,115971E+09
-713	2,097828E+08	2,097881E+08	2,848154E+09	2,848193E+09	4,195709E+08	5,696347E+09	6,115918E+09
-712	2,098182E+08	2,097935E+08	2,848079E+09	2,848165E+09	4,196117E+08	5,696244E+09	6,115855E+09
-711	2,098163E+08	2,098305E+08	2,848149E+09	2,848000E+09	4,196468E+08	5,696149E+09	6,115796E+09
-710	2,097900E+08	2,097957E+08	2,847948E+09	2,848065E+09	4,195856E+08	5,696012E+09	6,115598E+09
-709	2,098439E+08	2,098353E+08	2,847938E+09	2,847915E+09	4,196793E+08	5,695853E+09	6,115532E+09
-708	2,098197E+08	2,098430E+08	2,847931E+09	2,847772E+09	4,196627E+08	5,695703E+09	6,115366E+09
-707	2,098271E+08	2,098130E+08	2,847680E+09	2,847818E+09	4,196402E+08	5,695498E+09	6,115138E+09
-706	2,098736E+08	2,098675E+08	2,847722E+09	2,847636E+09	4,197411E+08	5,695358E+09	6,115099E+09
-705	2,098347E+08	2,098539E+08	2,847637E+09	2,847628E+09	4,196886E+08	5,695265E+09	6,114954E+09
-704	2,098665E+08	2,098469E+08	2,847527E+09	2,847636E+09	4,197135E+08	5,695162E+09	6,114876E+09
-703	2,098768E+08	2,098892E+08	2,847668E+09	2,847496E+09	4,197660E+08	5,695163E+09	6,114929E+09
-702	2,098375E+08	2,098425E+08	2,847567E+09	2,847646E+09	4,196800E+08	5,695213E+09	6,114893E+09
-701	2,098781E+08	2,098547E+08	2,847620E+09	2,847672E+09	4,197328E+08	5,695293E+09	6,115025E+09
-700	2,098531E+08	2,098681E+08	2,847770E+09	2,847647E+09	4,197212E+08	5,695417E+09	6,115138E+09
-699	2,098297E+08	2,098184E+08	2,847669E+09	2,847847E+09	4,196481E+08	5,695516E+09	6,115164E+09
-698	2,098654E+08	2,098561E+08	2,847851E+09	2,847809E+09	4,197215E+08	5,695660E+09	6,115382E+09

1	14	15	16	17	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	2,098189E+08	2,098366E+08	2,847946E+09	2,847863E+09	4,196554E+08	5,695809E+09	6,115465E+09
-696	2,098263E+08	2,098036E+08	2,847871E+09	2,847983E+09	4,196299E+08	5,695854E+09	6,115483E+09
-695	2,098460E+08	2,098463E+08	2,848010E+09	2,847882E+09	4,196923E+08	5,695891E+09	6,115584E+09
-694	2,097991E+08	2,098095E+08	2,847909E+09	2,847965E+09	4,196087E+08	5,695874E+09	6,115482E+09
-693	2,098375E+08	2,098197E+08	2,847841E+09	2,847949E+09	4,196572E+08	5,695790E+09	6,115447E+09
-692	2,098378E+08	2,098551E+08	2,847929E+09	2,847764E+09	4,196929E+08	5,695693E+09	6,115386E+09
-691	2,098134E+08	2,098152E+08	2,847708E+09	2,847805E+09	4,196286E+08	5,695513E+09	6,115142E+09
-690	2,098694E+08	2,098533E+08	2,847697E+09	2,847667E+09	4,197227E+08	5,695364E+09	6,115087E+09
-689	2,098453E+08	2,098650E+08	2,847683E+09	2,847540E+09	4,197104E+08	5,695223E+09	6,114933E+09
-688	2,098530E+08	2,098396E+08	2,847444E+09	2,847576E+09	4,196926E+08	5,695020E+09	6,114712E+09
-687	2,098936E+08	2,098966E+08	2,847501E+09	2,847401E+09	4,197902E+08	5,694902E+09	6,114692E+09
-686	2,098535E+08	2,098780E+08	2,847424E+09	2,847395E+09	4,197315E+08	5,694819E+09	6,114551E+09
-685	2,098865E+08	2,098673E+08	2,847330E+09	2,847442E+09	4,197538E+08	5,694773E+09	6,114526E+09
-684	2,098972E+08	2,099051E+08	2,847474E+09	2,847314E+09	4,198023E+08	5,694787E+09	6,114590E+09
-683	2,098578E+08	2,098558E+08	2,847340E+09	2,847450E+09	4,197136E+08	5,694790E+09	6,114504E+09
-682	2,098981E+08	2,098717E+08	2,847402E+09	2,847483E+09	4,197698E+08	5,694884E+09	6,114654E+09
-681	2,098731E+08	2,098897E+08	2,847572E+09	2,847457E+09	4,197627E+08	5,695029E+09	6,114792E+09
-680	2,098501E+08	2,098393E+08	2,847499E+09	2,847632E+09	4,196893E+08	5,695131E+09	6,114820E+09
-679	2,098808E+08	2,098753E+08	2,847684E+09	2,847606E+09	4,197561E+08	5,695291E+09	6,115047E+09
-678	2,098345E+08	2,098520E+08	2,847755E+09	2,847664E+09	4,196865E+08	5,695418E+09	6,115105E+09
-677	2,098433E+08	2,098219E+08	2,847667E+09	2,847810E+09	4,196652E+08	5,695477E+09	6,115142E+09
-676	2,098649E+08	2,098673E+08	2,847800E+09	2,847695E+09	4,197322E+08	5,695494E+09	6,115227E+09
-675	2,098194E+08	2,098306E+08	2,847675E+09	2,847735E+09	4,196500E+08	5,695409E+09	6,115059E+09
-674	2,098603E+08	2,098412E+08	2,847619E+09	2,847707E+09	4,197015E+08	5,695326E+09	6,115027E+09
-673	2,098625E+08	2,098768E+08	2,847705E+09	2,847523E+09	4,197393E+08	5,695228E+09	6,114967E+09
-672	2,098392E+08	2,098371E+08	2,847482E+09	2,847549E+09	4,196763E+08	5,695031E+09	6,114708E+09
-671	2,098899E+08	2,098778E+08	2,847455E+09	2,847425E+09	4,197677E+08	5,694880E+09	6,114648E+09
-670	2,098659E+08	2,098907E+08	2,847424E+09	2,847298E+09	4,197566E+08	5,694722E+09	6,114479E+09
-669	2,098749E+08	2,098672E+08	2,847208E+09	2,847359E+09	4,197421E+08	5,694567E+09	6,114309E+09
-668	2,099169E+08	2,099193E+08	2,847283E+09	2,847181E+09	4,198362E+08	5,694464E+09	6,114300E+09
-667	2,098778E+08	2,098942E+08	2,847185E+09	2,847164E+09	4,197720E+08	5,694349E+09	6,114121E+09
-666	2,099113E+08	2,098827E+08	2,847094E+09	2,847228E+09	4,197940E+08	5,694322E+09	6,114116E+09
-665	2,099206E+08	2,099237E+08	2,847243E+09	2,847113E+09	4,198443E+08	5,694355E+09	6,114200E+09
-664	2,098795E+08	2,098797E+08	2,847144E+09	2,847234E+09	4,197592E+08	5,694378E+09	6,114137E+09
-663	2,099121E+08	2,098971E+08	2,847236E+09	2,847275E+09	4,198093E+08	5,694511E+09	6,114321E+09
-662	2,098866E+08	2,099101E+08	2,847416E+09	2,847262E+09	4,197967E+08	5,694677E+09	6,114474E+09
-661	2,098650E+08	2,098570E+08	2,847353E+09	2,847476E+09	4,197219E+08	5,694829E+09	6,114551E+09
-660	2,098973E+08	2,098882E+08	2,847513E+09	2,847453E+09	4,197855E+08	5,694966E+09	6,114751E+09
-659	2,098534E+08	2,098641E+08	2,847524E+09	2,847480E+09	4,197174E+08	5,695004E+09	6,114722E+09
-658	2,098644E+08	2,098403E+08	2,847421E+09	2,847607E+09	4,197047E+08	5,695028E+09	6,114732E+09
-657	2,098879E+08	2,098894E+08	2,847564E+09	2,847468E+09	4,197773E+08	5,695032E+09	6,114809E+09
-656	2,098441E+08	2,098549E+08	2,847461E+09	2,847467E+09	4,196990E+08	5,694927E+09	6,114626E+09
-655	2,098801E+08	2,098646E+08	2,847408E+09	2,847446E+09	4,197448E+08	5,694854E+09	6,114598E+09
-654	2,098829E+08	2,098985E+08	2,847471E+09	2,847280E+09	4,197814E+08	5,694751E+09	6,114532E+09
-653	2,098608E+08	2,098621E+08	2,847251E+09	2,847342E+09	4,197229E+08	5,694593E+09	6,114316E+09
-652	2,099114E+08	2,099037E+08	2,847226E+09	2,847218E+09	4,198151E+08	5,694444E+09	6,114259E+09
-651	2,098897E+08	2,099137E+08	2,847175E+09	2,847065E+09	4,198033E+08	5,694240E+09	6,114044E+09
-650	2,099004E+08	2,098888E+08	2,846967E+09	2,847126E+09	4,197893E+08	5,694093E+09	6,113883E+09
-649	2,099432E+08	2,099383E+08	2,847048E+09	2,846954E+09	4,198815E+08	5,694002E+09	6,113884E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-648	2,099036E+08	2,099144E+08	2,846951E+09	2,846916E+09	4,198181E+08	5,693867E+09	6,113685E+09
-647	2,099293E+08	2,099056E+08	2,846870E+09	2,846997E+09	4,198349E+08	5,693867E+09	6,113701E+09
-646	2,099370E+08	2,099478E+08	2,847029E+09	2,846899E+09	4,198848E+08	5,693929E+09	6,113813E+09
-645	2,098955E+08	2,099033E+08	2,846979E+09	2,847055E+09	4,197988E+08	5,694034E+09	6,113833E+09
-644	2,099278E+08	2,099147E+08	2,847091E+09	2,847107E+09	4,198425E+08	5,694198E+09	6,114040E+09
-643	2,099052E+08	2,099198E+08	2,847231E+09	2,847087E+09	4,198250E+08	5,694317E+09	6,114142E+09
-642	2,098856E+08	2,098685E+08	2,847144E+09	2,847307E+09	4,197541E+08	5,694451E+09	6,114205E+09
-641	2,099194E+08	2,099035E+08	2,847286E+09	2,847277E+09	4,198229E+08	5,694562E+09	6,114385E+09
-640	2,098760E+08	2,098872E+08	2,847303E+09	2,847255E+09	4,197631E+08	5,694558E+09	6,114321E+09
-639	2,098817E+08	2,098666E+08	2,847221E+09	2,847365E+09	4,197483E+08	5,694586E+09	6,114334E+09
-638	2,099060E+08	2,099129E+08	2,847363E+09	2,847227E+09	4,198189E+08	5,694590E+09	6,114409E+09
-637	2,098635E+08	2,098775E+08	2,847275E+09	2,847255E+09	4,197410E+08	5,694530E+09	6,114271E+09
-636	2,098993E+08	2,098846E+08	2,847200E+09	2,847241E+09	4,197839E+08	5,694441E+09	6,114225E+09
-635	2,099046E+08	2,099174E+08	2,847207E+09	2,847061E+09	4,198220E+08	5,694268E+09	6,114090E+09
-634	2,098859E+08	2,098870E+08	2,846979E+09	2,847115E+09	4,197729E+08	5,694094E+09	6,113867E+09
-633	2,099389E+08	2,099274E+08	2,846962E+09	2,846975E+09	4,198663E+08	5,693937E+09	6,113803E+09
-632	2,099189E+08	2,099383E+08	2,846927E+09	2,846788E+09	4,198571E+08	5,693715E+09	6,113572E+09
-631	2,099240E+08	2,099118E+08	2,846731E+09	2,846857E+09	4,198358E+08	5,693588E+09	6,113424E+09
-630	2,099641E+08	2,099588E+08	2,846806E+09	2,846711E+09	4,199230E+08	5,693518E+09	6,113441E+09
-629	2,099231E+08	2,099388E+08	2,846750E+09	2,846717E+09	4,198619E+08	5,693467E+09	6,113329E+09
-628	2,099451E+08	2,099291E+08	2,846696E+09	2,846814E+09	4,198742E+08	5,693510E+09	6,113384E+09
-627	2,099540E+08	2,099656E+08	2,846848E+09	2,846718E+09	4,199197E+08	5,693566E+09	6,113486E+09
-626	2,099154E+08	2,099194E+08	2,846805E+09	2,846888E+09	4,198348E+08	5,693693E+09	6,113528E+09
-625	2,099487E+08	2,099264E+08	2,846907E+09	2,846946E+09	4,198751E+08	5,693853E+09	6,113728E+09
-624	2,099275E+08	2,099343E+08	2,847021E+09	2,846892E+09	4,198618E+08	5,693913E+09	6,113775E+09
-623	2,099024E+08	2,098886E+08	2,846925E+09	2,847096E+09	4,197910E+08	5,694021E+09	6,113812E+09
-622	2,099357E+08	2,099262E+08	2,847060E+09	2,847058E+09	4,198619E+08	5,694118E+09	6,113980E+09
-621	2,098935E+08	2,099121E+08	2,847122E+09	2,847042E+09	4,198056E+08	5,694163E+09	6,113969E+09
-620	2,098984E+08	2,098879E+08	2,847052E+09	2,847152E+09	4,197863E+08	5,694204E+09	6,113990E+09
-619	2,099257E+08	2,099281E+08	2,847148E+09	2,847011E+09	4,198538E+08	5,694159E+09	6,114013E+09
-618	2,098868E+08	2,098959E+08	2,847035E+09	2,847048E+09	4,197827E+08	5,694083E+09	6,113865E+09
-617	2,099243E+08	2,099055E+08	2,846947E+09	2,847032E+09	4,198297E+08	5,693978E+09	6,113808E+09
-616	2,099314E+08	2,099442E+08	2,846949E+09	2,846803E+09	4,198757E+08	5,693752E+09	6,113628E+09
-615	2,099089E+08	2,099155E+08	2,846739E+09	2,846844E+09	4,198245E+08	5,693583E+09	6,113408E+09
-614	2,099623E+08	2,099514E+08	2,846720E+09	2,846716E+09	4,199137E+08	5,693436E+09	6,113349E+09
-613	2,099421E+08	2,099607E+08	2,846709E+09	2,846556E+09	4,199028E+08	5,693265E+09	6,113168E+09
-612	2,099441E+08	2,099323E+08	2,846513E+09	2,846639E+09	4,198764E+08	5,693152E+09	6,113028E+09
-611	2,099840E+08	2,099769E+08	2,846557E+09	2,846497E+09	4,199609E+08	5,693054E+09	6,113015E+09
-610	2,099448E+08	2,099615E+08	2,846523E+09	2,846517E+09	4,199064E+08	5,693041E+09	6,112947E+09
-609	2,099673E+08	2,099484E+08	2,846500E+09	2,846621E+09	4,199157E+08	5,693121E+09	6,113037E+09
-608	2,099775E+08	2,099842E+08	2,846656E+09	2,846505E+09	4,199617E+08	5,693161E+09	6,113123E+09
-607	2,099347E+08	2,099368E+08	2,846615E+09	2,846683E+09	4,198715E+08	5,693299E+09	6,113170E+09
-606	2,099663E+08	2,099423E+08	2,846694E+09	2,846756E+09	4,199086E+08	5,693450E+09	6,113359E+09
-605	2,099442E+08	2,099554E+08	2,846838E+09	2,846714E+09	4,198995E+08	5,693552E+09	6,113452E+09
-604	2,099160E+08	2,099118E+08	2,846760E+09	2,846907E+09	4,198278E+08	5,693667E+09	6,113494E+09
-603	2,099508E+08	2,099437E+08	2,846874E+09	2,846857E+09	4,198945E+08	5,693732E+09	6,113626E+09
-602	2,099135E+08	2,099309E+08	2,846936E+09	2,846848E+09	4,198445E+08	5,693784E+09	6,113629E+09
-601	2,099205E+08	2,099027E+08	2,846846E+09	2,846956E+09	4,198232E+08	5,693802E+09	6,113626E+09
-600	2,099498E+08	2,099469E+08	2,846902E+09	2,846782E+09	4,198967E+08	5,693685E+09	6,113581E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-599	2,099090E+08	2,099210E+08	2,846779E+09	2,846802E+09	4,198300E+08	5,693581E+09	6,113411E+09
-598	2,099463E+08	2,099310E+08	2,846681E+09	2,846780E+09	4,198773E+08	5,693461E+09	6,113338E+09
-597	2,099552E+08	2,099705E+08	2,846727E+09	2,846554E+09	4,199257E+08	5,693281E+09	6,113207E+09
-596	2,099312E+08	2,099390E+08	2,846524E+09	2,846594E+09	4,198702E+08	5,693118E+09	6,112988E+09
-595	2,099852E+08	2,099679E+08	2,846463E+09	2,846474E+09	4,199530E+08	5,692937E+09	6,112890E+09
-594	2,099671E+08	2,099822E+08	2,846450E+09	2,846335E+09	4,199493E+08	5,692785E+09	6,112734E+09
-593	2,099682E+08	2,099546E+08	2,846276E+09	2,846428E+09	4,199228E+08	5,692703E+09	6,112626E+09
-592	2,100069E+08	2,100029E+08	2,846338E+09	2,846265E+09	4,200098E+08	5,692602E+09	6,112612E+09
-591	2,099652E+08	2,099864E+08	2,846341E+09	2,846292E+09	4,199516E+08	5,692633E+09	6,112585E+09
-590	2,099855E+08	2,099674E+08	2,846317E+09	2,846423E+09	4,199529E+08	5,692740E+09	6,112693E+09
-589	2,099955E+08	2,100008E+08	2,846491E+09	2,846332E+09	4,199963E+08	5,692824E+09	6,112820E+09
-588	2,099492E+08	2,099537E+08	2,846436E+09	2,846513E+09	4,199030E+08	5,692949E+09	6,112852E+09
-587	2,099811E+08	2,099573E+08	2,846471E+09	2,846576E+09	4,199384E+08	5,693047E+09	6,112986E+09
-586	2,099626E+08	2,099751E+08	2,846625E+09	2,846527E+09	4,199377E+08	5,693152E+09	6,113090E+09
-585	2,099369E+08	2,099288E+08	2,846575E+09	2,846708E+09	4,198657E+08	5,693282E+09	6,113148E+09
-584	2,099733E+08	2,099611E+08	2,846673E+09	2,846626E+09	4,199344E+08	5,693299E+09	6,113233E+09
-583	2,099349E+08	2,099496E+08	2,846728E+09	2,846617E+09	4,198845E+08	5,693345E+09	6,113230E+09
-582	2,099407E+08	2,099229E+08	2,846609E+09	2,846741E+09	4,198636E+08	5,693350E+09	6,113214E+09
-581	2,099701E+08	2,099717E+08	2,846686E+09	2,846569E+09	4,199418E+08	5,693255E+09	6,113197E+09
-580	2,099280E+08	2,099485E+08	2,846570E+09	2,846574E+09	4,198765E+08	5,693144E+09	6,113020E+09
-579	2,099675E+08	2,099518E+08	2,846439E+09	2,846540E+09	4,199193E+08	5,692978E+09	6,112898E+09
-578	2,099806E+08	2,099924E+08	2,846481E+09	2,846320E+09	4,199730E+08	5,692801E+09	6,112774E+09
-577	2,099580E+08	2,099578E+08	2,846275E+09	2,846358E+09	4,199159E+08	5,692634E+09	6,112550E+09
-576	2,100108E+08	2,099907E+08	2,846190E+09	2,846212E+09	4,200015E+08	5,692402E+09	6,112404E+09
-575	2,099900E+08	2,100104E+08	2,846200E+09	2,846076E+09	4,200005E+08	5,692276E+09	6,112276E+09
-574	2,099887E+08	2,099814E+08	2,846047E+09	2,846191E+09	4,199701E+08	5,692238E+09	6,112208E+09
-573	2,100266E+08	2,100267E+08	2,846169E+09	2,846054E+09	4,200534E+08	5,692223E+09	6,112276E+09
-572	2,099834E+08	2,100060E+08	2,846181E+09	2,846101E+09	4,199894E+08	5,692282E+09	6,112271E+09
-571	2,100028E+08	2,099781E+08	2,846108E+09	2,846247E+09	4,199809E+08	5,692355E+09	6,112336E+09
-570	2,100154E+08	2,100162E+08	2,846272E+09	2,846172E+09	4,200316E+08	5,692444E+09	6,112476E+09
-569	2,099694E+08	2,099704E+08	2,846232E+09	2,846335E+09	4,199399E+08	5,692567E+09	6,112507E+09
-568	2,100005E+08	2,099779E+08	2,846267E+09	2,846361E+09	4,199784E+08	5,692628E+09	6,112607E+09
-567	2,099821E+08	2,099968E+08	2,846451E+09	2,846306E+09	4,199789E+08	5,692757E+09	6,112736E+09
-566	2,099549E+08	2,099467E+08	2,846392E+09	2,846504E+09	4,199016E+08	5,692896E+09	6,112797E+09
-565	2,099908E+08	2,099789E+08	2,846502E+09	2,846434E+09	4,199696E+08	5,692936E+09	6,112906E+09
-564	2,099514E+08	2,099706E+08	2,846530E+09	2,846420E+09	4,199219E+08	5,692950E+09	6,112872E+09
-563	2,099577E+08	2,099428E+08	2,846359E+09	2,846528E+09	4,199004E+08	5,692887E+09	6,112788E+09
-562	2,099924E+08	2,099958E+08	2,846436E+09	2,846348E+09	4,199883E+08	5,692784E+09	6,112773E+09
-561	2,099542E+08	2,099701E+08	2,846335E+09	2,846331E+09	4,199243E+08	5,692666E+09	6,112590E+09
-560	2,099951E+08	2,099737E+08	2,846176E+09	2,846266E+09	4,199687E+08	5,692441E+09	6,112410E+09
-559	2,100072E+08	2,100160E+08	2,846222E+09	2,846045E+09	4,200232E+08	5,692267E+09	6,112291E+09
-558	2,099816E+08	2,099832E+08	2,846016E+09	2,846105E+09	4,199648E+08	5,692121E+09	6,112086E+09
-557	2,100311E+08	2,100188E+08	2,845983E+09	2,845976E+09	4,200499E+08	5,691960E+09	6,112009E+09
-556	2,100081E+08	2,100386E+08	2,846021E+09	2,845858E+09	4,200466E+08	5,691879E+09	6,111926E+09
-555	2,100070E+08	2,100004E+08	2,845849E+09	2,845992E+09	4,200074E+08	5,691841E+09	6,111849E+09
-554	2,100484E+08	2,100432E+08	2,845961E+09	2,845881E+09	4,200916E+08	5,691842E+09	6,111933E+09
-553	2,100075E+08	2,100181E+08	2,845966E+09	2,845929E+09	4,200256E+08	5,691895E+09	6,111920E+09
-552	2,100254E+08	2,099944E+08	2,845856E+09	2,846038E+09	4,200198E+08	5,691895E+09	6,111914E+09
-551	2,100359E+08	2,100372E+08	2,846043E+09	2,845948E+09	4,200732E+08	5,691991E+09	6,112064E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-550	2,099877E+08	2,099924E+08	2,846031E+09	2,846117E+09	4,199800E+08	5,692148E+09	6,112128E+09
-549	2,100172E+08	2,099985E+08	2,846121E+09	2,846151E+09	4,200157E+08	5,692272E+09	6,112287E+09
-548	2,099976E+08	2,100166E+08	2,846303E+09	2,846113E+09	4,200143E+08	5,692417E+09	6,112431E+09
-547	2,099702E+08	2,099613E+08	2,846189E+09	2,846322E+09	4,199314E+08	5,692511E+09	6,112443E+09
-546	2,100091E+08	2,099987E+08	2,846279E+09	2,846263E+09	4,200078E+08	5,692543E+09	6,112550E+09
-545	2,099734E+08	2,099913E+08	2,846312E+09	2,846225E+09	4,199647E+08	5,692537E+09	6,112501E+09
-544	2,099808E+08	2,099665E+08	2,846117E+09	2,846283E+09	4,199474E+08	5,692400E+09	6,112347E+09
-543	2,100176E+08	2,100195E+08	2,846206E+09	2,846086E+09	4,200370E+08	5,692292E+09	6,112329E+09
-542	2,099788E+08	2,099924E+08	2,846092E+09	2,846075E+09	4,199713E+08	5,692167E+09	6,112139E+09
-541	2,100176E+08	2,099967E+08	2,845951E+09	2,846016E+09	4,200142E+08	5,691967E+09	6,111981E+09
-540	2,100274E+08	2,100432E+08	2,845989E+09	2,845805E+09	4,200707E+08	5,691794E+09	6,111865E+09
-539	2,100006E+08	2,100069E+08	2,845760E+09	2,845872E+09	4,200075E+08	5,691632E+09	6,111639E+09
-538	2,100530E+08	2,100434E+08	2,845753E+09	2,845765E+09	4,200963E+08	5,691518E+09	6,111615E+09
-537	2,100346E+08	2,100566E+08	2,845811E+09	2,845649E+09	4,200913E+08	5,691459E+09	6,111551E+09
-536	2,100330E+08	2,100171E+08	2,845606E+09	2,845767E+09	4,200501E+08	5,691373E+09	6,111423E+09
-535	2,100733E+08	2,100609E+08	2,845722E+09	2,845660E+09	4,201342E+08	5,691383E+09	6,111517E+09
-534	2,100287E+08	2,100387E+08	2,845730E+09	2,845720E+09	4,200674E+08	5,691449E+09	6,111517E+09
-533	2,100421E+08	2,100184E+08	2,845680E+09	2,845828E+09	4,200605E+08	5,691508E+09	6,111569E+09
-532	2,100497E+08	2,100619E+08	2,845897E+09	2,845748E+09	4,201116E+08	5,691645E+09	6,111757E+09
-531	2,100007E+08	2,100095E+08	2,845873E+09	2,845932E+09	4,200102E+08	5,691806E+09	6,111816E+09
-530	2,100324E+08	2,100150E+08	2,845953E+09	2,845995E+09	4,200474E+08	5,691949E+09	6,111996E+09
-529	2,100176E+08	2,100295E+08	2,846116E+09	2,845953E+09	4,200472E+08	5,692069E+09	6,112116E+09
-528	2,099907E+08	2,099797E+08	2,845944E+09	2,846119E+09	4,199703E+08	5,692063E+09	6,112033E+09
-527	2,100316E+08	2,100206E+08	2,846036E+09	2,846031E+09	4,200521E+08	5,692068E+09	6,112120E+09
-526	2,099966E+08	2,100144E+08	2,846075E+09	2,845982E+09	4,200109E+08	5,692057E+09	6,112068E+09
-525	2,100040E+08	2,099895E+08	2,845913E+09	2,846026E+09	4,199936E+08	5,691940E+09	6,111933E+09
-524	2,100392E+08	2,100422E+08	2,845990E+09	2,845838E+09	4,200814E+08	5,691828E+09	6,111909E+09
-523	2,099997E+08	2,100130E+08	2,845836E+09	2,845836E+09	4,200126E+08	5,691671E+09	6,111684E+09
-522	2,100392E+08	2,100221E+08	2,845692E+09	2,845795E+09	4,200613E+08	5,691488E+09	6,111549E+09
-521	2,100523E+08	2,100674E+08	2,845754E+09	2,845584E+09	4,201197E+08	5,691338E+09	6,111458E+09
-520	2,100263E+08	2,100319E+08	2,845515E+09	2,845626E+09	4,200582E+08	5,691141E+09	6,111199E+09
-519	2,100793E+08	2,100651E+08	2,845525E+09	2,845523E+09	4,201444E+08	5,691049E+09	6,111193E+09
-518	2,100600E+08	2,100761E+08	2,845576E+09	2,845430E+09	4,201362E+08	5,691006E+09	6,111142E+09
-517	2,100546E+08	2,100375E+08	2,845392E+09	2,845546E+09	4,200921E+08	5,690938E+09	6,111030E+09
-516	2,100899E+08	2,100848E+08	2,845510E+09	2,845447E+09	4,201747E+08	5,690957E+09	6,111132E+09
-515	2,100427E+08	2,100604E+08	2,845516E+09	2,845511E+09	4,201031E+08	5,691027E+09	6,111130E+09
-514	2,100573E+08	2,100401E+08	2,845506E+09	2,845644E+09	4,200974E+08	5,691150E+09	6,111248E+09
-513	2,100697E+08	2,100765E+08	2,845744E+09	2,845577E+09	4,201462E+08	5,691321E+09	6,111468E+09
-512	2,100215E+08	2,100232E+08	2,845678E+09	2,845746E+09	4,200447E+08	5,691424E+09	6,111469E+09
-511	2,100533E+08	2,100304E+08	2,845748E+09	2,845806E+09	4,200837E+08	5,691554E+09	6,111638E+09
-510	2,100379E+08	2,100487E+08	2,845895E+09	2,845763E+09	4,200866E+08	5,691659E+09	6,111745E+09
-509	2,100091E+08	2,100036E+08	2,845756E+09	2,845902E+09	4,200127E+08	5,691658E+09	6,111671E+09
-508	2,100494E+08	2,100451E+08	2,845849E+09	2,845808E+09	4,200945E+08	5,691658E+09	6,111752E+09
-507	2,100151E+08	2,100337E+08	2,845853E+09	2,845753E+09	4,200489E+08	5,691606E+09	6,111654E+09
-506	2,100251E+08	2,100101E+08	2,845681E+09	2,845813E+09	4,200352E+08	5,691494E+09	6,111530E+09
-505	2,100644E+08	2,100607E+08	2,845741E+09	2,845616E+09	4,201251E+08	5,691357E+09	6,111482E+09
-504	2,100244E+08	2,100372E+08	2,845547E+09	2,845579E+09	4,200616E+08	5,691126E+09	6,111188E+09
-503	2,100643E+08	2,100490E+08	2,845432E+09	2,845529E+09	4,201134E+08	5,690961E+09	6,111074E+09
-502	2,100777E+08	2,100929E+08	2,845510E+09	2,845258E+09	4,201706E+08	5,690769E+09	6,110939E+09

1	14	15	16	17	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	2,100512E+08	2,100564E+08	2,845308E+09	2,845374E+09	4,201076E+08	5,690682E+09	6,110790E+09
-500	2,101010E+08	2,100874E+08	2,845310E+09	2,845294E+09	4,201884E+08	5,690603E+09	6,110792E+09
-499	2,100791E+08	2,100958E+08	2,845332E+09	2,845215E+09	4,201749E+08	5,690547E+09	6,110721E+09
-498	2,100725E+08	2,100612E+08	2,845171E+09	2,845354E+09	4,201337E+08	5,690525E+09	6,110659E+09
-497	2,101095E+08	2,101042E+08	2,845324E+09	2,845260E+09	4,202138E+08	5,690584E+09	6,110797E+09
-496	2,100625E+08	2,100795E+08	2,845327E+09	2,845306E+09	4,201420E+08	5,690633E+09	6,110775E+09
-495	2,100777E+08	2,100564E+08	2,845336E+09	2,845449E+09	4,201341E+08	5,690785E+09	6,110919E+09
-494	2,100897E+08	2,100909E+08	2,845556E+09	2,845407E+09	4,201806E+08	5,690963E+09	6,111144E+09
-493	2,100406E+08	2,100410E+08	2,845494E+09	2,845558E+09	4,200817E+08	5,691053E+09	6,111134E+09
-492	2,100688E+08	2,100516E+08	2,845544E+09	2,845612E+09	4,201204E+08	5,691155E+09	6,111276E+09
-491	2,100535E+08	2,100686E+08	2,845671E+09	2,845553E+09	4,201222E+08	5,691224E+09	6,111346E+09
-490	2,100275E+08	2,100257E+08	2,845546E+09	2,845690E+09	4,200532E+08	5,691236E+09	6,111290E+09
-489	2,100731E+08	2,100612E+08	2,845637E+09	2,845593E+09	4,201343E+08	5,691230E+09	6,111365E+09
-488	2,100400E+08	2,100529E+08	2,845594E+09	2,845509E+09	4,200929E+08	5,691103E+09	6,111196E+09
-487	2,100501E+08	2,100326E+08	2,845425E+09	2,845559E+09	4,200827E+08	5,690983E+09	6,111066E+09
-486	2,100877E+08	2,100870E+08	2,845487E+09	2,845372E+09	4,201747E+08	5,690859E+09	6,111034E+09
-485	2,100473E+08	2,100668E+08	2,845338E+09	2,845317E+09	4,201141E+08	5,690655E+09	6,110769E+09
-484	2,100845E+08	2,100768E+08	2,845232E+09	2,845284E+09	4,201613E+08	5,690516E+09	6,110677E+09
-483	2,100979E+08	2,101142E+08	2,845281E+09	2,845103E+09	4,202121E+08	5,690385E+09	6,110597E+09
-482	2,100730E+08	2,100778E+08	2,845075E+09	2,845173E+09	4,201508E+08	5,690248E+09	6,110399E+09
-481	2,101252E+08	2,101044E+08	2,845066E+09	2,845095E+09	4,202295E+08	5,690161E+09	6,110391E+09
-480	2,101022E+08	2,101168E+08	2,845062E+09	2,844985E+09	4,202190E+08	5,690048E+09	6,110267E+09
-479	2,100951E+08	2,100829E+08	2,844952E+09	2,845118E+09	4,201780E+08	5,690069E+09	6,110247E+09
-478	2,101307E+08	2,101233E+08	2,845133E+09	2,845049E+09	4,202540E+08	5,690183E+09	6,110437E+09
-477	2,100833E+08	2,100982E+08	2,845174E+09	2,845100E+09	4,201814E+08	5,690275E+09	6,110456E+09
-476	2,100940E+08	2,100746E+08	2,845171E+09	2,845269E+09	4,201687E+08	5,690440E+09	6,110608E+09
-475	2,101038E+08	2,101075E+08	2,845348E+09	2,845234E+09	4,202113E+08	5,690582E+09	6,110794E+09
-474	2,100556E+08	2,100630E+08	2,845298E+09	2,845392E+09	4,201186E+08	5,690691E+09	6,110809E+09
-473	2,100877E+08	2,100691E+08	2,845356E+09	2,845430E+09	4,201568E+08	5,690785E+09	6,110942E+09
-472	2,100742E+08	2,100864E+08	2,845452E+09	2,845332E+09	4,201607E+08	5,690784E+09	6,110944E+09
-471	2,100506E+08	2,100441E+08	2,845336E+09	2,845454E+09	4,200947E+08	5,690790E+09	6,110885E+09
-470	2,100957E+08	2,100795E+08	2,845401E+09	2,845367E+09	4,201752E+08	5,690768E+09	6,110943E+09
-469	2,100627E+08	2,100780E+08	2,845365E+09	2,845256E+09	4,201407E+08	5,690621E+09	6,110761E+09
-468	2,100688E+08	2,100616E+08	2,845191E+09	2,845307E+09	4,201304E+08	5,690498E+09	6,110628E+09
-467	2,101056E+08	2,101128E+08	2,845243E+09	2,845124E+09	4,202184E+08	5,690368E+09	6,110586E+09
-466	2,100696E+08	2,100924E+08	2,845118E+09	2,845091E+09	4,201621E+08	5,690209E+09	6,110371E+09
-465	2,101115E+08	2,100938E+08	2,845002E+09	2,845069E+09	4,202053E+08	5,690071E+09	6,110276E+09
-464	2,101253E+08	2,101320E+08	2,845001E+09	2,844868E+09	4,202573E+08	5,689869E+09	6,110127E+09
-463	2,101003E+08	2,100997E+08	2,844809E+09	2,844927E+09	4,202000E+08	5,689735E+09	6,109935E+09
-462	2,101484E+08	2,101280E+08	2,844818E+09	2,844865E+09	4,202764E+08	5,689683E+09	6,109959E+09
-461	2,101243E+08	2,101438E+08	2,844875E+09	2,844742E+09	4,202680E+08	5,689617E+09	6,109885E+09
-460	2,101121E+08	2,101068E+08	2,844790E+09	2,844902E+09	4,202189E+08	5,689692E+09	6,109910E+09
-459	2,101451E+08	2,101406E+08	2,844956E+09	2,844866E+09	4,202857E+08	5,689823E+09	6,110108E+09
-458	2,100999E+08	2,101157E+08	2,844998E+09	2,844946E+09	4,202156E+08	5,689944E+09	6,110159E+09
-457	2,101118E+08	2,100886E+08	2,844974E+09	2,845115E+09	4,202004E+08	5,690089E+09	6,110289E+09
-456	2,101221E+08	2,101247E+08	2,845112E+09	2,845041E+09	4,202468E+08	5,690153E+09	6,110400E+09
-455	2,100763E+08	2,100819E+08	2,845089E+09	2,845169E+09	4,201582E+08	5,690258E+09	6,110416E+09
-454	2,101089E+08	2,100863E+08	2,845149E+09	2,845213E+09	4,201952E+08	5,690362E+09	6,110557E+09
-453	2,100973E+08	2,101065E+08	2,845259E+09	2,845091E+09	4,202038E+08	5,690350E+09	6,110554E+09

1	14	15	16	17	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	2,100697E+08	2,100666E+08	2,845131E+09	2,845222E+09	4,201363E+08	5,690353E+09	6,110489E+09
-451	2,101114E+08	2,101026E+08	2,845166E+09	2,845141E+09	4,202140E+08	5,690307E+09	6,110521E+09
-450	2,100811E+08	2,101059E+08	2,845153E+09	2,845043E+09	4,201870E+08	5,690196E+09	6,110383E+09
-449	2,100908E+08	2,100841E+08	2,844983E+09	2,845096E+09	4,201749E+08	5,690079E+09	6,110253E+09
-448	2,101303E+08	2,101330E+08	2,844993E+09	2,844889E+09	4,202634E+08	5,689882E+09	6,110145E+09
-447	2,100983E+08	2,101125E+08	2,844867E+09	2,844846E+09	4,202108E+08	5,689713E+09	6,109924E+09
-446	2,101392E+08	2,101131E+08	2,844725E+09	2,844835E+09	4,202523E+08	5,689560E+09	6,109813E+09
-445	2,101515E+08	2,101578E+08	2,844738E+09	2,844602E+09	4,203093E+08	5,689340E+09	6,109650E+09
-444	2,101208E+08	2,101290E+08	2,844573E+09	2,844665E+09	4,202498E+08	5,689237E+09	6,109487E+09
-443	2,101644E+08	2,101525E+08	2,844598E+09	2,844620E+09	4,203168E+08	5,689218E+09	6,109535E+09
-442	2,101427E+08	2,101667E+08	2,844704E+09	2,844543E+09	4,203094E+08	5,689247E+09	6,109556E+09
-441	2,101325E+08	2,101216E+08	2,844622E+09	2,844735E+09	4,202540E+08	5,689357E+09	6,109611E+09
-440	2,101645E+08	2,101542E+08	2,844737E+09	2,844693E+09	4,203187E+08	5,689430E+09	6,109749E+09
-439	2,101214E+08	2,101328E+08	2,844789E+09	2,844762E+09	4,202541E+08	5,689552E+09	6,109806E+09
-438	2,101309E+08	2,101062E+08	2,844766E+09	2,844931E+09	4,202371E+08	5,689697E+09	6,109934E+09
-437	2,101421E+08	2,101457E+08	2,844934E+09	2,844819E+09	4,202878E+08	5,689753E+09	6,110040E+09
-436	2,100935E+08	2,101036E+08	2,844919E+09	2,844947E+09	4,201970E+08	5,689866E+09	6,110063E+09
-435	2,101237E+08	2,101043E+08	2,844948E+09	2,845004E+09	4,202280E+08	5,689951E+09	6,110179E+09
-434	2,101157E+08	2,101278E+08	2,845057E+09	2,844900E+09	4,202434E+08	5,689957E+09	6,110201E+09
-433	2,100901E+08	2,100867E+08	2,844909E+09	2,845026E+09	4,201768E+08	5,689935E+09	6,110112E+09
-432	2,101318E+08	2,101245E+08	2,844905E+09	2,844911E+09	4,202563E+08	5,689816E+09	6,110072E+09
-431	2,101070E+08	2,101289E+08	2,844913E+09	2,844792E+09	4,202360E+08	5,689705E+09	6,109941E+09
-430	2,101176E+08	2,101045E+08	2,844735E+09	2,844856E+09	4,202221E+08	5,689590E+09	6,109813E+09
-429	2,101593E+08	2,101563E+08	2,844744E+09	2,844622E+09	4,203157E+08	5,689366E+09	6,109682E+09
-428	2,101232E+08	2,101392E+08	2,844607E+09	2,844581E+09	4,202623E+08	5,689188E+09	6,109451E+09
-427	2,101588E+08	2,101400E+08	2,844457E+09	2,844580E+09	4,202987E+08	5,689037E+09	6,109336E+09
-426	2,101716E+08	2,101869E+08	2,844522E+09	2,844369E+09	4,203586E+08	5,688891E+09	6,109250E+09
-425	2,101412E+08	2,101513E+08	2,844389E+09	2,844454E+09	4,202925E+08	5,688843E+09	6,109136E+09
-424	2,101836E+08	2,101701E+08	2,844396E+09	2,844416E+09	4,203537E+08	5,688812E+09	6,109166E+09
-423	2,101663E+08	2,101822E+08	2,844509E+09	2,844355E+09	4,203485E+08	5,688863E+09	6,109212E+09
-422	2,101543E+08	2,101359E+08	2,844405E+09	2,844566E+09	4,202902E+08	5,688971E+09	6,109261E+09
-421	2,101860E+08	2,101745E+08	2,844520E+09	2,844487E+09	4,203605E+08	5,689007E+09	6,109368E+09
-420	2,101389E+08	2,101558E+08	2,844589E+09	2,844546E+09	4,202947E+08	5,689134E+09	6,109429E+09
-419	2,101448E+08	2,101259E+08	2,844568E+09	2,844716E+09	4,202708E+08	5,689284E+09	6,109555E+09
-418	2,101596E+08	2,101645E+08	2,844767E+09	2,844627E+09	4,203242E+08	5,689394E+09	6,109718E+09
-417	2,101128E+08	2,101191E+08	2,844741E+09	2,844767E+09	4,202319E+08	5,689508E+09	6,109740E+09
-416	2,101419E+08	2,101214E+08	2,844716E+09	2,844804E+09	4,202633E+08	5,689520E+09	6,109783E+09
-415	2,101379E+08	2,101501E+08	2,844832E+09	2,844687E+09	4,202880E+08	5,689520E+09	6,109808E+09
-414	2,101121E+08	2,101098E+08	2,844684E+09	2,844811E+09	4,202218E+08	5,689495E+09	6,109717E+09
-413	2,101560E+08	2,101495E+08	2,844688E+09	2,844655E+09	4,203056E+08	5,689344E+09	6,109649E+09
-412	2,101308E+08	2,101541E+08	2,844692E+09	2,844538E+09	4,202848E+08	5,689230E+09	6,109515E+09
-411	2,101387E+08	2,101266E+08	2,844474E+09	2,844607E+09	4,202653E+08	5,689081E+09	6,109346E+09
-410	2,101825E+08	2,101805E+08	2,844490E+09	2,844387E+09	4,203631E+08	5,688878E+09	6,109241E+09
-409	2,101466E+08	2,101642E+08	2,844353E+09	2,844345E+09	4,203108E+08	5,688698E+09	6,109008E+09
-408	2,101799E+08	2,101635E+08	2,844190E+09	2,844324E+09	4,203434E+08	5,688515E+09	6,108858E+09
-407	2,101972E+08	2,102092E+08	2,844299E+09	2,844125E+09	4,204064E+08	5,688424E+09	6,108831E+09
-406	2,101667E+08	2,101687E+08	2,844177E+09	2,844245E+09	4,203354E+08	5,688422E+09	6,108757E+09
-405	2,102085E+08	2,101893E+08	2,844187E+09	2,844198E+09	4,203979E+08	5,688385E+09	6,108783E+09
-404	2,101876E+08	2,102041E+08	2,844298E+09	2,844152E+09	4,203916E+08	5,688449E+09	6,108841E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-403	2,101694E+08	2,101580E+08	2,844187E+09	2,844370E+09	4,203274E+08	5,688557E+09	6,108884E+09
-402	2,102020E+08	2,101969E+08	2,844347E+09	2,844304E+09	4,203989E+08	5,688651E+09	6,109050E+09
-401	2,101561E+08	2,101739E+08	2,844428E+09	2,844366E+09	4,203299E+08	5,688795E+09	6,109125E+09
-400	2,101610E+08	2,101408E+08	2,844375E+09	2,844525E+09	4,203018E+08	5,688900E+09	6,109201E+09
-399	2,101811E+08	2,101799E+08	2,844569E+09	2,844438E+09	4,203610E+08	5,689008E+09	6,109369E+09
-398	2,101339E+08	2,101359E+08	2,844523E+09	2,844581E+09	4,202698E+08	5,689104E+09	6,109374E+09
-397	2,101630E+08	2,101458E+08	2,844491E+09	2,844571E+09	4,203088E+08	5,689062E+09	6,109371E+09
-396	2,101578E+08	2,101761E+08	2,844613E+09	2,844440E+09	4,203340E+08	5,689054E+09	6,109388E+09
-395	2,101304E+08	2,101332E+08	2,844456E+09	2,844566E+09	4,202636E+08	5,689022E+09	6,109286E+09
-394	2,101793E+08	2,101708E+08	2,844476E+09	2,844429E+09	4,203500E+08	5,688905E+09	6,109255E+09
-393	2,101557E+08	2,101737E+08	2,844454E+09	2,844317E+09	4,203294E+08	5,688771E+09	6,109101E+09
-392	2,101620E+08	2,101481E+08	2,844190E+09	2,844364E+09	4,203100E+08	5,688554E+09	6,108864E+09
-391	2,102087E+08	2,102053E+08	2,844224E+09	2,844137E+09	4,204140E+08	5,688361E+09	6,108775E+09
-390	2,101718E+08	2,101888E+08	2,844113E+09	2,844101E+09	4,203605E+08	5,688215E+09	6,108575E+09
-389	2,102046E+08	2,101895E+08	2,843975E+09	2,844062E+09	4,203941E+08	5,688037E+09	6,108431E+09
-388	2,102200E+08	2,102329E+08	2,844097E+09	2,843892E+09	4,204529E+08	5,687989E+09	6,108442E+09
-387	2,101859E+08	2,101891E+08	2,843955E+09	2,844041E+09	4,203750E+08	5,687996E+09	6,108371E+09
-386	2,102280E+08	2,102099E+08	2,843982E+09	2,844016E+09	4,204380E+08	5,687998E+09	6,108436E+09
-385	2,102062E+08	2,102247E+08	2,844091E+09	2,843972E+09	4,204309E+08	5,688063E+09	6,108494E+09
-384	2,101854E+08	2,101765E+08	2,843967E+09	2,844164E+09	4,203619E+08	5,688130E+09	6,108492E+09
-383	2,102224E+08	2,102131E+08	2,844155E+09	2,844104E+09	4,204355E+08	5,688258E+09	6,108694E+09
-382	2,101776E+08	2,101880E+08	2,844241E+09	2,844181E+09	4,203656E+08	5,688422E+09	6,108788E+09
-381	2,101823E+08	2,101592E+08	2,844176E+09	2,844309E+09	4,203415E+08	5,688486E+09	6,108827E+09
-380	2,102003E+08	2,102021E+08	2,844369E+09	2,844229E+09	4,204024E+08	5,688597E+09	6,109000E+09
-379	2,101496E+08	2,101596E+08	2,844311E+09	2,844370E+09	4,203092E+08	5,688681E+09	6,108990E+09
-378	2,101801E+08	2,101686E+08	2,844313E+09	2,844367E+09	4,203488E+08	5,688681E+09	6,109029E+09
-377	2,101778E+08	2,101962E+08	2,844426E+09	2,844240E+09	4,203740E+08	5,688665E+09	6,109039E+09
-376	2,101510E+08	2,101505E+08	2,844212E+09	2,844343E+09	4,203015E+08	5,688555E+09	6,108856E+09
-375	2,102063E+08	2,101885E+08	2,844209E+09	2,844203E+09	4,203948E+08	5,688412E+09	6,108807E+09
-374	2,101835E+08	2,101952E+08	2,844168E+09	2,844079E+09	4,203787E+08	5,688247E+09	6,108625E+09
-373	2,101887E+08	2,101772E+08	2,843911E+09	2,844072E+09	4,203659E+08	5,687983E+09	6,108349E+09
-372	2,102325E+08	2,102347E+08	2,843979E+09	2,843849E+09	4,204672E+08	5,687828E+09	6,108295E+09
-371	2,101928E+08	2,102147E+08	2,843885E+09	2,843840E+09	4,204076E+08	5,687725E+09	6,108132E+09
-370	2,102265E+08	2,102120E+08	2,843784E+09	2,843845E+09	4,204385E+08	5,687629E+09	6,108067E+09
-369	2,102416E+08	2,102535E+08	2,843890E+09	2,843706E+09	4,204951E+08	5,687596E+09	6,108091E+09
-368	2,102049E+08	2,102092E+08	2,843716E+09	2,843846E+09	4,204141E+08	5,687563E+09	6,107977E+09
-367	2,102496E+08	2,102298E+08	2,843762E+09	2,843825E+09	4,204794E+08	5,687587E+09	6,108066E+09
-366	2,102277E+08	2,102421E+08	2,843892E+09	2,843782E+09	4,204698E+08	5,687673E+09	6,108143E+09
-365	2,102065E+08	2,101962E+08	2,843782E+09	2,843940E+09	4,204027E+08	5,687722E+09	6,108125E+09
-364	2,102415E+08	2,102304E+08	2,843973E+09	2,843895E+09	4,204718E+08	5,687868E+09	6,108340E+09
-363	2,101936E+08	2,102056E+08	2,844043E+09	2,843989E+09	4,203992E+08	5,688031E+09	6,108431E+09
-362	2,101987E+08	2,101796E+08	2,843998E+09	2,844128E+09	4,203783E+08	5,688126E+09	6,108504E+09
-361	2,102161E+08	2,102233E+08	2,844178E+09	2,844046E+09	4,204395E+08	5,688224E+09	6,108663E+09
-360	2,101661E+08	2,101785E+08	2,844095E+09	2,844159E+09	4,203446E+08	5,688254E+09	6,108598E+09
-359	2,102034E+08	2,101846E+08	2,844093E+09	2,844157E+09	4,203880E+08	5,688250E+09	6,108638E+09
-358	2,102042E+08	2,102115E+08	2,844185E+09	2,844027E+09	4,204157E+08	5,688212E+09	6,108627E+09
-357	2,101782E+08	2,101742E+08	2,843945E+09	2,844079E+09	4,203523E+08	5,688024E+09	6,108376E+09
-356	2,102308E+08	2,102162E+08	2,843943E+09	2,843933E+09	4,204470E+08	5,687876E+09	6,108323E+09
-355	2,102040E+08	2,102257E+08	2,843914E+09	2,843807E+09	4,204297E+08	5,687721E+09	6,108151E+09

1	14	15	16	17	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	2,102097E+08	2,102055E+08	2,843715E+09	2,843818E+09	4,204152E+08	5,687533E+09	6,107948E+09
-353	2,102526E+08	2,102591E+08	2,843787E+09	2,843627E+09	4,205117E+08	5,687414E+09	6,107925E+09
-352	2,102134E+08	2,102340E+08	2,843657E+09	2,843626E+09	4,204474E+08	5,687282E+09	6,107730E+09
-351	2,102510E+08	2,102293E+08	2,843542E+09	2,843654E+09	4,204803E+08	5,687196E+09	6,107676E+09
-350	2,102670E+08	2,102722E+08	2,843637E+09	2,843514E+09	4,205392E+08	5,687152E+09	6,107691E+09
-349	2,102292E+08	2,102333E+08	2,843466E+09	2,843600E+09	4,204625E+08	5,687066E+09	6,107528E+09
-348	2,102712E+08	2,102509E+08	2,843546E+09	2,843582E+09	4,205221E+08	5,687128E+09	6,107650E+09
-347	2,102466E+08	2,102608E+08	2,843691E+09	2,843558E+09	4,205074E+08	5,687248E+09	6,107756E+09
-346	2,102250E+08	2,102129E+08	2,843623E+09	2,843746E+09	4,204379E+08	5,687369E+09	6,107807E+09
-345	2,102573E+08	2,102486E+08	2,843802E+09	2,843729E+09	4,205058E+08	5,687531E+09	6,108037E+09
-344	2,102083E+08	2,102244E+08	2,843841E+09	2,843809E+09	4,204326E+08	5,687651E+09	6,108083E+09
-343	2,102166E+08	2,101989E+08	2,843803E+09	2,843952E+09	4,204156E+08	5,687756E+09	6,108171E+09
-342	2,102369E+08	2,102405E+08	2,843982E+09	2,843860E+09	4,204774E+08	5,687842E+09	6,108320E+09
-341	2,101893E+08	2,101996E+08	2,843880E+09	2,843921E+09	4,203889E+08	5,687802E+09	6,108191E+09
-340	2,102266E+08	2,102041E+08	2,843861E+09	2,843918E+09	4,204307E+08	5,687779E+09	6,108209E+09
-339	2,102259E+08	2,102339E+08	2,843924E+09	2,843783E+09	4,204597E+08	5,687707E+09	6,108167E+09
-338	2,101999E+08	2,102012E+08	2,843714E+09	2,843826E+09	4,204011E+08	5,687540E+09	6,107941E+09
-337	2,102498E+08	2,102446E+08	2,843714E+09	2,843682E+09	4,204944E+08	5,687396E+09	6,107891E+09
-336	2,102234E+08	2,102502E+08	2,843678E+09	2,843550E+09	4,204736E+08	5,687228E+09	6,107701E+09
-335	2,102346E+08	2,102259E+08	2,843488E+09	2,843593E+09	4,204605E+08	5,687080E+09	6,107541E+09
-334	2,102798E+08	2,102759E+08	2,843544E+09	2,843422E+09	4,205557E+08	5,686966E+09	6,107522E+09
-333	2,102422E+08	2,102573E+08	2,843393E+09	2,843387E+09	4,204994E+08	5,686780E+09	6,107279E+09
-332	2,102764E+08	2,102530E+08	2,843286E+09	2,843414E+09	4,205294E+08	5,686700E+09	6,107229E+09
-331	2,102875E+08	2,102964E+08	2,843400E+09	2,843279E+09	4,205839E+08	5,686679E+09	6,107262E+09
-330	2,102490E+08	2,102560E+08	2,843296E+09	2,843375E+09	4,205050E+08	5,686671E+09	6,107176E+09
-329	2,102869E+08	2,102704E+08	2,843380E+09	2,843389E+09	4,205573E+08	5,686769E+09	6,107326E+09
-328	2,102619E+08	2,102763E+08	2,843501E+09	2,843375E+09	4,205383E+08	5,686876E+09	6,107414E+09
-327	2,102436E+08	2,102285E+08	2,843427E+09	2,843586E+09	4,204721E+08	5,687013E+09	6,107485E+09
-326	2,102761E+08	2,102658E+08	2,843597E+09	2,843565E+09	4,205419E+08	5,687162E+09	6,107704E+09
-325	2,102289E+08	2,102471E+08	2,843630E+09	2,843588E+09	4,204760E+08	5,687218E+09	6,107694E+09
-324	2,102365E+08	2,102185E+08	2,843604E+09	2,843723E+09	4,204550E+08	5,687327E+09	6,107782E+09
-323	2,102564E+08	2,102585E+08	2,843769E+09	2,843637E+09	4,205149E+08	5,687406E+09	6,107921E+09
-322	2,102109E+08	2,102194E+08	2,843685E+09	2,843697E+09	4,204303E+08	5,687382E+09	6,107812E+09
-321	2,102456E+08	2,102277E+08	2,843638E+09	2,843702E+09	4,204733E+08	5,687340E+09	6,107814E+09
-320	2,102445E+08	2,102584E+08	2,843676E+09	2,843545E+09	4,205030E+08	5,687221E+09	6,107724E+09
-319	2,102222E+08	2,102257E+08	2,843483E+09	2,843596E+09	4,204478E+08	5,687079E+09	6,107527E+09
-318	2,102740E+08	2,102658E+08	2,843490E+09	2,843456E+09	4,205398E+08	5,686946E+09	6,107486E+09
-317	2,102511E+08	2,102735E+08	2,843432E+09	2,843290E+09	4,205246E+08	5,686722E+09	6,107246E+09
-316	2,102616E+08	2,102467E+08	2,843232E+09	2,843348E+09	4,205083E+08	5,686579E+09	6,107088E+09
-315	2,103047E+08	2,102990E+08	2,843266E+09	2,843185E+09	4,206037E+08	5,686451E+09	6,107055E+09
-314	2,102666E+08	2,102838E+08	2,843154E+09	2,843142E+09	4,205504E+08	5,686297E+09	6,106847E+09
-313	2,102954E+08	2,102796E+08	2,843063E+09	2,843180E+09	4,205751E+08	5,686243E+09	6,106818E+09
-312	2,103051E+08	2,103166E+08	2,843182E+09	2,843044E+09	4,206217E+08	5,686226E+09	6,106847E+09
-311	2,102696E+08	2,102731E+08	2,843102E+09	2,843178E+09	4,205427E+08	5,686280E+09	6,106823E+09
-310	2,103074E+08	2,102851E+08	2,843188E+09	2,843217E+09	4,205925E+08	5,686404E+09	6,106997E+09
-309	2,102836E+08	2,102976E+08	2,843294E+09	2,843175E+09	4,205812E+08	5,686469E+09	6,107050E+09
-308	2,102626E+08	2,102500E+08	2,843235E+09	2,843389E+09	4,205126E+08	5,686624E+09	6,107137E+09
-307	2,102923E+08	2,102867E+08	2,843410E+09	2,843370E+09	4,205790E+08	5,686780E+09	6,107359E+09
-306	2,102473E+08	2,102666E+08	2,843483E+09	2,843387E+09	4,205139E+08	5,686870E+09	6,107384E+09

1	14	15	16	17	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	2,102520E+08	2,102371E+08	2,843428E+09	2,843535E+09	4,204891E+08	5,686964E+09	6,107453E+09
-304	2,102733E+08	2,102736E+08	2,843545E+09	2,843437E+09	4,205469E+08	5,686982E+09	6,107529E+09
-303	2,102328E+08	2,102391E+08	2,843443E+09	2,843497E+09	4,204719E+08	5,686940E+09	6,107412E+09
-302	2,102686E+08	2,102493E+08	2,843384E+09	2,843481E+09	4,205179E+08	5,686864E+09	6,107382E+09
-301	2,102705E+08	2,102852E+08	2,843417E+09	2,843270E+09	4,205557E+08	5,686687E+09	6,107243E+09
-300	2,102483E+08	2,102490E+08	2,843242E+09	2,843321E+09	4,204973E+08	5,686563E+09	6,107060E+09
-299	2,102980E+08	2,102874E+08	2,843240E+09	2,843203E+09	4,205853E+08	5,686443E+09	6,107028E+09
-298	2,102774E+08	2,102973E+08	2,843206E+09	2,843046E+09	4,205748E+08	5,686253E+09	6,106827E+09
-297	2,102830E+08	2,102743E+08	2,842987E+09	2,843121E+09	4,205573E+08	5,686107E+09	6,106665E+09
-296	2,103241E+08	2,103243E+08	2,843012E+09	2,842947E+09	4,206484E+08	5,685958E+09	6,106607E+09
-295	2,102891E+08	2,103083E+08	2,842928E+09	2,842920E+09	4,205974E+08	5,685849E+09	6,106446E+09
-294	2,103176E+08	2,102989E+08	2,842857E+09	2,842969E+09	4,206165E+08	5,685827E+09	6,106444E+09
-293	2,103287E+08	2,103363E+08	2,842968E+09	2,842817E+09	4,206651E+08	5,685784E+09	6,106449E+09
-292	2,102917E+08	2,102902E+08	2,842899E+09	2,842972E+09	4,205819E+08	5,685871E+09	6,106453E+09
-291	2,103250E+08	2,103048E+08	2,842976E+09	2,843028E+09	4,206299E+08	5,686004E+09	6,106634E+09
-290	2,103026E+08	2,103199E+08	2,843122E+09	2,842978E+09	4,206225E+08	5,686101E+09	6,106723E+09
-289	2,102767E+08	2,102724E+08	2,843067E+09	2,843200E+09	4,205490E+08	5,686266E+09	6,106815E+09
-288	2,103074E+08	2,103015E+08	2,843219E+09	2,843174E+09	4,206088E+08	5,686393E+09	6,107002E+09
-287	2,102681E+08	2,102803E+08	2,843279E+09	2,843211E+09	4,205484E+08	5,686489E+09	6,107038E+09
-286	2,102748E+08	2,102517E+08	2,843202E+09	2,843353E+09	4,205265E+08	5,686555E+09	6,107081E+09
-285	2,102983E+08	2,102958E+08	2,843283E+09	2,843199E+09	4,205940E+08	5,686483E+09	6,107077E+09
-284	2,102564E+08	2,102643E+08	2,843203E+09	2,843242E+09	4,205206E+08	5,686445E+09	6,106966E+09
-283	2,102890E+08	2,102756E+08	2,843156E+09	2,843225E+09	4,205646E+08	5,686381E+09	6,106946E+09
-282	2,102936E+08	2,103107E+08	2,843227E+09	2,843014E+09	4,206043E+08	5,686240E+09	6,106845E+09
-281	2,102680E+08	2,102743E+08	2,843031E+09	2,843092E+09	4,205423E+08	5,686122E+09	6,106665E+09
-280	2,103181E+08	2,103077E+08	2,842982E+09	2,842974E+09	4,206259E+08	5,685957E+09	6,106582E+09
-279	2,103024E+08	2,103216E+08	2,842937E+09	2,842832E+09	4,206240E+08	5,685768E+09	6,106392E+09
-278	2,103083E+08	2,102987E+08	2,842721E+09	2,842891E+09	4,206070E+08	5,685612E+09	6,106219E+09
-277	2,103505E+08	2,103489E+08	2,842749E+09	2,842674E+09	4,206994E+08	5,685423E+09	6,106123E+09
-276	2,103149E+08	2,103291E+08	2,842702E+09	2,842659E+09	4,206440E+08	5,685362E+09	6,106006E+09
-275	2,103394E+08	2,103177E+08	2,842640E+09	2,842743E+09	4,206571E+08	5,685382E+09	6,106039E+09
-274	2,103511E+08	2,103570E+08	2,842788E+09	2,842612E+09	4,207081E+08	5,685400E+09	6,106108E+09
-273	2,103077E+08	2,103145E+08	2,842719E+09	2,842795E+09	4,206222E+08	5,685514E+09	6,106136E+09
-272	2,103379E+08	2,103245E+08	2,842790E+09	2,842850E+09	4,206624E+08	5,685640E+09	6,106302E+09
-271	2,103204E+08	2,103381E+08	2,842950E+09	2,842820E+09	4,206585E+08	5,685770E+09	6,106429E+09
-270	2,102959E+08	2,102862E+08	2,842883E+09	2,843033E+09	4,205821E+08	5,685916E+09	6,106498E+09
-269	2,103298E+08	2,103156E+08	2,842994E+09	2,842969E+09	4,206453E+08	5,685963E+09	6,106608E+09
-268	2,102916E+08	2,102967E+08	2,843044E+09	2,842991E+09	4,205883E+08	5,686036E+09	6,106624E+09
-267	2,102945E+08	2,102743E+08	2,842954E+09	2,843123E+09	4,205688E+08	5,686077E+09	6,106646E+09
-266	2,103195E+08	2,103230E+08	2,843078E+09	2,842947E+09	4,206426E+08	5,686025E+09	6,106668E+09
-265	2,102733E+08	2,102925E+08	2,843006E+09	2,842995E+09	4,205658E+08	5,686001E+09	6,106567E+09
-264	2,103056E+08	2,102963E+08	2,842940E+09	2,842983E+09	4,206019E+08	5,685924E+09	6,106526E+09
-263	2,103168E+08	2,103309E+08	2,842995E+09	2,842807E+09	4,206477E+08	5,685802E+09	6,106449E+09
-262	2,102939E+08	2,102951E+08	2,842776E+09	2,842883E+09	4,205890E+08	5,685658E+09	6,106247E+09
-261	2,103464E+08	2,103322E+08	2,842693E+09	2,842723E+09	4,206786E+08	5,685415E+09	6,106094E+09
-260	2,103306E+08	2,103472E+08	2,842672E+09	2,842565E+09	4,206778E+08	5,685237E+09	6,105915E+09
-259	2,103324E+08	2,103241E+08	2,842477E+09	2,842629E+09	4,206565E+08	5,685106E+09	6,105762E+09
-258	2,103750E+08	2,103723E+08	2,842551E+09	2,842418E+09	4,207474E+08	5,684969E+09	6,105717E+09
-257	2,103335E+08	2,103525E+08	2,842508E+09	2,842443E+09	4,206860E+08	5,684950E+09	6,105636E+09

1	14	15	16	17	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	2,103553E+08	2,103365E+08	2,842426E+09	2,842544E+09	4,206917E+08	5,684970E+09	6,105662E+09
-255	2,103705E+08	2,103782E+08	2,842573E+09	2,842448E+09	4,207486E+08	5,685021E+09	6,105770E+09
-254	2,103281E+08	2,103342E+08	2,842518E+09	2,842623E+09	4,206623E+08	5,685141E+09	6,105803E+09
-253	2,103596E+08	2,103412E+08	2,842572E+09	2,842637E+09	4,207008E+08	5,685209E+09	6,105910E+09
-252	2,103431E+08	2,103518E+08	2,842745E+09	2,842606E+09	4,206950E+08	5,685351E+09	6,106046E+09
-251	2,103157E+08	2,103025E+08	2,842669E+09	2,842826E+09	4,206181E+08	5,685495E+09	6,106113E+09
-250	2,103506E+08	2,103359E+08	2,842797E+09	2,842752E+09	4,206865E+08	5,685549E+09	6,106235E+09
-249	2,103068E+08	2,103241E+08	2,842852E+09	2,842777E+09	4,206309E+08	5,685629E+09	6,106260E+09
-248	2,103076E+08	2,102980E+08	2,842758E+09	2,842898E+09	4,206056E+08	5,685656E+09	6,106262E+09
-247	2,103378E+08	2,103457E+08	2,842891E+09	2,842749E+09	4,206835E+08	5,685640E+09	6,106323E+09
-246	2,102953E+08	2,103113E+08	2,842806E+09	2,842797E+09	4,206066E+08	5,685603E+09	6,106210E+09
-245	2,103309E+08	2,103133E+08	2,842683E+09	2,842756E+09	4,206442E+08	5,685439E+09	6,106083E+09
-244	2,103449E+08	2,103505E+08	2,842718E+09	2,842566E+09	4,206954E+08	5,685285E+09	6,105980E+09
-243	2,103200E+08	2,103215E+08	2,842484E+09	2,842626E+09	4,206416E+08	5,685110E+09	6,105752E+09
-242	2,103736E+08	2,103606E+08	2,842442E+09	2,842440E+09	4,207342E+08	5,684882E+09	6,105616E+09
-241	2,103523E+08	2,103764E+08	2,842443E+09	2,842291E+09	4,207287E+08	5,684734E+09	6,105462E+09
-240	2,103514E+08	2,103450E+08	2,842249E+09	2,842373E+09	4,206965E+08	5,684623E+09	6,105319E+09
-239	2,103969E+08	2,103927E+08	2,842333E+09	2,842222E+09	4,207896E+08	5,684555E+09	6,105344E+09
-238	2,103564E+08	2,103727E+08	2,842290E+09	2,842260E+09	4,207291E+08	5,684551E+09	6,105280E+09
-237	2,103772E+08	2,103575E+08	2,842193E+09	2,842341E+09	4,207347E+08	5,684534E+09	6,105269E+09
-236	2,103928E+08	2,103985E+08	2,842370E+09	2,842241E+09	4,207914E+08	5,684611E+09	6,105403E+09
-235	2,103475E+08	2,103536E+08	2,842325E+09	2,842420E+09	4,207010E+08	5,684746E+09	6,105447E+09
-234	2,103799E+08	2,103583E+08	2,842403E+09	2,842428E+09	4,207381E+08	5,684832E+09	6,105570E+09
-233	2,103586E+08	2,103704E+08	2,842561E+09	2,842411E+09	4,207291E+08	5,684972E+09	6,105701E+09
-232	2,103289E+08	2,103201E+08	2,842460E+09	2,842625E+09	4,206490E+08	5,685085E+09	6,105734E+09
-231	2,103672E+08	2,103581E+08	2,842589E+09	2,842570E+09	4,207253E+08	5,685159E+09	6,105885E+09
-230	2,103262E+08	2,103459E+08	2,842656E+09	2,842578E+09	4,206721E+08	5,685234E+09	6,105906E+09
-229	2,103294E+08	2,103164E+08	2,842538E+09	2,842665E+09	4,206459E+08	5,685203E+09	6,105849E+09
-228	2,103630E+08	2,103618E+08	2,842663E+09	2,842517E+09	4,207248E+08	5,685180E+09	6,105905E+09
-227	2,103206E+08	2,103312E+08	2,842552E+09	2,842569E+09	4,206518E+08	5,685121E+09	6,105772E+09
-226	2,103581E+08	2,103378E+08	2,842430E+09	2,842505E+09	4,206959E+08	5,684935E+09	6,105631E+09
-225	2,103666E+08	2,103814E+08	2,842468E+09	2,842310E+09	4,207480E+08	5,684778E+09	6,105526E+09
-224	2,103395E+08	2,103496E+08	2,842240E+09	2,842355E+09	4,206891E+08	5,684594E+09	6,105284E+09
-223	2,103957E+08	2,103861E+08	2,842214E+09	2,842201E+09	4,207819E+08	5,684415E+09	6,105197E+09
-222	2,103764E+08	2,103980E+08	2,842224E+09	2,842068E+09	4,207744E+08	5,684291E+09	6,105066E+09
-221	2,103759E+08	2,103632E+08	2,841998E+09	2,842141E+09	4,207391E+08	5,684139E+09	6,104878E+09
-220	2,104214E+08	2,104122E+08	2,842086E+09	2,842003E+09	4,208336E+08	5,684089E+09	6,104922E+09
-219	2,103792E+08	2,103969E+08	2,842054E+09	2,842049E+09	4,207761E+08	5,684103E+09	6,104879E+09
-218	2,103995E+08	2,103805E+08	2,841999E+09	2,842111E+09	4,207800E+08	5,684110E+09	6,104890E+09
-217	2,104097E+08	2,104201E+08	2,842191E+09	2,842026E+09	4,208298E+08	5,684217E+09	6,105047E+09
-216	2,103625E+08	2,103687E+08	2,842135E+09	2,842213E+09	4,207312E+08	5,684348E+09	6,105079E+09
-215	2,103973E+08	2,103741E+08	2,842208E+09	2,842265E+09	4,207714E+08	5,684472E+09	6,105244E+09
-214	2,103777E+08	2,103887E+08	2,842365E+09	2,842244E+09	4,207664E+08	5,684609E+09	6,105375E+09
-213	2,103480E+08	2,103395E+08	2,842247E+09	2,842421E+09	4,206875E+08	5,684669E+09	6,105356E+09
-212	2,103874E+08	2,103778E+08	2,842396E+09	2,842357E+09	4,207652E+08	5,684753E+09	6,105518E+09
-211	2,103473E+08	2,103665E+08	2,842461E+09	2,842364E+09	4,207138E+08	5,684825E+09	6,105538E+09
-210	2,103521E+08	2,103364E+08	2,842342E+09	2,842436E+09	4,206885E+08	5,684778E+09	6,105466E+09
-209	2,103825E+08	2,103844E+08	2,842436E+09	2,842292E+09	4,207669E+08	5,684728E+09	6,105495E+09
-208	2,103398E+08	2,103547E+08	2,842287E+09	2,842326E+09	4,206945E+08	5,684613E+09	6,105307E+09

1	14	15	16	17	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	2,103808E+08	2,103653E+08	2,842167E+09	2,842275E+09	4,207461E+08	5,684442E+09	6,105188E+09
-206	2,103914E+08	2,104072E+08	2,842219E+09	2,842056E+09	4,207986E+08	5,684275E+09	6,105074E+09
-205	2,103653E+08	2,103707E+08	2,841980E+09	2,842075E+09	4,207360E+08	5,684055E+09	6,104791E+09
-204	2,104224E+08	2,104053E+08	2,841965E+09	2,841942E+09	4,208276E+08	5,683907E+09	6,104734E+09
-203	2,104023E+08	2,104201E+08	2,841974E+09	2,841833E+09	4,208225E+08	5,683806E+09	6,104629E+09
-202	2,104014E+08	2,103888E+08	2,841773E+09	2,841906E+09	4,207902E+08	5,683679E+09	6,104469E+09
-201	2,104401E+08	2,104403E+08	2,841877E+09	2,841783E+09	4,208805E+08	5,683661E+09	6,104541E+09
-200	2,103963E+08	2,104196E+08	2,841858E+09	2,841832E+09	4,208159E+08	5,683690E+09	6,104505E+09
-199	2,104178E+08	2,103995E+08	2,841816E+09	2,841935E+09	4,208173E+08	5,683751E+09	6,104568E+09
-198	2,104294E+08	2,104343E+08	2,842004E+09	2,841856E+09	4,208637E+08	5,683860E+09	6,104724E+09
-197	2,103825E+08	2,103815E+08	2,841911E+09	2,842018E+09	4,207640E+08	5,683929E+09	6,104693E+09
-196	2,104179E+08	2,103912E+08	2,841982E+09	2,842066E+09	4,208091E+08	5,684048E+09	6,104857E+09
-195	2,103982E+08	2,104118E+08	2,842151E+09	2,842038E+09	4,208100E+08	5,684189E+09	6,104999E+09
-194	2,103691E+08	2,103632E+08	2,842067E+09	2,842187E+09	4,207323E+08	5,684254E+09	6,104986E+09
-193	2,104034E+08	2,104001E+08	2,842218E+09	2,842134E+09	4,208036E+08	5,684352E+09	6,105155E+09
-192	2,103645E+08	2,103848E+08	2,842256E+09	2,842145E+09	4,207493E+08	5,684400E+09	6,105150E+09
-191	2,103723E+08	2,103566E+08	2,842113E+09	2,842244E+09	4,207289E+08	5,684357E+09	6,105086E+09
-190	2,104054E+08	2,104068E+08	2,842194E+09	2,842085E+09	4,208122E+08	5,684279E+09	6,105091E+09
-189	2,103642E+08	2,103785E+08	2,842022E+09	2,842070E+09	4,207427E+08	5,684091E+09	6,104834E+09
-188	2,104066E+08	2,103888E+08	2,841916E+09	2,842009E+09	4,207953E+08	5,683925E+09	6,104721E+09
-187	2,104179E+08	2,104312E+08	2,841976E+09	2,841798E+09	4,208491E+08	5,683774E+09	6,104623E+09
-186	2,103922E+08	2,103939E+08	2,841749E+09	2,841809E+09	4,207860E+08	5,683557E+09	6,104343E+09
-185	2,104427E+08	2,104302E+08	2,841729E+09	2,841699E+09	4,208729E+08	5,683428E+09	6,104301E+09
-184	2,104223E+08	2,104455E+08	2,841725E+09	2,841599E+09	4,208678E+08	5,683325E+09	6,104193E+09
-183	2,104223E+08	2,104153E+08	2,841548E+09	2,841705E+09	4,208376E+08	5,683253E+09	6,104091E+09
-182	2,104619E+08	2,104617E+08	2,841674E+09	2,841581E+09	4,209236E+08	5,683254E+09	6,104178E+09
-181	2,104192E+08	2,104345E+08	2,841634E+09	2,841613E+09	4,208537E+08	5,683247E+09	6,104100E+09
-180	2,104408E+08	2,104131E+08	2,841593E+09	2,841731E+09	4,208539E+08	5,683324E+09	6,104178E+09
-179	2,104517E+08	2,104519E+08	2,841780E+09	2,841663E+09	4,209035E+08	5,683443E+09	6,104347E+09
-178	2,104034E+08	2,104050E+08	2,841717E+09	2,841802E+09	4,208083E+08	5,683520E+09	6,104328E+09
-177	2,104316E+08	2,104178E+08	2,841814E+09	2,841855E+09	4,208494E+08	5,683670E+09	6,104519E+09
-176	2,104123E+08	2,104337E+08	2,841985E+09	2,841830E+09	4,208459E+08	5,683815E+09	6,104661E+09
-175	2,103857E+08	2,103825E+08	2,841905E+09	2,842015E+09	4,207682E+08	5,683920E+09	6,104689E+09
-174	2,104226E+08	2,104149E+08	2,842025E+09	2,841960E+09	4,208375E+08	5,683984E+09	6,104822E+09
-173	2,103866E+08	2,103990E+08	2,841999E+09	2,841935E+09	4,207856E+08	5,683935E+09	6,104720E+09
-172	2,103970E+08	2,103773E+08	2,841838E+09	2,842015E+09	4,207743E+08	5,683853E+09	6,104628E+09
-171	2,104317E+08	2,104315E+08	2,841923E+09	2,841831E+09	4,208633E+08	5,683754E+09	6,104617E+09
-170	2,103918E+08	2,104057E+08	2,841780E+09	2,841774E+09	4,207974E+08	5,683554E+09	6,104351E+09
-169	2,104288E+08	2,104148E+08	2,841683E+09	2,841725E+09	4,208436E+08	5,683408E+09	6,104252E+09
-168	2,104400E+08	2,104544E+08	2,841729E+09	2,841536E+09	4,208945E+08	5,683265E+09	6,104160E+09
-167	2,104152E+08	2,104195E+08	2,841511E+09	2,841596E+09	4,208348E+08	5,683107E+09	6,103941E+09
-166	2,104649E+08	2,104560E+08	2,841498E+09	2,841494E+09	4,209209E+08	5,682991E+09	6,103912E+09
-165	2,104458E+08	2,104685E+08	2,841484E+09	2,841373E+09	4,209143E+08	5,682857E+09	6,103771E+09
-164	2,104468E+08	2,104365E+08	2,841323E+09	2,841483E+09	4,208833E+08	5,682806E+09	6,103689E+09
-163	2,104863E+08	2,104800E+08	2,841455E+09	2,841370E+09	4,209663E+08	5,682825E+09	6,103791E+09
-162	2,104433E+08	2,104535E+08	2,841423E+09	2,841385E+09	4,208968E+08	5,682808E+09	6,103704E+09
-161	2,104574E+08	2,104344E+08	2,841383E+09	2,841517E+09	4,208918E+08	5,682900E+09	6,103792E+09
-160	2,104674E+08	2,104746E+08	2,841573E+09	2,841457E+09	4,209420E+08	5,683030E+09	6,103972E+09
-159	2,104196E+08	2,104283E+08	2,841546E+09	2,841621E+09	4,208479E+08	5,683166E+09	6,104014E+09

1	14	15	16	17	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	2,104476E+08	2,104360E+08	2,841657E+09	2,841675E+09	4,208836E+08	5,683332E+09	6,104216E+09
-157	2,104318E+08	2,104456E+08	2,841789E+09	2,841635E+09	4,208774E+08	5,683424E+09	6,104302E+09
-156	2,104078E+08	2,103957E+08	2,841681E+09	2,841825E+09	4,208035E+08	5,683506E+09	6,104309E+09
-155	2,104470E+08	2,104322E+08	2,841776E+09	2,841762E+09	4,208792E+08	5,683539E+09	6,104418E+09
-154	2,104123E+08	2,104242E+08	2,841753E+09	2,841686E+09	4,208366E+08	5,683439E+09	6,104276E+09
-153	2,104171E+08	2,104064E+08	2,841609E+09	2,841750E+09	4,208235E+08	5,683359E+09	6,104183E+09
-152	2,104522E+08	2,104578E+08	2,841695E+09	2,841564E+09	4,209100E+08	5,683258E+09	6,104168E+09
-151	2,104135E+08	2,104309E+08	2,841571E+09	2,841539E+09	4,208444E+08	5,683109E+09	6,103954E+09
-150	2,104498E+08	2,104367E+08	2,841460E+09	2,841503E+09	4,208865E+08	5,682963E+09	6,103850E+09
-149	2,104635E+08	2,104747E+08	2,841459E+09	2,841304E+09	4,209382E+08	5,682763E+09	6,103701E+09
-148	2,104410E+08	2,104448E+08	2,841239E+09	2,841367E+09	4,208858E+08	5,682606E+09	6,103491E+09
-147	2,104918E+08	2,104807E+08	2,841243E+09	2,841258E+09	4,209725E+08	5,682501E+09	6,103474E+09
-146	2,104736E+08	2,104927E+08	2,841252E+09	2,841110E+09	4,209664E+08	5,682362E+09	6,103329E+09
-145	2,104685E+08	2,104585E+08	2,841105E+09	2,841235E+09	4,209270E+08	5,682340E+09	6,103267E+09
-144	2,105060E+08	2,104982E+08	2,841225E+09	2,841144E+09	4,210041E+08	5,682369E+09	6,103373E+09
-143	2,104624E+08	2,104752E+08	2,841225E+09	2,841199E+09	4,209376E+08	5,682424E+09	6,103362E+09
-142	2,104735E+08	2,104565E+08	2,841208E+09	2,841337E+09	4,209300E+08	5,682545E+09	6,103475E+09
-141	2,104844E+08	2,104921E+08	2,841387E+09	2,841269E+09	4,209765E+08	5,682656E+09	6,103632E+09
-140	2,104396E+08	2,104451E+08	2,841369E+09	2,841444E+09	4,208847E+08	5,682813E+09	6,103698E+09
-139	2,104688E+08	2,104494E+08	2,841465E+09	2,841502E+09	4,209182E+08	5,682967E+09	6,103885E+09
-138	2,104552E+08	2,104617E+08	2,841572E+09	2,841425E+09	4,209169E+08	5,682997E+09	6,103914E+09
-137	2,104267E+08	2,104179E+08	2,841442E+09	2,841599E+09	4,208447E+08	5,683041E+09	6,103886E+09
-136	2,104663E+08	2,104569E+08	2,841523E+09	2,841521E+09	4,209232E+08	5,683044E+09	6,103967E+09
-135	2,104330E+08	2,104521E+08	2,841537E+09	2,841447E+09	4,208851E+08	5,682984E+09	6,103869E+09
-134	2,104371E+08	2,104307E+08	2,841406E+09	2,841504E+09	4,208678E+08	5,682911E+09	6,103779E+09
-133	2,104744E+08	2,104759E+08	2,841454E+09	2,841315E+09	4,209503E+08	5,682769E+09	6,103719E+09
-132	2,104390E+08	2,104518E+08	2,841314E+09	2,841308E+09	4,208908E+08	5,682623E+09	6,103514E+09
-131	2,104761E+08	2,104599E+08	2,841199E+09	2,841280E+09	4,209360E+08	5,682479E+09	6,103415E+09
-130	2,104911E+08	2,105034E+08	2,841204E+09	2,841047E+09	4,209945E+08	5,682251E+09	6,103246E+09
-129	2,104643E+08	2,104738E+08	2,841005E+09	2,841107E+09	4,209381E+08	5,682112E+09	6,103050E+09
-128	2,105148E+08	2,105037E+08	2,841010E+09	2,841013E+09	4,210185E+08	5,682023E+09	6,103042E+09
-127	2,104966E+08	2,105135E+08	2,841042E+09	2,840894E+09	4,210101E+08	5,681937E+09	6,102947E+09
-126	2,104877E+08	2,104766E+08	2,840895E+09	2,841033E+09	4,209643E+08	5,681927E+09	6,102892E+09
-125	2,105250E+08	2,105145E+08	2,840986E+09	2,840942E+09	4,210395E+08	5,681927E+09	6,102967E+09
-124	2,104829E+08	2,104964E+08	2,841006E+09	2,841006E+09	4,209793E+08	5,682012E+09	6,102991E+09
-123	2,104942E+08	2,104759E+08	2,841019E+09	2,841146E+09	4,209702E+08	5,682165E+09	6,103136E+09
-122	2,105067E+08	2,105108E+08	2,841203E+09	2,841053E+09	4,210176E+08	5,682256E+09	6,103274E+09
-121	2,104583E+08	2,104630E+08	2,841181E+09	2,841235E+09	4,209214E+08	5,682417E+09	6,103338E+09
-120	2,104867E+08	2,104659E+08	2,841245E+09	2,841304E+09	4,209526E+08	5,682548E+09	6,103501E+09
-119	2,104738E+08	2,104835E+08	2,841368E+09	2,841234E+09	4,209573E+08	5,682602E+09	6,103559E+09
-118	2,104430E+08	2,104432E+08	2,841248E+09	2,841388E+09	4,208862E+08	5,682636E+09	6,103522E+09
-117	2,104848E+08	2,104774E+08	2,841304E+09	2,841289E+09	4,209622E+08	5,682593E+09	6,103555E+09
-116	2,104556E+08	2,104741E+08	2,841321E+09	2,841220E+09	4,209297E+08	5,682541E+09	6,103471E+09
-115	2,104617E+08	2,104495E+08	2,841179E+09	2,841281E+09	4,209112E+08	5,682460E+09	6,103371E+09
-114	2,105006E+08	2,104974E+08	2,841196E+09	2,841065E+09	4,209981E+08	5,682261E+09	6,103259E+09
-113	2,104634E+08	2,104788E+08	2,841048E+09	2,841053E+09	4,209422E+08	5,682101E+09	6,103043E+09
-112	2,105000E+08	2,104867E+08	2,840921E+09	2,841022E+09	4,209867E+08	5,681943E+09	6,102929E+09
-111	2,105161E+08	2,105303E+08	2,840972E+09	2,840798E+09	4,210464E+08	5,681770E+09	6,102817E+09
-110	2,104876E+08	2,104975E+08	2,840785E+09	2,840860E+09	4,209850E+08	5,681645E+09	6,102630E+09

1	14	15	16	17	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	2,105377E+08	2,105191E+08	2,840755E+09	2,840775E+09	4,210568E+08	5,681530E+09	6,102586E+09
-108	2,105211E+08	2,105332E+08	2,840789E+09	2,840683E+09	4,210543E+08	5,681472E+09	6,102527E+09
-107	2,105111E+08	2,104976E+08	2,840665E+09	2,840830E+09	4,210086E+08	5,681495E+09	6,102504E+09
-106	2,105467E+08	2,105394E+08	2,840780E+09	2,840717E+09	4,210862E+08	5,681496E+09	6,102583E+09
-105	2,105016E+08	2,105211E+08	2,840836E+09	2,840788E+09	4,210227E+08	5,681624E+09	6,102647E+09
-104	2,105109E+08	2,104949E+08	2,840847E+09	2,840951E+09	4,210058E+08	5,681798E+09	6,102803E+09
-103	2,105239E+08	2,105275E+08	2,841043E+09	2,840883E+09	4,210514E+08	5,681926E+09	6,102978E+09
-102	2,104735E+08	2,104801E+08	2,840997E+09	2,841061E+09	4,209536E+08	5,682058E+09	6,103012E+09
-101	2,105031E+08	2,104814E+08	2,841007E+09	2,841111E+09	4,209845E+08	5,682118E+09	6,103102E+09
-100	2,104944E+08	2,105053E+08	2,841133E+09	2,841029E+09	4,209997E+08	5,682162E+09	6,103162E+09
-99	2,104659E+08	2,104637E+08	2,841037E+09	2,841163E+09	4,209295E+08	5,682199E+09	6,103129E+09
-98	2,105095E+08	2,104983E+08	2,841083E+09	2,841030E+09	4,210078E+08	5,682113E+09	6,103121E+09
-97	2,104794E+08	2,104957E+08	2,841090E+09	2,840964E+09	4,209751E+08	5,682054E+09	6,103029E+09
-96	2,104846E+08	2,104716E+08	2,840921E+09	2,841042E+09	4,209562E+08	5,681963E+09	6,102919E+09
-95	2,105237E+08	2,105242E+08	2,840957E+09	2,840835E+09	4,210479E+08	5,681792E+09	6,102840E+09
-94	2,104846E+08	2,105079E+08	2,840821E+09	2,840814E+09	4,209925E+08	5,681635E+09	6,102627E+09
-93	2,105227E+08	2,105088E+08	2,840670E+09	2,840776E+09	4,210315E+08	5,681447E+09	6,102478E+09
-92	2,105420E+08	2,105523E+08	2,840722E+09	2,840566E+09	4,210944E+08	5,681288E+09	6,102382E+09
-91	2,105143E+08	2,105161E+08	2,840541E+09	2,840630E+09	4,210304E+08	5,681171E+09	6,102201E+09
-90	2,105631E+08	2,105405E+08	2,840492E+09	2,840523E+09	4,211036E+08	5,681015E+09	6,102119E+09
-89	2,105432E+08	2,105598E+08	2,840550E+09	2,840437E+09	4,211029E+08	5,680987E+09	6,102090E+09
-88	2,105301E+08	2,105231E+08	2,840450E+09	2,840604E+09	4,210532E+08	5,681054E+09	6,102107E+09
-87	2,105646E+08	2,105624E+08	2,840623E+09	2,840515E+09	4,211269E+08	5,681138E+09	6,102265E+09
-86	2,105180E+08	2,105399E+08	2,840687E+09	2,840603E+09	4,210579E+08	5,681290E+09	6,102348E+09
-85	2,105274E+08	2,105053E+08	2,840645E+09	2,840776E+09	4,210327E+08	5,681421E+09	6,102453E+09
-84	2,105435E+08	2,105425E+08	2,840822E+09	2,840720E+09	4,210861E+08	5,681542E+09	6,102629E+09
-83	2,104949E+08	2,104982E+08	2,840782E+09	2,840876E+09	4,209931E+08	5,681659E+09	6,102652E+09
-82	2,105249E+08	2,105036E+08	2,840784E+09	2,840881E+09	4,210285E+08	5,681665E+09	6,102693E+09
-81	2,105164E+08	2,105291E+08	2,840933E+09	2,840786E+09	4,210455E+08	5,681719E+09	6,102765E+09
-80	2,104869E+08	2,104844E+08	2,840823E+09	2,840926E+09	4,209713E+08	5,681750E+09	6,102721E+09
-79	2,105296E+08	2,105186E+08	2,840881E+09	2,840808E+09	4,210482E+08	5,681689E+09	6,102737E+09
-78	2,104989E+08	2,105197E+08	2,840866E+09	2,840740E+09	4,210185E+08	5,681606E+09	6,102625E+09
-77	2,105046E+08	2,104940E+08	2,840647E+09	2,840806E+09	4,209986E+08	5,681453E+09	6,102452E+09
-76	2,105482E+08	2,105510E+08	2,840688E+09	2,840599E+09	4,210992E+08	5,681287E+09	6,102387E+09
-75	2,105130E+08	2,105316E+08	2,840571E+09	2,840560E+09	4,210446E+08	5,681132E+09	6,102176E+09
-74	2,105516E+08	2,105314E+08	2,840403E+09	2,840497E+09	4,210830E+08	5,680900E+09	6,101983E+09
-73	2,105689E+08	2,105756E+08	2,840462E+09	2,840293E+09	4,211445E+08	5,680755E+09	6,101900E+09
-72	2,105377E+08	2,105404E+08	2,840286E+09	2,840381E+09	4,210781E+08	5,680666E+09	6,101744E+09
-71	2,105826E+08	2,105674E+08	2,840294E+09	2,840298E+09	4,211501E+08	5,680591E+09	6,101741E+09
-70	2,105601E+08	2,105871E+08	2,840385E+09	2,840230E+09	4,211472E+08	5,680615E+09	6,101763E+09
-69	2,105464E+08	2,105412E+08	2,840270E+09	2,840416E+09	4,210876E+08	5,680686E+09	6,101774E+09
-68	2,105840E+08	2,105785E+08	2,840436E+09	2,840358E+09	4,211625E+08	5,680794E+09	6,101956E+09
-67	2,105403E+08	2,105514E+08	2,840491E+09	2,840444E+09	4,210917E+08	5,680935E+09	6,102026E+09
-66	2,105493E+08	2,105208E+08	2,840404E+09	2,840577E+09	4,210701E+08	5,680981E+09	6,102051E+09
-65	2,105648E+08	2,105631E+08	2,840585E+09	2,840496E+09	4,211278E+08	5,681081E+09	6,102209E+09
-64	2,105146E+08	2,105211E+08	2,840563E+09	2,840643E+09	4,210357E+08	5,681205E+09	6,102241E+09
-63	2,105436E+08	2,105263E+08	2,840611E+09	2,840646E+09	4,210699E+08	5,681258E+09	6,102327E+09
-62	2,105339E+08	2,105513E+08	2,840757E+09	2,840563E+09	4,210852E+08	5,681319E+09	6,102405E+09
-61	2,105047E+08	2,105014E+08	2,840596E+09	2,840714E+09	4,210061E+08	5,681310E+09	6,102316E+09

1	14	15	16	17	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	2,105503E+08	2,105407E+08	2,840632E+09	2,840611E+09	4,210910E+08	5,681243E+09	6,102334E+09
-59	2,105237E+08	2,105434E+08	2,840625E+09	2,840521E+09	4,210671E+08	5,681146E+09	6,102213E+09
-58	2,105308E+08	2,105204E+08	2,840386E+09	2,840543E+09	4,210512E+08	5,680929E+09	6,101980E+09
-57	2,105755E+08	2,105766E+08	2,840443E+09	2,840322E+09	4,211521E+08	5,680765E+09	6,101917E+09
-56	2,105392E+08	2,105555E+08	2,840318E+09	2,840294E+09	4,210947E+08	5,680612E+09	6,101707E+09
-55	2,105753E+08	2,105544E+08	2,840171E+09	2,840243E+09	4,211296E+08	5,680414E+09	6,101544E+09
-54	2,105893E+08	2,106020E+08	2,840228E+09	2,840054E+09	4,211913E+08	5,680282E+09	6,101474E+09
-53	2,105566E+08	2,105638E+08	2,840038E+09	2,840152E+09	4,211204E+08	5,680190E+09	6,101310E+09
-52	2,106028E+08	2,105919E+08	2,840077E+09	2,840098E+09	4,211947E+08	5,680174E+09	6,101369E+09
-51	2,105849E+08	2,106051E+08	2,840196E+09	2,840037E+09	4,211900E+08	5,680233E+09	6,101423E+09
-50	2,105709E+08	2,105566E+08	2,840048E+09	2,840207E+09	4,211275E+08	5,680255E+09	6,101382E+09
-49	2,106079E+08	2,105942E+08	2,840210E+09	2,840152E+09	4,212021E+08	5,680362E+09	6,101564E+09
-48	2,105616E+08	2,105705E+08	2,840254E+09	2,840239E+09	4,211321E+08	5,680493E+09	6,101625E+09
-47	2,105666E+08	2,105442E+08	2,840215E+09	2,840365E+09	4,211108E+08	5,680580E+09	6,101691E+09
-46	2,105796E+08	2,105888E+08	2,840422E+09	2,840285E+09	4,211684E+08	5,680707E+09	6,101876E+09
-45	2,105292E+08	2,105401E+08	2,840384E+09	2,840435E+09	4,210692E+08	5,680819E+09	6,101888E+09
-44	2,105605E+08	2,105454E+08	2,840424E+09	2,840465E+09	4,211059E+08	5,680888E+09	6,101994E+09
-43	2,105563E+08	2,105670E+08	2,840549E+09	2,840375E+09	4,211233E+08	5,680924E+09	6,102047E+09
-42	2,105282E+08	2,105222E+08	2,840332E+09	2,840486E+09	4,210503E+08	5,680818E+09	6,101868E+09
-41	2,105754E+08	2,105655E+08	2,840367E+09	2,840358E+09	4,211409E+08	5,680725E+09	6,101866E+09
-40	2,105495E+08	2,105696E+08	2,840365E+09	2,840257E+09	4,211191E+08	5,680622E+09	6,101741E+09
-39	2,105560E+08	2,105459E+08	2,840162E+09	2,840270E+09	4,211018E+08	5,680432E+09	6,101534E+09
-38	2,105988E+08	2,106010E+08	2,840212E+09	2,840061E+09	4,211997E+08	5,680272E+09	6,101472E+09
-37	2,105610E+08	2,105765E+08	2,840052E+09	2,840045E+09	4,211375E+08	5,680097E+09	6,101235E+09
-36	2,105974E+08	2,105804E+08	2,839912E+09	2,840024E+09	4,211777E+08	5,679937E+09	6,101114E+09
-35	2,106142E+08	2,106263E+08	2,840002E+09	2,839841E+09	4,212405E+08	5,679843E+09	6,101083E+09
-34	2,105818E+08	2,105880E+08	2,839810E+09	2,839922E+09	4,211697E+08	5,679732E+09	6,100902E+09
-33	2,106275E+08	2,106124E+08	2,839868E+09	2,839872E+09	4,212399E+08	5,679739E+09	6,100979E+09
-32	2,106084E+08	2,106227E+08	2,839979E+09	2,839833E+09	4,212312E+08	5,679813E+09	6,101044E+09
-31	2,105910E+08	2,105749E+08	2,839849E+09	2,840002E+09	4,211659E+08	5,679851E+09	6,101017E+09
-30	2,106235E+08	2,106159E+08	2,840001E+09	2,839950E+09	4,212394E+08	5,679952E+09	6,101191E+09
-29	2,105757E+08	2,105913E+08	2,840037E+09	2,840032E+09	4,211670E+08	5,680068E+09	6,101235E+09
-28	2,105823E+08	2,105667E+08	2,840027E+09	2,840173E+09	4,211490E+08	5,680199E+09	6,101348E+09
-27	2,106006E+08	2,106051E+08	2,840254E+09	2,840094E+09	4,212056E+08	5,680348E+09	6,101553E+09
-26	2,105516E+08	2,105559E+08	2,840172E+09	2,840223E+09	4,211075E+08	5,680395E+09	6,101502E+09
-25	2,105832E+08	2,105628E+08	2,840197E+09	2,840248E+09	4,211461E+08	5,680446E+09	6,101592E+09
-24	2,105790E+08	2,105890E+08	2,840304E+09	2,840158E+09	4,211680E+08	5,680462E+09	6,101630E+09
-23	2,105498E+08	2,105489E+08	2,840116E+09	2,840245E+09	4,210987E+08	5,680361E+09	6,101460E+09
-22	2,105961E+08	2,105930E+08	2,840154E+09	2,840112E+09	4,211891E+08	5,680266E+09	6,101455E+09
-21	2,105710E+08	2,105921E+08	2,840121E+09	2,840008E+09	4,211631E+08	5,680129E+09	6,101292E+09
-20	2,105791E+08	2,105691E+08	2,839912E+09	2,840042E+09	4,211481E+08	5,679954E+09	6,101102E+09
-19	2,106258E+08	2,106209E+08	2,839954E+09	2,839829E+09	4,212467E+08	5,679783E+09	6,101030E+09
-18	2,105877E+08	2,106011E+08	2,839758E+09	2,839783E+09	4,211888E+08	5,679541E+09	6,100730E+09
-17	2,106232E+08	2,106074E+08	2,839652E+09	2,839759E+09	4,212306E+08	5,679411E+09	6,100641E+09
-16	2,106395E+08	2,106521E+08	2,839765E+09	2,839592E+09	4,212915E+08	5,679357E+09	6,100648E+09
-15	2,106053E+08	2,106112E+08	2,839617E+09	2,839682E+09	4,212165E+08	5,679300E+09	6,100516E+09
-14	2,106471E+08	2,106331E+08	2,839671E+09	2,839660E+09	4,212801E+08	5,679331E+09	6,100611E+09
-13	2,106259E+08	2,106396E+08	2,839749E+09	2,839636E+09	4,212655E+08	5,679385E+09	6,100650E+09
-12	2,106077E+08	2,105969E+08	2,839634E+09	2,839826E+09	4,212045E+08	5,679460E+09	6,100664E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-11	2,106430E+08	2,106346E+08	2,839815E+09	2,839769E+09	4,212775E+08	5,679584E+09	6,100862E+09
-10	2,105958E+08	2,106105E+08	2,839844E+09	2,839823E+09	4,212064E+08	5,679667E+09	6,100873E+09
-9	2,106030E+08	2,105843E+08	2,839850E+09	2,839964E+09	4,211873E+08	5,679814E+09	6,101002E+09
-8	2,106213E+08	2,106211E+08	2,840055E+09	2,839903E+09	4,212424E+08	5,679958E+09	6,101200E+09
-7	2,105717E+08	2,105752E+08	2,839975E+09	2,840017E+09	4,211469E+08	5,679991E+09	6,101138E+09
-6	2,106004E+08	2,105867E+08	2,839976E+09	2,840034E+09	4,211871E+08	5,680010E+09	6,101197E+09
-5	2,105965E+08	2,106120E+08	2,840058E+09	2,839927E+09	4,212085E+08	5,679985E+09	6,101194E+09
-4	2,105707E+08	2,105750E+08	2,839884E+09	2,840017E+09	4,211457E+08	5,679901E+09	6,101046E+09
-3	2,106228E+08	2,106117E+08	2,839919E+09	2,839877E+09	4,212345E+08	5,679797E+09	6,101031E+09
-2	2,105991E+08	2,106126E+08	2,839841E+09	2,839745E+09	4,212117E+08	5,679586E+09	6,100797E+09
-1	2,106070E+08	2,105924E+08	2,839632E+09	2,839769E+09	4,211994E+08	5,679401E+09	6,100600E+09
1	2,106510E+08	2,106479E+08	2,839682E+09	2,839571E+09	4,212989E+08	5,679253E+09	6,100551E+09
2	2,106116E+08	2,106315E+08	2,839545E+09	2,839518E+09	4,212431E+08	5,679062E+09	6,100306E+09
3	2,106429E+08	2,106355E+08	2,839458E+09	2,839517E+09	4,212784E+08	5,678975E+09	6,100253E+09
4	2,106585E+08	2,106729E+08	2,839551E+09	2,839376E+09	4,213313E+08	5,678927E+09	6,100258E+09
5	2,106258E+08	2,106311E+08	2,839399E+09	2,839500E+09	4,212569E+08	5,678900E+09	6,100157E+09
6	2,106701E+08	2,106474E+08	2,839443E+09	2,839480E+09	4,213175E+08	5,678923E+09	6,100240E+09
7	2,106484E+08	2,106584E+08	2,839488E+09	2,839421E+09	4,213068E+08	5,678909E+09	6,100216E+09
8	2,106296E+08	2,106178E+08	2,839416E+09	2,839594E+09	4,212474E+08	5,679009E+09	6,100257E+09
9	2,106636E+08	2,106541E+08	2,839622E+09	2,839553E+09	4,213177E+08	5,679175E+09	6,100492E+09
10	2,106164E+08	2,106301E+08	2,839686E+09	2,839604E+09	4,212464E+08	5,679290E+09	6,100536E+09
11	2,106191E+08	2,106040E+08	2,839676E+09	2,839768E+09	4,212231E+08	5,679444E+09	6,100667E+09
12	2,106362E+08	2,106396E+08	2,839836E+09	2,839714E+09	4,212758E+08	5,679551E+09	6,100826E+09
13	2,105886E+08	2,105998E+08	2,839760E+09	2,839837E+09	4,211883E+08	5,679597E+09	6,100786E+09
14	2,106221E+08	2,106069E+08	2,839768E+09	2,839837E+09	4,212291E+08	5,679604E+09	6,100833E+09
15	2,106210E+08	2,106324E+08	2,839812E+09	2,839684E+09	4,212534E+08	5,679496E+09	6,100749E+09
16	2,105972E+08	2,105960E+08	2,839644E+09	2,839755E+09	4,211932E+08	5,679399E+09	6,100592E+09
17	2,106488E+08	2,106323E+08	2,839655E+09	2,839624E+09	4,212812E+08	5,679279E+09	6,100560E+09
18	2,106240E+08	2,106389E+08	2,839588E+09	2,839470E+09	4,212629E+08	5,679059E+09	6,100322E+09
19	2,106274E+08	2,106230E+08	2,839385E+09	2,839504E+09	4,212504E+08	5,678889E+09	6,100139E+09
20	2,106696E+08	2,106750E+08	2,839432E+09	2,839316E+09	4,213447E+08	5,678748E+09	6,100093E+09
21	2,106338E+08	2,106581E+08	2,839328E+09	2,839296E+09	4,212920E+08	5,678624E+09	6,099916E+09
22	2,106692E+08	2,106522E+08	2,839242E+09	2,839312E+09	4,213214E+08	5,678553E+09	6,099875E+09
23	2,106849E+08	2,106889E+08	2,839286E+09	2,839156E+09	4,213738E+08	5,678442E+09	6,099816E+09
24	2,106517E+08	2,106508E+08	2,839146E+09	2,839272E+09	4,213026E+08	5,678418E+09	6,099720E+09
25	2,106924E+08	2,106692E+08	2,839202E+09	2,839263E+09	4,213615E+08	5,678466E+09	6,099827E+09
26	2,106689E+08	2,106837E+08	2,839309E+09	2,839188E+09	4,213526E+08	5,678497E+09	6,099849E+09
27	2,106452E+08	2,106419E+08	2,839264E+09	2,839381E+09	4,212871E+08	5,678645E+09	6,099932E+09
28	2,106765E+08	2,106718E+08	2,839452E+09	2,839367E+09	4,213483E+08	5,678820E+09	6,100168E+09
29	2,106324E+08	2,106486E+08	2,839513E+09	2,839449E+09	4,212810E+08	5,678962E+09	6,100243E+09
30	2,106380E+08	2,106183E+08	2,839474E+09	2,839606E+09	4,212563E+08	5,679080E+09	6,100337E+09
31	2,106568E+08	2,106578E+08	2,839583E+09	2,839508E+09	4,213147E+08	5,679091E+09	6,100406E+09
32	2,106123E+08	2,106213E+08	2,839523E+09	2,839591E+09	4,212336E+08	5,679114E+09	6,100348E+09
33	2,106466E+08	2,106267E+08	2,839528E+09	2,839591E+09	4,212733E+08	5,679119E+09	6,100393E+09
34	2,106469E+08	2,106548E+08	2,839590E+09	2,839414E+09	4,213017E+08	5,679004E+09	6,100306E+09
35	2,106191E+08	2,106207E+08	2,839409E+09	2,839492E+09	4,212398E+08	5,678901E+09	6,100141E+09
36	2,106673E+08	2,106572E+08	2,839393E+09	2,839372E+09	4,213245E+08	5,678765E+09	6,100090E+09
37	2,106450E+08	2,106691E+08	2,839352E+09	2,839241E+09	4,213141E+08	5,678593E+09	6,099907E+09
38	2,106515E+08	2,106472E+08	2,839166E+09	2,839282E+09	4,212987E+08	5,678448E+09	6,099747E+09

1	14	15	16	17	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	2,106954E+08	2,106967E+08	2,839180E+09	2,839079E+09	4,213921E+08	5,678260E+09	6,099652E+09
40	2,106628E+08	2,106786E+08	2,839083E+09	2,839056E+09	4,213414E+08	5,678139E+09	6,099481E+09
41	2,106961E+08	2,106705E+08	2,838976E+09	2,839089E+09	4,213666E+08	5,678065E+09	6,099432E+09
42	2,107101E+08	2,107126E+08	2,839037E+09	2,838906E+09	4,214227E+08	5,677942E+09	6,099365E+09
43	2,106704E+08	2,106790E+08	2,838923E+09	2,839024E+09	4,213494E+08	5,677947E+09	6,099296E+09
44	2,107067E+08	2,106933E+08	2,838997E+09	2,839032E+09	4,214000E+08	5,678029E+09	6,099429E+09
45	2,106859E+08	2,107065E+08	2,839148E+09	2,839001E+09	4,213924E+08	5,678149E+09	6,099541E+09
46	2,106649E+08	2,106559E+08	2,839106E+09	2,839219E+09	4,213208E+08	5,678325E+09	6,099646E+09
47	2,106961E+08	2,106847E+08	2,839232E+09	2,839190E+09	4,213808E+08	5,678423E+09	6,099804E+09
48	2,106547E+08	2,106657E+08	2,839295E+09	2,839255E+09	4,213204E+08	5,678550E+09	6,099870E+09
49	2,106589E+08	2,106376E+08	2,839250E+09	2,839408E+09	4,212965E+08	5,678657E+09	6,099954E+09
50	2,106787E+08	2,106803E+08	2,839384E+09	2,839267E+09	4,213591E+08	5,678652E+09	6,100011E+09
51	2,106317E+08	2,106460E+08	2,839330E+09	2,839348E+09	4,212777E+08	5,678678E+09	6,099955E+09
52	2,106641E+08	2,106472E+08	2,839300E+09	2,839356E+09	4,213113E+08	5,678656E+09	6,099967E+09
53	2,106678E+08	2,106783E+08	2,839360E+09	2,839198E+09	4,213462E+08	5,678558E+09	6,099905E+09
54	2,106424E+08	2,106427E+08	2,839164E+09	2,839271E+09	4,212851E+08	5,678434E+09	6,099719E+09
55	2,106902E+08	2,106814E+08	2,839112E+09	2,839119E+09	4,213715E+08	5,678231E+09	6,099603E+09
56	2,106725E+08	2,106949E+08	2,839102E+09	2,838974E+09	4,213673E+08	5,678075E+09	6,099443E+09
57	2,106794E+08	2,106695E+08	2,838915E+09	2,839032E+09	4,213490E+08	5,677947E+09	6,099296E+09
58	2,107240E+08	2,107201E+08	2,838937E+09	2,838814E+09	4,214441E+08	5,677751E+09	6,099195E+09
59	2,106871E+08	2,107047E+08	2,838834E+09	2,838803E+09	4,213918E+08	5,677637E+09	6,099029E+09
60	2,107146E+08	2,106957E+08	2,838718E+09	2,838851E+09	4,214103E+08	5,677569E+09	6,098979E+09
61	2,107290E+08	2,107404E+08	2,838830E+09	2,838695E+09	4,214695E+08	5,677525E+09	6,098995E+09
62	2,106903E+08	2,106994E+08	2,838750E+09	2,838827E+09	4,213897E+08	5,677577E+09	6,098967E+09
63	2,107254E+08	2,107097E+08	2,838804E+09	2,838836E+09	4,214351E+08	5,677640E+09	6,099075E+09
64	2,107089E+08	2,107216E+08	2,838961E+09	2,838813E+09	4,214305E+08	5,677774E+09	6,099204E+09
65	2,106862E+08	2,106694E+08	2,838892E+09	2,839047E+09	4,213557E+08	5,677939E+09	6,099295E+09
66	2,107174E+08	2,107045E+08	2,839014E+09	2,838982E+09	4,214220E+08	5,677996E+09	6,099418E+09
67	2,106729E+08	2,106899E+08	2,839082E+09	2,839029E+09	4,213628E+08	5,678112E+09	6,099474E+09
68	2,106744E+08	2,106594E+08	2,839032E+09	2,839177E+09	4,213337E+08	5,678209E+09	6,099543E+09
69	2,106986E+08	2,107018E+08	2,839190E+09	2,839054E+09	4,214003E+08	5,678244E+09	6,099645E+09
70	2,106542E+08	2,106636E+08	2,839124E+09	2,839137E+09	4,213179E+08	5,678261E+09	6,099578E+09
71	2,106859E+08	2,106666E+08	2,839036E+09	2,839124E+09	4,213524E+08	5,678160E+09	6,099512E+09
72	2,106934E+08	2,107035E+08	2,839103E+09	2,838953E+09	4,213969E+08	5,678056E+09	6,099453E+09
73	2,106671E+08	2,106688E+08	2,838915E+09	2,839029E+09	4,213359E+08	5,677944E+09	6,099280E+09
74	2,107159E+08	2,107094E+08	2,838885E+09	2,838847E+09	4,214253E+08	5,677732E+09	6,099157E+09
75	2,106968E+08	2,107227E+08	2,838880E+09	2,838713E+09	4,214195E+08	5,677593E+09	6,099012E+09
76	2,107009E+08	2,106928E+08	2,838661E+09	2,838789E+09	4,213937E+08	5,677450E+09	6,098844E+09
77	2,107473E+08	2,107434E+08	2,838689E+09	2,838594E+09	4,214907E+08	5,677283E+09	6,098774E+09
78	2,107111E+08	2,107275E+08	2,838586E+09	2,838582E+09	4,214386E+08	5,677168E+09	6,098607E+09
79	2,107360E+08	2,107177E+08	2,838453E+09	2,838607E+09	4,214537E+08	5,677060E+09	6,098514E+09
80	2,107537E+08	2,107616E+08	2,838614E+09	2,838459E+09	4,215152E+08	5,677073E+09	6,098588E+09
81	2,107143E+08	2,107163E+08	2,838553E+09	2,838624E+09	4,214306E+08	5,677177E+09	6,098608E+09
82	2,107481E+08	2,107274E+08	2,838611E+09	2,838624E+09	4,214755E+08	5,677236E+09	6,098711E+09
83	2,107284E+08	2,107423E+08	2,838763E+09	2,838616E+09	4,214707E+08	5,677379E+09	6,098850E+09
84	2,107008E+08	2,106908E+08	2,838676E+09	2,838855E+09	4,213916E+08	5,677530E+09	6,098922E+09
85	2,107337E+08	2,107273E+08	2,838833E+09	2,838799E+09	4,214610E+08	5,677632E+09	6,099093E+09
86	2,106917E+08	2,107089E+08	2,838909E+09	2,838840E+09	4,214006E+08	5,677749E+09	6,099149E+09
87	2,106929E+08	2,106762E+08	2,838816E+09	2,838965E+09	4,213691E+08	5,677782E+09	6,099151E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
88	2,107223E+08	2,107194E+08	2,838968E+09	2,838837E+09	4,214417E+08	5,677805E+09	6,099247E+09
89	2,106781E+08	2,106830E+08	2,838878E+09	2,838918E+09	4,213611E+08	5,677796E+09	6,099157E+09
90	2,107090E+08	2,106935E+08	2,838786E+09	2,838861E+09	4,214025E+08	5,677647E+09	6,099049E+09
91	2,107152E+08	2,107338E+08	2,838866E+09	2,838683E+09	4,214490E+08	5,677549E+09	6,098998E+09
92	2,106873E+08	2,106955E+08	2,838673E+09	2,838769E+09	4,213828E+08	5,677442E+09	6,098825E+09
93	2,107406E+08	2,107331E+08	2,838663E+09	2,838615E+09	4,214737E+08	5,677278E+09	6,098752E+09
94	2,107240E+08	2,107424E+08	2,838632E+09	2,838488E+09	4,214664E+08	5,677120E+09	6,098586E+09
95	2,107262E+08	2,107132E+08	2,838365E+09	2,838546E+09	4,214395E+08	5,676912E+09	6,098351E+09
96	2,107747E+08	2,107675E+08	2,838415E+09	2,838344E+09	4,215422E+08	5,676759E+09	6,098301E+09
97	2,107364E+08	2,107513E+08	2,838344E+09	2,838342E+09	4,214878E+08	5,676686E+09	6,098173E+09
98	2,107597E+08	2,107431E+08	2,838250E+09	2,838353E+09	4,215028E+08	5,676602E+09	6,098105E+09
99	2,107748E+08	2,107850E+08	2,838428E+09	2,838236E+09	4,215597E+08	5,676664E+09	6,098224E+09
100	2,107315E+08	2,107354E+08	2,838351E+09	2,838432E+09	4,214670E+08	5,676783E+09	6,098250E+09
101	2,107657E+08	2,107468E+08	2,838420E+09	2,838456E+09	4,215125E+08	5,676877E+09	6,098389E+09
102	2,107464E+08	2,107614E+08	2,838564E+09	2,838443E+09	4,215079E+08	5,677007E+09	6,098514E+09
103	2,107170E+08	2,107097E+08	2,838450E+09	2,838648E+09	4,214267E+08	5,677098E+09	6,098525E+09
104	2,107552E+08	2,107447E+08	2,838628E+09	2,838586E+09	4,215000E+08	5,677214E+09	6,098714E+09
105	2,107146E+08	2,107249E+08	2,838703E+09	2,838633E+09	4,214395E+08	5,677336E+09	6,098776E+09
106	2,107161E+08	2,106967E+08	2,838599E+09	2,838725E+09	4,214128E+08	5,677324E+09	6,098737E+09
107	2,107432E+08	2,107442E+08	2,838745E+09	2,838601E+09	4,214874E+08	5,677346E+09	6,098833E+09
108	2,106960E+08	2,107098E+08	2,838645E+09	2,838684E+09	4,214058E+08	5,677329E+09	6,098735E+09
109	2,107286E+08	2,107196E+08	2,838586E+09	2,838638E+09	4,214482E+08	5,677224E+09	6,098672E+09
110	2,107381E+08	2,107563E+08	2,838660E+09	2,838466E+09	4,214944E+08	5,677126E+09	6,098620E+09
111	2,107111E+08	2,107152E+08	2,838410E+09	2,838532E+09	4,214263E+08	5,676942E+09	6,098368E+09
112	2,107697E+08	2,107518E+08	2,838383E+09	2,838378E+09	4,215214E+08	5,676761E+09	6,098282E+09
113	2,107534E+08	2,107640E+08	2,838338E+09	2,838245E+09	4,215174E+08	5,676583E+09	6,098100E+09
114	2,107535E+08	2,107419E+08	2,838082E+09	2,838255E+09	4,214953E+08	5,676337E+09	6,097832E+09
115	2,107979E+08	2,107969E+08	2,838174E+09	2,838061E+09	4,215949E+08	5,676235E+09	6,097830E+09
116	2,107562E+08	2,107769E+08	2,838127E+09	2,838089E+09	4,215332E+08	5,676216E+09	6,097749E+09
117	2,107797E+08	2,107646E+08	2,838077E+09	2,838148E+09	4,215442E+08	5,676225E+09	6,097769E+09
118	2,107947E+08	2,108033E+08	2,838242E+09	2,838064E+09	4,215980E+08	5,676306E+09	6,097904E+09
119	2,107495E+08	2,107532E+08	2,838123E+09	2,838251E+09	4,215027E+08	5,676373E+09	6,097876E+09
120	2,107862E+08	2,107653E+08	2,838206E+09	2,838273E+09	4,215515E+08	5,676479E+09	6,098031E+09
121	2,107677E+08	2,107787E+08	2,838364E+09	2,838254E+09	4,215464E+08	5,676618E+09	6,098164E+09
122	2,107379E+08	2,107303E+08	2,838261E+09	2,838418E+09	4,214682E+08	5,676679E+09	6,098147E+09
123	2,107750E+08	2,107643E+08	2,838439E+09	2,838366E+09	4,215393E+08	5,676804E+09	6,098343E+09
124	2,107321E+08	2,107440E+08	2,838488E+09	2,838424E+09	4,214761E+08	5,676912E+09	6,098388E+09
125	2,107348E+08	2,107187E+08	2,838396E+09	2,838524E+09	4,214536E+08	5,676920E+09	6,098374E+09
126	2,107624E+08	2,107674E+08	2,838523E+09	2,838391E+09	4,215298E+08	5,676914E+09	6,098444E+09
127	2,107160E+08	2,107318E+08	2,838396E+09	2,838445E+09	4,214478E+08	5,676840E+09	6,098288E+09
128	2,107549E+08	2,107394E+08	2,838341E+09	2,838400E+09	4,214943E+08	5,676741E+09	6,098235E+09
129	2,107670E+08	2,107744E+08	2,838397E+09	2,838229E+09	4,215414E+08	5,676626E+09	6,098168E+09
130	2,107406E+08	2,107406E+08	2,838127E+09	2,838253E+09	4,214811E+08	5,676380E+09	6,097861E+09
131	2,107962E+08	2,107803E+08	2,838101E+09	2,838098E+09	4,215765E+08	5,676199E+09	6,097775E+09
132	2,107751E+08	2,107949E+08	2,838073E+09	2,837970E+09	4,215699E+08	5,676043E+09	6,097613E+09
133	2,107746E+08	2,107707E+08	2,837885E+09	2,838004E+09	4,215453E+08	5,675889E+09	6,097434E+09
134	2,108177E+08	2,108209E+08	2,837993E+09	2,837844E+09	4,216386E+08	5,675837E+09	6,097475E+09
135	2,107758E+08	2,107954E+08	2,837916E+09	2,837886E+09	4,215713E+08	5,675803E+09	6,097374E+09
136	2,108024E+08	2,107805E+08	2,837857E+09	2,837970E+09	4,215829E+08	5,675827E+09	6,097410E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
137	2,108180E+08	2,108199E+08	2,838007E+09	2,837889E+09	4,216379E+08	5,675896E+09	6,097534E+09
138	2,107721E+08	2,107763E+08	2,837888E+09	2,838022E+09	4,215484E+08	5,675911E+09	6,097459E+09
139	2,108061E+08	2,107865E+08	2,837999E+09	2,838042E+09	4,215927E+08	5,676041E+09	6,097634E+09
140	2,107858E+08	2,107976E+08	2,838167E+09	2,838034E+09	4,215834E+08	5,676201E+09	6,097784E+09
141	2,107569E+08	2,107475E+08	2,838094E+09	2,838216E+09	4,215044E+08	5,676311E+09	6,097815E+09
142	2,107926E+08	2,107824E+08	2,838250E+09	2,838182E+09	4,215750E+08	5,676432E+09	6,098007E+09
143	2,107495E+08	2,107643E+08	2,838258E+09	2,838219E+09	4,215138E+08	5,676477E+09	6,097991E+09
144	2,107551E+08	2,107406E+08	2,838174E+09	2,838319E+09	4,214957E+08	5,676492E+09	6,097988E+09
145	2,107855E+08	2,107880E+08	2,838304E+09	2,838179E+09	4,215735E+08	5,676483E+09	6,098056E+09
146	2,107418E+08	2,107562E+08	2,838160E+09	2,838185E+09	4,214980E+08	5,676345E+09	6,097843E+09
147	2,107805E+08	2,107619E+08	2,838092E+09	2,838142E+09	4,215424E+08	5,676234E+09	6,097777E+09
148	2,107909E+08	2,107982E+08	2,838119E+09	2,837970E+09	4,215891E+08	5,676089E+09	6,097678E+09
149	2,107644E+08	2,107684E+08	2,837877E+09	2,837988E+09	4,215329E+08	5,675866E+09	6,097398E+09
150	2,108171E+08	2,108093E+08	2,837856E+09	2,837839E+09	4,216264E+08	5,675695E+09	6,097322E+09
151	2,107957E+08	2,108203E+08	2,837827E+09	2,837706E+09	4,216160E+08	5,675533E+09	6,097149E+09
152	2,107993E+08	2,107916E+08	2,837663E+09	2,837776E+09	4,215909E+08	5,675439E+09	6,097030E+09
153	2,108439E+08	2,108374E+08	2,837765E+09	2,837646E+09	4,216813E+08	5,675411E+09	6,097093E+09
154	2,108028E+08	2,108172E+08	2,837673E+09	2,837663E+09	4,216200E+08	5,675336E+09	6,096956E+09
155	2,108258E+08	2,108029E+08	2,837622E+09	2,837752E+09	4,216287E+08	5,675374E+09	6,097003E+09
156	2,108370E+08	2,108423E+08	2,837782E+09	2,837674E+09	4,216794E+08	5,675456E+09	6,097136E+09
157	2,107910E+08	2,107980E+08	2,837725E+09	2,837811E+09	4,215890E+08	5,675536E+09	6,097125E+09
158	2,108225E+08	2,108054E+08	2,837830E+09	2,837851E+09	4,216279E+08	5,675680E+09	6,097308E+09
159	2,108021E+08	2,108131E+08	2,837965E+09	2,837841E+09	4,216152E+08	5,675806E+09	6,097421E+09
160	2,107767E+08	2,107642E+08	2,837885E+09	2,838037E+09	4,215409E+08	5,675923E+09	6,097464E+09
161	2,108128E+08	2,108007E+08	2,838025E+09	2,837995E+09	4,216135E+08	5,676020E+09	6,097633E+09
162	2,107718E+08	2,107900E+08	2,838027E+09	2,837974E+09	4,215618E+08	5,676001E+09	6,097563E+09
163	2,107769E+08	2,107640E+08	2,837954E+09	2,838066E+09	4,215409E+08	5,676020E+09	6,097561E+09
164	2,108071E+08	2,108093E+08	2,838071E+09	2,837933E+09	4,216164E+08	5,676004E+09	6,097621E+09
165	2,107661E+08	2,107786E+08	2,837943E+09	2,837941E+09	4,215446E+08	5,675884E+09	6,097429E+09
166	2,108029E+08	2,107863E+08	2,837843E+09	2,837908E+09	4,215892E+08	5,675751E+09	6,097341E+09
167	2,108125E+08	2,108238E+08	2,837844E+09	2,837714E+09	4,216363E+08	5,675558E+09	6,097195E+09
168	2,107889E+08	2,107947E+08	2,837628E+09	2,837740E+09	4,215836E+08	5,675368E+09	6,096952E+09
169	2,108420E+08	2,108319E+08	2,837627E+09	2,837603E+09	4,216739E+08	5,675229E+09	6,096903E+09
170	2,108232E+08	2,108453E+08	2,837593E+09	2,837449E+09	4,216685E+08	5,675042E+09	6,096710E+09
171	2,108251E+08	2,108127E+08	2,837429E+09	2,837545E+09	4,216377E+08	5,674974E+09	6,096612E+09
172	2,108669E+08	2,108588E+08	2,837512E+09	2,837432E+09	4,217257E+08	5,674944E+09	6,096670E+09
173	2,108260E+08	2,108409E+08	2,837451E+09	2,837442E+09	4,216669E+08	5,674894E+09	6,096561E+09
174	2,108437E+08	2,108267E+08	2,837409E+09	2,837538E+09	4,216704E+08	5,674947E+09	6,096617E+09
175	2,108538E+08	2,108612E+08	2,837569E+09	2,837450E+09	4,217150E+08	5,675019E+09	6,096734E+09
176	2,108107E+08	2,108143E+08	2,837533E+09	2,837614E+09	4,216250E+08	5,675147E+09	6,096772E+09
177	2,108429E+08	2,108198E+08	2,837634E+09	2,837673E+09	4,216626E+08	5,675307E+09	6,096970E+09
178	2,108243E+08	2,108345E+08	2,837747E+09	2,837629E+09	4,216588E+08	5,675376E+09	6,097035E+09
179	2,107967E+08	2,107871E+08	2,837680E+09	2,837823E+09	4,215838E+08	5,675503E+09	6,097087E+09
180	2,108301E+08	2,108238E+08	2,837820E+09	2,837780E+09	4,216539E+08	5,675600E+09	6,097254E+09
181	2,107921E+08	2,108122E+08	2,837861E+09	2,837751E+09	4,216043E+08	5,675612E+09	6,097216E+09
182	2,107953E+08	2,107853E+08	2,837757E+09	2,837855E+09	4,215806E+08	5,675613E+09	6,097193E+09
183	2,108274E+08	2,108268E+08	2,837820E+09	2,837708E+09	4,216542E+08	5,675528E+09	6,097182E+09
184	2,107910E+08	2,108003E+08	2,837674E+09	2,837715E+09	4,215913E+08	5,675389E+09	6,096980E+09
185	2,108291E+08	2,108102E+08	2,837562E+09	2,837664E+09	4,216394E+08	5,675226E+09	6,096866E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
186	2,108403E+08	2,108534E+08	2,837565E+09	2,837420E+09	4,216938E+08	5,674986E+09	6,096679E+09
187	2,108161E+08	2,108209E+08	2,837383E+09	2,837455E+09	4,216371E+08	5,674838E+09	6,096475E+09
188	2,108661E+08	2,108548E+08	2,837380E+09	2,837346E+09	4,217209E+08	5,674726E+09	6,096447E+09
189	2,108495E+08	2,108687E+08	2,837377E+09	2,837213E+09	4,217182E+08	5,674589E+09	6,096308E+09
190	2,108465E+08	2,108384E+08	2,837193E+09	2,837331E+09	4,216849E+08	5,674523E+09	6,096208E+09
191	2,108855E+08	2,108821E+08	2,837263E+09	2,837209E+09	4,217676E+08	5,674473E+09	6,096240E+09
192	2,108473E+08	2,108640E+08	2,837237E+09	2,837237E+09	4,217113E+08	5,674473E+09	6,096184E+09
193	2,108647E+08	2,108445E+08	2,837213E+09	2,837340E+09	4,217092E+08	5,674553E+09	6,096262E+09
194	2,108764E+08	2,108802E+08	2,837366E+09	2,837231E+09	4,217566E+08	5,674596E+09	6,096353E+09
195	2,108320E+08	2,108311E+08	2,837338E+09	2,837409E+09	4,216631E+08	5,674747E+09	6,096410E+09
196	2,108600E+08	2,108391E+08	2,837423E+09	2,837479E+09	4,216990E+08	5,674902E+09	6,096601E+09
197	2,108434E+08	2,108576E+08	2,837568E+09	2,837424E+09	4,217010E+08	5,674992E+09	6,096693E+09
198	2,108119E+08	2,108111E+08	2,837496E+09	2,837620E+09	4,216230E+08	5,675116E+09	6,096739E+09
199	2,108465E+08	2,108413E+08	2,837611E+09	2,837564E+09	4,216878E+08	5,675175E+09	6,096863E+09
200	2,108150E+08	2,108291E+08	2,837640E+09	2,837551E+09	4,216441E+08	5,675190E+09	6,096835E+09
201	2,108205E+08	2,108022E+08	2,837508E+09	2,837650E+09	4,216228E+08	5,675157E+09	6,096780E+09
202	2,108552E+08	2,108514E+08	2,837536E+09	2,837449E+09	4,217066E+08	5,674985E+09	6,096691E+09
203	2,108173E+08	2,108280E+08	2,837409E+09	2,837439E+09	4,216454E+08	5,674848E+09	6,096494E+09
204	2,108519E+08	2,108388E+08	2,837313E+09	2,837391E+09	4,216907E+08	5,674704E+09	6,096395E+09
205	2,108654E+08	2,108808E+08	2,837361E+09	2,837150E+09	4,217463E+08	5,674511E+09	6,096257E+09
206	2,108373E+08	2,108470E+08	2,837167E+09	2,837219E+09	4,216843E+08	5,674386E+09	6,096070E+09
207	2,108867E+08	2,108754E+08	2,837127E+09	2,837119E+09	4,217620E+08	5,674247E+09	6,096009E+09
208	2,108742E+08	2,108914E+08	2,837115E+09	2,837007E+09	4,217656E+08	5,674122E+09	6,095888E+09
209	2,108711E+08	2,108611E+08	2,836936E+09	2,837117E+09	4,217322E+08	5,674053E+09	6,095785E+09
210	2,109108E+08	2,109055E+08	2,837009E+09	2,836953E+09	4,218163E+08	5,673962E+09	6,095778E+09
211	2,108716E+08	2,108838E+08	2,837022E+09	2,836988E+09	4,217555E+08	5,674010E+09	6,095766E+09
212	2,108851E+08	2,108623E+08	2,837005E+09	2,837121E+09	4,217474E+08	5,674126E+09	6,095874E+09
213	2,108979E+08	2,108993E+08	2,837191E+09	2,837028E+09	4,217972E+08	5,674219E+09	6,096017E+09
214	2,108478E+08	2,108544E+08	2,837157E+09	2,837228E+09	4,217023E+08	5,674385E+09	6,096087E+09
215	2,108731E+08	2,108595E+08	2,837227E+09	2,837290E+09	4,217326E+08	5,674518E+09	6,096250E+09
216	2,108615E+08	2,108777E+08	2,837385E+09	2,837250E+09	4,217392E+08	5,674635E+09	6,096375E+09
217	2,108326E+08	2,108280E+08	2,837301E+09	2,837438E+09	4,216606E+08	5,674739E+09	6,096400E+09
218	2,108709E+08	2,108587E+08	2,837372E+09	2,837342E+09	4,217296E+08	5,674714E+09	6,096444E+09
219	2,108412E+08	2,108482E+08	2,837388E+09	2,837313E+09	4,216894E+08	5,674701E+09	6,096391E+09
220	2,108437E+08	2,108265E+08	2,837231E+09	2,837397E+09	4,216702E+08	5,674628E+09	6,096298E+09
221	2,108797E+08	2,108804E+08	2,837298E+09	2,837171E+09	4,217602E+08	5,674469E+09	6,096229E+09
222	2,108373E+08	2,108591E+08	2,837183E+09	2,837165E+09	4,216964E+08	5,674348E+09	6,096045E+09
223	2,108703E+08	2,108621E+08	2,837078E+09	2,837126E+09	4,217325E+08	5,674204E+09	6,095936E+09
224	2,108898E+08	2,109031E+08	2,837123E+09	2,836931E+09	4,217929E+08	5,674055E+09	6,095847E+09
225	2,108644E+08	2,108677E+08	2,836910E+09	2,837011E+09	4,217321E+08	5,673921E+09	6,095653E+09
226	2,109152E+08	2,108994E+08	2,836843E+09	2,836875E+09	4,218146E+08	5,673718E+09	6,095532E+09
227	2,109020E+08	2,109162E+08	2,836858E+09	2,836754E+09	4,218181E+08	5,673612E+09	6,095430E+09
228	2,108940E+08	2,108852E+08	2,836702E+09	2,836871E+09	4,217792E+08	5,673573E+09	6,095352E+09
229	2,109337E+08	2,109275E+08	2,836826E+09	2,836713E+09	4,218612E+08	5,673539E+09	6,095401E+09
230	2,108888E+08	2,109058E+08	2,836842E+09	2,836783E+09	4,217946E+08	5,673625E+09	6,095420E+09
231	2,108992E+08	2,108797E+08	2,836804E+09	2,836930E+09	4,217788E+08	5,673734E+09	6,095513E+09
232	2,109160E+08	2,109198E+08	2,836987E+09	2,836868E+09	4,218358E+08	5,673855E+09	6,095691E+09
233	2,108673E+08	2,108742E+08	2,836958E+09	2,837057E+09	4,217416E+08	5,674015E+09	6,095757E+09
234	2,108944E+08	2,108782E+08	2,837012E+09	2,837074E+09	4,217726E+08	5,674086E+09	6,095859E+09

1	14	15	16	17	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	2,108848E+08	2,108931E+08	2,837176E+09	2,837026E+09	4,217780E+08	5,674202E+09	6,095980E+09
236	2,108543E+08	2,108458E+08	2,837070E+09	2,837218E+09	4,217001E+08	5,674288E+09	6,095988E+09
237	2,108951E+08	2,108798E+08	2,837147E+09	2,837103E+09	4,217749E+08	5,674250E+09	6,096025E+09
238	2,108600E+08	2,108769E+08	2,837157E+09	2,837071E+09	4,217369E+08	5,674228E+09	6,095965E+09
239	2,108602E+08	2,108531E+08	2,836999E+09	2,837140E+09	4,217133E+08	5,674139E+09	6,095852E+09
240	2,109007E+08	2,109060E+08	2,837081E+09	2,836942E+09	4,218066E+08	5,674023E+09	6,095829E+09
241	2,108619E+08	2,108807E+08	2,836964E+09	2,836945E+09	4,217426E+08	5,673909E+09	6,095651E+09
242	2,108976E+08	2,108819E+08	2,836812E+09	2,836883E+09	4,217795E+08	5,673695E+09	6,095475E+09
243	2,109191E+08	2,109237E+08	2,836846E+09	2,836686E+09	4,218428E+08	5,673531E+09	6,095374E+09
244	2,108914E+08	2,108941E+08	2,836616E+09	2,836759E+09	4,217856E+08	5,673375E+09	6,095161E+09
245	2,109424E+08	2,109270E+08	2,836592E+09	2,836600E+09	4,218694E+08	5,673192E+09	6,095062E+09
246	2,109230E+08	2,109447E+08	2,836633E+09	2,836491E+09	4,218677E+08	5,673124E+09	6,094992E+09
247	2,109117E+08	2,109057E+08	2,836485E+09	2,836623E+09	4,218175E+08	5,673108E+09	6,094925E+09
248	2,109537E+08	2,109468E+08	2,836623E+09	2,836525E+09	4,219005E+08	5,673148E+09	6,095048E+09
249	2,109102E+08	2,109247E+08	2,836642E+09	2,836613E+09	4,218350E+08	5,673255E+09	6,095090E+09
250	2,109198E+08	2,109003E+08	2,836585E+09	2,836736E+09	4,218201E+08	5,673321E+09	6,095141E+09
251	2,109374E+08	2,109400E+08	2,836793E+09	2,836668E+09	4,218773E+08	5,673461E+09	6,095339E+09
252	2,108869E+08	2,108938E+08	2,836764E+09	2,836854E+09	4,217807E+08	5,673619E+09	6,095399E+09
253	2,109155E+08	2,108956E+08	2,836836E+09	2,836860E+09	4,218111E+08	5,673695E+09	6,095507E+09
254	2,109022E+08	2,109129E+08	2,836977E+09	2,836818E+09	4,218151E+08	5,673796E+09	6,095611E+09
255	2,108696E+08	2,108646E+08	2,836837E+09	2,836995E+09	4,217343E+08	5,673831E+09	6,095566E+09
256	2,109145E+08	2,109039E+08	2,836908E+09	2,836897E+09	4,218183E+08	5,673805E+09	6,095624E+09
257	2,108824E+08	2,109014E+08	2,836926E+09	2,836844E+09	4,217838E+08	5,673770E+09	6,095554E+09
258	2,108846E+08	2,108754E+08	2,836753E+09	2,836876E+09	4,217600E+08	5,673629E+09	6,095389E+09
259	2,109277E+08	2,109256E+08	2,836837E+09	2,836685E+09	4,218533E+08	5,673522E+09	6,095376E+09
260	2,108891E+08	2,109027E+08	2,836699E+09	2,836700E+09	4,217918E+08	5,673399E+09	6,095191E+09
261	2,109262E+08	2,109071E+08	2,836553E+09	2,836626E+09	4,218332E+08	5,673179E+09	6,095012E+09
262	2,109419E+08	2,109550E+08	2,836587E+09	2,836429E+09	4,218969E+08	5,673016E+09	6,094913E+09
263	2,109109E+08	2,109224E+08	2,836368E+09	2,836492E+09	4,218333E+08	5,672860E+09	6,094693E+09
264	2,109641E+08	2,109525E+08	2,836370E+09	2,836373E+09	4,219166E+08	5,672743E+09	6,094659E+09
265	2,109460E+08	2,109655E+08	2,836428E+09	2,836282E+09	4,219115E+08	5,672709E+09	6,094621E+09
266	2,109349E+08	2,109232E+08	2,836257E+09	2,836406E+09	4,218581E+08	5,672663E+09	6,094521E+09
267	2,109768E+08	2,109641E+08	2,836396E+09	2,836321E+09	4,219409E+08	5,672717E+09	6,094658E+09
268	2,109320E+08	2,109468E+08	2,836417E+09	2,836414E+09	4,218789E+08	5,672831E+09	6,094710E+09
269	2,109412E+08	2,109224E+08	2,836395E+09	2,836512E+09	4,218635E+08	5,672907E+09	6,094771E+09
270	2,109534E+08	2,109614E+08	2,836612E+09	2,836453E+09	4,219148E+08	5,673065E+09	6,094980E+09
271	2,109019E+08	2,109099E+08	2,836568E+09	2,836641E+09	4,218118E+08	5,673209E+09	6,095021E+09
272	2,109344E+08	2,109118E+08	2,836624E+09	2,836684E+09	4,218461E+08	5,673307E+09	6,095153E+09
273	2,109239E+08	2,109317E+08	2,836756E+09	2,836632E+09	4,218555E+08	5,673388E+09	6,095243E+09
274	2,108920E+08	2,108867E+08	2,836592E+09	2,836762E+09	4,217787E+08	5,673354E+09	6,095132E+09
275	2,109375E+08	2,109266E+08	2,836685E+09	2,836651E+09	4,218641E+08	5,673335E+09	6,095199E+09
276	2,109060E+08	2,109260E+08	2,836704E+09	2,836599E+09	4,218320E+08	5,673303E+09	6,095135E+09
277	2,109097E+08	2,108988E+08	2,836538E+09	2,836621E+09	4,218086E+08	5,673158E+09	6,094967E+09
278	2,109490E+08	2,109511E+08	2,836597E+09	2,836442E+09	4,219001E+08	5,673039E+09	6,094939E+09
279	2,109102E+08	2,109282E+08	2,836425E+09	2,836446E+09	4,218383E+08	5,672871E+09	6,094709E+09
280	2,109500E+08	2,109355E+08	2,836281E+09	2,836393E+09	4,218855E+08	5,672674E+09	6,094560E+09
281	2,109674E+08	2,109815E+08	2,836336E+09	2,836180E+09	4,219489E+08	5,672516E+09	6,094465E+09
282	2,109368E+08	2,109442E+08	2,836113E+09	2,836218E+09	4,218810E+08	5,672331E+09	6,094212E+09
283	2,109904E+08	2,109708E+08	2,836133E+09	2,836122E+09	4,219612E+08	5,672256E+09	6,094217E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
284	2,109717E+08	2,109858E+08	2,836188E+09	2,836058E+09	4,219575E+08	5,672246E+09	6,094203E+09
285	2,109593E+08	2,109461E+08	2,836045E+09	2,836183E+09	4,219054E+08	5,672228E+09	6,094133E+09
286	2,109939E+08	2,109909E+08	2,836201E+09	2,836115E+09	4,219848E+08	5,672316E+09	6,094301E+09
287	2,109471E+08	2,109683E+08	2,836231E+09	2,836207E+09	4,219154E+08	5,672439E+09	6,094354E+09
288	2,109580E+08	2,109409E+08	2,836222E+09	2,836345E+09	4,218989E+08	5,672567E+09	6,094466E+09
289	2,109729E+08	2,109753E+08	2,836427E+09	2,836287E+09	4,219482E+08	5,672714E+09	6,094662E+09
290	2,109227E+08	2,109234E+08	2,836340E+09	2,836439E+09	4,218461E+08	5,672779E+09	6,094625E+09
291	2,109566E+08	2,109295E+08	2,836383E+09	2,836470E+09	4,218861E+08	5,672853E+09	6,094740E+09
292	2,109465E+08	2,109563E+08	2,836515E+09	2,836403E+09	4,219028E+08	5,672918E+09	6,094821E+09
293	2,109150E+08	2,109130E+08	2,836386E+09	2,836498E+09	4,218280E+08	5,672884E+09	6,094712E+09
294	2,109552E+08	2,109526E+08	2,836483E+09	2,836396E+09	4,219078E+08	5,672879E+09	6,094786E+09
295	2,109246E+08	2,109478E+08	2,836480E+09	2,836352E+09	4,218724E+08	5,672832E+09	6,094704E+09
296	2,109321E+08	2,109219E+08	2,836294E+09	2,836413E+09	4,218540E+08	5,672707E+09	6,094561E+09
297	2,109743E+08	2,109751E+08	2,836339E+09	2,836226E+09	4,219494E+08	5,672564E+09	6,094514E+09
298	2,109372E+08	2,109537E+08	2,836145E+09	2,836184E+09	4,218910E+08	5,672329E+09	6,094220E+09
299	2,109781E+08	2,109594E+08	2,836017E+09	2,836122E+09	4,219374E+08	5,672139E+09	6,094077E+09
300	2,109953E+08	2,110053E+08	2,836085E+09	2,835919E+09	4,220006E+08	5,672004E+09	6,094005E+09
301	2,109643E+08	2,109671E+08	2,835886E+09	2,835951E+09	4,219313E+08	5,671837E+09	6,093768E+09
302	2,110098E+08	2,109947E+08	2,835907E+09	2,835886E+09	4,220045E+08	5,671793E+09	6,093798E+09
303	2,109901E+08	2,110098E+08	2,835955E+09	2,835838E+09	4,220000E+08	5,671792E+09	6,093792E+09
304	2,109786E+08	2,109711E+08	2,835832E+09	2,835998E+09	4,219497E+08	5,671831E+09	6,093780E+09
305	2,110140E+08	2,110113E+08	2,836009E+09	2,835927E+09	4,220253E+08	5,671936E+09	6,093961E+09
306	2,109688E+08	2,109831E+08	2,836020E+09	2,835995E+09	4,219519E+08	5,672015E+09	6,093966E+09
307	2,109804E+08	2,109540E+08	2,836005E+09	2,836142E+09	4,219344E+08	5,672147E+09	6,094081E+09
308	2,109955E+08	2,109924E+08	2,836197E+09	2,836088E+09	4,219879E+08	5,672285E+09	6,094273E+09
309	2,109449E+08	2,109472E+08	2,836130E+09	2,836207E+09	4,218921E+08	5,672337E+09	6,094229E+09
310	2,109717E+08	2,109581E+08	2,836191E+09	2,836238E+09	4,219298E+08	5,672429E+09	6,094359E+09
311	2,109621E+08	2,109816E+08	2,836327E+09	2,836168E+09	4,219437E+08	5,672496E+09	6,094439E+09
312	2,109333E+08	2,109358E+08	2,836206E+09	2,836303E+09	4,218691E+08	5,672508E+09	6,094378E+09
313	2,109763E+08	2,109707E+08	2,836277E+09	2,836204E+09	4,219471E+08	5,672482E+09	6,094429E+09
314	2,109495E+08	2,109645E+08	2,836210E+09	2,836126E+09	4,219140E+08	5,672336E+09	6,094250E+09
315	2,109601E+08	2,109438E+08	2,836002E+09	2,836171E+09	4,219038E+08	5,672173E+09	6,094077E+09
316	2,110036E+08	2,110013E+08	2,836042E+09	2,835958E+09	4,220049E+08	5,672000E+09	6,094005E+09
317	2,109667E+08	2,109821E+08	2,835884E+09	2,835875E+09	4,219488E+08	5,671759E+09	6,093708E+09
318	2,110011E+08	2,109869E+08	2,835777E+09	2,835831E+09	4,219880E+08	5,671608E+09	6,093596E+09
319	2,110170E+08	2,110285E+08	2,835840E+09	2,835656E+09	4,220455E+08	5,671496E+09	6,093542E+09
320	2,109866E+08	2,109915E+08	2,835659E+09	2,835747E+09	4,219781E+08	5,671406E+09	6,093384E+09
321	2,110309E+08	2,110188E+08	2,835690E+09	2,835695E+09	4,220497E+08	5,671385E+09	6,093435E+09
322	2,110122E+08	2,110316E+08	2,835730E+09	2,835626E+09	4,220437E+08	5,671357E+09	6,093401E+09
323	2,110013E+08	2,109908E+08	2,835626E+09	2,835793E+09	4,219920E+08	5,671419E+09	6,093411E+09
324	2,110368E+08	2,110283E+08	2,835803E+09	2,835730E+09	4,220652E+08	5,671533E+09	6,093598E+09
325	2,109919E+08	2,110008E+08	2,835820E+09	2,835774E+09	4,219927E+08	5,671594E+09	6,093587E+09
326	2,109967E+08	2,109748E+08	2,835796E+09	2,835929E+09	4,219716E+08	5,671725E+09	6,093696E+09
327	2,110111E+08	2,110152E+08	2,835980E+09	2,835873E+09	4,220262E+08	5,671853E+09	6,093879E+09
328	2,109620E+08	2,109726E+08	2,835943E+09	2,836012E+09	4,219346E+08	5,671954E+09	6,093889E+09
329	2,109890E+08	2,109791E+08	2,836015E+09	2,836038E+09	4,219680E+08	5,672053E+09	6,094021E+09
330	2,109838E+08	2,109970E+08	2,836113E+09	2,835949E+09	4,219808E+08	5,672063E+09	6,094043E+09
331	2,109587E+08	2,109513E+08	2,835959E+09	2,836087E+09	4,219100E+08	5,672046E+09	6,093956E+09
332	2,110043E+08	2,109898E+08	2,836001E+09	2,835983E+09	4,219941E+08	5,671983E+09	6,093978E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
333	2,109791E+08	2,109919E+08	2,835936E+09	2,835854E+09	4,219710E+08	5,671789E+09	6,093760E+09
334	2,109829E+08	2,109753E+08	2,835743E+09	2,835886E+09	4,219583E+08	5,671628E+09	6,093586E+09
335	2,110258E+08	2,110297E+08	2,835794E+09	2,835673E+09	4,220555E+08	5,671467E+09	6,093522E+09
336	2,109898E+08	2,110091E+08	2,835662E+09	2,835629E+09	4,219989E+08	5,671291E+09	6,093290E+09
337	2,110229E+08	2,110096E+08	2,835554E+09	2,835605E+09	4,220324E+08	5,671159E+09	6,093192E+09
338	2,110407E+08	2,110487E+08	2,835580E+09	2,835427E+09	4,220895E+08	5,671007E+09	6,093096E+09
339	2,110120E+08	2,110151E+08	2,835402E+09	2,835529E+09	4,220272E+08	5,670931E+09	6,092958E+09
340	2,110561E+08	2,110425E+08	2,835449E+09	2,835476E+09	4,220986E+08	5,670925E+09	6,093024E+09
341	2,110381E+08	2,110545E+08	2,835518E+09	2,835378E+09	4,220925E+08	5,670896E+09	6,092989E+09
342	2,110203E+08	2,110119E+08	2,835425E+09	2,835561E+09	4,220321E+08	5,670986E+09	6,093018E+09
343	2,110546E+08	2,110454E+08	2,835588E+09	2,835518E+09	4,221000E+08	5,671106E+09	6,093206E+09
344	2,110100E+08	2,110214E+08	2,835626E+09	2,835598E+09	4,220314E+08	5,671224E+09	6,093255E+09
345	2,110132E+08	2,109969E+08	2,835616E+09	2,835751E+09	4,220100E+08	5,671367E+09	6,093377E+09
346	2,110294E+08	2,110337E+08	2,835782E+09	2,835672E+09	4,220630E+08	5,671454E+09	6,093517E+09
347	2,109836E+08	2,109909E+08	2,835751E+09	2,835815E+09	4,219745E+08	5,671567E+09	6,093541E+09
348	2,110120E+08	2,109953E+08	2,835804E+09	2,835840E+09	4,220073E+08	5,671644E+09	6,093652E+09
349	2,110090E+08	2,110155E+08	2,835879E+09	2,835715E+09	4,220245E+08	5,671594E+09	6,093619E+09
350	2,109799E+08	2,109762E+08	2,835702E+09	2,835841E+09	4,219562E+08	5,671543E+09	6,093499E+09
351	2,110263E+08	2,110164E+08	2,835721E+09	2,835721E+09	4,220426E+08	5,671443E+09	6,093485E+09
352	2,110025E+08	2,110222E+08	2,835692E+09	2,835596E+09	4,220246E+08	5,671288E+09	6,093313E+09
353	2,110054E+08	2,110020E+08	2,835516E+09	2,835621E+09	4,220074E+08	5,671137E+09	6,093144E+09
354	2,110498E+08	2,110496E+08	2,835540E+09	2,835405E+09	4,220995E+08	5,670945E+09	6,093044E+09
355	2,110165E+08	2,110306E+08	2,835402E+09	2,835388E+09	4,220471E+08	5,670790E+09	6,092837E+09
356	2,110497E+08	2,110327E+08	2,835292E+09	2,835380E+09	4,220823E+08	5,670672E+09	6,092754E+09
357	2,110679E+08	2,110768E+08	2,835333E+09	2,835176E+09	4,221448E+08	5,670509E+09	6,092654E+09
358	2,110342E+08	2,110438E+08	2,835182E+09	2,835284E+09	4,220780E+08	5,670466E+09	6,092544E+09
359	2,110765E+08	2,110645E+08	2,835237E+09	2,835248E+09	4,221409E+08	5,670485E+09	6,092626E+09
360	2,110589E+08	2,110742E+08	2,835329E+09	2,835187E+09	4,221331E+08	5,670516E+09	6,092649E+09
361	2,110381E+08	2,110283E+08	2,835230E+09	2,835378E+09	4,220664E+08	5,670608E+09	6,092674E+09
362	2,110736E+08	2,110600E+08	2,835354E+09	2,835324E+09	4,221336E+08	5,670679E+09	6,092812E+09
363	2,110313E+08	2,110417E+08	2,835398E+09	2,835401E+09	4,220730E+08	5,670799E+09	6,092872E+09
364	2,110345E+08	2,110173E+08	2,835411E+09	2,835545E+09	4,220519E+08	5,670956E+09	6,093007E+09
365	2,110524E+08	2,110547E+08	2,835587E+09	2,835435E+09	4,221071E+08	5,671021E+09	6,093128E+09
366	2,110031E+08	2,110114E+08	2,835550E+09	2,835585E+09	4,220145E+08	5,671135E+09	6,093149E+09
367	2,110312E+08	2,110140E+08	2,835570E+09	2,835621E+09	4,220453E+08	5,671191E+09	6,093236E+09
368	2,110301E+08	2,110394E+08	2,835651E+09	2,835506E+09	4,220695E+08	5,671157E+09	6,093226E+09
369	2,109995E+08	2,110039E+08	2,835477E+09	2,835611E+09	4,220034E+08	5,671088E+09	6,093092E+09
370	2,110483E+08	2,110396E+08	2,835473E+09	2,835466E+09	4,220879E+08	5,670939E+09	6,093027E+09
371	2,110281E+08	2,110463E+08	2,835451E+09	2,835344E+09	4,220744E+08	5,670795E+09	6,092870E+09
372	2,110322E+08	2,110230E+08	2,835272E+09	2,835376E+09	4,220552E+08	5,670649E+09	6,092704E+09
373	2,110775E+08	2,110725E+08	2,835278E+09	2,835141E+09	4,221500E+08	5,670419E+09	6,092569E+09
374	2,110409E+08	2,110582E+08	2,835139E+09	2,835132E+09	4,220991E+08	5,670272E+09	6,092371E+09
375	2,110726E+08	2,110601E+08	2,835027E+09	2,835132E+09	4,221327E+08	5,670159E+09	6,092292E+09
376	2,110912E+08	2,111039E+08	2,835115E+09	2,834949E+09	4,221951E+08	5,670064E+09	6,092259E+09
377	2,110557E+08	2,110665E+08	2,834982E+09	2,835062E+09	4,221223E+08	5,670044E+09	6,092166E+09
378	2,110983E+08	2,110775E+08	2,834998E+09	2,835028E+09	4,221759E+08	5,670026E+09	6,092202E+09
379	2,110826E+08	2,110904E+08	2,835088E+09	2,834990E+09	4,221731E+08	5,670078E+09	6,092251E+09
380	2,110612E+08	2,110474E+08	2,835003E+09	2,835181E+09	4,221085E+08	5,670184E+09	6,092292E+09
381	2,110948E+08	2,110839E+08	2,835146E+09	2,835098E+09	4,221787E+08	5,670244E+09	6,092422E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
382	2,110492E+08	2,110672E+08	2,835226E+09	2,835178E+09	4,221164E+08	5,670404E+09	6,092521E+09
383	2,110507E+08	2,110377E+08	2,835234E+09	2,835338E+09	4,220884E+08	5,670572E+09	6,092660E+09
384	2,110699E+08	2,110731E+08	2,835419E+09	2,835253E+09	4,221430E+08	5,670673E+09	6,092816E+09
385	2,110201E+08	2,110300E+08	2,835352E+09	2,835398E+09	4,220501E+08	5,670750E+09	6,092800E+09
386	2,110507E+08	2,110307E+08	2,835310E+09	2,835408E+09	4,220814E+08	5,670719E+09	6,092800E+09
387	2,110541E+08	2,110630E+08	2,835386E+09	2,835277E+09	4,221170E+08	5,670663E+09	6,092780E+09
388	2,110257E+08	2,110277E+08	2,835230E+09	2,835355E+09	4,220533E+08	5,670585E+09	6,092638E+09
389	2,110756E+08	2,110636E+08	2,835224E+09	2,835175E+09	4,221393E+08	5,670398E+09	6,092538E+09
390	2,110537E+08	2,110713E+08	2,835202E+09	2,835064E+09	4,221249E+08	5,670265E+09	6,092390E+09
391	2,110563E+08	2,110472E+08	2,835005E+09	2,835121E+09	4,221034E+08	5,670127E+09	6,092230E+09
392	2,111013E+08	2,111006E+08	2,835037E+09	2,834911E+09	4,222020E+08	5,669948E+09	6,092150E+09
393	2,110632E+08	2,110877E+08	2,834912E+09	2,834901E+09	4,221508E+08	5,669813E+09	6,091964E+09
394	2,110956E+08	2,110818E+08	2,834783E+09	2,834897E+09	4,221774E+08	5,669680E+09	6,091857E+09
395	2,111168E+08	2,111248E+08	2,834874E+09	2,834728E+09	4,222417E+08	5,669602E+09	6,091844E+09
396	2,110814E+08	2,110839E+08	2,834748E+09	2,834844E+09	4,221653E+08	5,669592E+09	6,091757E+09
397	2,111227E+08	2,110972E+08	2,834752E+09	2,834790E+09	4,222198E+08	5,669542E+09	6,091762E+09
398	2,111033E+08	2,111149E+08	2,834858E+09	2,834757E+09	4,222183E+08	5,669615E+09	6,091833E+09
399	2,110787E+08	2,110721E+08	2,834796E+09	2,834960E+09	4,221508E+08	5,669755E+09	6,091906E+09
400	2,111113E+08	2,111071E+08	2,834992E+09	2,834897E+09	4,222184E+08	5,669889E+09	6,092107E+09
401	2,110649E+08	2,110868E+08	2,835079E+09	2,834988E+09	4,221518E+08	5,670067E+09	6,092219E+09
402	2,110676E+08	2,110492E+08	2,835030E+09	2,835152E+09	4,221168E+08	5,670182E+09	6,092299E+09
403	2,110911E+08	2,110886E+08	2,835185E+09	2,835077E+09	4,221798E+08	5,670262E+09	6,092442E+09
404	2,110440E+08	2,110499E+08	2,835113E+09	2,835194E+09	4,220939E+08	5,670307E+09	6,092401E+09
405	2,110757E+08	2,110555E+08	2,835060E+09	2,835154E+09	4,221311E+08	5,670215E+09	6,092346E+09
406	2,110780E+08	2,110899E+08	2,835159E+09	2,835007E+09	4,221679E+08	5,670166E+09	6,092334E+09
407	2,110485E+08	2,110522E+08	2,834999E+09	2,835093E+09	4,221007E+08	5,670091E+09	6,092192E+09
408	2,110974E+08	2,110868E+08	2,835008E+09	2,834935E+09	4,221842E+08	5,669942E+09	6,092127E+09
409	2,110751E+08	2,110969E+08	2,834968E+09	2,834830E+09	4,221720E+08	5,669799E+09	6,091971E+09
410	2,110787E+08	2,110701E+08	2,834722E+09	2,834879E+09	4,221488E+08	5,669601E+09	6,091750E+09
411	2,111271E+08	2,111277E+08	2,834761E+09	2,834675E+09	4,222548E+08	5,669436E+09	6,091690E+09
412	2,110921E+08	2,111120E+08	2,834662E+09	2,834651E+09	4,222041E+08	5,669313E+09	6,091517E+09
413	2,111237E+08	2,111035E+08	2,834524E+09	2,834624E+09	4,222273E+08	5,669149E+09	6,091376E+09
414	2,111421E+08	2,111464E+08	2,834628E+09	2,834469E+09	4,222885E+08	5,669098E+09	6,091386E+09
415	2,111033E+08	2,111060E+08	2,834504E+09	2,834608E+09	4,222092E+08	5,669112E+09	6,091321E+09
416	2,111410E+08	2,111223E+08	2,834561E+09	2,834579E+09	4,222633E+08	5,669140E+09	6,091403E+09
417	2,111194E+08	2,111414E+08	2,834699E+09	2,834559E+09	4,222607E+08	5,669258E+09	6,091519E+09
418	2,110945E+08	2,110895E+08	2,834623E+09	2,834772E+09	4,221840E+08	5,669395E+09	6,091579E+09
419	2,111300E+08	2,111233E+08	2,834809E+09	2,834737E+09	4,222533E+08	5,669546E+09	6,091800E+09
420	2,110875E+08	2,110992E+08	2,834880E+09	2,834820E+09	4,221867E+08	5,669700E+09	6,091887E+09
421	2,110904E+08	2,110656E+08	2,834781E+09	2,834942E+09	4,221560E+08	5,669723E+09	6,091879E+09
422	2,111139E+08	2,111113E+08	2,834931E+09	2,834840E+09	4,222252E+08	5,669771E+09	6,091996E+09
423	2,110656E+08	2,110761E+08	2,834869E+09	2,834939E+09	4,221417E+08	5,669809E+09	6,091950E+09
424	2,110969E+08	2,110817E+08	2,834862E+09	2,834897E+09	4,221786E+08	5,669759E+09	6,091937E+09
425	2,110984E+08	2,111150E+08	2,834955E+09	2,834756E+09	4,222134E+08	5,669711E+09	6,091924E+09
426	2,110695E+08	2,110712E+08	2,834748E+09	2,834851E+09	4,221407E+08	5,669599E+09	6,091740E+09
427	2,111209E+08	2,111106E+08	2,834737E+09	2,834714E+09	4,222315E+08	5,669450E+09	6,091682E+09
428	2,111022E+08	2,111225E+08	2,834708E+09	2,834596E+09	4,222247E+08	5,669303E+09	6,091528E+09
429	2,111065E+08	2,110984E+08	2,834454E+09	2,834610E+09	4,222049E+08	5,669064E+09	6,091269E+09
430	2,111546E+08	2,111541E+08	2,834515E+09	2,834401E+09	4,223087E+08	5,668916E+09	6,091224E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
431	2,111181E+08	2,111357E+08	2,834417E+09	2,834393E+09	4,222538E+08	5,668810E+09	6,091064E+09
432	2,111467E+08	2,111251E+08	2,834304E+09	2,834387E+09	4,222718E+08	5,668691E+09	6,090962E+09
433	2,111615E+08	2,111703E+08	2,834408E+09	2,834248E+09	4,223318E+08	5,668656E+09	6,090987E+09
434	2,111211E+08	2,111273E+08	2,834269E+09	2,834394E+09	4,222484E+08	5,668663E+09	6,090911E+09
435	2,111595E+08	2,111457E+08	2,834354E+09	2,834389E+09	4,223052E+08	5,668742E+09	6,091048E+09
436	2,111421E+08	2,111594E+08	2,834522E+09	2,834369E+09	4,223015E+08	5,668891E+09	6,091193E+09
437	2,111175E+08	2,111054E+08	2,834416E+09	2,834564E+09	4,222229E+08	5,668981E+09	6,091203E+09
438	2,111522E+08	2,111391E+08	2,834592E+09	2,834533E+09	4,222913E+08	5,669125E+09	6,091416E+09
439	2,111087E+08	2,111188E+08	2,834645E+09	2,834614E+09	4,222275E+08	5,669259E+09	6,091487E+09
440	2,111091E+08	2,110899E+08	2,834577E+09	2,834725E+09	4,221990E+08	5,669302E+09	6,091501E+09
441	2,111312E+08	2,111383E+08	2,834745E+09	2,834613E+09	4,222695E+08	5,669358E+09	6,091627E+09
442	2,110834E+08	2,110973E+08	2,834660E+09	2,834702E+09	4,221808E+08	5,669361E+09	6,091542E+09
443	2,111167E+08	2,111033E+08	2,834642E+09	2,834683E+09	4,222200E+08	5,669325E+09	6,091545E+09
444	2,111238E+08	2,111339E+08	2,834722E+09	2,834538E+09	4,222576E+08	5,669260E+09	6,091518E+09
445	2,110958E+08	2,110939E+08	2,834464E+09	2,834600E+09	4,221897E+08	5,669064E+09	6,091254E+09
446	2,111477E+08	2,111377E+08	2,834456E+09	2,834447E+09	4,222853E+08	5,668904E+09	6,091189E+09
447	2,111294E+08	2,111509E+08	2,834436E+09	2,834322E+09	4,222804E+08	5,668757E+09	6,091038E+09
448	2,111325E+08	2,111251E+08	2,834225E+09	2,834335E+09	4,222576E+08	5,668560E+09	6,090818E+09
449	2,111782E+08	2,111786E+08	2,834284E+09	2,834141E+09	4,223567E+08	5,668425E+09	6,090782E+09
450	2,111403E+08	2,111553E+08	2,834154E+09	2,834148E+09	4,222956E+08	5,668302E+09	6,090598E+09
451	2,111685E+08	2,111494E+08	2,834049E+09	2,834177E+09	4,223179E+08	5,668225E+09	6,090543E+09
452	2,111858E+08	2,111938E+08	2,834188E+09	2,834042E+09	4,223796E+08	5,668230E+09	6,090610E+09
453	2,111445E+08	2,111510E+08	2,834058E+09	2,834171E+09	4,222955E+08	5,668228E+09	6,090524E+09
454	2,111814E+08	2,111667E+08	2,834168E+09	2,834175E+09	4,223481E+08	5,668342E+09	6,090690E+09
455	2,111632E+08	2,111771E+08	2,834327E+09	2,834177E+09	4,223403E+08	5,668504E+09	6,090845E+09
456	2,111364E+08	2,111230E+08	2,834232E+09	2,834372E+09	4,222594E+08	5,668604E+09	6,090864E+09
457	2,111686E+08	2,111596E+08	2,834382E+09	2,834334E+09	4,223282E+08	5,668717E+09	6,091045E+09
458	2,111249E+08	2,111392E+08	2,834410E+09	2,834398E+09	4,222641E+08	5,668808E+09	6,091073E+09
459	2,111273E+08	2,111142E+08	2,834360E+09	2,834513E+09	4,222414E+08	5,668873E+09	6,091115E+09
460	2,111543E+08	2,111571E+08	2,834545E+09	2,834392E+09	4,223115E+08	5,668937E+09	6,091248E+09
461	2,111081E+08	2,111163E+08	2,834425E+09	2,834458E+09	4,222244E+08	5,668883E+09	6,091107E+09
462	2,111414E+08	2,111234E+08	2,834393E+09	2,834438E+09	4,222648E+08	5,668832E+09	6,091097E+09
463	2,111487E+08	2,111586E+08	2,834457E+09	2,834298E+09	4,223072E+08	5,668755E+09	6,091062E+09
464	2,111200E+08	2,111231E+08	2,834230E+09	2,834345E+09	4,222431E+08	5,668575E+09	6,090818E+09
465	2,111703E+08	2,111671E+08	2,834230E+09	2,834191E+09	4,223374E+08	5,668421E+09	6,090758E+09
466	2,111525E+08	2,111746E+08	2,834185E+09	2,834066E+09	4,223272E+08	5,668250E+09	6,090577E+09
467	2,111565E+08	2,111488E+08	2,833969E+09	2,834106E+09	4,223054E+08	5,668075E+09	6,090380E+09
468	2,112050E+08	2,111979E+08	2,834028E+09	2,833913E+09	4,224029E+08	5,667941E+09	6,090344E+09
469	2,111665E+08	2,111792E+08	2,833872E+09	2,833895E+09	4,223457E+08	5,667767E+09	6,090113E+09
470	2,111926E+08	2,111758E+08	2,833805E+09	2,833925E+09	4,223684E+08	5,667730E+09	6,090098E+09
471	2,112089E+08	2,112193E+08	2,833974E+09	2,833810E+09	4,224282E+08	5,667784E+09	6,090213E+09
472	2,111660E+08	2,111727E+08	2,833887E+09	2,833950E+09	4,223387E+08	5,667837E+09	6,090175E+09
473	2,111992E+08	2,111854E+08	2,833989E+09	2,833979E+09	4,223846E+08	5,667968E+09	6,090352E+09
474	2,111802E+08	2,111917E+08	2,834103E+09	2,833987E+09	4,223719E+08	5,668089E+09	6,090461E+09
475	2,111533E+08	2,111438E+08	2,834006E+09	2,834197E+09	4,222971E+08	5,668204E+09	6,090501E+09
476	2,111895E+08	2,111788E+08	2,834179E+09	2,834145E+09	4,223684E+08	5,668323E+09	6,090692E+09
477	2,111469E+08	2,111601E+08	2,834195E+09	2,834169E+09	4,223070E+08	5,668365E+09	6,090672E+09
478	2,111497E+08	2,111344E+08	2,834162E+09	2,834278E+09	4,222841E+08	5,668440E+09	6,090724E+09
479	2,111771E+08	2,111763E+08	2,834325E+09	2,834170E+09	4,223534E+08	5,668496E+09	6,090849E+09

1	14	15	16	17	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							
480	2,111305E+08	2,111380E+08	2,834207E+09	2,834226E+09	4,222685E+08	5,668433E+09	6,090702E+09
481	2,111609E+08	2,111500E+08	2,834151E+09	2,834203E+09	4,223109E+08	5,668354E+09	6,090664E+09
482	2,111690E+08	2,111845E+08	2,834187E+09	2,834046E+09	4,223535E+08	5,668233E+09	6,090586E+09
483	2,111433E+08	2,111523E+08	2,833975E+09	2,834100E+09	4,222956E+08	5,668075E+09	6,090371E+09
484	2,111991E+08	2,111884E+08	2,833982E+09	2,833940E+09	4,223875E+08	5,667922E+09	6,090309E+09
485	2,111817E+08	2,111964E+08	2,833898E+09	2,833793E+09	4,223781E+08	5,667691E+09	6,090069E+09
486	2,111846E+08	2,111726E+08	2,833692E+09	2,833834E+09	4,223573E+08	5,667526E+09	6,089883E+09
487	2,112301E+08	2,112245E+08	2,833763E+09	2,833662E+09	4,224546E+08	5,667425E+09	6,089880E+09
488	2,111898E+08	2,112086E+08	2,833671E+09	2,833646E+09	4,223984E+08	5,667317E+09	6,089715E+09
489	2,112111E+08	2,112027E+08	2,833627E+09	2,833698E+09	4,224138E+08	5,667325E+09	6,089739E+09
490	2,112264E+08	2,112382E+08	2,833778E+09	2,833610E+09	4,224646E+08	5,667387E+09	6,089852E+09
491	2,111850E+08	2,111911E+08	2,833686E+09	2,833785E+09	4,223761E+08	5,667472E+09	6,089848E+09
492	2,112209E+08	2,111974E+08	2,833772E+09	2,833812E+09	4,224183E+08	5,667584E+09	6,090002E+09
493	2,112023E+08	2,112089E+08	2,833847E+09	2,833780E+09	4,224112E+08	5,667627E+09	6,090039E+09
494	2,111750E+08	2,111652E+08	2,833780E+09	2,833964E+09	4,223402E+08	5,667744E+09	6,090084E+09
495	2,112107E+08	2,112000E+08	2,833972E+09	2,833915E+09	4,224107E+08	5,667887E+09	6,090298E+09
496	2,111683E+08	2,111816E+08	2,834023E+09	2,833930E+09	4,223499E+08	5,667953E+09	6,090303E+09
497	2,111672E+08	2,111560E+08	2,833972E+09	2,834056E+09	4,223233E+08	5,668028E+09	6,090351E+09
498	2,111939E+08	2,111964E+08	2,834086E+09	2,833956E+09	4,223903E+08	5,668043E+09	6,090433E+09
499	2,111501E+08	2,111652E+08	2,833966E+09	2,834024E+09	4,223152E+08	5,667990E+09	6,090305E+09
500	2,111852E+08	2,111732E+08	2,833918E+09	2,833983E+09	4,223584E+08	5,667902E+09	6,090260E+09
501	2,111958E+08	2,112083E+08	2,833925E+09	2,833785E+09	4,224042E+08	5,667710E+09	6,090115E+09
502	2,111715E+08	2,111762E+08	2,833723E+09	2,833826E+09	4,223477E+08	5,667549E+09	6,089897E+09
503	2,112269E+08	2,112104E+08	2,833711E+09	2,833680E+09	4,224373E+08	5,667391E+09	6,089829E+09
504	2,112082E+08	2,112219E+08	2,833640E+09	2,833517E+09	4,224301E+08	5,667158E+09	6,089588E+09
505	2,112061E+08	2,112023E+08	2,833443E+09	2,833572E+09	4,224083E+08	5,667014E+09	6,089422E+09
506	2,112490E+08	2,112510E+08	2,833515E+09	2,833411E+09	4,225000E+08	5,666926E+09	6,089426E+09
507	2,112109E+08	2,112347E+08	2,833461E+09	2,833433E+09	4,224456E+08	5,666895E+09	6,089340E+09
508	2,112355E+08	2,112188E+08	2,833429E+09	2,833505E+09	4,224542E+08	5,666934E+09	6,089388E+09
509	2,112511E+08	2,112525E+08	2,833530E+09	2,833405E+09	4,225037E+08	5,666935E+09	6,089439E+09
510	2,112093E+08	2,112089E+08	2,833445E+09	2,833571E+09	4,224183E+08	5,667016E+09	6,089435E+09
511	2,112427E+08	2,112181E+08	2,833534E+09	2,833603E+09	4,224608E+08	5,667137E+09	6,089598E+09
512	2,112227E+08	2,112336E+08	2,833663E+09	2,833547E+09	4,224563E+08	5,667211E+09	6,089667E+09
513	2,111908E+08	2,111905E+08	2,833621E+09	2,833740E+09	4,223813E+08	5,667361E+09	6,089742E+09
514	2,112244E+08	2,112194E+08	2,833789E+09	2,833708E+09	4,224438E+08	5,667497E+09	6,089941E+09
515	2,111853E+08	2,112025E+08	2,833833E+09	2,833753E+09	4,223878E+08	5,667586E+09	6,089974E+09
516	2,111881E+08	2,111729E+08	2,833755E+09	2,833872E+09	4,223610E+08	5,667627E+09	6,089988E+09
517	2,112165E+08	2,112175E+08	2,833815E+09	2,833730E+09	4,224341E+08	5,667546E+09	6,089980E+09
518	2,111762E+08	2,111905E+08	2,833711E+09	2,833763E+09	4,223667E+08	5,667474E+09	6,089841E+09
519	2,112124E+08	2,111960E+08	2,833660E+09	2,833721E+09	4,224084E+08	5,667381E+09	6,089789E+09
520	2,112242E+08	2,112322E+08	2,833685E+09	2,833501E+09	4,224564E+08	5,667186E+09	6,089642E+09
521	2,111958E+08	2,112020E+08	2,833469E+09	2,833547E+09	4,223978E+08	5,667016E+09	6,089414E+09
522	2,112473E+08	2,112352E+08	2,833431E+09	2,833416E+09	4,224826E+08	5,666847E+09	6,089330E+09
523	2,112304E+08	2,112529E+08	2,833394E+09	2,833286E+09	4,224832E+08	5,666680E+09	6,089163E+09
524	2,112303E+08	2,112265E+08	2,833227E+09	2,833351E+09	4,224569E+08	5,666578E+09	6,089035E+09
525	2,112735E+08	2,112726E+08	2,833280E+09	2,833185E+09	4,225461E+08	5,666465E+09	6,089011E+09
526	2,112380E+08	2,112543E+08	2,833239E+09	2,833211E+09	4,224922E+08	5,666450E+09	6,088942E+09
527	2,112602E+08	2,112352E+08	2,833189E+09	2,833302E+09	4,224954E+08	5,666490E+09	6,088986E+09
528	2,112743E+08	2,112732E+08	2,833301E+09	2,833176E+09	4,225475E+08	5,666477E+09	6,089024E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
529	2,112268E+08	2,112350E+08	2,833231E+09	2,833337E+09	4,224618E+08	5,666568E+09	6,089030E+09
530	2,112563E+08	2,112416E+08	2,833327E+09	2,833376E+09	4,224979E+08	5,666703E+09	6,089201E+09
531	2,112394E+08	2,112573E+08	2,833495E+09	2,833353E+09	4,224967E+08	5,666848E+09	6,089345E+09
532	2,112105E+08	2,112057E+08	2,833457E+09	2,833561E+09	4,224162E+08	5,667017E+09	6,089434E+09
533	2,112444E+08	2,112340E+08	2,833563E+09	2,833515E+09	4,224784E+08	5,667078E+09	6,089556E+09
534	2,112088E+08	2,112217E+08	2,833601E+09	2,833543E+09	4,224305E+08	5,667145E+09	6,089575E+09
535	2,112115E+08	2,111948E+08	2,833511E+09	2,833657E+09	4,224064E+08	5,667168E+09	6,089574E+09
536	2,112418E+08	2,112422E+08	2,833591E+09	2,833469E+09	4,224840E+08	5,667061E+09	6,089545E+09
537	2,111990E+08	2,112177E+08	2,833490E+09	2,833496E+09	4,224167E+08	5,666986E+09	6,089403E+09
538	2,112335E+08	2,112189E+08	2,833403E+09	2,833462E+09	4,224524E+08	5,666864E+09	6,089317E+09
539	2,112476E+08	2,112573E+08	2,833428E+09	2,833264E+09	4,225049E+08	5,666692E+09	6,089197E+09
540	2,112213E+08	2,112251E+08	2,833207E+09	2,833309E+09	4,224464E+08	5,666516E+09	6,088963E+09
541	2,112716E+08	2,112607E+08	2,833139E+09	2,833153E+09	4,225323E+08	5,666293E+09	6,088825E+09
542	2,112581E+08	2,112803E+08	2,833145E+09	2,833016E+09	4,225383E+08	5,666161E+09	6,088699E+09
543	2,112577E+08	2,112497E+08	2,832989E+09	2,833107E+09	4,225074E+08	5,666096E+09	6,088603E+09
544	2,113005E+08	2,112947E+08	2,833057E+09	2,832934E+09	4,225952E+08	5,665991E+09	6,088586E+09
545	2,112604E+08	2,112782E+08	2,833011E+09	2,832977E+09	4,225386E+08	5,665988E+09	6,088526E+09
546	2,112772E+08	2,112575E+08	2,832942E+09	2,833082E+09	4,225347E+08	5,666024E+09	6,088559E+09
547	2,112916E+08	2,112992E+08	2,833099E+09	2,832982E+09	4,225908E+08	5,666081E+09	6,088672E+09
548	2,112457E+08	2,112552E+08	2,833066E+09	2,833147E+09	4,225009E+08	5,666213E+09	6,088714E+09
549	2,112743E+08	2,112586E+08	2,833140E+09	2,833180E+09	4,225328E+08	5,666320E+09	6,088852E+09
550	2,112620E+08	2,112736E+08	2,833314E+09	2,833162E+09	4,225356E+08	5,666475E+09	6,089011E+09
551	2,112326E+08	2,112199E+08	2,833240E+09	2,833381E+09	4,224525E+08	5,666620E+09	6,089073E+09
552	2,112670E+08	2,112540E+08	2,833334E+09	2,833295E+09	4,225210E+08	5,666630E+09	6,089151E+09
553	2,112292E+08	2,112480E+08	2,833368E+09	2,833300E+09	4,224771E+08	5,666668E+09	6,089145E+09
554	2,112293E+08	2,112192E+08	2,833266E+09	2,833404E+09	4,224485E+08	5,666669E+09	6,089118E+09
555	2,112641E+08	2,112669E+08	2,833370E+09	2,833233E+09	4,225310E+08	5,666604E+09	6,089135E+09
556	2,112244E+08	2,112376E+08	2,833258E+09	2,833258E+09	4,224619E+08	5,666517E+09	6,088979E+09
557	2,112581E+08	2,112398E+08	2,833116E+09	2,833206E+09	4,224979E+08	5,666322E+09	6,088820E+09
558	2,112754E+08	2,112840E+08	2,833151E+09	2,833000E+09	4,225593E+08	5,666150E+09	6,088710E+09
559	2,112479E+08	2,112528E+08	2,832946E+09	2,833055E+09	4,225007E+08	5,666001E+09	6,088502E+09
560	2,112975E+08	2,112897E+08	2,832914E+09	2,832879E+09	4,225872E+08	5,665792E+09	6,088380E+09
561	2,112820E+08	2,113086E+08	2,832932E+09	2,832760E+09	4,225906E+08	5,665692E+09	6,088283E+09
562	2,112780E+08	2,112720E+08	2,832750E+09	2,832877E+09	4,225501E+08	5,665627E+09	6,088177E+09
563	2,113223E+08	2,113165E+08	2,832825E+09	2,832734E+09	4,226388E+08	5,665559E+09	6,088197E+09
564	2,112830E+08	2,112983E+08	2,832778E+09	2,832776E+09	4,225813E+08	5,665554E+09	6,088135E+09
565	2,112974E+08	2,112783E+08	2,832690E+09	2,832858E+09	4,225756E+08	5,665548E+09	6,088124E+09
566	2,113150E+08	2,113198E+08	2,832892E+09	2,832757E+09	4,226347E+08	5,665649E+09	6,088283E+09
567	2,112690E+08	2,112720E+08	2,832876E+09	2,832946E+09	4,225410E+08	5,665822E+09	6,088363E+09
568	2,112966E+08	2,112759E+08	2,832948E+09	2,832961E+09	4,225725E+08	5,665909E+09	6,088482E+09
569	2,112817E+08	2,112945E+08	2,833109E+09	2,832953E+09	4,225761E+08	5,666062E+09	6,088638E+09
570	2,112485E+08	2,112425E+08	2,833008E+09	2,833174E+09	4,224910E+08	5,666182E+09	6,088673E+09
571	2,112850E+08	2,112789E+08	2,833129E+09	2,833097E+09	4,225639E+08	5,666226E+09	6,088790E+09
572	2,112505E+08	2,112697E+08	2,833173E+09	2,833090E+09	4,225202E+08	5,666263E+09	6,088783E+09
573	2,112510E+08	2,112391E+08	2,833023E+09	2,833168E+09	4,224900E+08	5,666191E+09	6,088681E+09
574	2,112906E+08	2,112872E+08	2,833124E+09	2,832989E+09	4,225778E+08	5,666113E+09	6,088691E+09
575	2,112511E+08	2,112592E+08	2,832990E+09	2,833013E+09	4,225103E+08	5,666003E+09	6,088513E+09
576	2,112838E+08	2,112680E+08	2,832847E+09	2,832921E+09	4,225518E+08	5,665768E+09	6,088320E+09
577	2,112988E+08	2,113165E+08	2,832900E+09	2,832715E+09	4,226153E+08	5,665615E+09	6,088231E+09

1	14	15	16	17	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	2,112691E+08	2,112813E+08	2,832699E+09	2,832787E+09	4,225504E+08	5,665486E+09	6,088037E+09
579	2,113214E+08	2,113146E+08	2,832696E+09	2,832650E+09	4,226361E+08	5,665346E+09	6,087982E+09
580	2,113084E+08	2,113280E+08	2,832702E+09	2,832548E+09	4,226365E+08	5,665249E+09	6,087886E+09
581	2,113022E+08	2,112909E+08	2,832470E+09	2,832654E+09	4,225931E+08	5,665124E+09	6,087717E+09
582	2,113486E+08	2,113385E+08	2,832566E+09	2,832507E+09	4,226870E+08	5,665073E+09	6,087760E+09
583	2,113077E+08	2,113201E+08	2,832546E+09	2,832554E+09	4,226278E+08	5,665099E+09	6,087727E+09
584	2,113200E+08	2,113017E+08	2,832498E+09	2,832615E+09	4,226217E+08	5,665113E+09	6,087735E+09
585	2,113349E+08	2,113426E+08	2,832717E+09	2,832538E+09	4,226776E+08	5,665255E+09	6,087932E+09
586	2,112848E+08	2,112904E+08	2,832681E+09	2,832753E+09	4,225752E+08	5,665434E+09	6,088009E+09
587	2,113131E+08	2,112952E+08	2,832760E+09	2,832794E+09	4,226084E+08	5,665554E+09	6,088162E+09
588	2,113001E+08	2,113135E+08	2,832904E+09	2,832774E+09	4,226136E+08	5,665678E+09	6,088291E+09
589	2,112663E+08	2,112630E+08	2,832768E+09	2,832956E+09	4,225292E+08	5,665724E+09	6,088253E+09
590	2,113087E+08	2,112987E+08	2,832905E+09	2,832864E+09	4,226074E+08	5,665769E+09	6,088376E+09
591	2,112763E+08	2,112881E+08	2,832942E+09	2,832857E+09	4,225643E+08	5,665799E+09	6,088363E+09
592	2,112769E+08	2,112614E+08	2,832779E+09	2,832900E+09	4,225383E+08	5,665679E+09	6,088218E+09
593	2,113142E+08	2,113141E+08	2,832870E+09	2,832723E+09	4,226282E+08	5,665593E+09	6,088221E+09
594	2,112712E+08	2,112884E+08	2,832729E+09	2,832752E+09	4,225596E+08	5,665481E+09	6,088041E+09
595	2,113051E+08	2,112976E+08	2,832628E+09	2,832681E+09	4,226027E+08	5,665309E+09	6,087912E+09
596	2,113228E+08	2,113416E+08	2,832689E+09	2,832488E+09	4,226643E+08	5,665177E+09	6,087841E+09
597	2,112940E+08	2,113028E+08	2,832441E+09	2,832553E+09	4,225968E+08	5,664994E+09	6,087591E+09
598	2,113507E+08	2,113332E+08	2,832426E+09	2,832421E+09	4,226840E+08	5,664847E+09	6,087531E+09
599	2,113381E+08	2,113479E+08	2,832415E+09	2,832320E+09	4,226860E+08	5,664735E+09	6,087421E+09
600	2,113292E+08	2,113174E+08	2,832191E+09	2,832378E+09	4,226466E+08	5,664569E+09	6,087215E+09
601	2,113706E+08	2,113667E+08	2,832330E+09	2,832235E+09	4,227374E+08	5,664565E+09	6,087302E+09
602	2,113258E+08	2,113453E+08	2,832341E+09	2,832309E+09	4,226711E+08	5,664650E+09	6,087321E+09
603	2,113378E+08	2,113227E+08	2,832338E+09	2,832418E+09	4,226606E+08	5,664755E+09	6,087416E+09
604	2,113533E+08	2,113597E+08	2,832545E+09	2,832371E+09	4,227130E+08	5,664916E+09	6,087629E+09
605	2,113023E+08	2,113072E+08	2,832457E+09	2,832575E+09	4,226096E+08	5,665032E+09	6,087641E+09
606	2,113337E+08	2,113139E+08	2,832543E+09	2,832609E+09	4,226476E+08	5,665151E+09	6,087799E+09
607	2,113224E+08	2,113319E+08	2,832694E+09	2,832577E+09	4,226542E+08	5,665270E+09	6,087925E+09
608	2,112889E+08	2,112853E+08	2,832562E+09	2,832710E+09	4,225742E+08	5,665273E+09	6,087847E+09
609	2,113305E+08	2,113208E+08	2,832694E+09	2,832622E+09	4,226513E+08	5,665316E+09	6,087968E+09
610	2,112961E+08	2,113097E+08	2,832703E+09	2,832620E+09	4,226058E+08	5,665323E+09	6,087929E+09
611	2,112974E+08	2,112859E+08	2,832552E+09	2,832673E+09	4,225833E+08	5,665225E+09	6,087809E+09
612	2,113355E+08	2,113400E+08	2,832630E+09	2,832492E+09	4,226755E+08	5,665123E+09	6,087798E+09
613	2,112933E+08	2,113135E+08	2,832465E+09	2,832498E+09	4,226068E+08	5,664963E+09	6,087570E+09
614	2,113329E+08	2,113202E+08	2,832378E+09	2,832433E+09	4,226531E+08	5,664811E+09	6,087464E+09
615	2,113533E+08	2,113608E+08	2,832422E+09	2,832246E+09	4,227141E+08	5,664668E+09	6,087382E+09
616	2,113245E+08	2,113273E+08	2,832157E+09	2,832277E+09	4,226518E+08	5,664434E+09	6,087085E+09
617	2,113777E+08	2,113606E+08	2,832144E+09	2,832148E+09	4,227382E+08	5,664293E+09	6,087031E+09
618	2,113593E+08	2,113769E+08	2,832150E+09	2,832055E+09	4,227362E+08	5,664205E+09	6,086941E+09
619	2,113490E+08	2,113454E+08	2,832003E+09	2,832140E+09	4,226944E+08	5,664142E+09	6,086837E+09
620	2,113890E+08	2,113892E+08	2,832163E+09	2,832030E+09	4,227782E+08	5,664194E+09	6,086972E+09
621	2,113440E+08	2,113626E+08	2,832148E+09	2,832118E+09	4,227066E+08	5,664266E+09	6,086972E+09
622	2,113589E+08	2,113375E+08	2,832137E+09	2,832248E+09	4,226964E+08	5,664385E+09	6,087081E+09
623	2,113757E+08	2,113746E+08	2,832319E+09	2,832203E+09	4,227503E+08	5,664522E+09	6,087272E+09
624	2,113247E+08	2,113297E+08	2,832223E+09	2,832349E+09	4,226543E+08	5,664573E+09	6,087227E+09
625	2,113541E+08	2,113361E+08	2,832326E+09	2,832371E+09	4,226902E+08	5,664696E+09	6,087387E+09
626	2,113412E+08	2,113525E+08	2,832480E+09	2,832341E+09	4,226937E+08	5,664821E+09	6,087515E+09

1	14	15	16	17	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	2,113092E+08	2,113056E+08	2,832376E+09	2,832488E+09	4,226148E+08	5,664864E+09	6,087479E+09
628	2,113504E+08	2,113408E+08	2,832483E+09	2,832414E+09	4,226912E+08	5,664896E+09	6,087588E+09
629	2,113163E+08	2,113326E+08	2,832447E+09	2,832392E+09	4,226489E+08	5,664838E+09	6,087487E+09
630	2,113209E+08	2,113107E+08	2,832303E+09	2,832441E+09	4,226317E+08	5,664744E+09	6,087376E+09
631	2,113615E+08	2,113635E+08	2,832388E+09	2,832258E+09	4,227250E+08	5,664646E+09	6,087371E+09
632	2,113219E+08	2,113407E+08	2,832213E+09	2,832221E+09	4,226626E+08	5,664434E+09	6,087097E+09
633	2,113600E+08	2,113447E+08	2,832119E+09	2,832165E+09	4,227047E+08	5,664284E+09	6,086988E+09
634	2,113780E+08	2,113853E+08	2,832142E+09	2,831986E+09	4,227633E+08	5,664127E+09	6,086890E+09
635	2,113488E+08	2,113546E+08	2,831904E+09	2,832019E+09	4,227033E+08	5,663923E+09	6,086626E+09
636	2,113989E+08	2,113882E+08	2,831901E+09	2,831900E+09	4,227871E+08	5,663801E+09	6,086588E+09
637	2,113796E+08	2,114016E+08	2,831910E+09	2,831802E+09	4,227811E+08	5,663712E+09	6,086493E+09
638	2,113723E+08	2,113654E+08	2,831798E+09	2,831922E+09	4,227377E+08	5,663719E+09	6,086457E+09
639	2,114132E+08	2,114044E+08	2,831957E+09	2,831844E+09	4,228176E+08	5,663801E+09	6,086619E+09
640	2,113690E+08	2,113823E+08	2,831924E+09	2,831906E+09	4,227513E+08	5,663830E+09	6,086582E+09
641	2,113802E+08	2,113586E+08	2,831915E+09	2,832041E+09	4,227388E+08	5,663956E+09	6,086695E+09
642	2,113934E+08	2,113967E+08	2,832101E+09	2,831995E+09	4,227901E+08	5,664096E+09	6,086886E+09
643	2,113426E+08	2,113521E+08	2,832059E+09	2,832141E+09	4,226947E+08	5,664200E+09	6,086895E+09
644	2,113710E+08	2,113562E+08	2,832153E+09	2,832176E+09	4,227272E+08	5,664329E+09	6,087057E+09
645	2,113590E+08	2,113692E+08	2,832264E+09	2,832137E+09	4,227282E+08	5,664401E+09	6,087129E+09
646	2,113313E+08	2,113236E+08	2,832149E+09	2,832288E+09	4,226549E+08	5,664437E+09	6,087092E+09
647	2,113737E+08	2,113606E+08	2,832229E+09	2,832199E+09	4,227342E+08	5,664428E+09	6,087162E+09
648	2,113415E+08	2,113607E+08	2,832186E+09	2,832118E+09	4,227022E+08	5,664304E+09	6,087007E+09
649	2,113453E+08	2,113379E+08	2,832061E+09	2,832163E+09	4,226833E+08	5,664224E+09	6,086907E+09
650	2,113848E+08	2,113878E+08	2,832137E+09	2,831992E+09	4,227726E+08	5,664129E+09	6,086901E+09
651	2,113478E+08	2,113651E+08	2,831984E+09	2,831966E+09	4,227129E+08	5,663950E+09	6,086663E+09
652	2,113844E+08	2,113691E+08	2,831859E+09	2,831925E+09	4,227535E+08	5,663784E+09	6,086537E+09
653	2,114010E+08	2,114105E+08	2,831855E+09	2,831728E+09	4,228115E+08	5,663583E+09	6,086395E+09
654	2,113741E+08	2,113809E+08	2,831651E+09	2,831770E+09	4,227549E+08	5,663421E+09	6,086176E+09
655	2,114240E+08	2,114104E+08	2,831675E+09	2,831666E+09	4,228344E+08	5,663341E+09	6,086175E+09
656	2,114062E+08	2,114262E+08	2,831690E+09	2,831554E+09	4,228324E+08	5,663243E+09	6,086076E+09
657	2,113964E+08	2,113859E+08	2,831585E+09	2,831702E+09	4,227823E+08	5,663286E+09	6,086069E+09
658	2,114333E+08	2,114243E+08	2,831725E+09	2,831645E+09	4,228576E+08	5,663370E+09	6,086228E+09
659	2,113897E+08	2,114049E+08	2,831722E+09	2,831705E+09	4,227946E+08	5,663428E+09	6,086222E+09
660	2,113967E+08	2,113815E+08	2,831714E+09	2,831842E+09	4,227782E+08	5,663556E+09	6,086335E+09
661	2,114099E+08	2,114155E+08	2,831892E+09	2,831778E+09	4,228254E+08	5,663670E+09	6,086495E+09
662	2,113632E+08	2,113690E+08	2,831861E+09	2,831936E+09	4,227323E+08	5,663797E+09	6,086529E+09
663	2,113934E+08	2,113710E+08	2,831940E+09	2,831982E+09	4,227644E+08	5,663922E+09	6,086686E+09
664	2,113837E+08	2,113919E+08	2,832023E+09	2,831900E+09	4,227756E+08	5,663922E+09	6,086698E+09
665	2,113534E+08	2,113487E+08	2,831915E+09	2,832046E+09	4,227021E+08	5,663961E+09	6,086663E+09
666	2,113925E+08	2,113869E+08	2,832001E+09	2,831958E+09	4,227794E+08	5,663958E+09	6,086738E+09
667	2,113637E+08	2,113864E+08	2,831999E+09	2,831874E+09	4,227501E+08	5,663873E+09	6,086623E+09
668	2,113663E+08	2,113620E+08	2,831850E+09	2,831936E+09	4,227282E+08	5,663786E+09	6,086514E+09
669	2,114076E+08	2,114074E+08	2,831872E+09	2,831754E+09	4,228150E+08	5,663625E+09	6,086440E+09
670	2,113751E+08	2,113876E+08	2,831702E+09	2,831731E+09	4,227627E+08	5,663432E+09	6,086195E+09
671	2,114125E+08	2,113930E+08	2,831564E+09	2,831677E+09	4,228055E+08	5,663241E+09	6,086047E+09
672	2,114298E+08	2,114403E+08	2,831568E+09	2,831431E+09	4,228701E+08	5,662999E+09	6,085869E+09
673	2,114006E+08	2,114078E+08	2,831411E+09	2,831485E+09	4,228084E+08	5,662896E+09	6,085704E+09
674	2,114463E+08	2,114337E+08	2,831447E+09	2,831417E+09	4,228800E+08	5,662864E+09	6,085744E+09
675	2,114299E+08	2,114485E+08	2,831499E+09	2,831335E+09	4,228784E+08	5,662834E+09	6,085713E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
676	2,114157E+08	2,114093E+08	2,831376E+09	2,831512E+09	4,228250E+08	5,662888E+09	6,085713E+09
677	2,114504E+08	2,114451E+08	2,831492E+09	2,831447E+09	4,228955E+08	5,662939E+09	6,085834E+09
678	2,114103E+08	2,114259E+08	2,831517E+09	2,831516E+09	4,228362E+08	5,663033E+09	6,085869E+09
679	2,114178E+08	2,113982E+08	2,831516E+09	2,831650E+09	4,228160E+08	5,663166E+09	6,085982E+09
680	2,114329E+08	2,114342E+08	2,831681E+09	2,831553E+09	4,228671E+08	5,663234E+09	6,086101E+09
681	2,113852E+08	2,113871E+08	2,831657E+09	2,831716E+09	4,227723E+08	5,663373E+09	6,086145E+09
682	2,114115E+08	2,113912E+08	2,831711E+09	2,831767E+09	4,228027E+08	5,663478E+09	6,086281E+09
683	2,114042E+08	2,114170E+08	2,831822E+09	2,831673E+09	4,228212E+08	5,663495E+09	6,086316E+09
684	2,113710E+08	2,113754E+08	2,831707E+09	2,831820E+09	4,227464E+08	5,663526E+09	6,086273E+09
685	2,114113E+08	2,114077E+08	2,831769E+09	2,831718E+09	4,228190E+08	5,663487E+09	6,086306E+09
686	2,113892E+08	2,114066E+08	2,831759E+09	2,831650E+09	4,227959E+08	5,663408E+09	6,086204E+09
687	2,113947E+08	2,113809E+08	2,831577E+09	2,831709E+09	4,227755E+08	5,663286E+09	6,086062E+09
688	2,114381E+08	2,114334E+08	2,831566E+09	2,831476E+09	4,228714E+08	5,663042E+09	6,085914E+09
689	2,114036E+08	2,114173E+08	2,831419E+09	2,831438E+09	4,228209E+08	5,662857E+09	6,085678E+09
690	2,114358E+08	2,114233E+08	2,831306E+09	2,831394E+09	4,228591E+08	5,662700E+09	6,085560E+09
691	2,114545E+08	2,114692E+08	2,831371E+09	2,831164E+09	4,229237E+08	5,662535E+09	6,085458E+09
692	2,114211E+08	2,114338E+08	2,831213E+09	2,831262E+09	4,228549E+08	5,662475E+09	6,085330E+09
693	2,114653E+08	2,114530E+08	2,831218E+09	2,831210E+09	4,229184E+08	5,662428E+09	6,085346E+09
694	2,114534E+08	2,114686E+08	2,831258E+09	2,831149E+09	4,229220E+08	5,662408E+09	6,085330E+09
695	2,114392E+08	2,114290E+08	2,831132E+09	2,831319E+09	4,228683E+08	5,662451E+09	6,085319E+09
696	2,114748E+08	2,114672E+08	2,831248E+09	2,831205E+09	4,229419E+08	5,662454E+09	6,085395E+09
697	2,114333E+08	2,114450E+08	2,831309E+09	2,831274E+09	4,228783E+08	5,662583E+09	6,085461E+09
698	2,114370E+08	2,114162E+08	2,831311E+09	2,831432E+09	4,228532E+08	5,662743E+09	6,085596E+09
699	2,114540E+08	2,114533E+08	2,831501E+09	2,831344E+09	4,229072E+08	5,662845E+09	6,085753E+09
700	2,114018E+08	2,114107E+08	2,831465E+09	2,831522E+09	4,228125E+08	5,662986E+09	6,085799E+09
701	2,114259E+08	2,114134E+08	2,831497E+09	2,831560E+09	4,228392E+08	5,663058E+09	6,085897E+09
702	2,114242E+08	2,114395E+08	2,831621E+09	2,831477E+09	4,228637E+08	5,663098E+09	6,085961E+09
703	2,113943E+08	2,113950E+08	2,831493E+09	2,831617E+09	4,227892E+08	5,663111E+09	6,085900E+09
704	2,114386E+08	2,114280E+08	2,831511E+09	2,831474E+09	4,228666E+08	5,662985E+09	6,085851E+09
705	2,114177E+08	2,114282E+08	2,831489E+09	2,831392E+09	4,228458E+08	5,662881E+09	6,085727E+09
706	2,114199E+08	2,114073E+08	2,831283E+09	2,831441E+09	4,228272E+08	5,662724E+09	6,085551E+09
707	2,114641E+08	2,114637E+08	2,831312E+09	2,831188E+09	4,229278E+08	5,662499E+09	6,085427E+09
708	2,114249E+08	2,114498E+08	2,831185E+09	2,831159E+09	4,228747E+08	5,662344E+09	6,085218E+09
709	2,114553E+08	2,114475E+08	2,831068E+09	2,831126E+09	4,229028E+08	5,662194E+09	6,085097E+09
710	2,114793E+08	2,114911E+08	2,831140E+09	2,830948E+09	4,229704E+08	5,662088E+09	6,085059E+09
711	2,114483E+08	2,114529E+08	2,830965E+09	2,831063E+09	4,229012E+08	5,662028E+09	6,084929E+09
712	2,114927E+08	2,114750E+08	2,830944E+09	2,830979E+09	4,229677E+08	5,661923E+09	6,084891E+09
713	2,114797E+08	2,114917E+08	2,831015E+09	2,830914E+09	4,229714E+08	5,661929E+09	6,084901E+09
714	2,114603E+08	2,114517E+08	2,830909E+09	2,831088E+09	4,229120E+08	5,661997E+09	6,084909E+09
715	2,114962E+08	2,114879E+08	2,831075E+09	2,830979E+09	4,229841E+08	5,662054E+09	6,085038E+09
716	2,114500E+08	2,114663E+08	2,831133E+09	2,831074E+09	4,229163E+08	5,662208E+09	6,085124E+09
717	2,114512E+08	2,114332E+08	2,831108E+09	2,831237E+09	4,228843E+08	5,662345E+09	6,085229E+09
718	2,114725E+08	2,114740E+08	2,831289E+09	2,831172E+09	4,229465E+08	5,662461E+09	6,085408E+09
719	2,114228E+08	2,114318E+08	2,831248E+09	2,831333E+09	4,228546E+08	5,662582E+09	6,085436E+09
720	2,114484E+08	2,114352E+08	2,831265E+09	2,831322E+09	4,228836E+08	5,662587E+09	6,085470E+09
721	2,114491E+08	2,114589E+08	2,831398E+09	2,831229E+09	4,229080E+08	5,662627E+09	6,085535E+09
722	2,114176E+08	2,114162E+08	2,831246E+09	2,831375E+09	4,228338E+08	5,662621E+09	6,085455E+09
723	2,114650E+08	2,114514E+08	2,831269E+09	2,831219E+09	4,229164E+08	5,662488E+09	6,085405E+09
724	2,114395E+08	2,114583E+08	2,831233E+09	2,831136E+09	4,228978E+08	5,662369E+09	6,085267E+09

1	14	15	16	17	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	2,114395E+08	2,114354E+08	2,831025E+09	2,831170E+09	4,228749E+08	5,662194E+09	6,085069E+09
726	2,114876E+08	2,114907E+08	2,831075E+09	2,830942E+09	4,229784E+08	5,662017E+09	6,084995E+09
727	2,114512E+08	2,114723E+08	2,830956E+09	2,830928E+09	4,229236E+08	5,661884E+09	6,084808E+09
728	2,114830E+08	2,114686E+08	2,830809E+09	2,830882E+09	4,229516E+08	5,661690E+09	6,084642E+09
729	2,115077E+08	2,115114E+08	2,830876E+09	2,830712E+09	4,230191E+08	5,661588E+09	6,084607E+09
730	2,114739E+08	2,114777E+08	2,830689E+09	2,830831E+09	4,229516E+08	5,661520E+09	6,084472E+09
731	2,115179E+08	2,115004E+08	2,830710E+09	2,830728E+09	4,230183E+08	5,661438E+09	6,084456E+09
732	2,114988E+08	2,115182E+08	2,830807E+09	2,830672E+09	4,230171E+08	5,661479E+09	6,084496E+09
733	2,114762E+08	2,114709E+08	2,830705E+09	2,830855E+09	4,229471E+08	5,661560E+09	6,084507E+09
734	2,115151E+08	2,115056E+08	2,830880E+09	2,830797E+09	4,230207E+08	5,661678E+09	6,084698E+09
735	2,114709E+08	2,114838E+08	2,830934E+09	2,830904E+09	4,229547E+08	5,661838E+09	6,084793E+09
736	2,114720E+08	2,114542E+08	2,830883E+09	2,831033E+09	4,229261E+08	5,661916E+09	6,084842E+09
737	2,114937E+08	2,114956E+08	2,831087E+09	2,830959E+09	4,229893E+08	5,662046E+09	6,085035E+09
738	2,114429E+08	2,114541E+08	2,831047E+09	2,831118E+09	4,228969E+08	5,662166E+09	6,085063E+09
739	2,114707E+08	2,114550E+08	2,831080E+09	2,831095E+09	4,229257E+08	5,662175E+09	6,085100E+09
740	2,114688E+08	2,114809E+08	2,831186E+09	2,831008E+09	4,229497E+08	5,662194E+09	6,085144E+09
741	2,114364E+08	2,114366E+08	2,830986E+09	2,831133E+09	4,228731E+08	5,662119E+09	6,084992E+09
742	2,114884E+08	2,114765E+08	2,830997E+09	2,830990E+09	4,229649E+08	5,661987E+09	6,084952E+09
743	2,114656E+08	2,114849E+08	2,830968E+09	2,830882E+09	4,229505E+08	5,661850E+09	6,084801E+09
744	2,114664E+08	2,114605E+08	2,830754E+09	2,830879E+09	4,229269E+08	5,661633E+09	6,084560E+09
745	2,115158E+08	2,115130E+08	2,830823E+09	2,830667E+09	4,230288E+08	5,661490E+09	6,084519E+09
746	2,114791E+08	2,114956E+08	2,830690E+09	2,830678E+09	4,229747E+08	5,661368E+09	6,084343E+09
747	2,115113E+08	2,114933E+08	2,830559E+09	2,830630E+09	4,230047E+08	5,661189E+09	6,084194E+09
748	2,115299E+08	2,115416E+08	2,830627E+09	2,830470E+09	4,230716E+08	5,661097E+09	6,084169E+09
749	2,114924E+08	2,115044E+08	2,830451E+09	2,830582E+09	4,229969E+08	5,661032E+09	6,084029E+09
750	2,115383E+08	2,115243E+08	2,830501E+09	2,830518E+09	4,230625E+08	5,661019E+09	6,084081E+09
751	2,115209E+08	2,115371E+08	2,830612E+09	2,830477E+09	4,230580E+08	5,661088E+09	6,084146E+09
752	2,114979E+08	2,114875E+08	2,830491E+09	2,830645E+09	4,229854E+08	5,661136E+09	6,084121E+09
753	2,115368E+08	2,115224E+08	2,830668E+09	2,830597E+09	4,230592E+08	5,661265E+09	6,084324E+09
754	2,114914E+08	2,115058E+08	2,830717E+09	2,830706E+09	4,229972E+08	5,661423E+09	6,084420E+09
755	2,114926E+08	2,114772E+08	2,830698E+09	2,830810E+09	4,229698E+08	5,661508E+09	6,084478E+09
756	2,115102E+08	2,115184E+08	2,830901E+09	2,830740E+09	4,230285E+08	5,661641E+09	6,084670E+09
757	2,114595E+08	2,114718E+08	2,830838E+09	2,830895E+09	4,229313E+08	5,661733E+09	6,084664E+09
758	2,114924E+08	2,114726E+08	2,830845E+09	2,830901E+09	4,229650E+08	5,661745E+09	6,084710E+09
759	2,114937E+08	2,115004E+08	2,830931E+09	2,830798E+09	4,229942E+08	5,661730E+09	6,084724E+09
760	2,114621E+08	2,114614E+08	2,830710E+09	2,830872E+09	4,229235E+08	5,661581E+09	6,084505E+09
761	2,115142E+08	2,115019E+08	2,830744E+09	2,830715E+09	4,230160E+08	5,661459E+09	6,084475E+09
762	2,114912E+08	2,115122E+08	2,830726E+09	2,830615E+09	4,230035E+08	5,661341E+09	6,084344E+09
763	2,114931E+08	2,114860E+08	2,830531E+09	2,830610E+09	4,229791E+08	5,661142E+09	6,084121E+09
764	2,115377E+08	2,115397E+08	2,830584E+09	2,830422E+09	4,230774E+08	5,661006E+09	6,084083E+09
765	2,115005E+08	2,115208E+08	2,830421E+09	2,830431E+09	4,230213E+08	5,660852E+09	6,083873E+09
766	2,115352E+08	2,115203E+08	2,830292E+09	2,830409E+09	4,230555E+08	5,660701E+09	6,083757E+09
767	2,115548E+08	2,115664E+08	2,830382E+09	2,830236E+09	4,231213E+08	5,660618E+09	6,083739E+09
768	2,115173E+08	2,115258E+08	2,830207E+09	2,830319E+09	4,230431E+08	5,660526E+09	6,083569E+09
769	2,115626E+08	2,115416E+08	2,830280E+09	2,830279E+09	4,231042E+08	5,660560E+09	6,083664E+09
770	2,115445E+08	2,115564E+08	2,830390E+09	2,830268E+09	4,231010E+08	5,660658E+09	6,083759E+09
771	2,115207E+08	2,115087E+08	2,830294E+09	2,830434E+09	4,230294E+08	5,660728E+09	6,083757E+09
772	2,115529E+08	2,115481E+08	2,830480E+09	2,830399E+09	4,231010E+08	5,660879E+09	6,083980E+09
773	2,115065E+08	2,115272E+08	2,830528E+09	2,830498E+09	4,230337E+08	5,661026E+09	6,084059E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
774	2,115103E+08	2,114963E+08	2,830515E+09	2,830635E+09	4,230066E+08	5,661150E+09	6,084157E+09
775	2,115315E+08	2,115337E+08	2,830702E+09	2,830560E+09	4,230652E+08	5,661262E+09	6,084327E+09
776	2,114825E+08	2,114876E+08	2,830588E+09	2,830672E+09	4,229701E+08	5,661260E+09	6,084230E+09
777	2,115174E+08	2,114922E+08	2,830580E+09	2,830664E+09	4,230096E+08	5,661244E+09	6,084253E+09
778	2,115192E+08	2,115274E+08	2,830658E+09	2,830542E+09	4,230465E+08	5,661200E+09	6,084247E+09
779	2,114877E+08	2,114905E+08	2,830478E+09	2,830578E+09	4,229782E+08	5,661056E+09	6,084034E+09
780	2,115339E+08	2,115311E+08	2,830523E+09	2,830435E+09	4,230650E+08	5,660958E+09	6,084023E+09
781	2,115115E+08	2,115367E+08	2,830489E+09	2,830349E+09	4,230482E+08	5,660838E+09	6,083886E+09
782	2,115170E+08	2,115105E+08	2,830281E+09	2,830395E+09	4,230274E+08	5,660676E+09	6,083703E+09
783	2,115642E+08	2,115639E+08	2,830320E+09	2,830205E+09	4,231281E+08	5,660525E+09	6,083653E+09
784	2,115280E+08	2,115466E+08	2,830141E+09	2,830174E+09	4,230746E+08	5,660315E+09	6,083390E+09
785	2,115627E+08	2,115440E+08	2,830039E+09	2,830151E+09	4,231067E+08	5,660190E+09	6,083296E+09
786	2,115812E+08	2,115893E+08	2,830146E+09	2,829993E+09	4,231705E+08	5,660139E+09	6,083309E+09
787	2,115430E+08	2,115472E+08	2,830004E+09	2,830073E+09	4,230902E+08	5,660077E+09	6,083168E+09
788	2,115806E+08	2,115635E+08	2,830074E+09	2,830062E+09	4,231441E+08	5,660136E+09	6,083280E+09
789	2,115617E+08	2,115780E+08	2,830172E+09	2,830062E+09	4,231398E+08	5,660233E+09	6,083373E+09
790	2,115392E+08	2,115323E+08	2,830088E+09	2,830258E+09	4,230714E+08	5,660346E+09	6,083418E+09
791	2,115720E+08	2,115677E+08	2,830288E+09	2,830214E+09	4,231397E+08	5,660502E+09	6,083642E+09
792	2,115278E+08	2,115429E+08	2,830318E+09	2,830281E+09	4,230707E+08	5,660599E+09	6,083670E+09
793	2,115332E+08	2,115101E+08	2,830293E+09	2,830422E+09	4,230433E+08	5,660715E+09	6,083759E+09
794	2,115557E+08	2,115514E+08	2,830457E+09	2,830347E+09	4,231071E+08	5,660804E+09	6,083911E+09
795	2,115072E+08	2,115125E+08	2,830355E+09	2,830419E+09	4,230198E+08	5,660774E+09	6,083794E+09
796	2,115353E+08	2,115229E+08	2,830357E+09	2,830406E+09	4,230582E+08	5,660764E+09	6,083822E+09
797	2,115372E+08	2,115555E+08	2,830441E+09	2,830279E+09	4,230927E+08	5,660721E+09	6,083813E+09
798	2,115086E+08	2,115162E+08	2,830272E+09	2,830356E+09	4,230249E+08	5,660628E+09	6,083653E+09
799	2,115569E+08	2,115519E+08	2,830301E+09	2,830222E+09	4,231088E+08	5,660523E+09	6,083632E+09
800	2,115384E+08	2,115561E+08	2,830213E+09	2,830108E+09	4,230945E+08	5,660321E+09	6,083416E+09
801	2,115461E+08	2,115334E+08	2,829986E+09	2,830148E+09	4,230794E+08	5,660135E+09	6,083214E+09
802	2,115942E+08	2,115909E+08	2,830024E+09	2,829944E+09	4,231850E+08	5,659967E+09	6,083152E+09
803	2,115578E+08	2,115746E+08	2,829884E+09	2,829875E+09	4,231324E+08	5,659759E+09	6,082892E+09
804	2,115854E+08	2,115709E+08	2,829805E+09	2,829873E+09	4,231563E+08	5,659677E+09	6,082834E+09
805	2,116022E+08	2,116110E+08	2,829909E+09	2,829740E+09	4,232133E+08	5,659648E+09	6,082862E+09
806	2,115643E+08	2,115695E+08	2,829787E+09	2,829880E+09	4,231338E+08	5,659666E+09	6,082800E+09
807	2,116004E+08	2,115860E+08	2,829868E+09	2,829882E+09	4,231864E+08	5,659750E+09	6,082936E+09
808	2,115824E+08	2,115990E+08	2,829958E+09	2,829857E+09	4,231814E+08	5,659815E+09	6,082996E+09
809	2,115605E+08	2,115515E+08	2,829895E+09	2,830058E+09	4,231120E+08	5,659953E+09	6,083065E+09
810	2,115941E+08	2,115849E+08	2,830087E+09	2,830020E+09	4,231790E+08	5,660107E+09	6,083286E+09
811	2,115512E+08	2,115608E+08	2,830120E+09	2,830058E+09	4,231120E+08	5,660178E+09	6,083290E+09
812	2,115506E+08	2,115318E+08	2,830075E+09	2,830201E+09	4,230824E+08	5,660276E+09	6,083358E+09
813	2,115732E+08	2,115748E+08	2,830218E+09	2,830114E+09	4,231480E+08	5,660332E+09	6,083480E+09
814	2,115266E+08	2,115401E+08	2,830139E+09	2,830200E+09	4,230666E+08	5,660338E+09	6,083405E+09
815	2,115551E+08	2,115470E+08	2,830153E+09	2,830176E+09	4,231021E+08	5,660329E+09	6,083431E+09
816	2,115607E+08	2,115749E+08	2,830207E+09	2,830030E+09	4,231356E+08	5,660237E+09	6,083373E+09
817	2,115359E+08	2,115351E+08	2,830016E+09	2,830121E+09	4,230710E+08	5,660138E+09	6,083209E+09
818	2,115864E+08	2,115731E+08	2,830016E+09	2,829991E+09	4,231595E+08	5,660007E+09	6,083166E+09
819	2,115698E+08	2,115843E+08	2,829934E+09	2,829834E+09	4,231541E+08	5,659768E+09	6,082922E+09
820	2,115707E+08	2,115653E+08	2,829718E+09	2,829865E+09	4,231360E+08	5,659582E+09	6,082718E+09
821	2,116171E+08	2,116186E+08	2,829770E+09	2,829661E+09	4,232357E+08	5,659431E+09	6,082667E+09
822	2,115813E+08	2,116012E+08	2,829662E+09	2,829636E+09	4,231825E+08	5,659298E+09	6,082480E+09

1	14	15	16	17	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	2,116066E+08	2,115921E+08	2,829589E+09	2,829656E+09	4,231987E+08	5,659245E+09	6,082444E+09
824	2,116248E+08	2,116298E+08	2,829666E+09	2,829523E+09	4,232546E+08	5,659189E+09	6,082444E+09
825	2,115882E+08	2,115908E+08	2,829549E+09	2,829675E+09	4,231790E+08	5,659224E+09	6,082403E+09
826	2,116235E+08	2,116081E+08	2,829644E+09	2,829678E+09	4,232316E+08	5,659322E+09	6,082553E+09
827	2,116064E+08	2,116207E+08	2,829762E+09	2,829620E+09	4,232270E+08	5,659382E+09	6,082609E+09
828	2,115782E+08	2,115721E+08	2,829703E+09	2,829833E+09	4,231503E+08	5,659536E+09	6,082686E+09
829	2,116116E+08	2,116014E+08	2,829871E+09	2,829808E+09	4,232130E+08	5,659680E+09	6,082893E+09
830	2,115705E+08	2,115813E+08	2,829910E+09	2,829873E+09	4,231518E+08	5,659783E+09	6,082935E+09
831	2,115688E+08	2,115548E+08	2,829869E+09	2,830005E+09	4,231236E+08	5,659874E+09	6,082998E+09
832	2,115937E+08	2,115963E+08	2,829995E+09	2,829886E+09	4,231900E+08	5,659882E+09	6,083072E+09
833	2,115500E+08	2,115616E+08	2,829927E+09	2,829974E+09	4,231116E+08	5,659901E+09	6,083013E+09
834	2,115801E+08	2,115671E+08	2,829926E+09	2,829956E+09	4,231472E+08	5,659882E+09	6,083029E+09
835	2,115885E+08	2,115964E+08	2,829959E+09	2,829777E+09	4,231848E+08	5,659736E+09	6,082921E+09
836	2,115600E+08	2,115620E+08	2,829743E+09	2,829864E+09	4,231220E+08	5,659607E+09	6,082729E+09
837	2,116111E+08	2,116010E+08	2,829717E+09	2,829717E+09	4,232121E+08	5,659434E+09	6,082646E+09
838	2,115952E+08	2,116156E+08	2,829669E+09	2,829568E+09	4,232108E+08	5,659237E+09	6,082448E+09
839	2,115945E+08	2,115930E+08	2,829480E+09	2,829595E+09	4,231875E+08	5,659076E+09	6,082263E+09
840	2,116415E+08	2,116389E+08	2,829514E+09	2,829391E+09	4,232804E+08	5,658905E+09	6,082186E+09
841	2,116076E+08	2,116218E+08	2,829413E+09	2,829399E+09	4,232293E+08	5,658812E+09	6,082042E+09
842	2,116324E+08	2,116139E+08	2,829341E+09	2,829442E+09	4,232462E+08	5,658783E+09	6,082030E+09
843	2,116506E+08	2,116560E+08	2,829439E+09	2,829288E+09	4,233066E+08	5,658728E+09	6,082034E+09
844	2,116083E+08	2,116180E+08	2,829349E+09	2,829450E+09	4,232263E+08	5,658799E+09	6,082026E+09
845	2,116416E+08	2,116285E+08	2,829449E+09	2,829465E+09	4,232701E+08	5,658914E+09	6,082184E+09
846	2,116255E+08	2,116391E+08	2,829585E+09	2,829443E+09	4,232646E+08	5,659028E+09	6,082293E+09
847	2,115954E+08	2,115882E+08	2,829512E+09	2,829657E+09	4,231836E+08	5,659170E+09	6,082353E+09
848	2,116306E+08	2,116160E+08	2,829635E+09	2,829612E+09	4,232466E+08	5,659246E+09	6,082493E+09
849	2,115926E+08	2,116026E+08	2,829673E+09	2,829667E+09	4,231952E+08	5,659340E+09	6,082536E+09
850	2,115916E+08	2,115773E+08	2,829645E+09	2,829783E+09	4,231689E+08	5,659428E+09	6,082597E+09
851	2,116186E+08	2,116196E+08	2,829785E+09	2,829626E+09	4,232382E+08	5,659411E+09	6,082649E+09
852	2,115719E+08	2,115848E+08	2,829705E+09	2,829720E+09	4,231568E+08	5,659425E+09	6,082582E+09
853	2,116016E+08	2,115878E+08	2,829670E+09	2,829714E+09	4,231895E+08	5,659383E+09	6,082573E+09
854	2,116123E+08	2,116225E+08	2,829707E+09	2,829550E+09	4,232348E+08	5,659257E+09	6,082492E+09
855	2,115825E+08	2,115914E+08	2,829491E+09	2,829619E+09	4,231739E+08	5,659110E+09	6,082284E+09
856	2,116356E+08	2,116259E+08	2,829450E+09	2,829448E+09	4,232615E+08	5,658898E+09	6,082159E+09
857	2,116226E+08	2,116406E+08	2,829415E+09	2,829306E+09	4,232632E+08	5,658721E+09	6,081984E+09
858	2,116223E+08	2,116148E+08	2,829233E+09	2,829346E+09	4,232371E+08	5,658579E+09	6,081816E+09
859	2,116693E+08	2,116613E+08	2,829263E+09	2,829129E+09	4,233306E+08	5,658391E+09	6,081722E+09
860	2,116313E+08	2,116481E+08	2,829164E+09	2,829154E+09	4,232794E+08	5,658318E+09	6,081598E+09
861	2,116535E+08	2,116399E+08	2,829093E+09	2,829209E+09	4,232934E+08	5,658302E+09	6,081596E+09
862	2,116719E+08	2,116820E+08	2,829236E+09	2,829078E+09	4,233538E+08	5,658314E+09	6,081668E+09
863	2,116275E+08	2,116396E+08	2,829164E+09	2,829245E+09	4,232671E+08	5,658409E+09	6,081676E+09
864	2,116617E+08	2,116411E+08	2,829228E+09	2,829259E+09	4,233028E+08	5,658487E+09	6,081790E+09
865	2,116481E+08	2,116540E+08	2,829355E+09	2,829255E+09	4,233021E+08	5,658609E+09	6,081912E+09
866	2,116184E+08	2,116070E+08	2,829284E+09	2,829462E+09	4,232254E+08	5,658746E+09	6,081972E+09
867	2,116532E+08	2,116401E+08	2,829414E+09	2,829375E+09	4,232933E+08	5,658789E+09	6,082082E+09
868	2,116119E+08	2,116296E+08	2,829482E+09	2,829427E+09	4,232416E+08	5,658909E+09	6,082150E+09
869	2,116095E+08	2,116002E+08	2,829449E+09	2,829551E+09	4,232097E+08	5,658999E+09	6,082209E+09
870	2,116376E+08	2,116408E+08	2,829595E+09	2,829422E+09	4,232784E+08	5,659018E+09	6,082296E+09
871	2,115913E+08	2,116062E+08	2,829490E+09	2,829514E+09	4,231975E+08	5,659004E+09	6,082202E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
872	2,116240E+08	2,116064E+08	2,829391E+09	2,829483E+09	4,232305E+08	5,658873E+09	6,082104E+09
873	2,116391E+08	2,116477E+08	2,829421E+09	2,829305E+09	4,232868E+08	5,658726E+09	6,082013E+09
874	2,116112E+08	2,116175E+08	2,829221E+09	2,829346E+09	4,232287E+08	5,658568E+09	6,081797E+09
875	2,116650E+08	2,116514E+08	2,829186E+09	2,829143E+09	4,233164E+08	5,658330E+09	6,081646E+09
876	2,116489E+08	2,116667E+08	2,829160E+09	2,829019E+09	4,233156E+08	5,658179E+09	6,081495E+09
877	2,116464E+08	2,116388E+08	2,828968E+09	2,829089E+09	4,232852E+08	5,658057E+09	6,081342E+09
878	2,116922E+08	2,116886E+08	2,829030E+09	2,828907E+09	4,233808E+08	5,657938E+09	6,081319E+09
879	2,116524E+08	2,116768E+08	2,828954E+09	2,828940E+09	4,233291E+08	5,657894E+09	6,081223E+09
880	2,116742E+08	2,116604E+08	2,828873E+09	2,828993E+09	4,233346E+08	5,657866E+09	6,081200E+09
881	2,116951E+08	2,117013E+08	2,829022E+09	2,828883E+09	4,233964E+08	5,657905E+09	6,081301E+09
882	2,116515E+08	2,116552E+08	2,828948E+09	2,829050E+09	4,233066E+08	5,657999E+09	6,081305E+09
883	2,116855E+08	2,116583E+08	2,828994E+09	2,829038E+09	4,233438E+08	5,658031E+09	6,081375E+09
884	2,116689E+08	2,116768E+08	2,829123E+09	2,829026E+09	4,233457E+08	5,658149E+09	6,081494E+09
885	2,116363E+08	2,116314E+08	2,829065E+09	2,829232E+09	4,232676E+08	5,658297E+09	6,081564E+09
886	2,116702E+08	2,116648E+08	2,829245E+09	2,829158E+09	4,233350E+08	5,658404E+09	6,081739E+09
887	2,116286E+08	2,116514E+08	2,829318E+09	2,829216E+09	4,232799E+08	5,658533E+09	6,081813E+09
888	2,116280E+08	2,116142E+08	2,829229E+09	2,829343E+09	4,232422E+08	5,658572E+09	6,081814E+09
889	2,116612E+08	2,116583E+08	2,829341E+09	2,829225E+09	4,233195E+08	5,658566E+09	6,081885E+09
890	2,116184E+08	2,116283E+08	2,829224E+09	2,829290E+09	4,232468E+08	5,658514E+09	6,081761E+09
891	2,116526E+08	2,116334E+08	2,829115E+09	2,829207E+09	4,232860E+08	5,658321E+09	6,081607E+09
892	2,116658E+08	2,116767E+08	2,829168E+09	2,829014E+09	4,233426E+08	5,658181E+09	6,081524E+09
893	2,116360E+08	2,116443E+08	2,828971E+09	2,829063E+09	4,232803E+08	5,658034E+09	6,081314E+09
894	2,116882E+08	2,116767E+08	2,828958E+09	2,828889E+09	4,233649E+08	5,657848E+09	6,081213E+09
895	2,116707E+08	2,116934E+08	2,828926E+09	2,828782E+09	4,233641E+08	5,657708E+09	6,081072E+09
896	2,116688E+08	2,116622E+08	2,828697E+09	2,828854E+09	4,233310E+08	5,657551E+09	6,080882E+09
897	2,117169E+08	2,117151E+08	2,828770E+09	2,828688E+09	4,234320E+08	5,657458E+09	6,080890E+09
898	2,116801E+08	2,117001E+08	2,828723E+09	2,828711E+09	4,233801E+08	5,657434E+09	6,080814E+09
899	2,117011E+08	2,116801E+08	2,828635E+09	2,828739E+09	4,233812E+08	5,657374E+09	6,080755E+09
900	2,117188E+08	2,117203E+08	2,828791E+09	2,828643E+09	4,234391E+08	5,657434E+09	6,080873E+09
901	2,116722E+08	2,116754E+08	2,828714E+09	2,828825E+09	4,233475E+08	5,657539E+09	6,080887E+09
902	2,117030E+08	2,116821E+08	2,828800E+09	2,828833E+09	4,233851E+08	5,657633E+09	6,081018E+09
903	2,116846E+08	2,117032E+08	2,828960E+09	2,828827E+09	4,233878E+08	5,657787E+09	6,081174E+09
904	2,116523E+08	2,116496E+08	2,828886E+09	2,829033E+09	4,233019E+08	5,657919E+09	6,081221E+09
905	2,116892E+08	2,116822E+08	2,829057E+09	2,828984E+09	4,233714E+08	5,658041E+09	6,081412E+09
906	2,116523E+08	2,116660E+08	2,829109E+09	2,829032E+09	4,233183E+08	5,658141E+09	6,081459E+09
907	2,116530E+08	2,116323E+08	2,828969E+09	2,829115E+09	4,232853E+08	5,658085E+09	6,081370E+09
908	2,116863E+08	2,116827E+08	2,829068E+09	2,828972E+09	4,233690E+08	5,658039E+09	6,081408E+09
909	2,116428E+08	2,116570E+08	2,828953E+09	2,829013E+09	4,232999E+08	5,657966E+09	6,081265E+09
910	2,116761E+08	2,116623E+08	2,828888E+09	2,828928E+09	4,233384E+08	5,657815E+09	6,081154E+09
911	2,116881E+08	2,117044E+08	2,828946E+09	2,828742E+09	4,233925E+08	5,657688E+09	6,081081E+09
912	2,116585E+08	2,116649E+08	2,828712E+09	2,828806E+09	4,233234E+08	5,657518E+09	6,080842E+09
913	2,117125E+08	2,117012E+08	2,828688E+09	2,828665E+09	4,234137E+08	5,657353E+09	6,080767E+09
914	2,116988E+08	2,117191E+08	2,828666E+09	2,828552E+09	4,234179E+08	5,657217E+09	6,080635E+09
915	2,116971E+08	2,116897E+08	2,828438E+09	2,828595E+09	4,233868E+08	5,657033E+09	6,080420E+09
916	2,117436E+08	2,117406E+08	2,828535E+09	2,828428E+09	4,234842E+08	5,656963E+09	6,080447E+09
917	2,117045E+08	2,117220E+08	2,828491E+09	2,828469E+09	4,234265E+08	5,656960E+09	6,080386E+09
918	2,117223E+08	2,116999E+08	2,828429E+09	2,828522E+09	4,234222E+08	5,656951E+09	6,080373E+09
919	2,117368E+08	2,117415E+08	2,828581E+09	2,828438E+09	4,234783E+08	5,657019E+09	6,080497E+09
920	2,116892E+08	2,116948E+08	2,828487E+09	2,828618E+09	4,233841E+08	5,657105E+09	6,080489E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
921	2,117210E+08	2,117051E+08	2,828593E+09	2,828642E+09	4,234262E+08	5,657234E+09	6,080661E+09
922	2,117072E+08	2,117222E+08	2,828778E+09	2,828629E+09	4,234294E+08	5,657407E+09	6,080837E+09
923	2,116758E+08	2,116670E+08	2,828677E+09	2,828811E+09	4,233427E+08	5,657488E+09	6,080831E+09
924	2,117121E+08	2,116995E+08	2,828830E+09	2,828764E+09	4,234116E+08	5,657594E+09	6,081006E+09
925	2,116749E+08	2,116873E+08	2,828858E+09	2,828807E+09	4,233623E+08	5,657665E+09	6,081028E+09
926	2,116742E+08	2,116592E+08	2,828741E+09	2,828879E+09	4,233334E+08	5,657620E+09	6,080954E+09
927	2,117060E+08	2,117125E+08	2,828855E+09	2,828723E+09	4,234184E+08	5,657577E+09	6,080996E+09
928	2,116633E+08	2,116815E+08	2,828722E+09	2,828752E+09	4,233448E+08	5,657475E+09	6,080819E+09
929	2,116986E+08	2,116864E+08	2,828648E+09	2,828694E+09	4,233850E+08	5,657343E+09	6,080728E+09
930	2,117159E+08	2,117253E+08	2,828699E+09	2,828510E+09	4,234412E+08	5,657209E+09	6,080650E+09
931	2,116873E+08	2,116884E+08	2,828421E+09	2,828544E+09	4,233757E+08	5,656965E+09	6,080340E+09
932	2,117401E+08	2,117285E+08	2,828404E+09	2,828397E+09	4,234686E+08	5,656801E+09	6,080269E+09
933	2,117261E+08	2,117481E+08	2,828398E+09	2,828282E+09	4,234742E+08	5,656681E+09	6,080155E+09
934	2,117220E+08	2,117159E+08	2,828217E+09	2,828334E+09	4,234379E+08	5,656551E+09	6,079989E+09
935	2,117653E+08	2,117637E+08	2,828320E+09	2,828188E+09	4,235290E+08	5,656508E+09	6,080037E+09
936	2,117254E+08	2,117391E+08	2,828244E+09	2,828243E+09	4,234645E+08	5,656487E+09	6,079951E+09
937	2,117429E+08	2,117214E+08	2,828187E+09	2,828330E+09	4,234642E+08	5,656516E+09	6,079981E+09
938	2,117601E+08	2,117633E+08	2,828369E+09	2,828244E+09	4,235234E+08	5,656613E+09	6,080137E+09
939	2,117118E+08	2,117176E+08	2,828284E+09	2,828398E+09	4,234295E+08	5,656682E+09	6,080111E+09
940	2,117415E+08	2,117262E+08	2,828413E+09	2,828427E+09	4,234677E+08	5,656840E+09	6,080308E+09
941	2,117276E+08	2,117409E+08	2,828586E+09	2,828429E+09	4,234684E+08	5,657015E+09	6,080484E+09
942	2,116945E+08	2,116857E+08	2,828490E+09	2,828614E+09	4,233801E+08	5,657103E+09	6,080483E+09
943	2,117295E+08	2,117214E+08	2,828613E+09	2,828559E+09	4,234509E+08	5,657173E+09	6,080624E+09
944	2,116935E+08	2,117093E+08	2,828606E+09	2,828578E+09	4,234027E+08	5,657184E+09	6,080587E+09
945	2,116952E+08	2,116858E+08	2,828499E+09	2,828650E+09	4,233810E+08	5,657149E+09	6,080530E+09
946	2,117325E+08	2,117337E+08	2,828624E+09	2,828475E+09	4,234662E+08	5,657099E+09	6,080565E+09
947	2,116912E+08	2,117029E+08	2,828460E+09	2,828479E+09	4,233941E+08	5,656939E+09	6,080333E+09
948	2,117258E+08	2,117089E+08	2,828377E+09	2,828424E+09	4,234347E+08	5,656800E+09	6,080235E+09
949	2,117426E+08	2,117518E+08	2,828415E+09	2,828250E+09	4,234944E+08	5,656665E+09	6,080159E+09
950	2,117130E+08	2,117191E+08	2,828178E+09	2,828283E+09	4,234321E+08	5,656461E+09	6,079894E+09
951	2,117631E+08	2,117586E+08	2,828176E+09	2,828142E+09	4,235218E+08	5,656318E+09	6,079840E+09
952	2,117492E+08	2,117714E+08	2,828155E+09	2,828034E+09	4,235207E+08	5,656189E+09	6,079709E+09
953	2,117454E+08	2,117388E+08	2,827971E+09	2,828120E+09	4,234842E+08	5,656090E+09	6,079574E+09
954	2,117913E+08	2,117812E+08	2,828077E+09	2,827975E+09	4,235726E+08	5,656052E+09	6,079625E+09
955	2,117506E+08	2,117609E+08	2,827978E+09	2,828004E+09	4,235116E+08	5,655982E+09	6,079493E+09
956	2,117654E+08	2,117464E+08	2,827954E+09	2,828088E+09	4,235119E+08	5,656042E+09	6,079554E+09
957	2,117813E+08	2,117883E+08	2,828167E+09	2,828017E+09	4,235696E+08	5,656183E+09	6,079753E+09
958	2,117315E+08	2,117396E+08	2,828128E+09	2,828181E+09	4,234711E+08	5,656309E+09	6,079780E+09
959	2,117573E+08	2,117453E+08	2,828246E+09	2,828234E+09	4,235026E+08	5,656480E+09	6,079983E+09
960	2,117442E+08	2,117556E+08	2,828368E+09	2,828241E+09	4,234997E+08	5,656609E+09	6,080108E+09
961	2,117127E+08	2,117069E+08	2,828253E+09	2,828437E+09	4,234196E+08	5,656689E+09	6,080109E+09
962	2,117535E+08	2,117416E+08	2,828386E+09	2,828358E+09	4,234951E+08	5,656744E+09	6,080239E+09
963	2,117192E+08	2,117321E+08	2,828362E+09	2,828325E+09	4,234513E+08	5,656687E+09	6,080138E+09
964	2,117204E+08	2,117084E+08	2,828269E+09	2,828386E+09	4,234288E+08	5,656655E+09	6,080084E+09
965	2,117576E+08	2,117560E+08	2,828380E+09	2,828224E+09	4,235136E+08	5,656604E+09	6,080118E+09
966	2,117155E+08	2,117268E+08	2,828225E+09	2,828224E+09	4,234423E+08	5,656450E+09	6,079892E+09
967	2,117469E+08	2,117372E+08	2,828124E+09	2,828175E+09	4,234841E+08	5,656299E+09	6,079783E+09
968	2,117645E+08	2,117791E+08	2,828136E+09	2,827992E+09	4,235436E+08	5,656128E+09	6,079671E+09
969	2,117375E+08	2,117492E+08	2,827918E+09	2,828040E+09	4,234867E+08	5,655958E+09	6,079445E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
970	2,117924E+08	2,117800E+08	2,827931E+09	2,827896E+09	4,235723E+08	5,655827E+09	6,079399E+09
971	2,117785E+08	2,117920E+08	2,827876E+09	2,827770E+09	4,235705E+08	5,655646E+09	6,079216E+09
972	2,117724E+08	2,117608E+08	2,827704E+09	2,827860E+09	4,235331E+08	5,655564E+09	6,079097E+09
973	2,118152E+08	2,118062E+08	2,827822E+09	2,827736E+09	4,236214E+08	5,655558E+09	6,079179E+09
974	2,117718E+08	2,117889E+08	2,827790E+09	2,827769E+09	4,235607E+08	5,655559E+09	6,079120E+09
975	2,117816E+08	2,117730E+08	2,827797E+09	2,827876E+09	4,235545E+08	5,655673E+09	6,079227E+09
976	2,117969E+08	2,118064E+08	2,827989E+09	2,827828E+09	4,236033E+08	5,655818E+09	6,079421E+09
977	2,117497E+08	2,117571E+08	2,827938E+09	2,828028E+09	4,235068E+08	5,655967E+09	6,079474E+09
978	2,117796E+08	2,117565E+08	2,828029E+09	2,828069E+09	4,235361E+08	5,656098E+09	6,079634E+09
979	2,117679E+08	2,117723E+08	2,828101E+09	2,828027E+09	4,235403E+08	5,656128E+09	6,079668E+09
980	2,117365E+08	2,117301E+08	2,828003E+09	2,828187E+09	4,234666E+08	5,656189E+09	6,079656E+09
981	2,117768E+08	2,117654E+08	2,828149E+09	2,828101E+09	4,235422E+08	5,656250E+09	6,079792E+09
982	2,117425E+08	2,117568E+08	2,828163E+09	2,828057E+09	4,234993E+08	5,656219E+09	6,079719E+09
983	2,117402E+08	2,117330E+08	2,828055E+09	2,828134E+09	4,234732E+08	5,656189E+09	6,079662E+09
984	2,117768E+08	2,117783E+08	2,828121E+09	2,827983E+09	4,235551E+08	5,656104E+09	6,079659E+09
985	2,117377E+08	2,117563E+08	2,827963E+09	2,828005E+09	4,234940E+08	5,655968E+09	6,079462E+09
986	2,117736E+08	2,117627E+08	2,827876E+09	2,827942E+09	4,235363E+08	5,655818E+09	6,079354E+09
987	2,117929E+08	2,118048E+08	2,827868E+09	2,827724E+09	4,235978E+08	5,655592E+09	6,079189E+09
988	2,117666E+08	2,117742E+08	2,827662E+09	2,827766E+09	4,235408E+08	5,655428E+09	6,078969E+09
989	2,118199E+08	2,118021E+08	2,827664E+09	2,827641E+09	4,236220E+08	5,655305E+09	6,078927E+09
990	2,118042E+08	2,118162E+08	2,827633E+09	2,827509E+09	4,236204E+08	5,655141E+09	6,078762E+09
991	2,117922E+08	2,117887E+08	2,827473E+09	2,827616E+09	4,235810E+08	5,655088E+09	6,078669E+09
992	2,118325E+08	2,118311E+08	2,827595E+09	2,827506E+09	4,236636E+08	5,655101E+09	6,078765E+09
993	2,117913E+08	2,118136E+08	2,827597E+09	2,827575E+09	4,236049E+08	5,655173E+09	6,078778E+09
994	2,118044E+08	2,117876E+08	2,827616E+09	2,827696E+09	4,235920E+08	5,655312E+09	6,078904E+09
995	2,118206E+08	2,118195E+08	2,827754E+09	2,827631E+09	4,236401E+08	5,655385E+09	6,079025E+09
996	2,117732E+08	2,117737E+08	2,827699E+09	2,827818E+09	4,235470E+08	5,655517E+09	6,079064E+09
997	2,118018E+08	2,117771E+08	2,827784E+09	2,827858E+09	4,235789E+08	5,655643E+09	6,079222E+09
998	2,117894E+08	2,117972E+08	2,827902E+09	2,827784E+09	4,235866E+08	5,655686E+09	6,079273E+09
999	2,117537E+08	2,117571E+08	2,827826E+09	2,827944E+09	4,235108E+08	5,655770E+09	6,079281E+09
1000	2,117927E+08	2,117868E+08	2,827944E+09	2,827870E+09	4,235795E+08	5,655813E+09	6,079393E+09
1001	2,117618E+08	2,117802E+08	2,827948E+09	2,827856E+09	4,235420E+08	5,655804E+09	6,079346E+09
1002	2,117637E+08	2,117521E+08	2,827818E+09	2,827926E+09	4,235158E+08	5,655744E+09	6,079260E+09
1003	2,118022E+08	2,118016E+08	2,827830E+09	2,827736E+09	4,236038E+08	5,655566E+09	6,079169E+09
1004	2,117660E+08	2,117841E+08	2,827690E+09	2,827728E+09	4,235501E+08	5,655418E+09	6,078968E+09
1005	2,118025E+08	2,117882E+08	2,827606E+09	2,827667E+09	4,235907E+08	5,655273E+09	6,078864E+09
1006	2,118217E+08	2,118298E+08	2,827624E+09	2,827435E+09	4,236515E+08	5,655059E+09	6,078711E+09
1007	2,117909E+08	2,118006E+08	2,827412E+09	2,827492E+09	4,235914E+08	5,654904E+09	6,078496E+09
1008	2,118407E+08	2,118255E+08	2,827387E+09	2,827387E+09	4,236662E+08	5,654775E+09	6,078441E+09
1009	2,118265E+08	2,118458E+08	2,827389E+09	2,827292E+09	4,236723E+08	5,654681E+09	6,078353E+09
1010	2,118165E+08	2,118116E+08	2,827266E+09	2,827405E+09	4,236281E+08	5,654671E+09	6,078299E+09
1011	2,118558E+08	2,118513E+08	2,827374E+09	2,827289E+09	4,237071E+08	5,654663E+09	6,078371E+09
1012	2,118165E+08	2,118325E+08	2,827394E+09	2,827365E+09	4,236490E+08	5,654759E+09	6,078408E+09
1013	2,118271E+08	2,118030E+08	2,827391E+09	2,827504E+09	4,236301E+08	5,654895E+09	6,078525E+09
1014	2,118423E+08	2,118385E+08	2,827537E+09	2,827414E+09	4,236808E+08	5,654951E+09	6,078632E+09
1015	2,117903E+08	2,117994E+08	2,827483E+09	2,827588E+09	4,235898E+08	5,655072E+09	6,078662E+09
1016	2,118165E+08	2,118009E+08	2,827565E+09	2,827625E+09	4,236174E+08	5,655190E+09	6,078807E+09
1017	2,118074E+08	2,118225E+08	2,827714E+09	2,827574E+09	4,236300E+08	5,655289E+09	6,078918E+09
1018	2,117754E+08	2,117743E+08	2,827641E+09	2,827739E+09	4,235497E+08	5,655379E+09	6,078929E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1019	2,118146E+08	2,118036E+08	2,827698E+09	2,827648E+09	4,236182E+08	5,655346E+09	6,078964E+09
1020	2,117874E+08	2,118023E+08	2,827694E+09	2,827619E+09	4,235897E+08	5,655313E+09	6,078903E+09
1021	2,117892E+08	2,117773E+08	2,827553E+09	2,827689E+09	4,235665E+08	5,655242E+09	6,078808E+09
1022	2,118292E+08	2,118295E+08	2,827593E+09	2,827463E+09	4,236587E+08	5,655056E+09	6,078715E+09
1023	2,117905E+08	2,118138E+08	2,827460E+09	2,827455E+09	4,236043E+08	5,654915E+09	6,078519E+09
1024	2,118253E+08	2,118120E+08	2,827344E+09	2,827407E+09	4,236373E+08	5,654751E+09	6,078389E+09
1025	2,118465E+08	2,118546E+08	2,827360E+09	2,827201E+09	4,237010E+08	5,654561E+09	6,078262E+09
1026	2,118175E+08	2,118223E+08	2,827150E+09	2,827256E+09	4,236398E+08	5,654406E+09	6,078046E+09
1027	2,118654E+08	2,118501E+08	2,827099E+09	2,827129E+09	4,237155E+08	5,654228E+09	6,077944E+09
1028	2,118531E+08	2,118725E+08	2,827149E+09	2,827032E+09	4,237256E+08	5,654180E+09	6,077906E+09
1029	2,118419E+08	2,118342E+08	2,827048E+09	2,827174E+09	4,236761E+08	5,654222E+09	6,077898E+09
1030	2,118800E+08	2,118715E+08	2,827175E+09	2,827056E+09	4,237515E+08	5,654231E+09	6,077983E+09
1031	2,118365E+08	2,118540E+08	2,827188E+09	2,827150E+09	4,236905E+08	5,654338E+09	6,078028E+09
1032	2,118427E+08	2,118230E+08	2,827155E+09	2,827299E+09	4,236658E+08	5,654454E+09	6,078120E+09
1033	2,118594E+08	2,118631E+08	2,827332E+09	2,827228E+09	4,237225E+08	5,654559E+09	6,078282E+09
1034	2,118099E+08	2,118198E+08	2,827310E+09	2,827392E+09	4,236297E+08	5,654701E+09	6,078331E+09
1035	2,118359E+08	2,118192E+08	2,827362E+09	2,827410E+09	4,236551E+08	5,654772E+09	6,078427E+09
1036	2,118312E+08	2,118411E+08	2,827515E+09	2,827359E+09	4,236723E+08	5,654873E+09	6,078546E+09
1037	2,117992E+08	2,117915E+08	2,827409E+09	2,827533E+09	4,235907E+08	5,654942E+09	6,078533E+09
1038	2,118384E+08	2,118258E+08	2,827456E+09	2,827408E+09	4,236641E+08	5,654864E+09	6,078528E+09
1039	2,118097E+08	2,118316E+08	2,827447E+09	2,827361E+09	4,236413E+08	5,654808E+09	6,078449E+09
1040	2,118099E+08	2,118044E+08	2,827287E+09	2,827421E+09	4,236143E+08	5,654708E+09	6,078322E+09
1041	2,118543E+08	2,118566E+08	2,827350E+09	2,827213E+09	4,237109E+08	5,654563E+09	6,078274E+09
1042	2,118190E+08	2,118353E+08	2,827209E+09	2,827199E+09	4,236542E+08	5,654408E+09	6,078062E+09
1043	2,118523E+08	2,118333E+08	2,827039E+09	2,827138E+09	4,236856E+08	5,654177E+09	6,077862E+09
1044	2,118754E+08	2,118816E+08	2,827074E+09	2,826929E+09	4,237570E+08	5,654003E+09	6,077760E+09
1045	2,118445E+08	2,118502E+08	2,826888E+09	2,827001E+09	4,236946E+08	5,653889E+09	6,077584E+09
1046	2,118900E+08	2,118787E+08	2,826889E+09	2,826863E+09	4,237687E+08	5,653753E+09	6,077521E+09
1047	2,118751E+08	2,119002E+08	2,826959E+09	2,826792E+09	4,237753E+08	5,653750E+09	6,077526E+09
1048	2,118602E+08	2,118547E+08	2,826835E+09	2,826965E+09	4,237148E+08	5,653800E+09	6,077514E+09
1049	2,118997E+08	2,118910E+08	2,826964E+09	2,826881E+09	4,237907E+08	5,653845E+09	6,077636E+09
1050	2,118581E+08	2,118711E+08	2,826969E+09	2,826967E+09	4,237292E+08	5,653935E+09	6,077665E+09
1051	2,118623E+08	2,118423E+08	2,826906E+09	2,827085E+09	4,237047E+08	5,653990E+09	6,077695E+09
1052	2,118824E+08	2,118841E+08	2,827121E+09	2,827000E+09	4,237664E+08	5,654121E+09	6,077887E+09
1053	2,118328E+08	2,118382E+08	2,827114E+09	2,827177E+09	4,236711E+08	5,654291E+09	6,077962E+09
1054	2,118581E+08	2,118384E+08	2,827168E+09	2,827178E+09	4,236965E+08	5,654346E+09	6,078042E+09
1055	2,118515E+08	2,118638E+08	2,827302E+09	2,827136E+09	4,237153E+08	5,654437E+09	6,078153E+09
1056	2,118172E+08	2,118155E+08	2,827162E+09	2,827312E+09	4,236328E+08	5,654475E+09	6,078107E+09
1057	2,118593E+08	2,118528E+08	2,827225E+09	2,827194E+09	4,237120E+08	5,654418E+09	6,078130E+09
1058	2,118344E+08	2,118554E+08	2,827226E+09	2,827131E+09	4,236898E+08	5,654357E+09	6,078047E+09
1059	2,118349E+08	2,118269E+08	2,827021E+09	2,827165E+09	4,236618E+08	5,654185E+09	6,077847E+09
1060	2,118831E+08	2,118786E+08	2,827082E+09	2,826949E+09	4,237618E+08	5,654031E+09	6,077793E+09
1061	2,118476E+08	2,118582E+08	2,826927E+09	2,826939E+09	4,237058E+08	5,653866E+09	6,077572E+09
1062	2,118792E+08	2,118614E+08	2,826763E+09	2,826846E+09	4,237407E+08	5,653609E+09	6,077350E+09
1063	2,118992E+08	2,119144E+08	2,826823E+09	2,826646E+09	4,238136E+08	5,653469E+09	6,077283E+09
1064	2,118653E+08	2,118787E+08	2,826650E+09	2,826740E+09	4,237440E+08	5,653390E+09	6,077134E+09
1065	2,119122E+08	2,119031E+08	2,826687E+09	2,826649E+09	4,238153E+08	5,653335E+09	6,077150E+09
1066	2,118997E+08	2,119177E+08	2,826749E+09	2,826597E+09	4,238174E+08	5,653345E+09	6,077163E+09
1067	2,118828E+08	2,118712E+08	2,826570E+09	2,826759E+09	4,237540E+08	5,653329E+09	6,077083E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1068	2,119243E+08	2,119110E+08	2,826715E+09	2,826669E+09	4,238353E+08	5,653384E+09	6,077219E+09
1069	2,118819E+08	2,118925E+08	2,826744E+09	2,826754E+09	4,237744E+08	5,653498E+09	6,077272E+09
1070	2,118840E+08	2,118657E+08	2,826719E+09	2,826846E+09	4,237496E+08	5,653565E+09	6,077315E+09
1071	2,119018E+08	2,119079E+08	2,826949E+09	2,826779E+09	4,238097E+08	5,653728E+09	6,077538E+09
1072	2,118492E+08	2,118576E+08	2,826914E+09	2,826974E+09	4,237068E+08	5,653887E+09	6,077594E+09
1073	2,118756E+08	2,118589E+08	2,826966E+09	2,826998E+09	4,237345E+08	5,653964E+09	6,077699E+09
1074	2,118722E+08	2,118845E+08	2,827078E+09	2,826937E+09	4,237567E+08	5,654015E+09	6,077772E+09
1075	2,118378E+08	2,118385E+08	2,826895E+09	2,827073E+09	4,236763E+08	5,653969E+09	6,077645E+09
1076	2,118857E+08	2,118759E+08	2,826978E+09	2,826937E+09	4,237616E+08	5,653915E+09	6,077677E+09
1077	2,118630E+08	2,118766E+08	2,826972E+09	2,826873E+09	4,237396E+08	5,653846E+09	6,077585E+09
1078	2,118631E+08	2,118509E+08	2,826758E+09	2,826877E+09	4,237140E+08	5,653635E+09	6,077349E+09
1079	2,119086E+08	2,119067E+08	2,826810E+09	2,826667E+09	4,238153E+08	5,653477E+09	6,077293E+09
1080	2,118694E+08	2,118882E+08	2,826652E+09	2,826667E+09	4,237575E+08	5,653319E+09	6,077076E+09
1081	2,119013E+08	2,118923E+08	2,826538E+09	2,826604E+09	4,237936E+08	5,653142E+09	6,076936E+09
1082	2,119235E+08	2,119397E+08	2,826619E+09	2,826421E+09	4,238631E+08	5,653040E+09	6,076903E+09
1083	2,118895E+08	2,118996E+08	2,826408E+09	2,826518E+09	4,237891E+08	5,652926E+09	6,076715E+09
1084	2,119396E+08	2,119208E+08	2,826441E+09	2,826438E+09	4,238604E+08	5,652878E+09	6,076739E+09
1085	2,119270E+08	2,119352E+08	2,826488E+09	2,826391E+09	4,238622E+08	5,652879E+09	6,076741E+09
1086	2,119074E+08	2,118953E+08	2,826315E+09	2,826511E+09	4,238027E+08	5,652826E+09	6,076628E+09
1087	2,119447E+08	2,119376E+08	2,826491E+09	2,826419E+09	4,238823E+08	5,652910E+09	6,076793E+09
1088	2,118991E+08	2,119165E+08	2,826546E+09	2,826518E+09	4,238156E+08	5,653065E+09	6,076880E+09
1089	2,119015E+08	2,118866E+08	2,826557E+09	2,826646E+09	4,237881E+08	5,653203E+09	6,076991E+09
1090	2,119204E+08	2,119244E+08	2,826771E+09	2,826601E+09	4,238448E+08	5,653372E+09	6,077217E+09
1091	2,118679E+08	2,118750E+08	2,826678E+09	2,826782E+09	4,237429E+08	5,653460E+09	6,077203E+09
1092	2,118975E+08	2,118791E+08	2,826730E+09	2,826795E+09	4,237766E+08	5,653525E+09	6,077302E+09
1093	2,118965E+08	2,119054E+08	2,826848E+09	2,826720E+09	4,238019E+08	5,653569E+09	6,077370E+09
1094	2,118631E+08	2,118635E+08	2,826668E+09	2,826807E+09	4,237266E+08	5,653475E+09	6,077202E+09
1095	2,119105E+08	2,119005E+08	2,826744E+09	2,826674E+09	4,238110E+08	5,653418E+09	6,077229E+09
1096	2,118856E+08	2,119004E+08	2,826709E+09	2,826614E+09	4,237860E+08	5,653323E+09	6,077109E+09
1097	2,118863E+08	2,118769E+08	2,826506E+09	2,826631E+09	4,237633E+08	5,653137E+09	6,076900E+09
1098	2,119321E+08	2,119338E+08	2,826553E+09	2,826420E+09	4,238659E+08	5,652972E+09	6,076838E+09
1099	2,118931E+08	2,119154E+08	2,826375E+09	2,826402E+09	4,238085E+08	5,652777E+09	6,076585E+09
1100	2,119287E+08	2,119171E+08	2,826292E+09	2,826350E+09	4,238458E+08	5,652642E+09	6,076488E+09
1101	2,119530E+08	2,119603E+08	2,826369E+09	2,826187E+09	4,239133E+08	5,652556E+09	6,076469E+09
1102	2,119186E+08	2,119228E+08	2,826145E+09	2,826262E+09	4,238414E+08	5,652407E+09	6,076248E+09
1103	2,119649E+08	2,119457E+08	2,826180E+09	2,826190E+09	4,239106E+08	5,652370E+09	6,076281E+09
1104	2,119473E+08	2,119614E+08	2,826233E+09	2,826148E+09	4,239087E+08	5,652382E+09	6,076290E+09
1105	2,119260E+08	2,119216E+08	2,826132E+09	2,826289E+09	4,238475E+08	5,652421E+09	6,076269E+09
1106	2,119625E+08	2,119590E+08	2,826332E+09	2,826221E+09	4,239214E+08	5,652552E+09	6,076474E+09
1107	2,119164E+08	2,119335E+08	2,826356E+09	2,826327E+09	4,238498E+08	5,652683E+09	6,076533E+09
1108	2,119218E+08	2,119017E+08	2,826362E+09	2,826472E+09	4,238235E+08	5,652834E+09	6,076658E+09
1109	2,119428E+08	2,119393E+08	2,826545E+09	2,826425E+09	4,238821E+08	5,652970E+09	6,076852E+09
1110	2,118911E+08	2,118980E+08	2,826437E+09	2,826549E+09	4,237891E+08	5,652986E+09	6,076775E+09
1111	2,119194E+08	2,119035E+08	2,826498E+09	2,826545E+09	4,238229E+08	5,653043E+09	6,076866E+09
1112	2,119173E+08	2,119284E+08	2,826614E+09	2,826466E+09	4,238457E+08	5,653080E+09	6,076926E+09
1113	2,118854E+08	2,118867E+08	2,826457E+09	2,826564E+09	4,237721E+08	5,653021E+09	6,076793E+09
1114	2,119333E+08	2,119222E+08	2,826506E+09	2,826440E+09	4,238555E+08	5,652945E+09	6,076801E+09
1115	2,119084E+08	2,119249E+08	2,826426E+09	2,826361E+09	4,238333E+08	5,652787E+09	6,076620E+09
1116	2,119120E+08	2,119043E+08	2,826241E+09	2,826378E+09	4,238163E+08	5,652619E+09	6,076435E+09

1	14	15	16	17	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	2,119591E+08	2,119595E+08	2,826304E+09	2,826174E+09	4,239186E+08	5,652478E+09	6,076397E+09
1118	2,119221E+08	2,119439E+08	2,826133E+09	2,826128E+09	4,238660E+08	5,652261E+09	6,076127E+09
1119	2,119557E+08	2,119418E+08	2,826045E+09	2,826094E+09	4,238975E+08	5,652139E+09	6,076036E+09
1120	2,119771E+08	2,119832E+08	2,826102E+09	2,825944E+09	4,239603E+08	5,652046E+09	6,076006E+09
1121	2,119422E+08	2,119478E+08	2,825901E+09	2,826024E+09	4,238900E+08	5,651925E+09	6,075815E+09
1122	2,119854E+08	2,119703E+08	2,825942E+09	2,825959E+09	4,239558E+08	5,651902E+09	6,075857E+09
1123	2,119666E+08	2,119845E+08	2,826000E+09	2,825910E+09	4,239511E+08	5,651910E+09	6,075861E+09
1124	2,119477E+08	2,119407E+08	2,825938E+09	2,826076E+09	4,238884E+08	5,652014E+09	6,075902E+09
1125	2,119850E+08	2,119734E+08	2,826138E+09	2,826036E+09	4,239584E+08	5,652174E+09	6,076132E+09
1126	2,119403E+08	2,119522E+08	2,826141E+09	2,826116E+09	4,238926E+08	5,652256E+09	6,076149E+09
1127	2,119428E+08	2,119228E+08	2,826140E+09	2,826262E+09	4,238656E+08	5,652402E+09	6,076268E+09
1128	2,119610E+08	2,119624E+08	2,826317E+09	2,826210E+09	4,239234E+08	5,652528E+09	6,076451E+09
1129	2,119105E+08	2,119225E+08	2,826255E+09	2,826328E+09	4,238330E+08	5,652583E+09	6,076416E+09
1130	2,119387E+08	2,119255E+08	2,826305E+09	2,826331E+09	4,238642E+08	5,652636E+09	6,076500E+09
1131	2,119379E+08	2,119479E+08	2,826374E+09	2,826236E+09	4,238858E+08	5,652610E+09	6,076496E+09
1132	2,119096E+08	2,119076E+08	2,826208E+09	2,826335E+09	4,238172E+08	5,652543E+09	6,076360E+09
1133	2,119589E+08	2,119446E+08	2,826234E+09	2,826202E+09	4,239035E+08	5,652436E+09	6,076339E+09
1134	2,119358E+08	2,119554E+08	2,826149E+09	2,826071E+09	4,238912E+08	5,652220E+09	6,076111E+09
1135	2,119383E+08	2,119342E+08	2,825989E+09	2,826090E+09	4,238725E+08	5,652080E+09	6,075952E+09
1136	2,119836E+08	2,119856E+08	2,826048E+09	2,825901E+09	4,239692E+08	5,651949E+09	6,075919E+09
1137	2,119486E+08	2,119687E+08	2,825903E+09	2,825877E+09	4,239173E+08	5,651780E+09	6,075697E+09
1138	2,119803E+08	2,119650E+08	2,825790E+09	2,825863E+09	4,239453E+08	5,651653E+09	6,075599E+09
1139	2,119997E+08	2,120062E+08	2,825817E+09	2,825701E+09	4,240059E+08	5,651518E+09	6,075524E+09
1140	2,119664E+08	2,119728E+08	2,825657E+09	2,825790E+09	4,239392E+08	5,651447E+09	6,075386E+09
1141	2,120094E+08	2,119912E+08	2,825728E+09	2,825740E+09	4,240006E+08	5,651467E+09	6,075468E+09
1142	2,119917E+08	2,120076E+08	2,825799E+09	2,825675E+09	4,239993E+08	5,651473E+09	6,075473E+09
1143	2,119699E+08	2,119604E+08	2,825746E+09	2,825867E+09	4,239303E+08	5,651612E+09	6,075543E+09
1144	2,120031E+08	2,119919E+08	2,825922E+09	2,825846E+09	4,239950E+08	5,651768E+09	6,075763E+09
1145	2,119596E+08	2,119739E+08	2,825947E+09	2,825922E+09	4,239335E+08	5,651868E+09	6,075802E+09
1146	2,119593E+08	2,119458E+08	2,825935E+09	2,826062E+09	4,239050E+08	5,651998E+09	6,075903E+09
1147	2,119781E+08	2,119825E+08	2,826095E+09	2,825984E+09	4,239606E+08	5,652080E+09	6,076040E+09
1148	2,119325E+08	2,119423E+08	2,826045E+09	2,826106E+09	4,238748E+08	5,652151E+09	6,076025E+09
1149	2,119632E+08	2,119423E+08	2,826073E+09	2,826116E+09	4,239055E+08	5,652189E+09	6,076095E+09
1150	2,119650E+08	2,119720E+08	2,826111E+09	2,825979E+09	4,239370E+08	5,652090E+09	6,076027E+09
1151	2,119347E+08	2,119346E+08	2,825947E+09	2,826068E+09	4,238693E+08	5,652014E+09	6,075884E+09
1152	2,119803E+08	2,119732E+08	2,825979E+09	2,825937E+09	4,239536E+08	5,651916E+09	6,075869E+09
1153	2,119602E+08	2,119843E+08	2,825942E+09	2,825808E+09	4,239445E+08	5,651750E+09	6,075694E+09
1154	2,119612E+08	2,119600E+08	2,825766E+09	2,825851E+09	4,239212E+08	5,651617E+09	6,075538E+09
1155	2,120076E+08	2,120065E+08	2,825780E+09	2,825661E+09	4,240141E+08	5,651440E+09	6,075455E+09
1156	2,119768E+08	2,119907E+08	2,825622E+09	2,825645E+09	4,239674E+08	5,651267E+09	6,075234E+09
1157	2,120088E+08	2,119873E+08	2,825499E+09	2,825626E+09	4,239960E+08	5,651125E+09	6,075121E+09
1158	2,120280E+08	2,120347E+08	2,825536E+09	2,825416E+09	4,240627E+08	5,650952E+09	6,075015E+09
1159	2,119916E+08	2,119993E+08	2,825430E+09	2,825515E+09	4,239908E+08	5,650944E+09	6,074935E+09
1160	2,120295E+08	2,120141E+08	2,825519E+09	2,825500E+09	4,240435E+08	5,651019E+09	6,075063E+09
1161	2,120132E+08	2,120290E+08	2,825626E+09	2,825466E+09	4,240422E+08	5,651093E+09	6,075135E+09
1162	2,119874E+08	2,119819E+08	2,825554E+09	2,825686E+09	4,239692E+08	5,651240E+09	6,075209E+09
1163	2,120191E+08	2,120120E+08	2,825697E+09	2,825655E+09	4,240310E+08	5,651352E+09	6,075383E+09
1164	2,119793E+08	2,119952E+08	2,825745E+09	2,825734E+09	4,239745E+08	5,651479E+09	6,075454E+09
1165	2,119807E+08	2,119637E+08	2,825736E+09	2,825870E+09	4,239444E+08	5,651606E+09	6,075550E+09

1	14	15	16	17	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	2,120026E+08	2,120023E+08	2,825875E+09	2,825751E+09	4,240049E+08	5,651626E+09	6,075630E+09
1167	2,119568E+08	2,119621E+08	2,825824E+09	2,825869E+09	4,239189E+08	5,651692E+09	6,075611E+09
1168	2,119841E+08	2,119641E+08	2,825819E+09	2,825876E+09	4,239482E+08	5,651696E+09	6,075644E+09
1169	2,119881E+08	2,119989E+08	2,825881E+09	2,825727E+09	4,239870E+08	5,651607E+09	6,075594E+09
1170	2,119551E+08	2,119640E+08	2,825714E+09	2,825818E+09	4,239191E+08	5,651533E+09	6,075452E+09
1171	2,120008E+08	2,119971E+08	2,825727E+09	2,825677E+09	4,239979E+08	5,651404E+09	6,075402E+09
1172	2,119870E+08	2,120072E+08	2,825694E+09	2,825570E+09	4,239942E+08	5,651264E+09	6,075258E+09
1173	2,119911E+08	2,119799E+08	2,825489E+09	2,825619E+09	4,239710E+08	5,651108E+09	6,075079E+09
1174	2,120391E+08	2,120318E+08	2,825472E+09	2,825385E+09	4,240710E+08	5,650857E+09	6,074928E+09
1175	2,120058E+08	2,120197E+08	2,825339E+09	2,825359E+09	4,240255E+08	5,650698E+09	6,074723E+09
1176	2,120318E+08	2,120166E+08	2,825243E+09	2,825352E+09	4,240484E+08	5,650595E+09	6,074644E+09
1177	2,120512E+08	2,120625E+08	2,825350E+09	2,825162E+09	4,241137E+08	5,650512E+09	6,074626E+09
1178	2,120104E+08	2,120241E+08	2,825252E+09	2,825304E+09	4,240345E+08	5,650556E+09	6,074591E+09
1179	2,120457E+08	2,120321E+08	2,825313E+09	2,825308E+09	4,240778E+08	5,650621E+09	6,074699E+09
1180	2,120342E+08	2,120475E+08	2,825413E+09	2,825298E+09	4,240817E+08	5,650711E+09	6,074793E+09
1181	2,120095E+08	2,119997E+08	2,825325E+09	2,825511E+09	4,240092E+08	5,650836E+09	6,074845E+09
1182	2,120430E+08	2,120332E+08	2,825459E+09	2,825426E+09	4,240762E+08	5,650885E+09	6,074961E+09
1183	2,120031E+08	2,120147E+08	2,825531E+09	2,825490E+09	4,240177E+08	5,651021E+09	6,075039E+09
1184	2,120011E+08	2,119826E+08	2,825515E+09	2,825639E+09	4,239837E+08	5,651154E+09	6,075137E+09
1185	2,120254E+08	2,120227E+08	2,825673E+09	2,825520E+09	4,240482E+08	5,651193E+09	6,075242E+09
1186	2,119755E+08	2,119873E+08	2,825602E+09	2,825646E+09	4,239627E+08	5,651248E+09	6,075211E+09
1187	2,120009E+08	2,119891E+08	2,825576E+09	2,825640E+09	4,239899E+08	5,651216E+09	6,075206E+09
1188	2,120105E+08	2,120251E+08	2,825654E+09	2,825502E+09	4,240355E+08	5,651155E+09	6,075191E+09
1189	2,119811E+08	2,119868E+08	2,825483E+09	2,825594E+09	4,239679E+08	5,651076E+09	6,075044E+09
1190	2,120303E+08	2,120205E+08	2,825458E+09	2,825417E+09	4,240508E+08	5,650875E+09	6,074925E+09
1191	2,120173E+08	2,120306E+08	2,825417E+09	2,825302E+09	4,240479E+08	5,650719E+09	6,074767E+09
1192	2,120174E+08	2,120068E+08	2,825188E+09	2,825348E+09	4,240243E+08	5,650536E+09	6,074560E+09
1193	2,120657E+08	2,120619E+08	2,825211E+09	2,825098E+09	4,241276E+08	5,650309E+09	6,074437E+09
1194	2,120269E+08	2,120520E+08	2,825105E+09	2,825083E+09	4,240789E+08	5,650188E+09	6,074267E+09
1195	2,120502E+08	2,120411E+08	2,825019E+09	2,825091E+09	4,240914E+08	5,650110E+09	6,074201E+09
1196	2,120740E+08	2,120838E+08	2,825144E+09	2,824960E+09	4,241578E+08	5,650104E+09	6,074262E+09
1197	2,120356E+08	2,120411E+08	2,825033E+09	2,825129E+09	4,240767E+08	5,650161E+09	6,074238E+09
1198	2,120711E+08	2,120515E+08	2,825060E+09	2,825100E+09	4,241226E+08	5,650160E+09	6,074283E+09
1199	2,120590E+08	2,120686E+08	2,825183E+09	2,825081E+09	4,241277E+08	5,650264E+09	6,074392E+09
1200	2,120297E+08	2,120217E+08	2,825106E+09	2,825289E+09	4,240514E+08	5,650395E+09	6,074447E+09
1201	2,120640E+08	2,120534E+08	2,825284E+09	2,825201E+09	4,241173E+08	5,650485E+09	6,074602E+09
1202	2,120202E+08	2,120365E+08	2,825350E+09	2,825284E+09	4,240568E+08	5,650634E+09	6,074691E+09
1203	2,120163E+08	2,120004E+08	2,825297E+09	2,825429E+09	4,240167E+08	5,650726E+09	6,074743E+09
1204	2,120454E+08	2,120443E+08	2,825445E+09	2,825328E+09	4,240897E+08	5,650773E+09	6,074863E+09
1205	2,119986E+08	2,120101E+08	2,825363E+09	2,825436E+09	4,240087E+08	5,650799E+09	6,074808E+09
1206	2,120256E+08	2,120140E+08	2,825322E+09	2,825378E+09	4,240396E+08	5,650701E+09	6,074740E+09
1207	2,120373E+08	2,120482E+08	2,825415E+09	2,825231E+09	4,240855E+08	5,650647E+09	6,074732E+09
1208	2,120067E+08	2,120106E+08	2,825219E+09	2,825333E+09	4,240174E+08	5,650553E+09	6,074570E+09
1209	2,120587E+08	2,120449E+08	2,825202E+09	2,825150E+09	4,241035E+08	5,650352E+09	6,074456E+09
1210	2,120412E+08	2,120612E+08	2,825147E+09	2,825037E+09	4,241024E+08	5,650184E+09	6,074286E+09
1211	2,120380E+08	2,120357E+08	2,824917E+09	2,825072E+09	4,240737E+08	5,649989E+09	6,074062E+09
1212	2,120894E+08	2,120897E+08	2,824975E+09	2,824854E+09	4,241791E+08	5,649830E+09	6,074009E+09
1213	2,120532E+08	2,120743E+08	2,824886E+09	2,824861E+09	4,241276E+08	5,649747E+09	6,073875E+09
1214	2,120773E+08	2,120617E+08	2,824779E+09	2,824861E+09	4,241389E+08	5,649640E+09	6,073779E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1215	2,121013E+08	2,121024E+08	2,824901E+09	2,824739E+09	4,242037E+08	5,649640E+09	6,073844E+09
1216	2,120596E+08	2,120631E+08	2,824774E+09	2,824915E+09	4,241227E+08	5,649689E+09	6,073811E+09
1217	2,120945E+08	2,120750E+08	2,824839E+09	2,824867E+09	4,241695E+08	5,649706E+09	6,073876E+09
1218	2,120766E+08	2,120938E+08	2,824981E+09	2,824851E+09	4,241704E+08	5,649831E+09	6,074002E+09
1219	2,120443E+08	2,120412E+08	2,824906E+09	2,825059E+09	4,240856E+08	5,649965E+09	6,074050E+09
1220	2,120829E+08	2,120714E+08	2,825085E+09	2,825013E+09	4,241543E+08	5,650098E+09	6,074253E+09
1221	2,120422E+08	2,120541E+08	2,825139E+09	2,825101E+09	4,240963E+08	5,650240E+09	6,074336E+09
1222	2,120387E+08	2,120228E+08	2,825056E+09	2,825205E+09	4,240615E+08	5,650260E+09	6,074322E+09
1223	2,120683E+08	2,120682E+08	2,825222E+09	2,825091E+09	4,241366E+08	5,650313E+09	6,074449E+09
1224	2,120205E+08	2,120355E+08	2,825142E+09	2,825198E+09	4,240561E+08	5,650340E+09	6,074396E+09
1225	2,120498E+08	2,120371E+08	2,825121E+09	2,825130E+09	4,240869E+08	5,650251E+09	6,074338E+09
1226	2,120589E+08	2,120730E+08	2,825188E+09	2,824994E+09	4,241319E+08	5,650182E+09	6,074314E+09
1227	2,120276E+08	2,120335E+08	2,824947E+09	2,825081E+09	4,240612E+08	5,650028E+09	6,074089E+09
1228	2,120841E+08	2,120708E+08	2,824917E+09	2,824915E+09	4,241549E+08	5,649831E+09	6,073986E+09
1229	2,120693E+08	2,120882E+08	2,824869E+09	2,824783E+09	4,241575E+08	5,649652E+09	6,073809E+09
1230	2,120664E+08	2,120618E+08	2,824639E+09	2,824778E+09	4,241281E+08	5,649417E+09	6,073546E+09
1231	2,121177E+08	2,121123E+08	2,824730E+09	2,824580E+09	4,242300E+08	5,649310E+09	6,073540E+09
1232	2,120802E+08	2,120973E+08	2,824635E+09	2,824618E+09	4,241775E+08	5,649253E+09	6,073430E+09
1233	2,121034E+08	2,120842E+08	2,824549E+09	2,824624E+09	4,241877E+08	5,649173E+09	6,073360E+09
1234	2,121214E+08	2,121303E+08	2,824672E+09	2,824520E+09	4,242517E+08	5,649192E+09	6,073444E+09
1235	2,120761E+08	2,120877E+08	2,824549E+09	2,824688E+09	4,241638E+08	5,649237E+09	6,073401E+09
1236	2,121132E+08	2,120969E+08	2,824644E+09	2,824675E+09	4,242101E+08	5,649319E+09	6,073529E+09
1237	2,120979E+08	2,121111E+08	2,824793E+09	2,824666E+09	4,242090E+08	5,649459E+09	6,073668E+09
1238	2,120659E+08	2,120577E+08	2,824693E+09	2,824849E+09	4,241235E+08	5,649542E+09	6,073665E+09
1239	2,121048E+08	2,120882E+08	2,824871E+09	2,824803E+09	4,241930E+08	5,649674E+09	6,073867E+09
1240	2,120635E+08	2,120768E+08	2,824908E+09	2,824887E+09	4,241403E+08	5,649795E+09	6,073935E+09
1241	2,120603E+08	2,120476E+08	2,824853E+09	2,824962E+09	4,241078E+08	5,649815E+09	6,073923E+09
1242	2,120861E+08	2,120945E+08	2,825020E+09	2,824851E+09	4,241806E+08	5,649871E+09	6,074051E+09
1243	2,120386E+08	2,120569E+08	2,824917E+09	2,824954E+09	4,240955E+08	5,649872E+09	6,073967E+09
1244	2,120737E+08	2,120574E+08	2,824872E+09	2,824921E+09	4,241312E+08	5,649793E+09	6,073924E+09
1245	2,120869E+08	2,120937E+08	2,824911E+09	2,824770E+09	4,241806E+08	5,649681E+09	6,073861E+09
1246	2,120568E+08	2,120599E+08	2,824645E+09	2,824802E+09	4,241167E+08	5,649447E+09	6,073563E+09
1247	2,121130E+08	2,120980E+08	2,824640E+09	2,824620E+09	4,242110E+08	5,649260E+09	6,073471E+09
1248	2,120965E+08	2,121172E+08	2,824612E+09	2,824501E+09	4,242137E+08	5,649112E+09	6,073326E+09
1249	2,120935E+08	2,120886E+08	2,824420E+09	2,824505E+09	4,241820E+08	5,648925E+09	6,073107E+09
1250	2,121386E+08	2,121391E+08	2,824503E+09	2,824342E+09	4,242777E+08	5,648845E+09	6,073123E+09
1251	2,121001E+08	2,121211E+08	2,824387E+09	2,824389E+09	4,242212E+08	5,648776E+09	6,072997E+09
1252	2,121255E+08	2,121089E+08	2,824301E+09	2,824426E+09	4,242344E+08	5,648728E+09	6,072962E+09
1253	2,121448E+08	2,121526E+08	2,824441E+09	2,824311E+09	4,242973E+08	5,648752E+09	6,073050E+09
1254	2,120994E+08	2,121079E+08	2,824321E+09	2,824442E+09	4,242073E+08	5,648763E+09	6,072970E+09
1255	2,121364E+08	2,121131E+08	2,824435E+09	2,824446E+09	4,242495E+08	5,648881E+09	6,073130E+09
1256	2,121204E+08	2,121293E+08	2,824577E+09	2,824460E+09	4,242498E+08	5,649037E+09	6,073287E+09
1257	2,120882E+08	2,120782E+08	2,824496E+09	2,824632E+09	4,241664E+08	5,649128E+09	6,073295E+09
1258	2,121203E+08	2,121146E+08	2,824675E+09	2,824596E+09	4,242349E+08	5,649270E+09	6,073505E+09
1259	2,120787E+08	2,121007E+08	2,824712E+09	2,824667E+09	4,241794E+08	5,649379E+09	6,073558E+09
1260	2,120791E+08	2,120692E+08	2,824661E+09	2,824776E+09	4,241483E+08	5,649437E+09	6,073585E+09
1261	2,121098E+08	2,121119E+08	2,824808E+09	2,824660E+09	4,242217E+08	5,649468E+09	6,073690E+09
1262	2,120651E+08	2,120749E+08	2,824648E+09	2,824715E+09	4,241401E+08	5,649363E+09	6,073503E+09
1263	2,121021E+08	2,120781E+08	2,824584E+09	2,824665E+09	4,241802E+08	5,649249E+09	6,073429E+09

1	14	15	16	17	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	2,121153E+08	2,121219E+08	2,824610E+09	2,824493E+09	4,242373E+08	5,649104E+09	6,073341E+09
1265	2,120843E+08	2,120907E+08	2,824389E+09	2,824488E+09	4,241750E+08	5,648876E+09	6,073051E+09
1266	2,121337E+08	2,121295E+08	2,824408E+09	2,824326E+09	4,242632E+08	5,648734E+09	6,072997E+09
1267	2,121171E+08	2,121430E+08	2,824374E+09	2,824228E+09	4,242601E+08	5,648602E+09	6,072863E+09
1268	2,121173E+08	2,121127E+08	2,824180E+09	2,824295E+09	4,242299E+08	5,648475E+09	6,072705E+09
1269	2,121645E+08	2,121616E+08	2,824251E+09	2,824139E+09	4,243261E+08	5,648390E+09	6,072716E+09
1270	2,121269E+08	2,121450E+08	2,824118E+09	2,824150E+09	4,242719E+08	5,648268E+09	6,072540E+09
1271	2,121514E+08	2,121309E+08	2,824063E+09	2,824186E+09	4,242823E+08	5,648249E+09	6,072532E+09
1272	2,121695E+08	2,121738E+08	2,824218E+09	2,824082E+09	4,243432E+08	5,648300E+09	6,072644E+09
1273	2,121232E+08	2,121281E+08	2,824133E+09	2,824206E+09	4,242512E+08	5,648339E+09	6,072590E+09
1274	2,121529E+08	2,121349E+08	2,824242E+09	2,824237E+09	4,242878E+08	5,648479E+09	6,072767E+09
1275	2,121364E+08	2,121504E+08	2,824366E+09	2,824257E+09	4,242867E+08	5,648623E+09	6,072910E+09
1276	2,121064E+08	2,121021E+08	2,824291E+09	2,824457E+09	4,242084E+08	5,648748E+09	6,072957E+09
1277	2,121400E+08	2,121352E+08	2,824472E+09	2,824404E+09	4,242752E+08	5,648876E+09	6,073151E+09
1278	2,121015E+08	2,121190E+08	2,824489E+09	2,824434E+09	4,242205E+08	5,648923E+09	6,073143E+09
1279	2,121042E+08	2,120859E+08	2,824423E+09	2,824540E+09	4,241901E+08	5,648964E+09	6,073154E+09
1280	2,121364E+08	2,121315E+08	2,824540E+09	2,824423E+09	4,242679E+08	5,648963E+09	6,073231E+09
1281	2,120926E+08	2,121017E+08	2,824391E+09	2,824438E+09	4,241943E+08	5,648828E+09	6,073023E+09
1282	2,121230E+08	2,121108E+08	2,824330E+09	2,824385E+09	4,242338E+08	5,648715E+09	6,072949E+09
1283	2,121354E+08	2,121524E+08	2,824370E+09	2,824209E+09	4,242877E+08	5,648579E+09	6,072867E+09
1284	2,121071E+08	2,121186E+08	2,824169E+09	2,824251E+09	4,242257E+08	5,648420E+09	6,072645E+09
1285	2,121578E+08	2,121516E+08	2,824183E+09	2,824106E+09	4,243094E+08	5,648289E+09	6,072598E+09
1286	2,121445E+08	2,121633E+08	2,824106E+09	2,823990E+09	4,243078E+08	5,648096E+09	6,072404E+09
1287	2,121464E+08	2,121344E+08	2,823899E+09	2,824059E+09	4,242807E+08	5,647957E+09	6,072238E+09
1288	2,121933E+08	2,121870E+08	2,823966E+09	2,823896E+09	4,243803E+08	5,647862E+09	6,072242E+09
1289	2,121551E+08	2,121717E+08	2,823877E+09	2,823871E+09	4,243268E+08	5,647748E+09	6,072075E+09
1290	2,121714E+08	2,121567E+08	2,823848E+09	2,823929E+09	4,243281E+08	5,647777E+09	6,072105E+09
1291	2,121877E+08	2,121942E+08	2,824005E+09	2,823849E+09	4,243820E+08	5,647854E+09	6,072236E+09
1292	2,121427E+08	2,121484E+08	2,823932E+09	2,824028E+09	4,242911E+08	5,647961E+09	6,072252E+09
1293	2,121720E+08	2,121552E+08	2,824043E+09	2,824066E+09	4,243272E+08	5,648110E+09	6,072437E+09
1294	2,121573E+08	2,121711E+08	2,824149E+09	2,824050E+09	4,243284E+08	5,648199E+09	6,072527E+09
1295	2,121281E+08	2,121217E+08	2,824091E+09	2,824249E+09	4,242498E+08	5,648340E+09	6,072590E+09
1296	2,121630E+08	2,121540E+08	2,824263E+09	2,824198E+09	4,243170E+08	5,648461E+09	6,072778E+09
1297	2,121262E+08	2,121384E+08	2,824279E+09	2,824196E+09	4,242646E+08	5,648475E+09	6,072739E+09
1298	2,121235E+08	2,121094E+08	2,824189E+09	2,824304E+09	4,242329E+08	5,648493E+09	6,072726E+09
1299	2,121565E+08	2,121560E+08	2,824275E+09	2,824170E+09	4,243124E+08	5,648446E+09	6,072758E+09
1300	2,121150E+08	2,121311E+08	2,824143E+09	2,824196E+09	4,242461E+08	5,648339E+09	6,072585E+09
1301	2,121457E+08	2,121375E+08	2,824096E+09	2,824131E+09	4,242832E+08	5,648227E+09	6,072510E+09
1302	2,121612E+08	2,121750E+08	2,824116E+09	2,823936E+09	4,243362E+08	5,648051E+09	6,072388E+09
1303	2,121358E+08	2,121395E+08	2,823908E+09	2,823999E+09	4,242754E+08	5,647907E+09	6,072182E+09
1304	2,121879E+08	2,121739E+08	2,823896E+09	2,823869E+09	4,243618E+08	5,647764E+09	6,072126E+09
1305	2,121756E+08	2,121914E+08	2,823832E+09	2,823719E+09	4,243670E+08	5,647551E+09	6,071918E+09
1306	2,121702E+08	2,121666E+08	2,823640E+09	2,823790E+09	4,243368E+08	5,647430E+09	6,071767E+09
1307	2,122146E+08	2,122139E+08	2,823727E+09	2,823633E+09	4,244284E+08	5,647359E+09	6,071788E+09
1308	2,121772E+08	2,121969E+08	2,823674E+09	2,823655E+09	4,243741E+08	5,647328E+09	6,071702E+09
1309	2,121916E+08	2,121760E+08	2,823648E+09	2,823731E+09	4,243676E+08	5,647378E+09	6,071746E+09
1310	2,122094E+08	2,122111E+08	2,823777E+09	2,823644E+09	4,244205E+08	5,647421E+09	6,071842E+09
1311	2,121656E+08	2,121680E+08	2,823706E+09	2,823829E+09	4,243337E+08	5,647536E+09	6,071870E+09
1312	2,121937E+08	2,121767E+08	2,823821E+09	2,823863E+09	4,243705E+08	5,647684E+09	6,072055E+09

1	14	15	16	17	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	2,121803E+08	2,121934E+08	2,823958E+09	2,823810E+09	4,243736E+08	5,647768E+09	6,072142E+09
1314	2,121457E+08	2,121437E+08	2,823897E+09	2,824018E+09	4,242895E+08	5,647915E+09	6,072205E+09
1315	2,121812E+08	2,121715E+08	2,824040E+09	2,823977E+09	4,243527E+08	5,648017E+09	6,072369E+09
1316	2,121476E+08	2,121599E+08	2,824049E+09	2,823998E+09	4,243075E+08	5,648048E+09	6,072355E+09
1317	2,121447E+08	2,121336E+08	2,823952E+09	2,824089E+09	4,242784E+08	5,648041E+09	6,072319E+09
1318	2,121799E+08	2,121802E+08	2,824021E+09	2,823916E+09	4,243601E+08	5,647937E+09	6,072297E+09
1319	2,121410E+08	2,121556E+08	2,823907E+09	2,823939E+09	4,242966E+08	5,647846E+09	6,072143E+09
1320	2,121724E+08	2,121607E+08	2,823853E+09	2,823885E+09	4,243331E+08	5,647738E+09	6,072071E+09
1321	2,121902E+08	2,121992E+08	2,823867E+09	2,823668E+09	4,243895E+08	5,647535E+09	6,071925E+09
1322	2,121605E+08	2,121677E+08	2,823639E+09	2,823743E+09	4,243281E+08	5,647382E+09	6,071710E+09
1323	2,122123E+08	2,122017E+08	2,823606E+09	2,823607E+09	4,244140E+08	5,647213E+09	6,071627E+09
1324	2,122012E+08	2,122217E+08	2,823571E+09	2,823471E+09	4,244229E+08	5,647042E+09	6,071465E+09
1325	2,121938E+08	2,121930E+08	2,823408E+09	2,823538E+09	4,243868E+08	5,646946E+09	6,071333E+09
1326	2,122386E+08	2,122328E+08	2,823481E+09	2,823373E+09	4,244714E+08	5,646854E+09	6,071325E+09
1327	2,122022E+08	2,122152E+08	2,823438E+09	2,823428E+09	4,244174E+08	5,646866E+09	6,071283E+09
1328	2,122159E+08	2,121958E+08	2,823414E+09	2,823528E+09	4,244116E+08	5,646942E+09	6,071353E+09
1329	2,122335E+08	2,122351E+08	2,823562E+09	2,823419E+09	4,244686E+08	5,646981E+09	6,071449E+09
1330	2,121841E+08	2,121944E+08	2,823517E+09	2,823613E+09	4,243785E+08	5,647130E+09	6,071508E+09
1331	2,122105E+08	2,121972E+08	2,823632E+09	2,823654E+09	4,244076E+08	5,647286E+09	6,071694E+09
1332	2,121993E+08	2,122121E+08	2,823782E+09	2,823632E+09	4,244114E+08	5,647414E+09	6,071825E+09
1333	2,121640E+08	2,121609E+08	2,823699E+09	2,823836E+09	4,243249E+08	5,647534E+09	6,071859E+09
1334	2,122026E+08	2,121871E+08	2,823785E+09	2,823764E+09	4,243896E+08	5,647549E+09	6,071939E+09
1335	2,121723E+08	2,121825E+08	2,823787E+09	2,823769E+09	4,243548E+08	5,647556E+09	6,071911E+09
1336	2,121701E+08	2,121594E+08	2,823697E+09	2,823836E+09	4,243295E+08	5,647533E+09	6,071863E+09
1337	2,122063E+08	2,122071E+08	2,823788E+09	2,823624E+09	4,244135E+08	5,647412E+09	6,071826E+09
1338	2,121641E+08	2,121832E+08	2,823675E+09	2,823663E+09	4,243473E+08	5,647338E+09	6,071685E+09
1339	2,121949E+08	2,121842E+08	2,823593E+09	2,823630E+09	4,243791E+08	5,647222E+09	6,071601E+09
1340	2,122157E+08	2,122265E+08	2,823609E+09	2,823441E+09	4,244421E+08	5,647050E+09	6,071492E+09
1341	2,121852E+08	2,121972E+08	2,823376E+09	2,823500E+09	4,243824E+08	5,646876E+09	6,071259E+09
1342	2,122383E+08	2,122263E+08	2,823331E+09	2,823341E+09	4,244646E+08	5,646672E+09	6,071137E+09
1343	2,122291E+08	2,122461E+08	2,823319E+09	2,823215E+09	4,244752E+08	5,646534E+09	6,071009E+09
1344	2,122207E+08	2,122139E+08	2,823167E+09	2,823297E+09	4,244346E+08	5,646464E+09	6,070899E+09
1345	2,122649E+08	2,122537E+08	2,823250E+09	2,823124E+09	4,245186E+08	5,646374E+09	6,070893E+09
1346	2,122239E+08	2,122395E+08	2,823211E+09	2,823200E+09	4,244634E+08	5,646412E+09	6,070875E+09
1347	2,122346E+08	2,122196E+08	2,823187E+09	2,823312E+09	4,244543E+08	5,646498E+09	6,070953E+09
1348	2,122527E+08	2,122599E+08	2,823372E+09	2,823226E+09	4,245126E+08	5,646598E+09	6,071110E+09
1349	2,122019E+08	2,122153E+08	2,823341E+09	2,823419E+09	4,244172E+08	5,646760E+09	6,071177E+09
1350	2,122297E+08	2,122097E+08	2,823418E+09	2,823451E+09	4,244395E+08	5,646869E+09	6,071308E+09
1351	2,122221E+08	2,122267E+08	2,823549E+09	2,823438E+09	4,244488E+08	5,646987E+09	6,071436E+09
1352	2,121878E+08	2,121803E+08	2,823454E+09	2,823628E+09	4,243682E+08	5,647082E+09	6,071450E+09
1353	2,122271E+08	2,122129E+08	2,823546E+09	2,823508E+09	4,244400E+08	5,647054E+09	6,071494E+09
1354	2,121932E+08	2,122124E+08	2,823574E+09	2,823507E+09	4,244056E+08	5,647081E+09	6,071486E+09
1355	2,121897E+08	2,121853E+08	2,823484E+09	2,823583E+09	4,243750E+08	5,647067E+09	6,071442E+09
1356	2,122276E+08	2,122310E+08	2,823581E+09	2,823402E+09	4,244586E+08	5,646983E+09	6,071442E+09
1357	2,121863E+08	2,122064E+08	2,823444E+09	2,823444E+09	4,243927E+08	5,646888E+09	6,071280E+09
1358	2,122202E+08	2,122042E+08	2,823300E+09	2,823386E+09	4,244244E+08	5,646686E+09	6,071110E+09
1359	2,122443E+08	2,122520E+08	2,823308E+09	2,823187E+09	4,244964E+08	5,646495E+09	6,070991E+09
1360	2,122153E+08	2,122244E+08	2,823094E+09	2,823225E+09	4,244397E+08	5,646320E+09	6,070759E+09
1361	2,122682E+08	2,122520E+08	2,823066E+09	2,823035E+09	4,245202E+08	5,646101E+09	6,070622E+09

1	14	15	16	17	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	2,122546E+08	2,122719E+08	2,823072E+09	2,822934E+09	4,245265E+08	5,646007E+09	6,070533E+09
1363	2,122435E+08	2,122367E+08	2,822917E+09	2,823050E+09	4,244801E+08	5,645967E+09	6,070447E+09
1364	2,122862E+08	2,122791E+08	2,823032E+09	2,822919E+09	4,245653E+08	5,645951E+09	6,070516E+09
1365	2,122433E+08	2,122666E+08	2,823016E+09	2,823002E+09	4,245099E+08	5,646018E+09	6,070528E+09
1366	2,122536E+08	2,122393E+08	2,822982E+09	2,823106E+09	4,244929E+08	5,646088E+09	6,070581E+09
1367	2,122741E+08	2,122784E+08	2,823174E+09	2,823039E+09	4,245524E+08	5,646213E+09	6,070765E+09
1368	2,122247E+08	2,122313E+08	2,823135E+09	2,823230E+09	4,244560E+08	5,646365E+09	6,070821E+09
1369	2,122529E+08	2,122269E+08	2,823190E+09	2,823230E+09	4,244798E+08	5,646420E+09	6,070900E+09
1370	2,122431E+08	2,122498E+08	2,823315E+09	2,823208E+09	4,244929E+08	5,646523E+09	6,071016E+09
1371	2,122069E+08	2,122057E+08	2,823220E+09	2,823385E+09	4,244127E+08	5,646605E+09	6,071018E+09
1372	2,122462E+08	2,122396E+08	2,823353E+09	2,823274E+09	4,244858E+08	5,646627E+09	6,071113E+09
1373	2,122124E+08	2,122370E+08	2,823384E+09	2,823270E+09	4,244494E+08	5,646654E+09	6,071103E+09
1374	2,122108E+08	2,122021E+08	2,823244E+09	2,823348E+09	4,244129E+08	5,646592E+09	6,071005E+09
1375	2,122534E+08	2,122509E+08	2,823310E+09	2,823184E+09	4,245044E+08	5,646495E+09	6,070999E+09
1376	2,122158E+08	2,122302E+08	2,823157E+09	2,823206E+09	4,244460E+08	5,646363E+09	6,070809E+09
1377	2,122509E+08	2,122325E+08	2,823010E+09	2,823101E+09	4,244834E+08	5,646111E+09	6,070595E+09
1378	2,122722E+08	2,122822E+08	2,823045E+09	2,822891E+09	4,245544E+08	5,645936E+09	6,070490E+09
1379	2,122405E+08	2,122517E+08	2,822843E+09	2,822941E+09	4,244922E+08	5,645784E+09	6,070276E+09
1380	2,122914E+08	2,122772E+08	2,822844E+09	2,822789E+09	4,245686E+08	5,645633E+09	6,070202E+09
1381	2,122759E+08	2,122971E+08	2,822851E+09	2,822710E+09	4,245729E+08	5,645561E+09	6,070134E+09
1382	2,122645E+08	2,122579E+08	2,822667E+09	2,822831E+09	4,245224E+08	5,645497E+09	6,070020E+09
1383	2,123087E+08	2,123036E+08	2,822791E+09	2,822716E+09	4,246123E+08	5,645508E+09	6,070120E+09
1384	2,122682E+08	2,122886E+08	2,822804E+09	2,822791E+09	4,245568E+08	5,645595E+09	6,070152E+09
1385	2,122779E+08	2,122583E+08	2,822770E+09	2,822869E+09	4,245362E+08	5,645639E+09	6,070175E+09
1386	2,122956E+08	2,122962E+08	2,822961E+09	2,822816E+09	4,245918E+08	5,645777E+09	6,070368E+09
1387	2,122447E+08	2,122502E+08	2,822909E+09	2,823014E+09	4,244948E+08	5,645923E+09	6,070417E+09
1388	2,122717E+08	2,122499E+08	2,822982E+09	2,823024E+09	4,245216E+08	5,646007E+09	6,070528E+09
1389	2,122607E+08	2,122766E+08	2,823127E+09	2,822995E+09	4,245373E+08	5,646122E+09	6,070659E+09
1390	2,122254E+08	2,122263E+08	2,823017E+09	2,823159E+09	4,244517E+08	5,646175E+09	6,070627E+09
1391	2,122668E+08	2,122595E+08	2,823142E+09	2,823069E+09	4,245264E+08	5,646211E+09	6,070737E+09
1392	2,122381E+08	2,122553E+08	2,823157E+09	2,823060E+09	4,244934E+08	5,646217E+09	6,070710E+09
1393	2,122384E+08	2,122227E+08	2,822969E+09	2,823099E+09	4,244611E+08	5,646068E+09	6,070529E+09
1394	2,122808E+08	2,122774E+08	2,823021E+09	2,822916E+09	4,245582E+08	5,645937E+09	6,070496E+09
1395	2,122425E+08	2,122611E+08	2,822866E+09	2,822916E+09	4,245036E+08	5,645782E+09	6,070285E+09
1396	2,122764E+08	2,122632E+08	2,822765E+09	2,822813E+09	4,245396E+08	5,645577E+09	6,070117E+09
1397	2,122953E+08	2,123110E+08	2,822815E+09	2,822612E+09	4,246064E+08	5,645427E+09	6,070033E+09
1398	2,122635E+08	2,122728E+08	2,822586E+09	2,822677E+09	4,245363E+08	5,645263E+09	6,069799E+09
1399	2,123149E+08	2,123008E+08	2,822584E+09	2,822567E+09	4,246157E+08	5,645151E+09	6,069767E+09
1400	2,123029E+08	2,123222E+08	2,822606E+09	2,822493E+09	4,246251E+08	5,645099E+09	6,069724E+09
1401	2,122909E+08	2,122842E+08	2,822431E+09	2,822591E+09	4,245751E+08	5,645022E+09	6,069597E+09
1402	2,123325E+08	2,123280E+08	2,822584E+09	2,822484E+09	4,246605E+08	5,645068E+09	6,069729E+09
1403	2,122905E+08	2,123086E+08	2,822596E+09	2,822573E+09	4,245991E+08	5,645169E+09	6,069768E+09
1404	2,122978E+08	2,122761E+08	2,822579E+09	2,822674E+09	4,245739E+08	5,645253E+09	6,069827E+09
1405	2,123134E+08	2,123153E+08	2,822756E+09	2,822620E+09	4,246287E+08	5,645376E+09	6,070005E+09
1406	2,122621E+08	2,122685E+08	2,822674E+09	2,822802E+09	4,245306E+08	5,645477E+09	6,070007E+09
1407	2,122905E+08	2,122737E+08	2,822761E+09	2,822822E+09	4,245643E+08	5,645582E+09	6,070147E+09
1408	2,122842E+08	2,122979E+08	2,822926E+09	2,822777E+09	4,245820E+08	5,645703E+09	6,070285E+09
1409	2,122499E+08	2,122463E+08	2,822797E+09	2,822915E+09	4,244962E+08	5,645712E+09	6,070208E+09
1410	2,122908E+08	2,122794E+08	2,822903E+09	2,822830E+09	4,245701E+08	5,645733E+09	6,070303E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1411	2,122626E+08	2,122784E+08	2,822891E+09	2,822817E+09	4,245410E+08	5,645709E+09	6,070250E+09
1412	2,122622E+08	2,122515E+08	2,822719E+09	2,822849E+09	4,245137E+08	5,645569E+09	6,070082E+09
1413	2,123033E+08	2,123087E+08	2,822783E+09	2,822652E+09	4,246120E+08	5,645436E+09	6,070048E+09
1414	2,122654E+08	2,122872E+08	2,822616E+09	2,822639E+09	4,245525E+08	5,645255E+09	6,069808E+09
1415	2,123006E+08	2,122888E+08	2,822513E+09	2,822567E+09	4,245895E+08	5,645079E+09	6,069669E+09
1416	2,123235E+08	2,123329E+08	2,822565E+09	2,822375E+09	4,246564E+08	5,644939E+09	6,069596E+09
1417	2,122922E+08	2,122963E+08	2,822310E+09	2,822421E+09	4,245885E+08	5,644731E+09	6,069320E+09
1418	2,123411E+08	2,123271E+08	2,822318E+09	2,822316E+09	4,246682E+08	5,644633E+09	6,069301E+09
1419	2,123287E+08	2,123499E+08	2,822357E+09	2,822245E+09	4,246785E+08	5,644602E+09	6,069281E+09
1420	2,123143E+08	2,123089E+08	2,822227E+09	2,822351E+09	4,246232E+08	5,644577E+09	6,069200E+09
1421	2,123525E+08	2,123490E+08	2,822385E+09	2,822263E+09	4,247015E+08	5,644648E+09	6,069349E+09
1422	2,123102E+08	2,123238E+08	2,822362E+09	2,822359E+09	4,246340E+08	5,644722E+09	6,069356E+09
1423	2,123173E+08	2,122956E+08	2,822338E+09	2,822488E+09	4,246130E+08	5,644827E+09	6,069440E+09
1424	2,123364E+08	2,123366E+08	2,822538E+09	2,822425E+09	4,246730E+08	5,644963E+09	6,069636E+09
1425	2,122851E+08	2,122922E+08	2,822464E+09	2,822570E+09	4,245773E+08	5,645034E+09	6,069611E+09
1426	2,123111E+08	2,122967E+08	2,822573E+09	2,822591E+09	4,246078E+08	5,645164E+09	6,069772E+09
1427	2,123052E+08	2,123192E+08	2,822726E+09	2,822558E+09	4,246244E+08	5,645284E+09	6,069908E+09
1428	2,122703E+08	2,122673E+08	2,822598E+09	2,822701E+09	4,245375E+08	5,645299E+09	6,069836E+09
1429	2,123101E+08	2,123029E+08	2,822673E+09	2,822610E+09	4,246130E+08	5,645282E+09	6,069895E+09
1430	2,122841E+08	2,123022E+08	2,822617E+09	2,822570E+09	4,245863E+08	5,645187E+09	6,069773E+09
1431	2,122858E+08	2,122804E+08	2,822451E+09	2,822602E+09	4,245661E+08	5,645052E+09	6,069619E+09
1432	2,123320E+08	2,123328E+08	2,822533E+09	2,822386E+09	4,246649E+08	5,644920E+09	6,069585E+09
1433	2,122947E+08	2,123108E+08	2,822347E+09	2,822350E+09	4,246055E+08	5,644697E+09	6,069302E+09
1434	2,123285E+08	2,123125E+08	2,822242E+09	2,822293E+09	4,246409E+08	5,644535E+09	6,069176E+09
1435	2,123508E+08	2,123591E+08	2,822283E+09	2,822118E+09	4,247099E+08	5,644401E+09	6,069111E+09
1436	2,123181E+08	2,123260E+08	2,822073E+09	2,822173E+09	4,246441E+08	5,644246E+09	6,068891E+09
1437	2,123631E+08	2,123564E+08	2,822103E+09	2,822076E+09	4,247195E+08	5,644178E+09	6,068898E+09
1438	2,123501E+08	2,123713E+08	2,822132E+09	2,822013E+09	4,247214E+08	5,644145E+09	6,068866E+09
1439	2,123356E+08	2,123299E+08	2,822001E+09	2,822158E+09	4,246655E+08	5,644160E+09	6,068825E+09
1440	2,123768E+08	2,123641E+08	2,822158E+09	2,822071E+09	4,247409E+08	5,644229E+09	6,068970E+09
1441	2,123342E+08	2,123430E+08	2,822112E+09	2,822136E+09	4,246772E+08	5,644248E+09	6,068925E+09
1442	2,123389E+08	2,123194E+08	2,822109E+09	2,822255E+09	4,246583E+08	5,644364E+09	6,069023E+09
1443	2,123570E+08	2,123616E+08	2,822333E+09	2,822194E+09	4,247186E+08	5,644528E+09	6,069246E+09
1444	2,123045E+08	2,123153E+08	2,822304E+09	2,822343E+09	4,246198E+08	5,644648E+09	6,069267E+09
1445	2,123271E+08	2,123173E+08	2,822400E+09	2,822382E+09	4,246445E+08	5,644782E+09	6,069426E+09
1446	2,123228E+08	2,123353E+08	2,822497E+09	2,822352E+09	4,246580E+08	5,644849E+09	6,069507E+09
1447	2,122907E+08	2,122905E+08	2,822342E+09	2,822508E+09	4,245812E+08	5,644850E+09	6,069431E+09
1448	2,123367E+08	2,123254E+08	2,822420E+09	2,822390E+09	4,246622E+08	5,644810E+09	6,069472E+09
1449	2,123127E+08	2,123281E+08	2,822352E+09	2,822298E+09	4,246407E+08	5,644650E+09	6,069290E+09
1450	2,123136E+08	2,123057E+08	2,822199E+09	2,822319E+09	4,246193E+08	5,644518E+09	6,069137E+09
1451	2,123596E+08	2,123572E+08	2,822273E+09	2,822117E+09	4,247168E+08	5,644390E+09	6,069107E+09
1452	2,123211E+08	2,123361E+08	2,822099E+09	2,822082E+09	4,246572E+08	5,644182E+09	6,068839E+09
1453	2,123505E+08	2,123411E+08	2,821985E+09	2,822038E+09	4,246916E+08	5,644023E+09	6,068715E+09
1454	2,123731E+08	2,123869E+08	2,822008E+09	2,821862E+09	4,247600E+08	5,643870E+09	6,068630E+09
1455	2,123419E+08	2,123558E+08	2,821819E+09	2,821942E+09	4,246978E+08	5,643760E+09	6,068458E+09
1456	2,123907E+08	2,123770E+08	2,821874E+09	2,821845E+09	4,247676E+08	5,643720E+09	6,068487E+09
1457	2,123777E+08	2,123901E+08	2,821876E+09	2,821767E+09	4,247678E+08	5,643642E+09	6,068410E+09
1458	2,123604E+08	2,123495E+08	2,821754E+09	2,821919E+09	4,247099E+08	5,643673E+09	6,068383E+09
1459	2,123992E+08	2,123868E+08	2,821915E+09	2,821847E+09	4,247860E+08	5,643762E+09	6,068548E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1460	2,123543E+08	2,123694E+08	2,821929E+09	2,821910E+09	4,247237E+08	5,643839E+09	6,068563E+09
1461	2,123539E+08	2,123457E+08	2,821956E+09	2,822044E+09	4,246996E+08	5,644000E+09	6,068700E+09
1462	2,123721E+08	2,123802E+08	2,822158E+09	2,821998E+09	4,247523E+08	5,644157E+09	6,068909E+09
1463	2,123223E+08	2,123341E+08	2,822113E+09	2,822183E+09	4,246564E+08	5,644297E+09	6,068953E+09
1464	2,123500E+08	2,123302E+08	2,822182E+09	2,822211E+09	4,246803E+08	5,644392E+09	6,069072E+09
1465	2,123482E+08	2,123532E+08	2,822223E+09	2,822130E+09	4,247014E+08	5,644353E+09	6,069054E+09
1466	2,123169E+08	2,123158E+08	2,822072E+09	2,822248E+09	4,246326E+08	5,644321E+09	6,068953E+09
1467	2,123634E+08	2,123515E+08	2,822154E+09	2,822113E+09	4,247149E+08	5,644267E+09	6,068982E+09
1468	2,123388E+08	2,123549E+08	2,822125E+09	2,822006E+09	4,246936E+08	5,644132E+09	6,068826E+09
1469	2,123356E+08	2,123326E+08	2,821965E+09	2,822043E+09	4,246682E+08	5,644008E+09	6,068676E+09
1470	2,123804E+08	2,123804E+08	2,821999E+09	2,821857E+09	4,247608E+08	5,643855E+09	6,068616E+09
1471	2,123446E+08	2,123663E+08	2,821829E+09	2,821856E+09	4,247109E+08	5,643686E+09	6,068397E+09
1472	2,123779E+08	2,123672E+08	2,821735E+09	2,821807E+09	4,247451E+08	5,643541E+09	6,068287E+09
1473	2,124014E+08	2,124126E+08	2,821749E+09	2,821603E+09	4,248140E+08	5,643352E+09	6,068166E+09
1474	2,123701E+08	2,123801E+08	2,821578E+09	2,821684E+09	4,247501E+08	5,643262E+09	6,068012E+09
1475	2,124168E+08	2,123972E+08	2,821625E+09	2,821609E+09	4,248141E+08	5,643234E+09	6,068048E+09
1476	2,124017E+08	2,124115E+08	2,821651E+09	2,821528E+09	4,248131E+08	5,643178E+09	6,067991E+09
1477	2,123786E+08	2,123749E+08	2,821536E+09	2,821690E+09	4,247535E+08	5,643226E+09	6,067980E+09
1478	2,124149E+08	2,124100E+08	2,821697E+09	2,821626E+09	4,248249E+08	5,643323E+09	6,068148E+09
1479	2,123723E+08	2,123944E+08	2,821744E+09	2,821721E+09	4,247667E+08	5,643465E+09	6,068231E+09
1480	2,123752E+08	2,123612E+08	2,821784E+09	2,821863E+09	4,247364E+08	5,643647E+09	6,068383E+09
1481	2,123951E+08	2,123943E+08	2,821932E+09	2,821799E+09	4,247894E+08	5,643731E+09	6,068521E+09
1482	2,123466E+08	2,123514E+08	2,821868E+09	2,821969E+09	4,246979E+08	5,643837E+09	6,068535E+09
1483	2,123745E+08	2,123519E+08	2,821919E+09	2,821988E+09	4,247263E+08	5,643907E+09	6,068633E+09
1484	2,123725E+08	2,123800E+08	2,821996E+09	2,821867E+09	4,247525E+08	5,643863E+09	6,068616E+09
1485	2,123366E+08	2,123455E+08	2,821865E+09	2,821978E+09	4,246821E+08	5,643843E+09	6,068525E+09
1486	2,123821E+08	2,123759E+08	2,821923E+09	2,821853E+09	4,247580E+08	5,643776E+09	6,068534E+09
1487	2,123603E+08	2,123810E+08	2,821887E+09	2,821781E+09	4,247413E+08	5,643668E+09	6,068410E+09
1488	2,123612E+08	2,123535E+08	2,821716E+09	2,821817E+09	4,247147E+08	5,643533E+09	6,068248E+09
1489	2,124074E+08	2,124050E+08	2,821701E+09	2,821600E+09	4,248124E+08	5,643301E+09	6,068114E+09
1490	2,123739E+08	2,123952E+08	2,821553E+09	2,821581E+09	4,247691E+08	5,643134E+09	6,067903E+09
1491	2,124070E+08	2,123935E+08	2,821470E+09	2,821537E+09	4,248005E+08	5,643007E+09	6,067808E+09
1492	2,124294E+08	2,124368E+08	2,821517E+09	2,821326E+09	4,248662E+08	5,642843E+09	6,067709E+09
1493	2,123927E+08	2,124049E+08	2,821344E+09	2,821427E+09	4,247976E+08	5,642771E+09	6,067568E+09
1494	2,124362E+08	2,124184E+08	2,821363E+09	2,821374E+09	4,248546E+08	5,642737E+09	6,067592E+09
1495	2,124220E+08	2,124388E+08	2,821419E+09	2,821331E+09	4,248608E+08	5,642749E+09	6,067610E+09
1496	2,124010E+08	2,123967E+08	2,821348E+09	2,821496E+09	4,247977E+08	5,642844E+09	6,067642E+09
1497	2,124364E+08	2,124293E+08	2,821497E+09	2,821421E+09	4,248657E+08	5,642917E+09	6,067783E+09
1498	2,123961E+08	2,124126E+08	2,821557E+09	2,821520E+09	4,248087E+08	5,643077E+09	6,067886E+09
1499	2,123977E+08	2,123764E+08	2,821566E+09	2,821673E+09	4,247741E+08	5,643239E+09	6,068013E+09
1500	2,124171E+08	2,124124E+08	2,821713E+09	2,821582E+09	4,248295E+08	5,643295E+09	6,068125E+09
1501	2,123650E+08	2,123777E+08	2,821640E+09	2,821733E+09	4,247427E+08	5,643373E+09	6,068116E+09
1502	2,123912E+08	2,123767E+08	2,821674E+09	2,821739E+09	4,247679E+08	5,643412E+09	6,068180E+09
1503	2,123928E+08	2,124074E+08	2,821781E+09	2,821635E+09	4,248002E+08	5,643416E+09	6,068216E+09
1504	2,123608E+08	2,123652E+08	2,821655E+09	2,821743E+09	4,247261E+08	5,643398E+09	6,068124E+09
1505	2,124065E+08	2,123949E+08	2,821657E+09	2,821603E+09	4,248014E+08	5,643260E+09	6,068062E+09
1506	2,123881E+08	2,124052E+08	2,821614E+09	2,821524E+09	4,247933E+08	5,643138E+09	6,067931E+09
1507	2,123891E+08	2,123807E+08	2,821434E+09	2,821565E+09	4,247698E+08	5,642999E+09	6,067769E+09
1508	2,124354E+08	2,124346E+08	2,821456E+09	2,821322E+09	4,248700E+08	5,642778E+09	6,067648E+09

1	14	15	16	17	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	2,123991E+08	2,124260E+08	2,821322E+09	2,821307E+09	4,248252E+08	5,642629E+09	6,067454E+09
1510	2,124295E+08	2,124172E+08	2,821214E+09	2,821282E+09	4,248467E+08	5,642496E+09	6,067343E+09
1511	2,124532E+08	2,124610E+08	2,821264E+09	2,821108E+09	4,249142E+08	5,642373E+09	6,067287E+09
1512	2,124182E+08	2,124248E+08	2,821098E+09	2,821209E+09	4,248430E+08	5,642307E+09	6,067150E+09
1513	2,124598E+08	2,124412E+08	2,821094E+09	2,821136E+09	4,249011E+08	5,642230E+09	6,067131E+09
1514	2,124473E+08	2,124643E+08	2,821191E+09	2,821087E+09	4,249116E+08	5,642278E+09	6,067190E+09
1515	2,124249E+08	2,124185E+08	2,821146E+09	2,821274E+09	4,248435E+08	5,642420E+09	6,067264E+09
1516	2,124587E+08	2,124487E+08	2,821313E+09	2,821194E+09	4,249074E+08	5,642507E+09	6,067415E+09
1517	2,124143E+08	2,124331E+08	2,821361E+09	2,821308E+09	4,248474E+08	5,642669E+09	6,067517E+09
1518	2,124129E+08	2,123958E+08	2,821331E+09	2,821470E+09	4,248087E+08	5,642801E+09	6,067610E+09
1519	2,124351E+08	2,124371E+08	2,821492E+09	2,821393E+09	4,248722E+08	5,642885E+09	6,067757E+09
1520	2,123865E+08	2,123994E+08	2,821448E+09	2,821522E+09	4,247859E+08	5,642970E+09	6,067756E+09
1521	2,124133E+08	2,123973E+08	2,821448E+09	2,821502E+09	4,248105E+08	5,642950E+09	6,067760E+09
1522	2,124189E+08	2,124286E+08	2,821558E+09	2,821394E+09	4,248474E+08	5,642952E+09	6,067799E+09
1523	2,123870E+08	2,123852E+08	2,821405E+09	2,821512E+09	4,247722E+08	5,642917E+09	6,067689E+09
1524	2,124320E+08	2,124187E+08	2,821400E+09	2,821343E+09	4,248507E+08	5,642743E+09	6,067594E+09
1525	2,124117E+08	2,124367E+08	2,821354E+09	2,821253E+09	4,248484E+08	5,642607E+09	6,067455E+09
1526	2,124113E+08	2,124101E+08	2,821160E+09	2,821290E+09	4,248214E+08	5,642451E+09	6,067272E+09
1527	2,124607E+08	2,124634E+08	2,821209E+09	2,821074E+09	4,249241E+08	5,642283E+09	6,067207E+09
1528	2,124278E+08	2,124479E+08	2,821079E+09	2,821060E+09	4,248757E+08	5,642139E+09	6,067015E+09
1529	2,124567E+08	2,124371E+08	2,820918E+09	2,821026E+09	4,248937E+08	5,641944E+09	6,066838E+09
1530	2,124819E+08	2,124854E+08	2,820987E+09	2,820853E+09	4,249673E+08	5,641840E+09	6,066808E+09
1531	2,124448E+08	2,124510E+08	2,820845E+09	2,820966E+09	4,248957E+08	5,641810E+09	6,066706E+09
1532	2,124827E+08	2,124679E+08	2,820897E+09	2,820883E+09	4,249506E+08	5,641780E+09	6,066731E+09
1533	2,124671E+08	2,124910E+08	2,821022E+09	2,820861E+09	4,249581E+08	5,641883E+09	6,066841E+09
1534	2,124410E+08	2,124374E+08	2,820950E+09	2,821078E+09	4,248785E+08	5,642029E+09	6,066907E+09
1535	2,124765E+08	2,124668E+08	2,821116E+09	2,821034E+09	4,249434E+08	5,642150E+09	6,067093E+09
1536	2,124357E+08	2,124486E+08	2,821147E+09	2,821133E+09	4,248843E+08	5,642280E+09	6,067164E+09
1537	2,124335E+08	2,124148E+08	2,821073E+09	2,821254E+09	4,248483E+08	5,642327E+09	6,067176E+09
1538	2,124595E+08	2,124592E+08	2,821264E+09	2,821152E+09	4,249187E+08	5,642416E+09	6,067334E+09
1539	2,124114E+08	2,124204E+08	2,821229E+09	2,821281E+09	4,248318E+08	5,642510E+09	6,067342E+09
1540	2,124370E+08	2,124189E+08	2,821233E+09	2,821242E+09	4,248560E+08	5,642475E+09	6,067331E+09
1541	2,124409E+08	2,124543E+08	2,821324E+09	2,821143E+09	4,248952E+08	5,642466E+09	6,067362E+09
1542	2,124068E+08	2,124117E+08	2,821138E+09	2,821267E+09	4,248185E+08	5,642405E+09	6,067224E+09
1543	2,124545E+08	2,124492E+08	2,821153E+09	2,821116E+09	4,249037E+08	5,642269E+09	6,067172E+09
1544	2,124383E+08	2,124629E+08	2,821125E+09	2,821013E+09	4,249013E+08	5,642137E+09	6,067039E+09
1545	2,124384E+08	2,124343E+08	2,820890E+09	2,821031E+09	4,248727E+08	5,641921E+09	6,066793E+09
1546	2,124911E+08	2,124858E+08	2,820937E+09	2,820809E+09	4,249770E+08	5,641746E+09	6,066723E+09
1547	2,124576E+08	2,124702E+08	2,820796E+09	2,820803E+09	4,249277E+08	5,641599E+09	6,066526E+09
1548	2,124837E+08	2,124637E+08	2,820647E+09	2,820744E+09	4,249474E+08	5,641391E+09	6,066338E+09
1549	2,125045E+08	2,125168E+08	2,820745E+09	2,820581E+09	4,250213E+08	5,641326E+09	6,066348E+09
1550	2,124637E+08	2,124782E+08	2,820626E+09	2,820720E+09	4,249420E+08	5,641345E+09	6,066287E+09
1551	2,125021E+08	2,124912E+08	2,820716E+09	2,820686E+09	4,249933E+08	5,641402E+09	6,066395E+09
1552	2,124893E+08	2,125065E+08	2,820838E+09	2,820683E+09	4,249958E+08	5,641521E+09	6,066517E+09
1553	2,124621E+08	2,124520E+08	2,820704E+09	2,820889E+09	4,249140E+08	5,641593E+09	6,066507E+09
1554	2,125004E+08	2,124850E+08	2,820872E+09	2,820833E+09	4,249853E+08	5,641705E+09	6,066691E+09
1555	2,124597E+08	2,124697E+08	2,820919E+09	2,820920E+09	4,249294E+08	5,641839E+09	6,066768E+09
1556	2,124558E+08	2,124387E+08	2,820876E+09	2,821005E+09	4,248945E+08	5,641882E+09	6,066776E+09
1557	2,124794E+08	2,124847E+08	2,821079E+09	2,820913E+09	4,249641E+08	5,641992E+09	6,066956E+09

1	14	15	16	17	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	2,124288E+08	2,124423E+08	2,821017E+09	2,821057E+09	4,248712E+08	5,642074E+09	6,066945E+09
1559	2,124555E+08	2,124418E+08	2,821018E+09	2,821044E+09	4,248974E+08	5,642062E+09	6,066959E+09
1560	2,124636E+08	2,124769E+08	2,821088E+09	2,820931E+09	4,249405E+08	5,642019E+09	6,066960E+09
1561	2,124306E+08	2,124367E+08	2,820852E+09	2,821016E+09	4,248673E+08	5,641868E+09	6,066735E+09
1562	2,124838E+08	2,124744E+08	2,820888E+09	2,820846E+09	4,249582E+08	5,641734E+09	6,066692E+09
1563	2,124697E+08	2,124862E+08	2,820854E+09	2,820740E+09	4,249559E+08	5,641594E+09	6,066550E+09
1564	2,124680E+08	2,124587E+08	2,820615E+09	2,820734E+09	4,249267E+08	5,641349E+09	6,066276E+09
1565	2,125172E+08	2,125138E+08	2,820660E+09	2,820524E+09	4,250310E+08	5,641185E+09	6,066216E+09
1566	2,124795E+08	2,124993E+08	2,820518E+09	2,820533E+09	4,249788E+08	5,641051E+09	6,066029E+09
1567	2,125050E+08	2,124942E+08	2,820428E+09	2,820511E+09	4,249991E+08	5,640939E+09	6,065938E+09
1568	2,125277E+08	2,125411E+08	2,820557E+09	2,820369E+09	4,250689E+08	5,640925E+09	6,065994E+09
1569	2,124866E+08	2,124976E+08	2,820405E+09	2,820514E+09	4,249842E+08	5,640919E+09	6,065904E+09
1570	2,125271E+08	2,125074E+08	2,820495E+09	2,820493E+09	4,250345E+08	5,640988E+09	6,066022E+09
1571	2,125149E+08	2,125218E+08	2,820596E+09	2,820494E+09	4,250367E+08	5,641089E+09	6,066126E+09
1572	2,124850E+08	2,124742E+08	2,820460E+09	2,820654E+09	4,249592E+08	5,641114E+09	6,066073E+09
1573	2,125201E+08	2,125116E+08	2,820649E+09	2,820588E+09	4,250317E+08	5,641237E+09	6,066269E+09
1574	2,124763E+08	2,124948E+08	2,820715E+09	2,820678E+09	4,249711E+08	5,641393E+09	6,066364E+09
1575	2,124733E+08	2,124619E+08	2,820707E+09	2,820795E+09	4,249352E+08	5,641502E+09	6,066438E+09
1576	2,124992E+08	2,125024E+08	2,820892E+09	2,820718E+09	4,250016E+08	5,641610E+09	6,066611E+09
1577	2,124497E+08	2,124612E+08	2,820766E+09	2,820848E+09	4,249109E+08	5,641614E+09	6,066524E+09
1578	2,124802E+08	2,124641E+08	2,820759E+09	2,820820E+09	4,249443E+08	5,641579E+09	6,066523E+09
1579	2,124908E+08	2,125006E+08	2,820833E+09	2,820693E+09	4,249914E+08	5,641526E+09	6,066518E+09
1580	2,124586E+08	2,124645E+08	2,820606E+09	2,820733E+09	4,249231E+08	5,641339E+09	6,066262E+09
1581	2,125106E+08	2,125011E+08	2,820637E+09	2,820568E+09	4,250117E+08	5,641205E+09	6,066217E+09
1582	2,124939E+08	2,125110E+08	2,820581E+09	2,820472E+09	4,250050E+08	5,641053E+09	6,066058E+09
1583	2,124922E+08	2,124850E+08	2,820355E+09	2,820486E+09	4,249772E+08	5,640841E+09	6,065818E+09
1584	2,125415E+08	2,125399E+08	2,820403E+09	2,820279E+09	4,250814E+08	5,640682E+09	6,065764E+09
1585	2,125033E+08	2,125262E+08	2,820248E+09	2,820275E+09	4,250296E+08	5,640523E+09	6,065553E+09
1586	2,125311E+08	2,125184E+08	2,820198E+09	2,820268E+09	4,250496E+08	5,640466E+09	6,065516E+09
1587	2,125551E+08	2,125607E+08	2,820331E+09	2,820151E+09	4,251158E+08	5,640482E+09	6,065598E+09
1588	2,125131E+08	2,125184E+08	2,820169E+09	2,820279E+09	4,250315E+08	5,640448E+09	6,065479E+09
1589	2,125495E+08	2,125295E+08	2,820255E+09	2,820268E+09	4,250791E+08	5,640523E+09	6,065602E+09
1590	2,125331E+08	2,125459E+08	2,820357E+09	2,820271E+09	4,250791E+08	5,640628E+09	6,065707E+09
1591	2,125021E+08	2,124998E+08	2,820281E+09	2,820447E+09	4,250018E+08	5,640729E+09	6,065731E+09
1592	2,125378E+08	2,125326E+08	2,820491E+09	2,820394E+09	4,250704E+08	5,640884E+09	6,065955E+09
1593	2,124948E+08	2,125121E+08	2,820515E+09	2,820478E+09	4,250070E+08	5,640993E+09	6,066000E+09
1594	2,124950E+08	2,124781E+08	2,820499E+09	2,820604E+09	4,249731E+08	5,641103E+09	6,066076E+09
1595	2,125235E+08	2,125189E+08	2,820649E+09	2,820520E+09	4,250424E+08	5,641169E+09	6,066211E+09
1596	2,124750E+08	2,124857E+08	2,820503E+09	2,820594E+09	4,249607E+08	5,641098E+09	6,066058E+09
1597	2,125042E+08	2,124916E+08	2,820507E+09	2,820551E+09	4,249959E+08	5,641058E+09	6,066053E+09
1598	2,125138E+08	2,125266E+08	2,820577E+09	2,820418E+09	4,250404E+08	5,640995E+09	6,066035E+09
1599	2,124830E+08	2,124906E+08	2,820374E+09	2,820473E+09	4,249736E+08	5,640847E+09	6,065821E+09
1600	2,125359E+08	2,125241E+08	2,820381E+09	2,820319E+09	4,250600E+08	5,640699E+09	6,065759E+09
1601	2,125188E+08	2,125362E+08	2,820280E+09	2,820207E+09	4,250550E+08	5,640487E+09	6,065542E+09
1602	2,125193E+08	2,125132E+08	2,820081E+09	2,820225E+09	4,250325E+08	5,640306E+09	6,065339E+09
1603	2,125689E+08	2,125663E+08	2,820156E+09	2,820030E+09	4,251352E+08	5,640186E+09	6,065322E+09
1604	2,125312E+08	2,125545E+08	2,820021E+09	2,820009E+09	4,250857E+08	5,640030E+09	6,065116E+09
1605	2,125559E+08	2,125432E+08	2,819978E+09	2,820028E+09	4,250991E+08	5,640006E+09	6,065106E+09
1606	2,125762E+08	2,125820E+08	2,820092E+09	2,819934E+09	4,251582E+08	5,640026E+09	6,065184E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1607	2,125340E+08	2,125412E+08	2,819951E+09	2,820074E+09	4,250751E+08	5,640026E+09	6,065101E+09
1608	2,125688E+08	2,125511E+08	2,820034E+09	2,820064E+09	4,251199E+08	5,640098E+09	6,065218E+09
1609	2,125522E+08	2,125669E+08	2,820129E+09	2,820048E+09	4,251191E+08	5,640177E+09	6,065296E+09
1610	2,125238E+08	2,125187E+08	2,820087E+09	2,820231E+09	4,250425E+08	5,640318E+09	6,065361E+09
1611	2,125604E+08	2,125472E+08	2,820291E+09	2,820197E+09	4,251076E+08	5,640489E+09	6,065597E+09
1612	2,125189E+08	2,125318E+08	2,820295E+09	2,820254E+09	4,250507E+08	5,640549E+09	6,065599E+09
1613	2,125165E+08	2,125005E+08	2,820265E+09	2,820380E+09	4,250170E+08	5,640645E+09	6,065662E+09
1614	2,125428E+08	2,125440E+08	2,820406E+09	2,820291E+09	4,250868E+08	5,640697E+09	6,065783E+09
1615	2,124964E+08	2,125129E+08	2,820301E+09	2,820360E+09	4,250093E+08	5,640661E+09	6,065670E+09
1616	2,125264E+08	2,125154E+08	2,820295E+09	2,820321E+09	4,250418E+08	5,640616E+09	6,065658E+09
1617	2,125373E+08	2,125478E+08	2,820317E+09	2,820171E+09	4,250851E+08	5,640487E+09	6,065573E+09
1618	2,125098E+08	2,125130E+08	2,820106E+09	2,820225E+09	4,250227E+08	5,640330E+09	6,065353E+09
1619	2,125637E+08	2,125472E+08	2,820093E+09	2,820066E+09	4,251110E+08	5,640159E+09	6,065270E+09
1620	2,125476E+08	2,125676E+08	2,819994E+09	2,819908E+09	4,251152E+08	5,639902E+09	6,065017E+09
1621	2,125454E+08	2,125444E+08	2,819832E+09	2,819935E+09	4,250898E+08	5,639767E+09	6,064857E+09
1622	2,125920E+08	2,125933E+08	2,819918E+09	2,819767E+09	4,251852E+08	5,639685E+09	6,064870E+09
1623	2,125559E+08	2,125784E+08	2,819813E+09	2,819780E+09	4,251343E+08	5,639593E+09	6,064728E+09
1624	2,125789E+08	2,125635E+08	2,819748E+09	2,819824E+09	4,251424E+08	5,639572E+09	6,064714E+09
1625	2,125980E+08	2,126016E+08	2,819820E+09	2,819715E+09	4,251996E+08	5,639535E+09	6,064734E+09
1626	2,125573E+08	2,125637E+08	2,819714E+09	2,819856E+09	4,251211E+08	5,639571E+09	6,064692E+09
1627	2,125924E+08	2,125709E+08	2,819823E+09	2,819853E+09	4,251633E+08	5,639675E+09	6,064839E+09
1628	2,125763E+08	2,125891E+08	2,819930E+09	2,819813E+09	4,251655E+08	5,639743E+09	6,064909E+09
1629	2,125451E+08	2,125389E+08	2,819900E+09	2,820017E+09	4,250840E+08	5,639918E+09	6,065002E+09
1630	2,125777E+08	2,125661E+08	2,820076E+09	2,819998E+09	4,251439E+08	5,640075E+09	6,065218E+09
1631	2,125382E+08	2,125544E+08	2,820095E+09	2,820052E+09	4,250927E+08	5,640147E+09	6,065239E+09
1632	2,125346E+08	2,125251E+08	2,820047E+09	2,820168E+09	4,250597E+08	5,640215E+09	6,065275E+09
1633	2,125623E+08	2,125664E+08	2,820163E+09	2,820048E+09	4,251287E+08	5,640211E+09	6,065340E+09
1634	2,125209E+08	2,125357E+08	2,820071E+09	2,820115E+09	4,250566E+08	5,640186E+09	6,065242E+09
1635	2,125540E+08	2,125345E+08	2,820039E+09	2,820081E+09	4,250885E+08	5,640120E+09	6,065208E+09
1636	2,125665E+08	2,125733E+08	2,820032E+09	2,819890E+09	4,251397E+08	5,639922E+09	6,065062E+09
1637	2,125367E+08	2,125422E+08	2,819829E+09	2,819940E+09	4,250789E+08	5,639768E+09	6,064847E+09
1638	2,125860E+08	2,125778E+08	2,819828E+09	2,819791E+09	4,251638E+08	5,639619E+09	6,064783E+09
1639	2,125723E+08	2,125982E+08	2,819789E+09	2,819649E+09	4,251705E+08	5,639438E+09	6,064608E+09
1640	2,125688E+08	2,125702E+08	2,819619E+09	2,819706E+09	4,251391E+08	5,639325E+09	6,064464E+09
1641	2,126157E+08	2,126131E+08	2,819662E+09	2,819544E+09	4,252289E+08	5,639206E+09	6,064435E+09
1642	2,125834E+08	2,125984E+08	2,819549E+09	2,819566E+09	4,251819E+08	5,639116E+09	6,064297E+09
1643	2,126061E+08	2,125825E+08	2,819470E+09	2,819608E+09	4,251886E+08	5,639077E+09	6,064266E+09
1644	2,126246E+08	2,126275E+08	2,819554E+09	2,819452E+09	4,252521E+08	5,639005E+09	6,064257E+09
1645	2,125805E+08	2,125889E+08	2,819500E+09	2,819595E+09	4,251694E+08	5,639094E+09	6,064264E+09
1646	2,126104E+08	2,125930E+08	2,819628E+09	2,819621E+09	4,252034E+08	5,639249E+09	6,064452E+09
1647	2,125962E+08	2,126100E+08	2,819767E+09	2,819610E+09	4,252062E+08	5,639377E+09	6,064583E+09
1648	2,125621E+08	2,125592E+08	2,819712E+09	2,819837E+09	4,251214E+08	5,639549E+09	6,064671E+09
1649	2,125939E+08	2,125861E+08	2,819845E+09	2,819803E+09	4,251800E+08	5,639649E+09	6,064829E+09
1650	2,125592E+08	2,125769E+08	2,819880E+09	2,819852E+09	4,251361E+08	5,639732E+09	6,064868E+09
1651	2,125580E+08	2,125449E+08	2,819831E+09	2,819959E+09	4,251029E+08	5,639789E+09	6,064892E+09
1652	2,125891E+08	2,125887E+08	2,819925E+09	2,819794E+09	4,251778E+08	5,639719E+09	6,064897E+09
1653	2,125472E+08	2,125585E+08	2,819830E+09	2,819855E+09	4,251057E+08	5,639685E+09	6,064791E+09
1654	2,125770E+08	2,125587E+08	2,819768E+09	2,819822E+09	4,251357E+08	5,639591E+09	6,064726E+09
1655	2,125917E+08	2,126017E+08	2,819782E+09	2,819624E+09	4,251934E+08	5,639406E+09	6,064600E+09

1	14	15	16	17	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	2,125597E+08	2,125730E+08	2,819581E+09	2,819678E+09	4,251327E+08	5,639259E+09	6,064392E+09
1657	2,126082E+08	2,126036E+08	2,819565E+09	2,819520E+09	4,252118E+08	5,639086E+09	6,064297E+09
1658	2,125999E+08	2,126224E+08	2,819541E+09	2,819405E+09	4,252222E+08	5,638946E+09	6,064168E+09
1659	2,125989E+08	2,125903E+08	2,819349E+09	2,819479E+09	4,251892E+08	5,638828E+09	6,064017E+09
1660	2,126463E+08	2,126368E+08	2,819364E+09	2,819281E+09	4,252831E+08	5,638645E+09	6,063928E+09
1661	2,126112E+08	2,126257E+08	2,819279E+09	2,819298E+09	4,252369E+08	5,638578E+09	6,063815E+09
1662	2,126275E+08	2,126102E+08	2,819226E+09	2,819352E+09	4,252377E+08	5,638577E+09	6,063815E+09
1663	2,126459E+08	2,126537E+08	2,819383E+09	2,819214E+09	4,252996E+08	5,638597E+09	6,063897E+09
1664	2,125977E+08	2,126124E+08	2,819340E+09	2,819396E+09	4,252101E+08	5,638736E+09	6,063946E+09
1665	2,126251E+08	2,126101E+08	2,819435E+09	2,819436E+09	4,252352E+08	5,638871E+09	6,064106E+09
1666	2,126160E+08	2,126278E+08	2,819565E+09	2,819444E+09	4,252438E+08	5,639009E+09	6,064252E+09
1667	2,125843E+08	2,125768E+08	2,819484E+09	2,819660E+09	4,251611E+08	5,639144E+09	6,064306E+09
1668	2,126181E+08	2,126081E+08	2,819602E+09	2,819568E+09	4,252262E+08	5,639170E+09	6,064396E+09
1669	2,125839E+08	2,125988E+08	2,819660E+09	2,819598E+09	4,251827E+08	5,639258E+09	6,064441E+09
1670	2,125797E+08	2,125663E+08	2,819596E+09	2,819714E+09	4,251459E+08	5,639310E+09	6,064456E+09
1671	2,126139E+08	2,126108E+08	2,819705E+09	2,819550E+09	4,252246E+08	5,639255E+09	6,064480E+09
1672	2,125689E+08	2,125848E+08	2,819583E+09	2,819612E+09	4,251537E+08	5,639195E+09	6,064349E+09
1673	2,125969E+08	2,125852E+08	2,819496E+09	2,819564E+09	4,251821E+08	5,639060E+09	6,064242E+09
1674	2,126167E+08	2,126305E+08	2,819534E+09	2,819377E+09	4,252472E+08	5,638911E+09	6,064159E+09
1675	2,125876E+08	2,125973E+08	2,819338E+09	2,819440E+09	4,251849E+08	5,638777E+09	6,063962E+09
1676	2,126384E+08	2,126282E+08	2,819299E+09	2,819257E+09	4,252666E+08	5,638556E+09	6,063823E+09
1677	2,126302E+08	2,126458E+08	2,819271E+09	2,819144E+09	4,252760E+08	5,638416E+09	6,063692E+09
1678	2,126246E+08	2,126157E+08	2,819060E+09	2,819224E+09	4,252403E+08	5,638284E+09	6,063524E+09
1679	2,126718E+08	2,126646E+08	2,819114E+09	2,819015E+09	4,253364E+08	5,638129E+09	6,063465E+09
1680	2,126315E+08	2,126557E+08	2,819056E+09	2,819042E+09	4,252872E+08	5,638098E+09	6,063385E+09
1681	2,126444E+08	2,126333E+08	2,819015E+09	2,819106E+09	4,252777E+08	5,638121E+09	6,063399E+09
1682	2,126669E+08	2,126736E+08	2,819193E+09	2,819021E+09	4,253404E+08	5,638214E+09	6,063554E+09
1683	2,126210E+08	2,126276E+08	2,819137E+09	2,819227E+09	4,252486E+08	5,638364E+09	6,063612E+09
1684	2,126487E+08	2,126288E+08	2,819195E+09	2,819235E+09	4,252775E+08	5,638431E+09	6,063708E+09
1685	2,126393E+08	2,126489E+08	2,819342E+09	2,819230E+09	4,252882E+08	5,638572E+09	6,063861E+09
1686	2,126042E+08	2,126001E+08	2,819266E+09	2,819441E+09	4,252042E+08	5,638707E+09	6,063911E+09
1687	2,126403E+08	2,126293E+08	2,819417E+09	2,819339E+09	4,252696E+08	5,638756E+09	6,064026E+09
1688	2,126037E+08	2,126219E+08	2,819461E+09	2,819379E+09	4,252256E+08	5,638840E+09	6,064066E+09
1689	2,125979E+08	2,125861E+08	2,819351E+09	2,819481E+09	4,251841E+08	5,638832E+09	6,064016E+09
1690	2,126366E+08	2,126340E+08	2,819448E+09	2,819328E+09	4,252706E+08	5,638776E+09	6,064047E+09
1691	2,125948E+08	2,126102E+08	2,819317E+09	2,819374E+09	4,252050E+08	5,638692E+09	6,063897E+09
1692	2,126237E+08	2,126134E+08	2,819221E+09	2,819278E+09	4,252371E+08	5,638499E+09	6,063736E+09
1693	2,126448E+08	2,126570E+08	2,819288E+09	2,819091E+09	4,253018E+08	5,638378E+09	6,063680E+09
1694	2,126144E+08	2,126231E+08	2,819073E+09	2,819173E+09	4,252376E+08	5,638246E+09	6,063483E+09
1695	2,126672E+08	2,126525E+08	2,819046E+09	2,818995E+09	4,253196E+08	5,638041E+09	6,063361E+09
1696	2,126544E+08	2,126751E+08	2,819005E+09	2,818891E+09	4,253295E+08	5,637896E+09	6,063225E+09
1697	2,126451E+08	2,126432E+08	2,818790E+09	2,818961E+09	4,252882E+08	5,637751E+09	6,063039E+09
1698	2,126945E+08	2,126910E+08	2,818887E+09	2,818785E+09	4,253856E+08	5,637672E+09	6,063057E+09
1699	2,126565E+08	2,126768E+08	2,818853E+09	2,818833E+09	4,253332E+08	5,637686E+09	6,063019E+09
1700	2,126690E+08	2,126528E+08	2,818799E+09	2,818889E+09	4,253218E+08	5,637689E+09	6,063011E+09
1701	2,126915E+08	2,126911E+08	2,818981E+09	2,818819E+09	4,253826E+08	5,637800E+09	6,063183E+09
1702	2,126428E+08	2,126475E+08	2,818901E+09	2,819034E+09	4,252903E+08	5,637935E+09	6,063225E+09
1703	2,126707E+08	2,126505E+08	2,818988E+09	2,819020E+09	4,253213E+08	5,638008E+09	6,063329E+09
1704	2,126571E+08	2,126733E+08	2,819139E+09	2,819006E+09	4,253304E+08	5,638145E+09	6,063476E+09

1	14	15	16	17	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							
1705	2,126197E+08	2,126202E+08	2,819054E+09	2,819205E+09	4,252399E+08	5,638259E+09	6,063499E+09
1706	2,126610E+08	2,126486E+08	2,819202E+09	2,819136E+09	4,253097E+08	5,638337E+09	6,063647E+09
1707	2,126278E+08	2,126403E+08	2,819225E+09	2,819173E+09	4,252680E+08	5,638397E+09	6,063665E+09
1708	2,126228E+08	2,126101E+08	2,819085E+09	2,819230E+09	4,252329E+08	5,638315E+09	6,063548E+09
1709	2,126619E+08	2,126604E+08	2,819199E+09	2,819064E+09	4,253223E+08	5,638264E+09	6,063586E+09
1710	2,126188E+08	2,126385E+08	2,819078E+09	2,819115E+09	4,252573E+08	5,638192E+09	6,063450E+09
1711	2,126497E+08	2,126391E+08	2,819008E+09	2,819016E+09	4,252888E+08	5,638024E+09	6,063312E+09
1712	2,126681E+08	2,126836E+08	2,819052E+09	2,818846E+09	4,253517E+08	5,637898E+09	6,063250E+09
1713	2,126368E+08	2,126468E+08	2,818795E+09	2,818920E+09	4,252836E+08	5,637715E+09	6,062999E+09
1714	2,126938E+08	2,126777E+08	2,818757E+09	2,818761E+09	4,253714E+08	5,637518E+09	6,062890E+09
1715	2,126828E+08	2,127009E+08	2,818725E+09	2,818643E+09	4,253837E+08	5,637368E+09	6,062751E+09
1716	2,126728E+08	2,126694E+08	2,818522E+09	2,818677E+09	4,253421E+08	5,637198E+09	6,062541E+09
1717	2,127210E+08	2,127133E+08	2,818662E+09	2,818522E+09	4,254343E+08	5,637184E+09	6,062618E+09
1718	2,126810E+08	2,126988E+08	2,818629E+09	2,818609E+09	4,253798E+08	5,637238E+09	6,062617E+09
1719	2,126929E+08	2,126733E+08	2,818593E+09	2,818672E+09	4,253661E+08	5,637265E+09	6,062631E+09
1720	2,127100E+08	2,127166E+08	2,818767E+09	2,818618E+09	4,254266E+08	5,637385E+09	6,062812E+09
1721	2,126585E+08	2,126710E+08	2,818682E+09	2,818817E+09	4,253295E+08	5,637499E+09	6,062829E+09
1722	2,126889E+08	2,126717E+08	2,818791E+09	2,818831E+09	4,253607E+08	5,637622E+09	6,062983E+09
1723	2,126788E+08	2,126906E+08	2,818947E+09	2,818818E+09	4,253694E+08	5,637765E+09	6,063135E+09
1724	2,126422E+08	2,126380E+08	2,818829E+09	2,818982E+09	4,252802E+08	5,637811E+09	6,063091E+09
1725	2,126844E+08	2,126668E+08	2,818973E+09	2,818908E+09	4,253512E+08	5,637880E+09	6,063232E+09
1726	2,126509E+08	2,126647E+08	2,818972E+09	2,818937E+09	4,253157E+08	5,637910E+09	6,063225E+09
1727	2,126465E+08	2,126370E+08	2,818860E+09	2,818967E+09	4,252835E+08	5,637827E+09	6,063111E+09
1728	2,126815E+08	2,126896E+08	2,818980E+09	2,818804E+09	4,253711E+08	5,637784E+09	6,063155E+09
1729	2,126390E+08	2,126627E+08	2,818837E+09	2,818854E+09	4,253017E+08	5,637690E+09	6,062992E+09
1730	2,126752E+08	2,126614E+08	2,818749E+09	2,818795E+09	4,253366E+08	5,637544E+09	6,062880E+09
1731	2,126977E+08	2,127051E+08	2,818767E+09	2,818616E+09	4,254028E+08	5,637384E+09	6,062787E+09
1732	2,126667E+08	2,126738E+08	2,818486E+09	2,818641E+09	4,253405E+08	5,637127E+09	6,062467E+09
1733	2,127230E+08	2,127052E+08	2,818483E+09	2,818475E+09	4,254282E+08	5,636958E+09	6,062386E+09
1734	2,127098E+08	2,127291E+08	2,818476E+09	2,818372E+09	4,254389E+08	5,636849E+09	6,062287E+09
1735	2,126990E+08	2,126946E+08	2,818322E+09	2,818419E+09	4,253936E+08	5,636741E+09	6,062135E+09
1736	2,127405E+08	2,127382E+08	2,818456E+09	2,818302E+09	4,254788E+08	5,636758E+09	6,062236E+09
1737	2,126989E+08	2,127198E+08	2,818401E+09	2,818399E+09	4,254188E+08	5,636801E+09	6,062219E+09
1738	2,127129E+08	2,126956E+08	2,818365E+09	2,818495E+09	4,254085E+08	5,636860E+09	6,062268E+09
1739	2,127318E+08	2,127365E+08	2,818546E+09	2,818425E+09	4,254684E+08	5,636971E+09	6,062440E+09
1740	2,126807E+08	2,126907E+08	2,818461E+09	2,818580E+09	4,253714E+08	5,637041E+09	6,062412E+09
1741	2,127120E+08	2,126879E+08	2,818583E+09	2,818601E+09	4,253999E+08	5,637184E+09	6,062584E+09
1742	2,127018E+08	2,127088E+08	2,818723E+09	2,818603E+09	4,254106E+08	5,637327E+09	6,062737E+09
1743	2,126655E+08	2,126592E+08	2,818618E+09	2,818749E+09	4,253248E+08	5,637367E+09	6,062692E+09
1744	2,127016E+08	2,126946E+08	2,818754E+09	2,818678E+09	4,253962E+08	5,637432E+09	6,062828E+09
1745	2,126679E+08	2,126915E+08	2,818751E+09	2,818694E+09	4,253595E+08	5,637445E+09	6,062804E+09
1746	2,126676E+08	2,126621E+08	2,818648E+09	2,818755E+09	4,253297E+08	5,637403E+09	6,062733E+09
1747	2,127071E+08	2,127101E+08	2,818751E+09	2,818594E+09	4,254172E+08	5,637344E+09	6,062762E+09
1748	2,126677E+08	2,126841E+08	2,818558E+09	2,818602E+09	4,253518E+08	5,637160E+09	6,062512E+09
1749	2,127055E+08	2,126834E+08	2,818454E+09	2,818532E+09	4,253889E+08	5,636986E+09	6,062375E+09
1750	2,127276E+08	2,127336E+08	2,818459E+09	2,818340E+09	4,254612E+08	5,636798E+09	6,062260E+09
1751	2,126956E+08	2,127047E+08	2,818222E+09	2,818326E+09	4,254003E+08	5,636548E+09	6,061948E+09
1752	2,127442E+08	2,127369E+08	2,818251E+09	2,818181E+09	4,254811E+08	5,636432E+09	6,061913E+09
1753	2,127300E+08	2,127550E+08	2,818248E+09	2,818106E+09	4,254851E+08	5,636354E+09	6,061839E+09

1	14	15	16	17	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	2,127213E+08	2,127171E+08	2,818099E+09	2,818221E+09	4,254384E+08	5,636320E+09	6,061759E+09
1755	2,127642E+08	2,127582E+08	2,818225E+09	2,818120E+09	4,255225E+08	5,636345E+09	6,061868E+09
1756	2,127237E+08	2,127415E+08	2,818151E+09	2,818182E+09	4,254653E+08	5,636333E+09	6,061798E+09
1757	2,127368E+08	2,127156E+08	2,818145E+09	2,818274E+09	4,254525E+08	5,636419E+09	6,061872E+09
1758	2,127550E+08	2,127563E+08	2,818335E+09	2,818211E+09	4,255114E+08	5,636546E+09	6,062058E+09
1759	2,127038E+08	2,127099E+08	2,818280E+09	2,818350E+09	4,254137E+08	5,636630E+09	6,062044E+09
1760	2,127285E+08	2,127097E+08	2,818389E+09	2,818391E+09	4,254382E+08	5,636780E+09	6,062218E+09
1761	2,127183E+08	2,127300E+08	2,818502E+09	2,818390E+09	4,254483E+08	5,636891E+09	6,062340E+09
1762	2,126847E+08	2,126839E+08	2,818397E+09	2,818558E+09	4,253686E+08	5,636955E+09	6,062324E+09
1763	2,127226E+08	2,127175E+08	2,818536E+09	2,818468E+09	4,254400E+08	5,637003E+09	6,062444E+09
1764	2,126920E+08	2,127133E+08	2,818515E+09	2,818441E+09	4,254053E+08	5,636957E+09	6,062362E+09
1765	2,126946E+08	2,126819E+08	2,818403E+09	2,818506E+09	4,253764E+08	5,636909E+09	6,062285E+09
1766	2,127363E+08	2,127314E+08	2,818468E+09	2,818346E+09	4,254676E+08	5,636814E+09	6,062282E+09
1767	2,126982E+08	2,127113E+08	2,818283E+09	2,818315E+09	4,254095E+08	5,636598E+09	6,062007E+09
1768	2,127293E+08	2,127169E+08	2,818177E+09	2,818242E+09	4,254462E+08	5,636418E+09	6,061865E+09
1769	2,127492E+08	2,127644E+08	2,818199E+09	2,818045E+09	4,255136E+08	5,636245E+09	6,061758E+09
1770	2,127192E+08	2,127334E+08	2,817999E+09	2,818085E+09	4,254525E+08	5,636084E+09	6,061537E+09
1771	2,127680E+08	2,127587E+08	2,818032E+09	2,817966E+09	4,255267E+08	5,635997E+09	6,061524E+09
1772	2,127563E+08	2,127748E+08	2,817999E+09	2,817880E+09	4,255311E+08	5,635879E+09	6,061411E+09
1773	2,127488E+08	2,127367E+08	2,817842E+09	2,818004E+09	4,254855E+08	5,635846E+09	6,061331E+09
1774	2,127911E+08	2,127810E+08	2,817960E+09	2,817901E+09	4,255721E+08	5,635861E+09	6,061433E+09
1775	2,127500E+08	2,127660E+08	2,817929E+09	2,817924E+09	4,255160E+08	5,635853E+09	6,061369E+09
1776	2,127551E+08	2,127402E+08	2,817942E+09	2,818031E+09	4,254953E+08	5,635973E+09	6,061468E+09
1777	2,127717E+08	2,127759E+08	2,818129E+09	2,817984E+09	4,255476E+08	5,636113E+09	6,061660E+09
1778	2,127226E+08	2,127304E+08	2,818080E+09	2,818169E+09	4,254530E+08	5,636249E+09	6,061702E+09
1779	2,127475E+08	2,127303E+08	2,818183E+09	2,818210E+09	4,254778E+08	5,636393E+09	6,061871E+09
1780	2,127399E+08	2,127529E+08	2,818276E+09	2,818169E+09	4,254928E+08	5,636445E+09	6,061938E+09
1781	2,127078E+08	2,127058E+08	2,818188E+09	2,818333E+09	4,254136E+08	5,636521E+09	6,061935E+09
1782	2,127473E+08	2,127387E+08	2,818314E+09	2,818248E+09	4,254860E+08	5,636562E+09	6,062048E+09
1783	2,127194E+08	2,127350E+08	2,818290E+09	2,818186E+09	4,254544E+08	5,636477E+09	6,061931E+09
1784	2,127167E+08	2,127075E+08	2,818148E+09	2,818254E+09	4,254241E+08	5,636402E+09	6,061826E+09
1785	2,127590E+08	2,127572E+08	2,818183E+09	2,818077E+09	4,255162E+08	5,636259E+09	6,061776E+09
1786	2,127229E+08	2,127418E+08	2,818011E+09	2,818058E+09	4,254647E+08	5,636068E+09	6,061533E+09
1787	2,127540E+08	2,127448E+08	2,817927E+09	2,817976E+09	4,254987E+08	5,635903E+09	6,061402E+09
1788	2,127760E+08	2,127885E+08	2,817941E+09	2,817764E+09	4,255645E+08	5,635704E+09	6,061269E+09
1789	2,127479E+08	2,127545E+08	2,817749E+09	2,817835E+09	4,255024E+08	5,635584E+09	6,061086E+09
1790	2,127967E+08	2,127802E+08	2,817762E+09	2,817740E+09	4,255770E+08	5,635502E+09	6,061079E+09
1791	2,127858E+08	2,128005E+08	2,817746E+09	2,817629E+09	4,255863E+08	5,635375E+09	6,060961E+09
1792	2,127705E+08	2,127668E+08	2,817604E+09	2,817760E+09	4,255374E+08	5,635364E+09	6,060901E+09
1793	2,128102E+08	2,128056E+08	2,817739E+09	2,817659E+09	4,256158E+08	5,635398E+09	6,061014E+09
1794	2,127701E+08	2,127889E+08	2,817741E+09	2,817727E+09	4,255590E+08	5,635468E+09	6,061027E+09
1795	2,127739E+08	2,127583E+08	2,817755E+09	2,817849E+09	4,255321E+08	5,635605E+09	6,061137E+09
1796	2,127923E+08	2,127918E+08	2,817910E+09	2,817787E+09	4,255841E+08	5,635697E+09	6,061281E+09
1797	2,127453E+08	2,127493E+08	2,817860E+09	2,817972E+09	4,254945E+08	5,635831E+09	6,061326E+09
1798	2,127698E+08	2,127522E+08	2,817952E+09	2,818000E+09	4,255220E+08	5,635952E+09	6,061474E+09
1799	2,127641E+08	2,127765E+08	2,818074E+09	2,817915E+09	4,255406E+08	5,635988E+09	6,061529E+09
1800	2,127273E+08	2,127306E+08	2,817979E+09	2,818084E+09	4,254579E+08	5,636063E+09	6,061521E+09
1801	2,127673E+08	2,127582E+08	2,818072E+09	2,818006E+09	4,255256E+08	5,636078E+09	6,061603E+09
1802	2,127433E+08	2,127585E+08	2,818039E+09	2,817970E+09	4,255018E+08	5,636009E+09	6,061511E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1803	2,127409E+08	2,127331E+08	2,817881E+09	2,818020E+09	4,254740E+08	5,635901E+09	6,061375E+09
1804	2,127853E+08	2,127834E+08	2,817902E+09	2,817801E+09	4,255687E+08	5,635702E+09	6,061271E+09
1805	2,127512E+08	2,127685E+08	2,817757E+09	2,817780E+09	4,255197E+08	5,635537E+09	6,061057E+09
1806	2,127821E+08	2,127699E+08	2,817675E+09	2,817717E+09	4,255520E+08	5,635392E+09	6,060944E+09
1807	2,128055E+08	2,128138E+08	2,817698E+09	2,817493E+09	4,256192E+08	5,635191E+09	6,060811E+09
1808	2,127722E+08	2,127825E+08	2,817494E+09	2,817586E+09	4,255547E+08	5,635080E+09	6,060635E+09
1809	2,128192E+08	2,128066E+08	2,817490E+09	2,817495E+09	4,256258E+08	5,634985E+09	6,060611E+09
1810	2,128095E+08	2,128294E+08	2,817502E+09	2,817404E+09	4,256390E+08	5,634907E+09	6,060546E+09
1811	2,127916E+08	2,127917E+08	2,817390E+09	2,817532E+09	4,255834E+08	5,634922E+09	6,060505E+09
1812	2,128320E+08	2,128235E+08	2,817516E+09	2,817422E+09	4,256556E+08	5,634938E+09	6,060593E+09
1813	2,127935E+08	2,128053E+08	2,817525E+09	2,817516E+09	4,255989E+08	5,635041E+09	6,060640E+09
1814	2,127972E+08	2,127763E+08	2,817530E+09	2,817656E+09	4,255735E+08	5,635186E+09	6,060760E+09
1815	2,128163E+08	2,128147E+08	2,817695E+09	2,817560E+09	4,256310E+08	5,635255E+09	6,060886E+09
1816	2,127636E+08	2,127761E+08	2,817663E+09	2,817749E+09	4,255397E+08	5,635412E+09	6,060951E+09
1817	2,127864E+08	2,127743E+08	2,817757E+09	2,817780E+09	4,255608E+08	5,635537E+09	6,061098E+09
1818	2,127838E+08	2,127971E+08	2,817886E+09	2,817725E+09	4,255809E+08	5,635611E+09	6,061192E+09
1819	2,127475E+08	2,127497E+08	2,817767E+09	2,817890E+09	4,254972E+08	5,635657E+09	6,061154E+09
1820	2,127916E+08	2,127753E+08	2,817799E+09	2,817777E+09	4,255669E+08	5,635576E+09	6,061143E+09
1821	2,127710E+08	2,127820E+08	2,817755E+09	2,817722E+09	4,255531E+08	5,635477E+09	6,061030E+09
1822	2,127691E+08	2,127608E+08	2,817600E+09	2,817747E+09	4,255298E+08	5,635347E+09	6,060877E+09
1823	2,128139E+08	2,128122E+08	2,817650E+09	2,817488E+09	4,256261E+08	5,635138E+09	6,060764E+09
1824	2,127752E+08	2,127984E+08	2,817517E+09	2,817490E+09	4,255736E+08	5,635007E+09	6,060581E+09
1825	2,128048E+08	2,127948E+08	2,817417E+09	2,817455E+09	4,255996E+08	5,634872E+09	6,060472E+09
1826	2,128303E+08	2,128410E+08	2,817447E+09	2,817272E+09	4,256712E+08	5,634720E+09	6,060391E+09
1827	2,127964E+08	2,128110E+08	2,817243E+09	2,817364E+09	4,256074E+08	5,634607E+09	6,060214E+09
1828	2,128441E+08	2,128297E+08	2,817231E+09	2,817251E+09	4,256738E+08	5,634482E+09	6,060156E+09
1829	2,128362E+08	2,128514E+08	2,817271E+09	2,817172E+09	4,256876E+08	5,634443E+09	6,060131E+09
1830	2,128174E+08	2,128106E+08	2,817162E+09	2,817311E+09	4,256280E+08	5,634473E+09	6,060101E+09
1831	2,128572E+08	2,128422E+08	2,817299E+09	2,817188E+09	4,256994E+08	5,634486E+09	6,060186E+09
1832	2,128140E+08	2,128282E+08	2,817310E+09	2,817297E+09	4,256423E+08	5,634607E+09	6,060249E+09
1833	2,128145E+08	2,127989E+08	2,817308E+09	2,817441E+09	4,256134E+08	5,634749E+09	6,060362E+09
1834	2,128346E+08	2,128396E+08	2,817506E+09	2,817366E+09	4,256742E+08	5,634872E+09	6,060546E+09
1835	2,127815E+08	2,127979E+08	2,817482E+09	2,817548E+09	4,255793E+08	5,635030E+09	6,060610E+09
1836	2,128065E+08	2,127887E+08	2,817536E+09	2,817565E+09	4,255952E+08	5,635102E+09	6,060697E+09
1837	2,128083E+08	2,128133E+08	2,817642E+09	2,817515E+09	4,256215E+08	5,635157E+09	6,060778E+09
1838	2,127738E+08	2,127710E+08	2,817498E+09	2,817663E+09	4,255448E+08	5,635161E+09	6,060706E+09
1839	2,128192E+08	2,128029E+08	2,817533E+09	2,817498E+09	4,256221E+08	5,635031E+09	6,060653E+09
1840	2,127945E+08	2,128147E+08	2,817513E+09	2,817434E+09	4,256092E+08	5,634946E+09	6,060556E+09
1841	2,127904E+08	2,127894E+08	2,817367E+09	2,817468E+09	4,255797E+08	5,634835E+09	6,060415E+09
1842	2,128364E+08	2,128391E+08	2,817434E+09	2,817252E+09	4,256755E+08	5,634686E+09	6,060361E+09
1843	2,127982E+08	2,128231E+08	2,817287E+09	2,817269E+09	4,256213E+08	5,634556E+09	6,060177E+09
1844	2,128304E+08	2,128153E+08	2,817136E+09	2,817220E+09	4,256458E+08	5,634356E+09	6,060002E+09
1845	2,128592E+08	2,128654E+08	2,817156E+09	2,817034E+09	4,257246E+08	5,634190E+09	6,059915E+09
1846	2,128265E+08	2,128369E+08	2,816968E+09	2,817108E+09	4,256634E+08	5,634076E+09	6,059739E+09
1847	2,128734E+08	2,128536E+08	2,816978E+09	2,816961E+09	4,257270E+08	5,633939E+09	6,059666E+09
1848	2,128599E+08	2,128752E+08	2,817039E+09	2,816908E+09	4,257351E+08	5,633947E+09	6,059682E+09
1849	2,128378E+08	2,128315E+08	2,816933E+09	2,817079E+09	4,256693E+08	5,634011E+09	6,059681E+09
1850	2,128764E+08	2,128653E+08	2,817094E+09	2,816997E+09	4,257417E+08	5,634090E+09	6,059832E+09
1851	2,128318E+08	2,128536E+08	2,817126E+09	2,817110E+09	4,256854E+08	5,634236E+09	6,059921E+09

1	14	15	16	17	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	2,128326E+08	2,128181E+08	2,817111E+09	2,817240E+09	4,256507E+08	5,634351E+09	6,060001E+09
1853	2,128556E+08	2,128576E+08	2,817313E+09	2,817180E+09	4,257132E+08	5,634493E+09	6,060206E+09
1854	2,128048E+08	2,128147E+08	2,817273E+09	2,817357E+09	4,256195E+08	5,634629E+09	6,060249E+09
1855	2,128313E+08	2,128064E+08	2,817299E+09	2,817335E+09	4,256377E+08	5,634634E+09	6,060272E+09
1856	2,128309E+08	2,128372E+08	2,817391E+09	2,817271E+09	4,256681E+08	5,634662E+09	6,060330E+09
1857	2,127949E+08	2,127985E+08	2,817239E+09	2,817398E+09	4,255934E+08	5,634637E+09	6,060231E+09
1858	2,128403E+08	2,128323E+08	2,817313E+09	2,817240E+09	4,256726E+08	5,634552E+09	6,060225E+09
1859	2,128156E+08	2,128426E+08	2,817305E+09	2,817176E+09	4,256582E+08	5,634481E+09	6,060139E+09
1860	2,128135E+08	2,128088E+08	2,817117E+09	2,817216E+09	4,256223E+08	5,634333E+09	6,059956E+09
1861	2,128639E+08	2,128602E+08	2,817159E+09	2,817026E+09	4,257241E+08	5,634185E+09	6,059909E+09
1862	2,128296E+08	2,128475E+08	2,816991E+09	2,817029E+09	4,256772E+08	5,634020E+09	6,059697E+09
1863	2,128622E+08	2,128434E+08	2,816842E+09	2,816937E+09	4,257056E+08	5,633780E+09	6,059485E+09
1864	2,128870E+08	2,128956E+08	2,816895E+09	2,816747E+09	4,257825E+08	5,633642E+09	6,059425E+09
1865	2,128506E+08	2,128632E+08	2,816725E+09	2,816833E+09	4,257139E+08	5,633558E+09	6,059271E+09
1866	2,128953E+08	2,128776E+08	2,816771E+09	2,816732E+09	4,257729E+08	5,633502E+09	6,059275E+09
1867	2,128796E+08	2,128984E+08	2,816835E+09	2,816701E+09	4,257781E+08	5,633536E+09	6,059314E+09
1868	2,128573E+08	2,128504E+08	2,816702E+09	2,816874E+09	4,257077E+08	5,633576E+09	6,059284E+09
1869	2,128971E+08	2,128880E+08	2,816870E+09	2,816806E+09	4,257851E+08	5,633677E+09	6,059462E+09
1870	2,128552E+08	2,128750E+08	2,816923E+09	2,816906E+09	4,257302E+08	5,633829E+09	6,059560E+09
1871	2,128557E+08	2,128373E+08	2,816909E+09	2,817005E+09	4,256930E+08	5,633914E+09	6,059607E+09
1872	2,128767E+08	2,128761E+08	2,817103E+09	2,816954E+09	4,257527E+08	5,634057E+09	6,059810E+09
1873	2,128248E+08	2,128343E+08	2,817040E+09	2,817132E+09	4,256591E+08	5,634172E+09	6,059831E+09
1874	2,128516E+08	2,128308E+08	2,817075E+09	2,817121E+09	4,256824E+08	5,634196E+09	6,059878E+09
1875	2,128505E+08	2,128655E+08	2,817178E+09	2,817043E+09	4,257159E+08	5,634221E+09	6,059937E+09
1876	2,128158E+08	2,128215E+08	2,817015E+09	2,817151E+09	4,256373E+08	5,634166E+09	6,059804E+09
1877	2,128635E+08	2,128546E+08	2,817081E+09	2,817011E+09	4,257181E+08	5,634093E+09	6,059811E+09
1878	2,128439E+08	2,128634E+08	2,817060E+09	2,816948E+09	4,257074E+08	5,634008E+09	6,059715E+09
1879	2,128436E+08	2,128314E+08	2,816834E+09	2,816954E+09	4,256749E+08	5,633788E+09	6,059463E+09
1880	2,128922E+08	2,128874E+08	2,816863E+09	2,816754E+09	4,257796E+08	5,633617E+09	6,059397E+09
1881	2,128570E+08	2,128786E+08	2,816698E+09	2,816743E+09	4,257356E+08	5,633441E+09	6,059176E+09
1882	2,128879E+08	2,128737E+08	2,816595E+09	2,816659E+09	4,257615E+08	5,633254E+09	6,059015E+09
1883	2,129094E+08	2,129231E+08	2,816673E+09	2,816480E+09	4,258325E+08	5,633154E+09	6,058986E+09
1884	2,128726E+08	2,128829E+08	2,816482E+09	2,816581E+09	4,257556E+08	5,633064E+09	6,058819E+09
1885	2,129175E+08	2,128987E+08	2,816528E+09	2,816525E+09	4,258162E+08	5,633052E+09	6,058869E+09
1886	2,129052E+08	2,129214E+08	2,816605E+09	2,816501E+09	4,258265E+08	5,633106E+09	6,058932E+09
1887	2,128821E+08	2,128749E+08	2,816484E+09	2,816646E+09	4,257569E+08	5,633130E+09	6,058887E+09
1888	2,129183E+08	2,129113E+08	2,816679E+09	2,816587E+09	4,258296E+08	5,633265E+09	6,059095E+09
1889	2,128755E+08	2,128948E+08	2,816730E+09	2,816697E+09	4,257702E+08	5,633427E+09	6,059197E+09
1890	2,128744E+08	2,128553E+08	2,816725E+09	2,816817E+09	4,257298E+08	5,633542E+09	6,059272E+09
1891	2,128946E+08	2,128952E+08	2,816899E+09	2,816762E+09	4,257899E+08	5,633661E+09	6,059451E+09
1892	2,128443E+08	2,128529E+08	2,816792E+09	2,816912E+09	4,256971E+08	5,633704E+09	6,059401E+09
1893	2,128733E+08	2,128557E+08	2,816828E+09	2,816900E+09	4,257290E+08	5,633728E+09	6,059457E+09
1894	2,128770E+08	2,128896E+08	2,816945E+09	2,816796E+09	4,257666E+08	5,633742E+09	6,059508E+09
1895	2,128428E+08	2,128447E+08	2,816772E+09	2,816875E+09	4,256875E+08	5,633647E+09	6,059334E+09
1896	2,128888E+08	2,128780E+08	2,816828E+09	2,816747E+09	4,257668E+08	5,633575E+09	6,059342E+09
1897	2,128697E+08	2,128890E+08	2,816781E+09	2,816687E+09	4,257588E+08	5,633468E+09	6,059226E+09
1898	2,128691E+08	2,128618E+08	2,816573E+09	2,816697E+09	4,257310E+08	5,633270E+09	6,059001E+09
1899	2,129163E+08	2,129196E+08	2,816615E+09	2,816488E+09	4,258359E+08	5,633103E+09	6,058939E+09
1900	2,128813E+08	2,129049E+08	2,816445E+09	2,816467E+09	4,257862E+08	5,632912E+09	6,058698E+09

1	14	15	16	17	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	2,129125E+08	2,128988E+08	2,816347E+09	2,816420E+09	4,258113E+08	5,632766E+09	6,058577E+09
1902	2,129372E+08	2,129439E+08	2,816431E+09	2,816254E+09	4,258811E+08	5,632684E+09	6,058565E+09
1903	2,129000E+08	2,129047E+08	2,816228E+09	2,816339E+09	4,258047E+08	5,632567E+09	6,058372E+09
1904	2,129413E+08	2,129234E+08	2,816285E+09	2,816290E+09	4,258646E+08	5,632575E+09	6,058440E+09
1905	2,129279E+08	2,129474E+08	2,816379E+09	2,816272E+09	4,258754E+08	5,632651E+09	6,058526E+09
1906	2,129027E+08	2,128987E+08	2,816305E+09	2,816429E+09	4,258014E+08	5,632734E+09	6,058535E+09
1907	2,129360E+08	2,129310E+08	2,816501E+09	2,816386E+09	4,258670E+08	5,632886E+09	6,058753E+09
1908	2,128944E+08	2,129085E+08	2,816510E+09	2,816497E+09	4,258029E+08	5,633007E+09	6,058810E+09
1909	2,128946E+08	2,128737E+08	2,816479E+09	2,816634E+09	4,257683E+08	5,633113E+09	6,058881E+09
1910	2,129193E+08	2,129162E+08	2,816661E+09	2,816557E+09	4,258355E+08	5,633218E+09	6,059054E+09
1911	2,128694E+08	2,128784E+08	2,816561E+09	2,816657E+09	4,257478E+08	5,633217E+09	6,058965E+09
1912	2,128953E+08	2,128809E+08	2,816618E+09	2,816642E+09	4,257762E+08	5,633260E+09	6,059036E+09
1913	2,128995E+08	2,129138E+08	2,816729E+09	2,816552E+09	4,258133E+08	5,633281E+09	6,059094E+09
1914	2,128652E+08	2,128682E+08	2,816557E+09	2,816644E+09	4,257334E+08	5,633201E+09	6,058934E+09
1915	2,129101E+08	2,129031E+08	2,816585E+09	2,816516E+09	4,258132E+08	5,633102E+09	6,058915E+09
1916	2,128936E+08	2,129140E+08	2,816494E+09	2,816430E+09	4,258076E+08	5,632924E+09	6,058732E+09
1917	2,128950E+08	2,128916E+08	2,816288E+09	2,816443E+09	4,257866E+08	5,632732E+09	6,058518E+09
1918	2,129464E+08	2,129445E+08	2,816354E+09	2,816217E+09	4,258910E+08	5,632571E+09	6,058462E+09
1919	2,129115E+08	2,129289E+08	2,816175E+09	2,816173E+09	4,258404E+08	5,632348E+09	6,058188E+09
1920	2,129395E+08	2,129221E+08	2,816084E+09	2,816149E+09	4,258616E+08	5,632233E+09	6,058094E+09
1921	2,129630E+08	2,129694E+08	2,816166E+09	2,816008E+09	4,259324E+08	5,632174E+09	6,058107E+09
1922	2,129238E+08	2,129329E+08	2,816010E+09	2,816112E+09	4,258567E+08	5,632122E+09	6,057979E+09
1923	2,129606E+08	2,129513E+08	2,816095E+09	2,816076E+09	4,259119E+08	5,632171E+09	6,058082E+09
1924	2,129475E+08	2,129669E+08	2,816176E+09	2,816060E+09	4,259144E+08	5,632237E+09	6,058151E+09
1925	2,129228E+08	2,129179E+08	2,816095E+09	2,816254E+09	4,258407E+08	5,632350E+09	6,058190E+09
1926	2,129600E+08	2,129450E+08	2,816279E+09	2,816203E+09	4,259050E+08	5,632482E+09	6,058387E+09
1927	2,129186E+08	2,129265E+08	2,816259E+09	2,816272E+09	4,258451E+08	5,632532E+09	6,058377E+09
1928	2,129165E+08	2,128978E+08	2,816241E+09	2,816395E+09	4,258143E+08	5,632635E+09	6,058450E+09
1929	2,129406E+08	2,129426E+08	2,816438E+09	2,816309E+09	4,258832E+08	5,632747E+09	6,058630E+09
1930	2,128898E+08	2,129040E+08	2,816385E+09	2,816409E+09	4,257937E+08	5,632794E+09	6,058588E+09
1931	2,129126E+08	2,129043E+08	2,816431E+09	2,816411E+09	4,258169E+08	5,632842E+09	6,058659E+09
1932	2,129191E+08	2,129321E+08	2,816487E+09	2,816326E+09	4,258512E+08	5,632813E+09	6,058664E+09
1933	2,128883E+08	2,128932E+08	2,816284E+09	2,816436E+09	4,257816E+08	5,632720E+09	6,058501E+09
1934	2,129396E+08	2,129273E+08	2,816310E+09	2,816283E+09	4,258669E+08	5,632592E+09	6,058459E+09
1935	2,129245E+08	2,129415E+08	2,816212E+09	2,816145E+09	4,258661E+08	5,632357E+09	6,058223E+09
1936	2,129241E+08	2,129189E+08	2,816027E+09	2,816152E+09	4,258429E+08	5,632179E+09	6,058022E+09
1937	2,129740E+08	2,129699E+08	2,816093E+09	2,815944E+09	4,259439E+08	5,632037E+09	6,057981E+09
1938	2,129374E+08	2,129544E+08	2,815941E+09	2,815915E+09	4,258918E+08	5,631855E+09	6,057747E+09
1939	2,129605E+08	2,129493E+08	2,815846E+09	2,815912E+09	4,259098E+08	5,631758E+09	6,057668E+09
1940	2,129844E+08	2,129947E+08	2,815912E+09	2,815775E+09	4,259791E+08	5,631687E+09	6,057666E+09
1941	2,129466E+08	2,129604E+08	2,815773E+09	2,815902E+09	4,259069E+08	5,631676E+09	6,057582E+09
1942	2,129860E+08	2,129698E+08	2,815884E+09	2,815865E+09	4,259558E+08	5,631749E+09	6,057705E+09
1943	2,129731E+08	2,129839E+08	2,815942E+09	2,815830E+09	4,259570E+08	5,631772E+09	6,057729E+09
1944	2,129454E+08	2,129356E+08	2,815859E+09	2,816029E+09	4,258810E+08	5,631888E+09	6,057769E+09
1945	2,129815E+08	2,129661E+08	2,816040E+09	2,815986E+09	4,259476E+08	5,632026E+09	6,057973E+09
1946	2,129388E+08	2,129525E+08	2,816067E+09	2,816045E+09	4,258912E+08	5,632112E+09	6,058003E+09
1947	2,129321E+08	2,129249E+08	2,816076E+09	2,816172E+09	4,258569E+08	5,632248E+09	6,058105E+09
1948	2,129568E+08	2,129627E+08	2,816251E+09	2,816094E+09	4,259196E+08	5,632345E+09	6,058264E+09
1949	2,129093E+08	2,129249E+08	2,816178E+09	2,816230E+09	4,258342E+08	5,632408E+09	6,058242E+09

1	14	15	16	17	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	2,129374E+08	2,129198E+08	2,816197E+09	2,816221E+09	4,258572E+08	5,632418E+09	6,058275E+09
1951	2,129471E+08	2,129524E+08	2,816197E+09	2,816084E+09	4,258995E+08	5,632281E+09	6,058180E+09
1952	2,129166E+08	2,129209E+08	2,815994E+09	2,816160E+09	4,258376E+08	5,632154E+09	6,057992E+09
1953	2,129684E+08	2,129563E+08	2,816027E+09	2,815992E+09	4,259247E+08	5,632018E+09	6,057943E+09
1954	2,129520E+08	2,129704E+08	2,815973E+09	2,815844E+09	4,259224E+08	5,631817E+09	6,057739E+09
1955	2,129470E+08	2,129471E+08	2,815790E+09	2,815872E+09	4,258941E+08	5,631662E+09	6,057556E+09
1956	2,129958E+08	2,129929E+08	2,815819E+09	2,815682E+09	4,259887E+08	5,631501E+09	6,057489E+09
1957	2,129613E+08	2,129837E+08	2,815674E+09	2,815695E+09	4,259450E+08	5,631369E+09	6,057314E+09
1958	2,129875E+08	2,129748E+08	2,815606E+09	2,815689E+09	4,259623E+08	5,631295E+09	6,057257E+09
1959	2,130112E+08	2,130192E+08	2,815670E+09	2,815530E+09	4,260303E+08	5,631201E+09	6,057231E+09
1960	2,129722E+08	2,129831E+08	2,815556E+09	2,815667E+09	4,259553E+08	5,631224E+09	6,057179E+09
1961	2,130098E+08	2,129879E+08	2,815655E+09	2,815651E+09	4,259977E+08	5,631307E+09	6,057305E+09
1962	2,129952E+08	2,130025E+08	2,815736E+09	2,815614E+09	4,259977E+08	5,631350E+09	6,057347E+09
1963	2,129623E+08	2,129591E+08	2,815652E+09	2,815814E+09	4,259214E+08	5,631466E+09	6,057387E+09
1964	2,129972E+08	2,129881E+08	2,815820E+09	2,815768E+09	4,259852E+08	5,631587E+09	6,057573E+09
1965	2,129569E+08	2,129780E+08	2,815875E+09	2,815849E+09	4,259349E+08	5,631723E+09	6,057658E+09
1966	2,129540E+08	2,129420E+08	2,815893E+09	2,815975E+09	4,258960E+08	5,631868E+09	6,057764E+09
1967	2,129803E+08	2,129787E+08	2,816018E+09	2,815876E+09	4,259591E+08	5,631894E+09	6,057853E+09
1968	2,129346E+08	2,129445E+08	2,815924E+09	2,816001E+09	4,258791E+08	5,631925E+09	6,057804E+09
1969	2,129634E+08	2,129434E+08	2,815920E+09	2,815985E+09	4,259068E+08	5,631904E+09	6,057811E+09
1970	2,129735E+08	2,129812E+08	2,815954E+09	2,815812E+09	4,259547E+08	5,631766E+09	6,057721E+09
1971	2,129389E+08	2,129526E+08	2,815766E+09	2,815878E+09	4,258914E+08	5,631645E+09	6,057536E+09
1972	2,129902E+08	2,129817E+08	2,815777E+09	2,815718E+09	4,259719E+08	5,631495E+09	6,057467E+09
1973	2,129761E+08	2,129976E+08	2,815717E+09	2,815606E+09	4,259737E+08	5,631323E+09	6,057297E+09
1974	2,129741E+08	2,129682E+08	2,815532E+09	2,815638E+09	4,259423E+08	5,631170E+09	6,057112E+09
1975	2,130232E+08	2,130174E+08	2,815527E+09	2,815426E+09	4,260406E+08	5,630953E+09	6,056994E+09
1976	2,129899E+08	2,130119E+08	2,815406E+09	2,815430E+09	4,260018E+08	5,630836E+09	6,056838E+09
1977	2,130149E+08	2,130004E+08	2,815360E+09	2,815435E+09	4,260153E+08	5,630795E+09	6,056810E+09
1978	2,130369E+08	2,130418E+08	2,815460E+09	2,815275E+09	4,260787E+08	5,630735E+09	6,056813E+09
1979	2,129926E+08	2,130056E+08	2,815344E+09	2,815433E+09	4,259982E+08	5,630777E+09	6,056775E+09
1980	2,130276E+08	2,130063E+08	2,815409E+09	2,815435E+09	4,260340E+08	5,630845E+09	6,056879E+09
1981	2,130145E+08	2,130276E+08	2,815507E+09	2,815429E+09	4,260421E+08	5,630935E+09	6,056977E+09
1982	2,129840E+08	2,129804E+08	2,815462E+09	2,815620E+09	4,259645E+08	5,631082E+09	6,057046E+09
1983	2,130183E+08	2,130084E+08	2,815619E+09	2,815551E+09	4,260267E+08	5,631171E+09	6,057197E+09
1984	2,129799E+08	2,129980E+08	2,815686E+09	2,815636E+09	4,259779E+08	5,631322E+09	6,057300E+09
1985	2,129765E+08	2,129600E+08	2,815676E+09	2,815774E+09	4,259365E+08	5,631450E+09	6,057387E+09
1986	2,130031E+08	2,129984E+08	2,815795E+09	2,815652E+09	4,260015E+08	5,631447E+09	6,057448E+09
1987	2,129550E+08	2,129724E+08	2,815683E+09	2,815758E+09	4,259274E+08	5,631441E+09	6,057368E+09
1988	2,129836E+08	2,129698E+08	2,815649E+09	2,815720E+09	4,259534E+08	5,631369E+09	6,057322E+09
1989	2,129968E+08	2,130107E+08	2,815708E+09	2,815559E+09	4,260075E+08	5,631267E+09	6,057275E+09
1990	2,129659E+08	2,129751E+08	2,815533E+09	2,815617E+09	4,259410E+08	5,631150E+09	6,057091E+09
1991	2,130167E+08	2,130024E+08	2,815495E+09	2,815446E+09	4,260191E+08	5,630941E+09	6,056960E+09
1992	2,130048E+08	2,130229E+08	2,815438E+09	2,815339E+09	4,260277E+08	5,630777E+09	6,056805E+09
1993	2,130027E+08	2,129960E+08	2,815250E+09	2,815385E+09	4,259987E+08	5,630635E+09	6,056633E+09
1994	2,130506E+08	2,130467E+08	2,815291E+09	2,815159E+09	4,260973E+08	5,630450E+09	6,056548E+09
1995	2,130137E+08	2,130420E+08	2,815193E+09	2,815174E+09	4,260558E+08	5,630367E+09	6,056423E+09
1996	2,130359E+08	2,130220E+08	2,815124E+09	2,815203E+09	4,260579E+08	5,630327E+09	6,056385E+09
1997	2,130587E+08	2,130634E+08	2,815228E+09	2,815083E+09	4,261222E+08	5,630311E+09	6,056433E+09
1998	2,130164E+08	2,130227E+08	2,815117E+09	2,815235E+09	4,260391E+08	5,630352E+09	6,056391E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1999	2,130498E+08	2,130268E+08	2,815154E+09	2,815213E+09	4,260766E+08	5,630367E+09	6,056443E+09
2000	2,130383E+08	2,130523E+08	2,815290E+09	2,815196E+09	4,260905E+08	5,630486E+09	6,056576E+09
2001	2,130064E+08	2,130024E+08	2,815270E+09	2,815400E+09	4,260088E+08	5,630670E+09	6,056679E+09
2002	2,130391E+08	2,130281E+08	2,815447E+09	2,815327E+09	4,260672E+08	5,630774E+09	6,056841E+09
2003	2,129981E+08	2,130190E+08	2,815491E+09	2,815421E+09	4,260170E+08	5,630912E+09	6,056929E+09
2004	2,129934E+08	2,129795E+08	2,815431E+09	2,815562E+09	4,259730E+08	5,630993E+09	6,056966E+09
2005	2,130239E+08	2,130244E+08	2,815549E+09	2,815448E+09	4,260482E+08	5,630997E+09	6,057045E+09
2006	2,129796E+08	2,129961E+08	2,815459E+09	2,815525E+09	4,259757E+08	5,630983E+09	6,056959E+09
2007	2,130089E+08	2,129930E+08	2,815396E+09	2,815458E+09	4,260019E+08	5,630854E+09	6,056856E+09
2008	2,130252E+08	2,130341E+08	2,815459E+09	2,815293E+09	4,260593E+08	5,630752E+09	6,056812E+09
2009	2,129942E+08	2,129974E+08	2,815268E+09	2,815364E+09	4,259916E+08	5,630632E+09	6,056624E+09
2010	2,130434E+08	2,130274E+08	2,815232E+09	2,815173E+09	4,260709E+08	5,630405E+09	6,056476E+09
2011	2,130293E+08	2,130553E+08	2,815175E+09	2,815066E+09	4,260846E+08	5,630241E+09	6,056326E+09
2012	2,130253E+08	2,130259E+08	2,814979E+09	2,815115E+09	4,260512E+08	5,630095E+09	6,056146E+09
2013	2,130752E+08	2,130756E+08	2,815051E+09	2,814922E+09	4,261508E+08	5,629973E+09	6,056124E+09
2014	2,130411E+08	2,130629E+08	2,814965E+09	2,814942E+09	4,261040E+08	5,629908E+09	6,056012E+09
2015	2,130613E+08	2,130405E+08	2,814848E+09	2,814964E+09	4,261018E+08	5,629812E+09	6,055914E+09
2016	2,130849E+08	2,130855E+08	2,814969E+09	2,814847E+09	4,261704E+08	5,629816E+09	6,055987E+09
2017	2,130410E+08	2,130475E+08	2,814883E+09	2,815009E+09	4,260885E+08	5,629892E+09	6,055980E+09
2018	2,130708E+08	2,130521E+08	2,814973E+09	2,814974E+09	4,261229E+08	5,629947E+09	6,056070E+09
2019	2,130567E+08	2,130784E+08	2,815134E+09	2,814979E+09	4,261351E+08	5,630113E+09	6,056248E+09
2020	2,130223E+08	2,130211E+08	2,815080E+09	2,815206E+09	4,260433E+08	5,630285E+09	6,056329E+09
2021	2,130568E+08	2,130463E+08	2,815246E+09	2,815166E+09	4,261030E+08	5,630412E+09	6,056515E+09
2022	2,130205E+08	2,130349E+08	2,815273E+09	2,815238E+09	4,260554E+08	5,630511E+09	6,056566E+09
2023	2,130160E+08	2,129995E+08	2,815156E+09	2,815334E+09	4,260155E+08	5,630490E+09	6,056505E+09
2024	2,130504E+08	2,130483E+08	2,815299E+09	2,815190E+09	4,260987E+08	5,630488E+09	6,056587E+09
2025	2,130071E+08	2,130200E+08	2,815217E+09	2,815258E+09	4,260270E+08	5,630475E+09	6,056502E+09
2026	2,130349E+08	2,130168E+08	2,815163E+09	2,815174E+09	4,260517E+08	5,630337E+09	6,056388E+09
2027	2,130489E+08	2,130619E+08	2,815210E+09	2,815023E+09	4,261108E+08	5,630232E+09	6,056343E+09
2028	2,130159E+08	2,130250E+08	2,814987E+09	2,815105E+09	4,260409E+08	5,630093E+09	6,056134E+09
2029	2,130667E+08	2,130593E+08	2,814975E+09	2,814941E+09	4,261260E+08	5,629916E+09	6,056042E+09
2030	2,130567E+08	2,130825E+08	2,814946E+09	2,814825E+09	4,261391E+08	5,629771E+09	6,055910E+09
2031	2,130522E+08	2,130501E+08	2,814718E+09	2,814863E+09	4,261024E+08	5,629581E+09	6,055683E+09
2032	2,131044E+08	2,130975E+08	2,814797E+09	2,814675E+09	4,262018E+08	5,629472E+09	6,055673E+09
2033	2,130696E+08	2,130832E+08	2,814703E+09	2,814708E+09	4,261528E+08	5,629411E+09	6,055563E+09
2034	2,130867E+08	2,130639E+08	2,814600E+09	2,814709E+09	4,261506E+08	5,629309E+09	6,055460E+09
2035	2,131062E+08	2,131141E+08	2,814741E+09	2,814598E+09	4,262203E+08	5,629338E+09	6,055558E+09
2036	2,130587E+08	2,130729E+08	2,814675E+09	2,814776E+09	4,261315E+08	5,629450E+09	6,055582E+09
2037	2,130885E+08	2,130752E+08	2,814801E+09	2,814783E+09	4,261636E+08	5,629584E+09	6,055748E+09
2038	2,130774E+08	2,130932E+08	2,814959E+09	2,814801E+09	4,261705E+08	5,629760E+09	6,055930E+09
2039	2,130428E+08	2,130354E+08	2,814839E+09	2,815016E+09	4,260782E+08	5,629855E+09	6,055933E+09
2040	2,130810E+08	2,130644E+08	2,814995E+09	2,814960E+09	4,261454E+08	5,629956E+09	6,056101E+09
2041	2,130461E+08	2,130573E+08	2,815027E+09	2,815014E+09	4,261035E+08	5,630041E+09	6,056145E+09
2042	2,130402E+08	2,130256E+08	2,814938E+09	2,815067E+09	4,260658E+08	5,630005E+09	6,056071E+09
2043	2,130726E+08	2,130761E+08	2,815090E+09	2,814927E+09	4,261487E+08	5,630017E+09	6,056166E+09
2044	2,130267E+08	2,130447E+08	2,814983E+09	2,815007E+09	4,260714E+08	5,629990E+09	6,056061E+09
2045	2,130553E+08	2,130424E+08	2,814926E+09	2,814953E+09	4,260977E+08	5,629879E+09	6,055977E+09
2046	2,130733E+08	2,130864E+08	2,814962E+09	2,814792E+09	4,261597E+08	5,629754E+09	6,055914E+09
2047	2,130415E+08	2,130521E+08	2,814694E+09	2,814846E+09	4,260937E+08	5,629540E+09	6,055634E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2048	2,130963E+08	2,130863E+08	2,814709E+09	2,814671E+09	4,261826E+08	5,629380E+09	6,055562E+09
2049	2,130881E+08	2,131067E+08	2,814686E+09	2,814560E+09	4,261949E+08	5,629246E+09	6,055441E+09
2050	2,130815E+08	2,130735E+08	2,814456E+09	2,814581E+09	4,261550E+08	5,629038E+09	6,055193E+09
2051	2,131298E+08	2,131231E+08	2,814533E+09	2,814410E+09	4,262529E+08	5,628943E+09	6,055196E+09
2052	2,130910E+08	2,131099E+08	2,814433E+09	2,814455E+09	4,262008E+08	5,628888E+09	6,055088E+09
2053	2,131064E+08	2,130925E+08	2,814386E+09	2,814493E+09	4,261989E+08	5,628880E+09	6,055079E+09
2054	2,131276E+08	2,131370E+08	2,814570E+09	2,814398E+09	4,262647E+08	5,628968E+09	6,055233E+09
2055	2,130796E+08	2,130908E+08	2,814473E+09	2,814581E+09	4,261704E+08	5,629055E+09	6,055225E+09
2056	2,131112E+08	2,130903E+08	2,814600E+09	2,814602E+09	4,262016E+08	5,629202E+09	6,055404E+09
2057	2,131018E+08	2,131074E+08	2,814731E+09	2,814619E+09	4,262092E+08	5,629351E+09	6,055560E+09
2058	2,130655E+08	2,130563E+08	2,814599E+09	2,814787E+09	4,261219E+08	5,629386E+09	6,055508E+09
2059	2,131016E+08	2,130911E+08	2,814762E+09	2,814714E+09	4,261927E+08	5,629477E+09	6,055669E+09
2060	2,130645E+08	2,130835E+08	2,814803E+09	2,814758E+09	4,261480E+08	5,629561E+09	6,055709E+09
2061	2,130592E+08	2,130512E+08	2,814744E+09	2,814836E+09	4,261104E+08	5,629581E+09	6,055691E+09
2062	2,130943E+08	2,130962E+08	2,814883E+09	2,814704E+09	4,261906E+08	5,629588E+09	6,055778E+09
2063	2,130494E+08	2,130657E+08	2,814714E+09	2,814772E+09	4,261150E+08	5,629486E+09	6,055601E+09
2064	2,130816E+08	2,130673E+08	2,814655E+09	2,814712E+09	4,261489E+08	5,629367E+09	6,055516E+09
2065	2,131025E+08	2,131126E+08	2,814695E+09	2,814544E+09	4,262151E+08	5,629239E+09	6,055454E+09
2066	2,130714E+08	2,130812E+08	2,814443E+09	2,814562E+09	4,261527E+08	5,629005E+09	6,055158E+09
2067	2,131245E+08	2,131137E+08	2,814454E+09	2,814394E+09	4,262382E+08	5,628849E+09	6,055087E+09
2068	2,131131E+08	2,131312E+08	2,814412E+09	2,814297E+09	4,262443E+08	5,628708E+09	6,054952E+09
2069	2,131055E+08	2,130992E+08	2,814200E+09	2,814344E+09	4,262047E+08	5,628543E+09	6,054748E+09
2070	2,131534E+08	2,131469E+08	2,814283E+09	2,814176E+09	4,263003E+08	5,628459E+09	6,054759E+09
2071	2,131136E+08	2,131354E+08	2,814176E+09	2,814211E+09	4,262489E+08	5,628387E+09	6,054636E+09
2072	2,131304E+08	2,131160E+08	2,814176E+09	2,814262E+09	4,262464E+08	5,628438E+09	6,054684E+09
2073	2,131526E+08	2,131557E+08	2,814368E+09	2,814193E+09	4,263083E+08	5,628561E+09	6,054869E+09
2074	2,131036E+08	2,131101E+08	2,814262E+09	2,814360E+09	4,262137E+08	5,628622E+09	6,054836E+09
2075	2,131317E+08	2,131110E+08	2,814375E+09	2,814390E+09	4,262427E+08	5,628764E+09	6,055007E+09
2076	2,131193E+08	2,131304E+08	2,814495E+09	2,814403E+09	4,262496E+08	5,628898E+09	6,055147E+09
2077	2,130828E+08	2,130829E+08	2,814408E+09	2,814577E+09	4,261657E+08	5,628985E+09	6,055151E+09
2078	2,131205E+08	2,131132E+08	2,814589E+09	2,814505E+09	4,262337E+08	5,629094E+09	6,055328E+09
2079	2,130846E+08	2,131033E+08	2,814588E+09	2,814539E+09	4,261880E+08	5,629127E+09	6,055315E+09
2080	2,130824E+08	2,130698E+08	2,814523E+09	2,814624E+09	4,261522E+08	5,629147E+09	6,055299E+09
2081	2,131206E+08	2,131148E+08	2,814630E+09	2,814490E+09	4,262353E+08	5,629119E+09	6,055355E+09
2082	2,130772E+08	2,130916E+08	2,814438E+09	2,814506E+09	4,261688E+08	5,628943E+09	6,055112E+09
2083	2,131081E+08	2,130970E+08	2,814387E+09	2,814433E+09	4,262050E+08	5,628820E+09	6,055025E+09
2084	2,131274E+08	2,131409E+08	2,814426E+09	2,814259E+09	4,262683E+08	5,628684E+09	6,054952E+09
2085	2,130968E+08	2,131089E+08	2,814200E+09	2,814298E+09	4,262058E+08	5,628498E+09	6,054704E+09
2086	2,131506E+08	2,131364E+08	2,814198E+09	2,814146E+09	4,262870E+08	5,628344E+09	6,054631E+09
2087	2,131383E+08	2,131547E+08	2,814111E+09	2,814038E+09	4,262930E+08	5,628149E+09	6,054442E+09
2088	2,131321E+08	2,131258E+08	2,813933E+09	2,814092E+09	4,262579E+08	5,628026E+09	6,054284E+09
2089	2,131798E+08	2,131721E+08	2,814050E+09	2,813939E+09	4,263519E+08	5,627989E+09	6,054341E+09
2090	2,131396E+08	2,131616E+08	2,813974E+09	2,813962E+09	4,263012E+08	5,627935E+09	6,054237E+09
2091	2,131524E+08	2,131392E+08	2,813984E+09	2,814042E+09	4,262916E+08	5,628026E+09	6,054318E+09
2092	2,131712E+08	2,131749E+08	2,814152E+09	2,813996E+09	4,263460E+08	5,628148E+09	6,054494E+09
2093	2,131222E+08	2,131307E+08	2,814059E+09	2,814177E+09	4,262529E+08	5,628236E+09	6,054489E+09
2094	2,131502E+08	2,131308E+08	2,814161E+09	2,814198E+09	4,262810E+08	5,628358E+09	6,054639E+09
2095	2,131382E+08	2,131509E+08	2,814262E+09	2,814181E+09	4,262890E+08	5,628443E+09	6,054732E+09
2096	2,131048E+08	2,131035E+08	2,814208E+09	2,814351E+09	4,262083E+08	5,628559E+09	6,054768E+09

1	14	15	16	17	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	2,131445E+08	2,131296E+08	2,814377E+09	2,814291E+09	4,262741E+08	5,628668E+09	6,054943E+09
2098	2,131105E+08	2,131245E+08	2,814353E+09	2,814295E+09	4,262350E+08	5,628647E+09	6,054882E+09
2099	2,131062E+08	2,130945E+08	2,814266E+09	2,814376E+09	4,262007E+08	5,628642E+09	6,054843E+09
2100	2,131419E+08	2,131424E+08	2,814360E+09	2,814238E+09	4,262843E+08	5,628598E+09	6,054882E+09
2101	2,131007E+08	2,131226E+08	2,814213E+09	2,814255E+09	4,262233E+08	5,628467E+09	6,054691E+09
2102	2,131324E+08	2,131229E+08	2,814159E+09	2,814186E+09	4,262554E+08	5,628346E+09	6,054601E+09
2103	2,131526E+08	2,131638E+08	2,814155E+09	2,814002E+09	4,263164E+08	5,628157E+09	6,054474E+09
2104	2,131249E+08	2,131322E+08	2,813927E+09	2,814043E+09	4,262571E+08	5,627970E+09	6,054228E+09
2105	2,131794E+08	2,131589E+08	2,813911E+09	2,813894E+09	4,263384E+08	5,627805E+09	6,054144E+09
2106	2,131671E+08	2,131849E+08	2,813831E+09	2,813749E+09	4,263520E+08	5,627580E+09	6,053931E+09
2107	2,131571E+08	2,131564E+08	2,813696E+09	2,813815E+09	4,263135E+08	5,627511E+09	6,053825E+09
2108	2,132004E+08	2,131982E+08	2,813834E+09	2,813691E+09	4,263986E+08	5,627525E+09	6,053924E+09
2109	2,131614E+08	2,131845E+08	2,813792E+09	2,813753E+09	4,263459E+08	5,627545E+09	6,053891E+09
2110	2,131724E+08	2,131570E+08	2,813781E+09	2,813860E+09	4,263294E+08	5,627641E+09	6,053970E+09
2111	2,131907E+08	2,131922E+08	2,813901E+09	2,813801E+09	4,263829E+08	5,627703E+09	6,054085E+09
2112	2,131441E+08	2,131518E+08	2,813832E+09	2,813976E+09	4,262958E+08	5,627808E+09	6,054104E+09
2113	2,131738E+08	2,131501E+08	2,813951E+09	2,813995E+09	4,263239E+08	5,627946E+09	6,054270E+09
2114	2,131630E+08	2,131729E+08	2,814057E+09	2,813942E+09	4,263359E+08	5,627999E+09	6,054335E+09
2115	2,131271E+08	2,131249E+08	2,814010E+09	2,814123E+09	4,262520E+08	5,628133E+09	6,054385E+09
2116	2,131629E+08	2,131503E+08	2,814150E+09	2,814071E+09	4,263131E+08	5,628222E+09	6,054535E+09
2117	2,131309E+08	2,131488E+08	2,814135E+09	2,814075E+09	4,262797E+08	5,628210E+09	6,054489E+09
2118	2,131263E+08	2,131208E+08	2,814032E+09	2,814149E+09	4,262471E+08	5,628182E+09	6,054429E+09
2119	2,131637E+08	2,131672E+08	2,814097E+09	2,813980E+09	4,263309E+08	5,628077E+09	6,054408E+09
2120	2,131275E+08	2,131477E+08	2,813967E+09	2,813994E+09	4,262753E+08	5,627962E+09	6,054237E+09
2121	2,131623E+08	2,131437E+08	2,813890E+09	2,813933E+09	4,263060E+08	5,627824E+09	6,054130E+09
2122	2,131835E+08	2,131889E+08	2,813861E+09	2,813713E+09	4,263724E+08	5,627574E+09	6,053946E+09
2123	2,131527E+08	2,131615E+08	2,813644E+09	2,813754E+09	4,263142E+08	5,627397E+09	6,053712E+09
2124	2,132019E+08	2,131897E+08	2,813643E+09	2,813618E+09	4,263916E+08	5,627261E+09	6,053653E+09
2125	2,131907E+08	2,132158E+08	2,813632E+09	2,813498E+09	4,264065E+08	5,627130E+09	6,053536E+09
2126	2,131790E+08	2,131817E+08	2,813507E+09	2,813600E+09	4,263607E+08	5,627107E+09	6,053468E+09
2127	2,132214E+08	2,132168E+08	2,813605E+09	2,813491E+09	4,264382E+08	5,627096E+09	6,053534E+09
2128	2,131863E+08	2,132023E+08	2,813560E+09	2,813567E+09	4,263885E+08	5,627127E+09	6,053515E+09
2129	2,131979E+08	2,131730E+08	2,813525E+09	2,813668E+09	4,263709E+08	5,627193E+09	6,053564E+09
2130	2,132165E+08	2,132154E+08	2,813645E+09	2,813556E+09	4,264319E+08	5,627202E+09	6,053633E+09
2131	2,131668E+08	2,131769E+08	2,813617E+09	2,813717E+09	4,263437E+08	5,627334E+09	6,053678E+09
2132	2,131913E+08	2,131730E+08	2,813750E+09	2,813754E+09	4,263643E+08	5,627504E+09	6,053868E+09
2133	2,131826E+08	2,131955E+08	2,813888E+09	2,813726E+09	4,263781E+08	5,627614E+09	6,053992E+09
2134	2,131447E+08	2,131461E+08	2,813812E+09	2,813925E+09	4,262908E+08	5,627738E+09	6,054029E+09
2135	2,131801E+08	2,131714E+08	2,813905E+09	2,813860E+09	4,263516E+08	5,627765E+09	6,054116E+09
2136	2,131537E+08	2,131738E+08	2,813903E+09	2,813856E+09	4,263275E+08	5,627758E+09	6,054086E+09
2137	2,131525E+08	2,131432E+08	2,813798E+09	2,813922E+09	4,262958E+08	5,627720E+09	6,054015E+09
2138	2,131932E+08	2,131917E+08	2,813843E+09	2,813711E+09	4,263848E+08	5,627553E+09	6,053938E+09
2139	2,131562E+08	2,131727E+08	2,813709E+09	2,813720E+09	4,263289E+08	5,627429E+09	6,053758E+09
2140	2,131870E+08	2,131690E+08	2,813606E+09	2,813665E+09	4,263560E+08	5,627270E+09	6,053626E+09
2141	2,132096E+08	2,132180E+08	2,813602E+09	2,813442E+09	4,264276E+08	5,627044E+09	6,053471E+09
2142	2,131760E+08	2,131924E+08	2,813396E+09	2,813493E+09	4,263684E+08	5,626889E+09	6,053257E+09
2143	2,132233E+08	2,132160E+08	2,813393E+09	2,813357E+09	4,264393E+08	5,626751E+09	6,053190E+09
2144	2,132167E+08	2,132396E+08	2,813408E+09	2,813270E+09	4,264563E+08	5,626678E+09	6,053134E+09
2145	2,132075E+08	2,131997E+08	2,813265E+09	2,813398E+09	4,264072E+08	5,626663E+09	6,053070E+09

1	14	15	16	17	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	2,132502E+08	2,132371E+08	2,813330E+09	2,813254E+09	4,264873E+08	5,626585E+09	6,053072E+09
2147	2,132123E+08	2,132263E+08	2,813305E+09	2,813323E+09	4,264386E+08	5,626628E+09	6,053066E+09
2148	2,132177E+08	2,131990E+08	2,813290E+09	2,813430E+09	4,264167E+08	5,626719E+09	6,053136E+09
2149	2,132361E+08	2,132402E+08	2,813478E+09	2,813328E+09	4,264763E+08	5,626806E+09	6,053283E+09
2150	2,131832E+08	2,131997E+08	2,813464E+09	2,813518E+09	4,263829E+08	5,626982E+09	6,053365E+09
2151	2,132059E+08	2,131903E+08	2,813555E+09	2,813563E+09	4,263962E+08	5,627118E+09	6,053514E+09
2152	2,132027E+08	2,132137E+08	2,813682E+09	2,813550E+09	4,264164E+08	5,627232E+09	6,053648E+09
2153	2,131684E+08	2,131645E+08	2,813574E+09	2,813737E+09	4,263328E+08	5,627311E+09	6,053644E+09
2154	2,132062E+08	2,131950E+08	2,813644E+09	2,813610E+09	4,264012E+08	5,627255E+09	6,053656E+09
2155	2,131804E+08	2,131988E+08	2,813664E+09	2,813584E+09	4,263792E+08	5,627248E+09	6,053627E+09
2156	2,131764E+08	2,131678E+08	2,813543E+09	2,813655E+09	4,263443E+08	5,627198E+09	6,053542E+09
2157	2,132195E+08	2,132160E+08	2,813604E+09	2,813446E+09	4,264355E+08	5,627050E+09	6,053485E+09
2158	2,131798E+08	2,132007E+08	2,813448E+09	2,813461E+09	4,263805E+08	5,626908E+09	6,053289E+09
2159	2,132086E+08	2,131968E+08	2,813318E+09	2,813396E+09	4,264054E+08	5,626713E+09	6,053119E+09
2160	2,132357E+08	2,132483E+08	2,813349E+09	2,813191E+09	4,264840E+08	5,626540E+09	6,053024E+09
2161	2,132049E+08	2,132174E+08	2,813157E+09	2,813255E+09	4,264223E+08	5,626412E+09	6,052834E+09
2162	2,132529E+08	2,132405E+08	2,813142E+09	2,813104E+09	4,264934E+08	5,626245E+09	6,052739E+09
2163	2,132457E+08	2,132625E+08	2,813160E+09	2,813025E+09	4,265082E+08	5,626184E+09	6,052693E+09
2164	2,132309E+08	2,132228E+08	2,812997E+09	2,813164E+09	4,264537E+08	5,626161E+09	6,052615E+09
2165	2,132734E+08	2,132621E+08	2,813100E+09	2,813016E+09	4,265354E+08	5,626115E+09	6,052651E+09
2166	2,132309E+08	2,132536E+08	2,813094E+09	2,813088E+09	4,264845E+08	5,626182E+09	6,052667E+09
2167	2,132332E+08	2,132207E+08	2,813089E+09	2,813197E+09	4,264539E+08	5,626286E+09	6,052740E+09
2168	2,132559E+08	2,132594E+08	2,813298E+09	2,813137E+09	4,265154E+08	5,626435E+09	6,052951E+09
2169	2,132060E+08	2,132143E+08	2,813266E+09	2,813346E+09	4,264203E+08	5,626613E+09	6,053033E+09
2170	2,132291E+08	2,132089E+08	2,813316E+09	2,813356E+09	4,264381E+08	5,626673E+09	6,053111E+09
2171	2,132265E+08	2,132359E+08	2,813450E+09	2,813326E+09	4,264624E+08	5,626775E+09	6,053238E+09
2172	2,131892E+08	2,131900E+08	2,813341E+09	2,813504E+09	4,263792E+08	5,626846E+09	6,053225E+09
2173	2,132299E+08	2,132190E+08	2,813446E+09	2,813368E+09	4,264489E+08	5,626814E+09	6,053263E+09
2174	2,132022E+08	2,132240E+08	2,813451E+09	2,813350E+09	4,264261E+08	5,626801E+09	6,053227E+09
2175	2,131969E+08	2,131898E+08	2,813284E+09	2,813409E+09	4,263867E+08	5,626693E+09	6,053080E+09
2176	2,132447E+08	2,132400E+08	2,813331E+09	2,813212E+09	4,264847E+08	5,626542E+09	6,053027E+09
2177	2,132085E+08	2,132265E+08	2,813166E+09	2,813212E+09	4,264350E+08	5,626378E+09	6,052813E+09
2178	2,132374E+08	2,132263E+08	2,813030E+09	2,813099E+09	4,264637E+08	5,626130E+09	6,052593E+09
2179	2,132643E+08	2,132762E+08	2,813101E+09	2,812900E+09	4,265404E+08	5,626001E+09	6,052541E+09
2180	2,132312E+08	2,132438E+08	2,812904E+09	2,812994E+09	4,264751E+08	5,625898E+09	6,052373E+09
2181	2,132799E+08	2,132632E+08	2,812906E+09	2,812857E+09	4,265430E+08	5,625763E+09	6,052306E+09
2182	2,132683E+08	2,132886E+08	2,812913E+09	2,812794E+09	4,265569E+08	5,625707E+09	6,052264E+09
2183	2,132498E+08	2,132476E+08	2,812738E+09	2,812925E+09	4,264974E+08	5,625664E+09	6,052161E+09
2184	2,132947E+08	2,132863E+08	2,812884E+09	2,812805E+09	4,265809E+08	5,625689E+09	6,052270E+09
2185	2,132546E+08	2,132731E+08	2,812903E+09	2,812891E+09	4,265277E+08	5,625795E+09	6,052323E+09
2186	2,132565E+08	2,132394E+08	2,812884E+09	2,812986E+09	4,264959E+08	5,625870E+09	6,052366E+09
2187	2,132791E+08	2,132767E+08	2,813097E+09	2,812936E+09	4,265558E+08	5,626033E+09	6,052589E+09
2188	2,132269E+08	2,132343E+08	2,813037E+09	2,813149E+09	4,264612E+08	5,626186E+09	6,052647E+09
2189	2,132503E+08	2,132314E+08	2,813106E+09	2,813138E+09	4,264817E+08	5,626244E+09	6,052725E+09
2190	2,132447E+08	2,132624E+08	2,813242E+09	2,813095E+09	4,265071E+08	5,626337E+09	6,052844E+09
2191	2,132061E+08	2,132129E+08	2,813116E+09	2,813258E+09	4,264190E+08	5,626374E+09	6,052793E+09
2192	2,132530E+08	2,132405E+08	2,813216E+09	2,813149E+09	4,264935E+08	5,626365E+09	6,052858E+09
2193	2,132295E+08	2,132438E+08	2,813191E+09	2,813121E+09	4,264733E+08	5,626312E+09	6,052785E+09
2194	2,132248E+08	2,132152E+08	2,812990E+09	2,813135E+09	4,264400E+08	5,626125E+09	6,052565E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2195	2,132724E+08	2,132687E+08	2,813059E+09	2,812925E+09	4,265411E+08	5,625984E+09	6,052525E+09
2196	2,132338E+08	2,132571E+08	2,812911E+09	2,812934E+09	4,264909E+08	5,625845E+09	6,052336E+09
2197	2,132636E+08	2,132538E+08	2,812819E+09	2,812833E+09	4,265175E+08	5,625652E+09	6,052169E+09
2198	2,132875E+08	2,133033E+08	2,812874E+09	2,812662E+09	4,265908E+08	5,625536E+09	6,052127E+09
2199	2,132532E+08	2,132664E+08	2,812640E+09	2,812759E+09	4,265196E+08	5,625400E+09	6,051919E+09
2200	2,133054E+08	2,132858E+08	2,812634E+09	2,812645E+09	4,265912E+08	5,625280E+09	6,051871E+09
2201	2,132959E+08	2,133111E+08	2,812646E+09	2,812571E+09	4,266070E+08	5,625216E+09	6,051823E+09
2202	2,132757E+08	2,132721E+08	2,812485E+09	2,812660E+09	4,265478E+08	5,625146E+09	6,051694E+09
2203	2,133190E+08	2,133076E+08	2,812676E+09	2,812555E+09	4,266266E+08	5,625231E+09	6,051857E+09
2204	2,132764E+08	2,132942E+08	2,812700E+09	2,812676E+09	4,265706E+08	5,625376E+09	6,051946E+09
2205	2,132777E+08	2,132590E+08	2,812699E+09	2,812779E+09	4,265367E+08	5,625478E+09	6,052015E+09
2206	2,132956E+08	2,133010E+08	2,812896E+09	2,812744E+09	4,265966E+08	5,625640E+09	6,052236E+09
2207	2,132421E+08	2,132577E+08	2,812820E+09	2,812941E+09	4,264998E+08	5,625761E+09	6,052261E+09
2208	2,132695E+08	2,132531E+08	2,812903E+09	2,812947E+09	4,265226E+08	5,625850E+09	6,052372E+09
2209	2,132687E+08	2,132803E+08	2,813036E+09	2,812897E+09	4,265490E+08	5,625933E+09	6,052482E+09
2210	2,132314E+08	2,132329E+08	2,812870E+09	2,813015E+09	4,264643E+08	5,625885E+09	6,052349E+09
2211	2,132790E+08	2,132604E+08	2,812961E+09	2,812897E+09	4,265395E+08	5,625858E+09	6,052397E+09
2212	2,132549E+08	2,132701E+08	2,812915E+09	2,812863E+09	4,265250E+08	5,625778E+09	6,052303E+09
2213	2,132506E+08	2,132438E+08	2,812742E+09	2,812851E+09	4,264944E+08	5,625593E+09	6,052088E+09
2214	2,132936E+08	2,133002E+08	2,812826E+09	2,812649E+09	4,265938E+08	5,625474E+09	6,052068E+09
2215	2,132552E+08	2,132836E+08	2,812664E+09	2,812664E+09	4,265388E+08	5,625329E+09	6,051868E+09
2216	2,132897E+08	2,132772E+08	2,812564E+09	2,812611E+09	4,265669E+08	5,625175E+09	6,051742E+09
2217	2,133171E+08	2,133242E+08	2,812596E+09	2,812441E+09	4,266413E+08	5,625036E+09	6,051678E+09
2218	2,132828E+08	2,132922E+08	2,812335E+09	2,812493E+09	4,265750E+08	5,624828E+09	6,051404E+09
2219	2,133335E+08	2,133122E+08	2,812368E+09	2,812373E+09	4,266458E+08	5,624741E+09	6,051387E+09
2220	2,133211E+08	2,133386E+08	2,812411E+09	2,812314E+09	4,266596E+08	5,624725E+09	6,051385E+09
2221	2,132992E+08	2,132961E+08	2,812309E+09	2,812417E+09	4,265953E+08	5,624726E+09	6,051321E+09
2222	2,133358E+08	2,133315E+08	2,812500E+09	2,812352E+09	4,266673E+08	5,624852E+09	6,051519E+09
2223	2,132920E+08	2,133136E+08	2,812496E+09	2,812485E+09	4,266056E+08	5,624981E+09	6,051586E+09
2224	2,132964E+08	2,132795E+08	2,812487E+09	2,812617E+09	4,265759E+08	5,625104E+09	6,051680E+09
2225	2,133176E+08	2,133198E+08	2,812674E+09	2,812559E+09	4,266374E+08	5,625233E+09	6,051870E+09
2226	2,132650E+08	2,132782E+08	2,812589E+09	2,812700E+09	4,265432E+08	5,625290E+09	6,051833E+09
2227	2,132939E+08	2,132711E+08	2,812685E+09	2,812704E+09	4,265650E+08	5,625389E+09	6,051954E+09
2228	2,132930E+08	2,132998E+08	2,812794E+09	2,812663E+09	4,265928E+08	5,625458E+09	6,052050E+09
2229	2,132563E+08	2,132554E+08	2,812640E+09	2,812761E+09	4,265118E+08	5,625401E+09	6,051913E+09
2230	2,132985E+08	2,132898E+08	2,812717E+09	2,812645E+09	4,265883E+08	5,625362E+09	6,051950E+09
2231	2,132741E+08	2,132994E+08	2,812669E+09	2,812599E+09	4,265735E+08	5,625268E+09	6,051841E+09
2232	2,132737E+08	2,132718E+08	2,812516E+09	2,812622E+09	4,265454E+08	5,625138E+09	6,051683E+09
2233	2,133208E+08	2,133226E+08	2,812589E+09	2,812428E+09	4,266434E+08	5,625018E+09	6,051661E+09
2234	2,132850E+08	2,133064E+08	2,812387E+09	2,812411E+09	4,265914E+08	5,624798E+09	6,051390E+09
2235	2,133205E+08	2,132990E+08	2,812276E+09	2,812353E+09	4,266195E+08	5,624629E+09	6,051248E+09
2236	2,133463E+08	2,133511E+08	2,812295E+09	2,812176E+09	4,266974E+08	5,624471E+09	6,051168E+09
2237	2,133105E+08	2,133219E+08	2,812085E+09	2,812198E+09	4,266324E+08	5,624282E+09	6,050915E+09
2238	2,133531E+08	2,133426E+08	2,812152E+09	2,812101E+09	4,266957E+08	5,624253E+09	6,050949E+09
2239	2,133393E+08	2,133629E+08	2,812207E+09	2,812069E+09	4,267022E+08	5,624277E+09	6,050979E+09
2240	2,133196E+08	2,133163E+08	2,812110E+09	2,812237E+09	4,266359E+08	5,624347E+09	6,050983E+09
2241	2,133578E+08	2,133484E+08	2,812287E+09	2,812187E+09	4,267062E+08	5,624474E+09	6,051180E+09
2242	2,133155E+08	2,133337E+08	2,812255E+09	2,812277E+09	4,266493E+08	5,624532E+09	6,051182E+09
2243	2,133193E+08	2,132990E+08	2,812268E+09	2,812400E+09	4,266183E+08	5,624668E+09	6,051287E+09

1	14	15	16	17	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	2,133404E+08	2,133401E+08	2,812463E+09	2,812343E+09	4,266804E+08	5,624806E+09	6,051487E+09
2245	2,132886E+08	2,132984E+08	2,812401E+09	2,812462E+09	4,265869E+08	5,624863E+09	6,051450E+09
2246	2,133120E+08	2,132942E+08	2,812477E+09	2,812481E+09	4,266062E+08	5,624958E+09	6,051565E+09
2247	2,133114E+08	2,133223E+08	2,812553E+09	2,812430E+09	4,266337E+08	5,624983E+09	6,051617E+09
2248	2,132778E+08	2,132818E+08	2,812396E+09	2,812546E+09	4,265596E+08	5,624942E+09	6,051502E+09
2249	2,133216E+08	2,133153E+08	2,812475E+09	2,812411E+09	4,266369E+08	5,624886E+09	6,051523E+09
2250	2,133001E+08	2,133252E+08	2,812415E+09	2,812322E+09	4,266253E+08	5,624737E+09	6,051362E+09
2251	2,133019E+08	2,132948E+08	2,812264E+09	2,812355E+09	4,265968E+08	5,624620E+09	6,051216E+09
2252	2,133506E+08	2,133462E+08	2,812307E+09	2,812173E+09	4,266967E+08	5,624480E+09	6,051176E+09
2253	2,133157E+08	2,133336E+08	2,812114E+09	2,812128E+09	4,266494E+08	5,624242E+09	6,050891E+09
2254	2,133444E+08	2,133320E+08	2,812003E+09	2,812076E+09	4,266764E+08	5,624079E+09	6,050755E+09
2255	2,133676E+08	2,133807E+08	2,812039E+09	2,811897E+09	4,267483E+08	5,623936E+09	6,050684E+09
2256	2,133336E+08	2,133492E+08	2,811874E+09	2,811971E+09	4,266828E+08	5,623845E+09	6,050528E+09
2257	2,133761E+08	2,133629E+08	2,811949E+09	2,811900E+09	4,267390E+08	5,623848E+09	6,050587E+09
2258	2,133639E+08	2,133812E+08	2,811978E+09	2,811860E+09	4,267450E+08	5,623838E+09	6,050583E+09
2259	2,133449E+08	2,133338E+08	2,811880E+09	2,812038E+09	4,266787E+08	5,623918E+09	6,050597E+09
2260	2,133822E+08	2,133687E+08	2,812039E+09	2,811987E+09	4,267509E+08	5,624025E+09	6,050776E+09
2261	2,133400E+08	2,133563E+08	2,812048E+09	2,812035E+09	4,266963E+08	5,624083E+09	6,050780E+09
2262	2,133365E+08	2,133234E+08	2,812071E+09	2,812165E+09	4,266600E+08	5,624236E+09	6,050896E+09
2263	2,133570E+08	2,133595E+08	2,812255E+09	2,812115E+09	4,267165E+08	5,624370E+09	6,051087E+09
2264	2,133082E+08	2,133193E+08	2,812192E+09	2,812271E+09	4,266275E+08	5,624463E+09	6,051091E+09
2265	2,133328E+08	2,133152E+08	2,812250E+09	2,812283E+09	4,266480E+08	5,624533E+09	6,051181E+09
2266	2,133349E+08	2,133472E+08	2,812302E+09	2,812187E+09	4,266821E+08	5,624489E+09	6,051172E+09
2267	2,133030E+08	2,133066E+08	2,812166E+09	2,812296E+09	4,266097E+08	5,624463E+09	6,051072E+09
2268	2,133474E+08	2,133396E+08	2,812240E+09	2,812169E+09	4,266870E+08	5,624409E+09	6,051096E+09
2269	2,133287E+08	2,133496E+08	2,812187E+09	2,812057E+09	4,266783E+08	5,624244E+09	6,050922E+09
2270	2,133256E+08	2,133220E+08	2,812006E+09	2,812103E+09	4,266476E+08	5,624109E+09	6,050757E+09
2271	2,133748E+08	2,133717E+08	2,812017E+09	2,811909E+09	4,267465E+08	5,623926E+09	6,050673E+09
2272	2,133425E+08	2,133633E+08	2,811831E+09	2,811876E+09	4,267058E+08	5,623707E+09	6,050412E+09
2273	2,133703E+08	2,133591E+08	2,811744E+09	2,811815E+09	4,267294E+08	5,623559E+09	6,050288E+09
2274	2,133945E+08	2,134049E+08	2,811784E+09	2,811618E+09	4,267994E+08	5,623403E+09	6,050202E+09
2275	2,133608E+08	2,133696E+08	2,811641E+09	2,811726E+09	4,267304E+08	5,623367E+09	6,050097E+09
2276	2,134020E+08	2,133831E+08	2,811704E+09	2,811689E+09	4,267851E+08	5,623393E+09	6,050178E+09
2277	2,133906E+08	2,134044E+08	2,811749E+09	2,811628E+09	4,267950E+08	5,623377E+09	6,050172E+09
2278	2,133643E+08	2,133620E+08	2,811660E+09	2,811816E+09	4,267263E+08	5,623476E+09	6,050202E+09
2279	2,133993E+08	2,133921E+08	2,811831E+09	2,811762E+09	4,267914E+08	5,623592E+09	6,050384E+09
2280	2,133592E+08	2,133784E+08	2,811868E+09	2,811847E+09	4,267376E+08	5,623715E+09	6,050452E+09
2281	2,133552E+08	2,133414E+08	2,811885E+09	2,811984E+09	4,266966E+08	5,623869E+09	6,050566E+09
2282	2,133782E+08	2,133761E+08	2,812029E+09	2,811907E+09	4,267543E+08	5,623936E+09	6,050691E+09
2283	2,133315E+08	2,133391E+08	2,811962E+09	2,812055E+09	4,266706E+08	5,624017E+09	6,050688E+09
2284	2,133561E+08	2,133394E+08	2,812004E+09	2,812055E+09	4,266954E+08	5,624059E+09	6,050755E+09
2285	2,133603E+08	2,133735E+08	2,812086E+09	2,811915E+09	4,267338E+08	5,624001E+09	6,050735E+09
2286	2,133242E+08	2,133346E+08	2,811949E+09	2,812035E+09	4,266589E+08	5,623984E+09	6,050643E+09
2287	2,133695E+08	2,133612E+08	2,811988E+09	2,811916E+09	4,267307E+08	5,623904E+09	6,050635E+09
2288	2,133552E+08	2,133740E+08	2,811923E+09	2,811833E+09	4,267292E+08	5,623756E+09	6,050485E+09
2289	2,133526E+08	2,133481E+08	2,811720E+09	2,811861E+09	4,267007E+08	5,623581E+09	6,050282E+09
2290	2,134029E+08	2,133983E+08	2,811718E+09	2,811626E+09	4,268012E+08	5,623343E+09	6,050144E+09
2291	2,133715E+08	2,133908E+08	2,811574E+09	2,811594E+09	4,267623E+08	5,623168E+09	6,049931E+09
2292	2,133982E+08	2,133841E+08	2,811498E+09	2,811558E+09	4,267823E+08	5,623056E+09	6,049838E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2293	2,134228E+08	2,134290E+08	2,811563E+09	2,811361E+09	4,268517E+08	5,622924E+09	6,049776E+09
2294	2,133832E+08	2,133955E+08	2,811413E+09	2,811500E+09	4,267788E+08	5,622913E+09	6,049692E+09
2295	2,134218E+08	2,134061E+08	2,811460E+09	2,811470E+09	4,268280E+08	5,622931E+09	6,049759E+09
2296	2,134119E+08	2,134302E+08	2,811527E+09	2,811432E+09	4,268422E+08	5,622959E+09	6,049801E+09
2297	2,133837E+08	2,133846E+08	2,811459E+09	2,811610E+09	4,267683E+08	5,623068E+09	6,049837E+09
2298	2,134198E+08	2,134089E+08	2,811618E+09	2,811536E+09	4,268287E+08	5,623154E+09	6,049982E+09
2299	2,133820E+08	2,133942E+08	2,811660E+09	2,811637E+09	4,267762E+08	5,623297E+09	6,050073E+09
2300	2,133781E+08	2,133592E+08	2,811657E+09	2,811785E+09	4,267373E+08	5,623442E+09	6,050180E+09
2301	2,134025E+08	2,133991E+08	2,811809E+09	2,811672E+09	4,268016E+08	5,623481E+09	6,050282E+09
2302	2,133510E+08	2,133676E+08	2,811750E+09	2,811820E+09	4,267185E+08	5,623570E+09	6,050289E+09
2303	2,133743E+08	2,133638E+08	2,811793E+09	2,811819E+09	4,267381E+08	5,623612E+09	6,050350E+09
2304	2,133825E+08	2,133970E+08	2,811879E+09	2,811706E+09	4,267795E+08	5,623585E+09	6,050365E+09
2305	2,133473E+08	2,133563E+08	2,811716E+09	2,811823E+09	4,267036E+08	5,623540E+09	6,050243E+09
2306	2,133966E+08	2,133806E+08	2,811699E+09	2,811671E+09	4,267772E+08	5,623370E+09	6,050147E+09
2307	2,133853E+08	2,133984E+08	2,811621E+09	2,811570E+09	4,267836E+08	5,623191E+09	6,049974E+09
2308	2,133825E+08	2,133771E+08	2,811422E+09	2,811579E+09	4,267595E+08	5,623000E+09	6,049760E+09
2309	2,134324E+08	2,134282E+08	2,811458E+09	2,811305E+09	4,268606E+08	5,622764E+09	6,049624E+09
2310	2,133953E+08	2,134216E+08	2,811341E+09	2,811303E+09	4,268170E+08	5,622644E+09	6,049461E+09
2311	2,134195E+08	2,134090E+08	2,811258E+09	2,811303E+09	4,268284E+08	5,622562E+09	6,049390E+09
2312	2,134458E+08	2,134545E+08	2,811333E+09	2,811158E+09	4,269003E+08	5,622491E+09	6,049391E+09
2313	2,134056E+08	2,134213E+08	2,811183E+09	2,811302E+09	4,268269E+08	5,622485E+09	6,049312E+09
2314	2,134445E+08	2,134273E+08	2,811220E+09	2,811248E+09	4,268718E+08	5,622468E+09	6,049340E+09
2315	2,134361E+08	2,134501E+08	2,811317E+09	2,811219E+09	4,268862E+08	5,622535E+09	6,049422E+09
2316	2,134072E+08	2,134027E+08	2,811250E+09	2,811407E+09	4,268099E+08	5,622657E+09	6,049467E+09
2317	2,134436E+08	2,134264E+08	2,811415E+09	2,811315E+09	4,268699E+08	5,622730E+09	6,049600E+09
2318	2,134017E+08	2,134164E+08	2,811453E+09	2,811426E+09	4,268181E+08	5,622879E+09	6,049697E+09
2319	2,133958E+08	2,133812E+08	2,811430E+09	2,811567E+09	4,267769E+08	5,622997E+09	6,049774E+09
2320	2,134219E+08	2,134246E+08	2,811604E+09	2,811468E+09	4,268465E+08	5,623072E+09	6,049919E+09
2321	2,133705E+08	2,133916E+08	2,811553E+09	2,811602E+09	4,267622E+08	5,623155E+09	6,049917E+09
2322	2,133958E+08	2,133810E+08	2,811558E+09	2,811583E+09	4,267768E+08	5,623140E+09	6,049917E+09
2323	2,134086E+08	2,134154E+08	2,811625E+09	2,811478E+09	4,268241E+08	5,623103E+09	6,049928E+09
2324	2,133759E+08	2,133791E+08	2,811428E+09	2,811581E+09	4,267550E+08	5,623009E+09	6,049764E+09
2325	2,134269E+08	2,134088E+08	2,811412E+09	2,811379E+09	4,268357E+08	5,622791E+09	6,049627E+09
2326	2,134108E+08	2,134324E+08	2,811359E+09	2,811269E+09	4,268432E+08	5,622629E+09	6,049472E+09
2327	2,134051E+08	2,134066E+08	2,811179E+09	2,811289E+09	4,268118E+08	5,622468E+09	6,049280E+09
2328	2,134554E+08	2,134557E+08	2,811243E+09	2,811067E+09	4,269111E+08	5,622310E+09	6,049221E+09
2329	2,134182E+08	2,134462E+08	2,811120E+09	2,811088E+09	4,268645E+08	5,622209E+09	6,049073E+09
2330	2,134436E+08	2,134285E+08	2,810997E+09	2,811083E+09	4,268721E+08	5,622079E+09	6,048951E+09
2331	2,134729E+08	2,134770E+08	2,811066E+09	2,810942E+09	4,269500E+08	5,622008E+09	6,048958E+09
2332	2,134333E+08	2,134451E+08	2,810927E+09	2,811073E+09	4,268785E+08	5,622001E+09	6,048879E+09
2333	2,134714E+08	2,134492E+08	2,810993E+09	2,810985E+09	4,269206E+08	5,621978E+09	6,048899E+09
2334	2,134578E+08	2,134719E+08	2,811104E+09	2,810976E+09	4,269298E+08	5,622080E+09	6,049009E+09
2335	2,134261E+08	2,134220E+08	2,811033E+09	2,811186E+09	4,268481E+08	5,622219E+09	6,049067E+09
2336	2,134624E+08	2,134485E+08	2,811209E+09	2,811126E+09	4,269109E+08	5,622335E+09	6,049246E+09
2337	2,134195E+08	2,134416E+08	2,811257E+09	2,811231E+09	4,268611E+08	5,622488E+09	6,049349E+09
2338	2,134142E+08	2,134025E+08	2,811223E+09	2,811351E+09	4,268166E+08	5,622574E+09	6,049391E+09
2339	2,134434E+08	2,134446E+08	2,811403E+09	2,811263E+09	4,268880E+08	5,622665E+09	6,049553E+09
2340	2,133953E+08	2,134109E+08	2,811333E+09	2,811396E+09	4,268062E+08	5,622729E+09	6,049535E+09
2341	2,134228E+08	2,134006E+08	2,811310E+09	2,811338E+09	4,268234E+08	5,622648E+09	6,049471E+09

1	14	15	16	17	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	2,134335E+08	2,134407E+08	2,811359E+09	2,811221E+09	4,268741E+08	5,622580E+09	6,049454E+09
2343	2,133993E+08	2,134081E+08	2,811148E+09	2,811302E+09	4,268074E+08	5,622450E+09	6,049257E+09
2344	2,134506E+08	2,134399E+08	2,811166E+09	2,811107E+09	4,268906E+08	5,622273E+09	6,049163E+09
2345	2,134335E+08	2,134621E+08	2,811136E+09	2,810999E+09	4,268956E+08	5,622134E+09	6,049030E+09
2346	2,134292E+08	2,134280E+08	2,810928E+09	2,811027E+09	4,268572E+08	5,621955E+09	6,048812E+09
2347	2,134821E+08	2,134770E+08	2,810981E+09	2,810842E+09	4,269590E+08	5,621823E+09	6,048782E+09
2348	2,134485E+08	2,134699E+08	2,810842E+09	2,810867E+09	4,269184E+08	5,621709E+09	6,048627E+09
2349	2,134739E+08	2,134545E+08	2,810724E+09	2,810825E+09	4,269284E+08	5,621549E+09	6,048478E+09
2350	2,134987E+08	2,135052E+08	2,810827E+09	2,810685E+09	4,270039E+08	5,621512E+09	6,048516E+09
2351	2,134556E+08	2,134693E+08	2,810704E+09	2,810822E+09	4,269249E+08	5,621526E+09	6,048451E+09
2352	2,134918E+08	2,134709E+08	2,810799E+09	2,810778E+09	4,269627E+08	5,621577E+09	6,048540E+09
2353	2,134763E+08	2,134930E+08	2,810913E+09	2,810784E+09	4,269693E+08	5,621698E+09	6,048667E+09
2354	2,134443E+08	2,134389E+08	2,810812E+09	2,810986E+09	4,268831E+08	5,621798E+09	6,048681E+09
2355	2,134820E+08	2,134699E+08	2,810991E+09	2,810936E+09	4,269519E+08	5,621928E+09	6,048879E+09
2356	2,134426E+08	2,134636E+08	2,811049E+09	2,811024E+09	4,269061E+08	5,622073E+09	6,048979E+09
2357	2,134377E+08	2,134229E+08	2,811019E+09	2,811107E+09	4,268607E+08	5,622126E+09	6,048986E+09
2358	2,134652E+08	2,134650E+08	2,811187E+09	2,811026E+09	4,269302E+08	5,622213E+09	6,049143E+09
2359	2,134170E+08	2,134319E+08	2,811086E+09	2,811158E+09	4,268489E+08	5,622244E+09	6,049093E+09
2360	2,134456E+08	2,134262E+08	2,811062E+09	2,811109E+09	4,268718E+08	5,622171E+09	6,049043E+09
2361	2,134558E+08	2,134704E+08	2,811115E+09	2,810973E+09	4,269262E+08	5,622088E+09	6,049014E+09
2362	2,134224E+08	2,134337E+08	2,810898E+09	2,811029E+09	4,268562E+08	5,621927E+09	6,048783E+09
2363	2,134755E+08	2,134651E+08	2,810923E+09	2,810857E+09	4,269405E+08	5,621781E+09	6,048721E+09
2364	2,134628E+08	2,134854E+08	2,810886E+09	2,810761E+09	4,269482E+08	5,621647E+09	6,048596E+09
2365	2,134598E+08	2,134515E+08	2,810659E+09	2,810768E+09	4,269113E+08	5,621426E+09	6,048338E+09
2366	2,135101E+08	2,135036E+08	2,810697E+09	2,810584E+09	4,270136E+08	5,621281E+09	6,048295E+09
2367	2,134753E+08	2,134995E+08	2,810560E+09	2,810600E+09	4,269748E+08	5,621160E+09	6,048135E+09
2368	2,134985E+08	2,134837E+08	2,810487E+09	2,810567E+09	4,269822E+08	5,621054E+09	6,048036E+09
2369	2,135191E+08	2,135309E+08	2,810618E+09	2,810437E+09	4,270500E+08	5,621055E+09	6,048105E+09
2370	2,134754E+08	2,134875E+08	2,810483E+09	2,810586E+09	4,269629E+08	5,621069E+09	6,048032E+09
2371	2,135121E+08	2,134897E+08	2,810574E+09	2,810584E+09	4,270019E+08	5,621157E+09	6,048159E+09
2372	2,135004E+08	2,135139E+08	2,810694E+09	2,810595E+09	4,270143E+08	5,621289E+09	6,048303E+09
2373	2,134681E+08	2,134622E+08	2,810601E+09	2,810763E+09	4,269304E+08	5,621364E+09	6,048295E+09
2374	2,135020E+08	2,134933E+08	2,810804E+09	2,810717E+09	4,269953E+08	5,621521E+09	6,048517E+09
2375	2,134622E+08	2,134843E+08	2,810859E+09	2,810810E+09	4,269465E+08	5,621669E+09	6,048615E+09
2376	2,134572E+08	2,134425E+08	2,810828E+09	2,810913E+09	4,268997E+08	5,621741E+09	6,048641E+09
2377	2,134846E+08	2,134851E+08	2,810972E+09	2,810825E+09	4,269698E+08	5,621796E+09	6,048766E+09
2378	2,134388E+08	2,134521E+08	2,810822E+09	2,810921E+09	4,268908E+08	5,621743E+09	6,048634E+09
2379	2,134698E+08	2,134525E+08	2,810791E+09	2,810870E+09	4,269222E+08	5,621661E+09	6,048584E+09
2380	2,134844E+08	2,134970E+08	2,810861E+09	2,810709E+09	4,269814E+08	5,621570E+09	6,048552E+09
2381	2,134515E+08	2,134591E+08	2,810645E+09	2,810735E+09	4,269106E+08	5,621380E+09	6,048291E+09
2382	2,135017E+08	2,134902E+08	2,810667E+09	2,810585E+09	4,269920E+08	5,621252E+09	6,048244E+09
2383	2,134894E+08	2,135117E+08	2,810607E+09	2,810497E+09	4,270011E+08	5,621104E+09	6,048105E+09
2384	2,134860E+08	2,134814E+08	2,810396E+09	2,810519E+09	4,269674E+08	5,620915E+09	6,047882E+09
2385	2,135339E+08	2,135350E+08	2,810454E+09	2,810332E+09	4,270689E+08	5,620786E+09	6,047855E+09
2386	2,134990E+08	2,135240E+08	2,810317E+09	2,810338E+09	4,270230E+08	5,620655E+09	6,047677E+09
2387	2,135218E+08	2,135066E+08	2,810256E+09	2,810346E+09	4,270284E+08	5,620602E+09	6,047631E+09
2388	2,135453E+08	2,135493E+08	2,810392E+09	2,810230E+09	4,270946E+08	5,620622E+09	6,047717E+09
2389	2,135011E+08	2,135066E+08	2,810251E+09	2,810360E+09	4,270078E+08	5,620611E+09	6,047619E+09
2390	2,135337E+08	2,135124E+08	2,810349E+09	2,810365E+09	4,270461E+08	5,620714E+09	6,047760E+09

1	14	15	16	17	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	2,135214E+08	2,135387E+08	2,810478E+09	2,810375E+09	4,270601E+08	5,620853E+09	6,047913E+09
2392	2,134875E+08	2,134861E+08	2,810428E+09	2,810551E+09	4,269736E+08	5,620979E+09	6,047953E+09
2393	2,135189E+08	2,135138E+08	2,810629E+09	2,810514E+09	4,270327E+08	5,621143E+09	6,048176E+09
2394	2,134811E+08	2,134989E+08	2,810638E+09	2,810602E+09	4,269800E+08	5,621240E+09	6,048220E+09
2395	2,134783E+08	2,134623E+08	2,810575E+09	2,810721E+09	4,269406E+08	5,621296E+09	6,048237E+09
2396	2,135113E+08	2,135074E+08	2,810712E+09	2,810607E+09	4,270187E+08	5,621319E+09	6,048338E+09
2397	2,134666E+08	2,134799E+08	2,810569E+09	2,810646E+09	4,269465E+08	5,621214E+09	6,048161E+09
2398	2,134944E+08	2,134806E+08	2,810557E+09	2,810587E+09	4,269751E+08	5,621144E+09	6,048119E+09
2399	2,135092E+08	2,135240E+08	2,810626E+09	2,810441E+09	4,270332E+08	5,621066E+09	6,048099E+09
2400	2,134759E+08	2,134854E+08	2,810419E+09	2,810489E+09	4,269613E+08	5,620907E+09	6,047868E+09
2401	2,135237E+08	2,135164E+08	2,810420E+09	2,810347E+09	4,270401E+08	5,620767E+09	6,047808E+09
2402	2,135139E+08	2,135368E+08	2,810323E+09	2,810244E+09	4,270507E+08	5,620567E+09	6,047617E+09
2403	2,135122E+08	2,135106E+08	2,810112E+09	2,810276E+09	4,270228E+08	5,620388E+09	6,047411E+09
2404	2,135637E+08	2,135590E+08	2,810199E+09	2,810075E+09	4,271227E+08	5,620274E+09	6,047396E+09
2405	2,135283E+08	2,135467E+08	2,810064E+09	2,810058E+09	4,270750E+08	5,620122E+09	6,047197E+09
2406	2,135469E+08	2,135279E+08	2,810013E+09	2,810094E+09	4,270748E+08	5,620107E+09	6,047182E+09
2407	2,135688E+08	2,135723E+08	2,810149E+09	2,810003E+09	4,271410E+08	5,620152E+09	6,047293E+09
2408	2,135226E+08	2,135327E+08	2,810050E+09	2,810150E+09	4,270554E+08	5,620200E+09	6,047255E+09
2409	2,135502E+08	2,135390E+08	2,810175E+09	2,810165E+09	4,270892E+08	5,620339E+09	6,047428E+09
2410	2,135389E+08	2,135578E+08	2,810295E+09	2,810172E+09	4,270967E+08	5,620467E+09	6,047564E+09
2411	2,135062E+08	2,135050E+08	2,810233E+09	2,810384E+09	4,270112E+08	5,620617E+09	6,047628E+09
2412	2,135429E+08	2,135276E+08	2,810415E+09	2,810339E+09	4,270705E+08	5,620754E+09	6,047824E+09
2413	2,135068E+08	2,135165E+08	2,810384E+09	2,810376E+09	4,270233E+08	5,620760E+09	6,047784E+09
2414	2,135023E+08	2,134867E+08	2,810318E+09	2,810474E+09	4,269890E+08	5,620792E+09	6,047781E+09
2415	2,135351E+08	2,135354E+08	2,810460E+09	2,810337E+09	4,270705E+08	5,620797E+09	6,047868E+09
2416	2,134890E+08	2,135082E+08	2,810364E+09	2,810372E+09	4,269972E+08	5,620736E+09	6,047733E+09
2417	2,135134E+08	2,135071E+08	2,810353E+09	2,810331E+09	4,270205E+08	5,620685E+09	6,047705E+09
2418	2,135305E+08	2,135444E+08	2,810372E+09	2,810194E+09	4,270749E+08	5,620566E+09	6,047641E+09
2419	2,135009E+08	2,135112E+08	2,810138E+09	2,810272E+09	4,270121E+08	5,620410E+09	6,047422E+09
2420	2,135547E+08	2,135412E+08	2,810135E+09	2,810112E+09	4,270959E+08	5,620247E+09	6,047343E+09
2421	2,135461E+08	2,135645E+08	2,810039E+09	2,809961E+09	4,271106E+08	5,619999E+09	6,047110E+09
2422	2,135411E+08	2,135380E+08	2,809855E+09	2,809992E+09	4,270792E+08	5,619847E+09	6,046926E+09
2423	2,135905E+08	2,135836E+08	2,809946E+09	2,809812E+09	4,271741E+08	5,619758E+09	6,046932E+09
2424	2,135527E+08	2,135710E+08	2,809846E+09	2,809816E+09	4,271237E+08	5,619662E+09	6,046785E+09
2425	2,135658E+08	2,135533E+08	2,809799E+09	2,809873E+09	4,271191E+08	5,619672E+09	6,046791E+09
2426	2,135877E+08	2,135953E+08	2,809917E+09	2,809788E+09	4,271830E+08	5,619705E+09	6,046888E+09
2427	2,135429E+08	2,135588E+08	2,809837E+09	2,809962E+09	4,271017E+08	5,619799E+09	6,046900E+09
2428	2,135733E+08	2,135567E+08	2,809983E+09	2,809971E+09	4,271300E+08	5,619954E+09	6,047084E+09
2429	2,135632E+08	2,135739E+08	2,810080E+09	2,809954E+09	4,271371E+08	5,620034E+09	6,047171E+09
2430	2,135286E+08	2,135224E+08	2,810001E+09	2,810163E+09	4,270510E+08	5,620164E+09	6,047215E+09
2431	2,135653E+08	2,135483E+08	2,810164E+09	2,810117E+09	4,271136E+08	5,620281E+09	6,047395E+09
2432	2,135288E+08	2,135433E+08	2,810171E+09	2,810135E+09	4,270721E+08	5,620306E+09	6,047379E+09
2433	2,135195E+08	2,135155E+08	2,810127E+09	2,810229E+09	4,270350E+08	5,620356E+09	6,047391E+09
2434	2,135533E+08	2,135578E+08	2,810253E+09	2,810097E+09	4,271110E+08	5,620351E+09	6,047462E+09
2435	2,135106E+08	2,135317E+08	2,810140E+09	2,810170E+09	4,270423E+08	5,620310E+09	6,047352E+09
2436	2,135402E+08	2,135250E+08	2,810108E+09	2,810125E+09	4,270652E+08	5,620233E+09	6,047298E+09
2437	2,135604E+08	2,135664E+08	2,810077E+09	2,809942E+09	4,271268E+08	5,620019E+09	6,047146E+09
2438	2,135310E+08	2,135398E+08	2,809839E+09	2,809996E+09	4,270708E+08	5,619835E+09	6,046906E+09
2439	2,135846E+08	2,135707E+08	2,809846E+09	2,809822E+09	4,271553E+08	5,619668E+09	6,046823E+09

1	14	15	16	17	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	2,135738E+08	2,135935E+08	2,809799E+09	2,809663E+09	4,271673E+08	5,619463E+09	6,046630E+09
2441	2,135629E+08	2,135657E+08	2,809627E+09	2,809720E+09	4,271286E+08	5,619347E+09	6,046476E+09
2442	2,136109E+08	2,136052E+08	2,809693E+09	2,809565E+09	4,272161E+08	5,619257E+09	6,046473E+09
2443	2,135747E+08	2,135978E+08	2,809600E+09	2,809618E+09	4,271725E+08	5,619218E+09	6,046390E+09
2444	2,135908E+08	2,135765E+08	2,809581E+09	2,809676E+09	4,271673E+08	5,619257E+09	6,046425E+09
2445	2,136128E+08	2,136176E+08	2,809699E+09	2,809564E+09	4,272303E+08	5,619263E+09	6,046493E+09
2446	2,135668E+08	2,135794E+08	2,809639E+09	2,809746E+09	4,271462E+08	5,619385E+09	6,046532E+09
2447	2,135957E+08	2,135737E+08	2,809768E+09	2,809770E+09	4,271694E+08	5,619538E+09	6,046707E+09
2448	2,135843E+08	2,135911E+08	2,809878E+09	2,809745E+09	4,271753E+08	5,619623E+09	6,046798E+09
2449	2,135451E+08	2,135454E+08	2,809791E+09	2,809949E+09	4,270905E+08	5,619740E+09	6,046830E+09
2450	2,135823E+08	2,135703E+08	2,809927E+09	2,809889E+09	4,271526E+08	5,619815E+09	6,046968E+09
2451	2,135486E+08	2,135704E+08	2,809956E+09	2,809921E+09	4,271190E+08	5,619877E+09	6,046996E+09
2452	2,135434E+08	2,135353E+08	2,809924E+09	2,810005E+09	4,270787E+08	5,619930E+09	6,047009E+09
2453	2,135786E+08	2,135766E+08	2,810007E+09	2,809853E+09	4,271552E+08	5,619860E+09	6,047015E+09
2454	2,135375E+08	2,135541E+08	2,809873E+09	2,809923E+09	4,270916E+08	5,619796E+09	6,046888E+09
2455	2,135680E+08	2,135510E+08	2,809814E+09	2,809874E+09	4,271190E+08	5,619688E+09	6,046807E+09
2456	2,135882E+08	2,135972E+08	2,809819E+09	2,809662E+09	4,271854E+08	5,619481E+09	6,046666E+09
2457	2,135544E+08	2,135737E+08	2,809603E+09	2,809708E+09	4,271280E+08	5,619311E+09	6,046439E+09
2458	2,136071E+08	2,135967E+08	2,809596E+09	2,809547E+09	4,272038E+08	5,619143E+09	6,046347E+09
2459	2,135979E+08	2,136205E+08	2,809552E+09	2,809435E+09	4,272184E+08	5,618988E+09	6,046206E+09
2460	2,135896E+08	2,135855E+08	2,809384E+09	2,809501E+09	4,271752E+08	5,618885E+09	6,046060E+09
2461	2,136376E+08	2,136273E+08	2,809423E+09	2,809328E+09	4,272649E+08	5,618751E+09	6,046016E+09
2462	2,136018E+08	2,136240E+08	2,809351E+09	2,809375E+09	4,272258E+08	5,618726E+09	6,045952E+09
2463	2,136157E+08	2,136005E+08	2,809354E+09	2,809441E+09	4,272162E+08	5,618796E+09	6,046012E+09
2464	2,136358E+08	2,136388E+08	2,809513E+09	2,809330E+09	4,272746E+08	5,618843E+09	6,046117E+09
2465	2,135845E+08	2,136000E+08	2,809446E+09	2,809531E+09	4,271845E+08	5,618977E+09	6,046161E+09
2466	2,136122E+08	2,135897E+08	2,809534E+09	2,809568E+09	4,272019E+08	5,619102E+09	6,046304E+09
2467	2,136034E+08	2,136143E+08	2,809645E+09	2,809566E+09	4,272177E+08	5,619211E+09	6,046429E+09
2468	2,135676E+08	2,135668E+08	2,809588E+09	2,809748E+09	4,271344E+08	5,619337E+09	6,046471E+09
2469	2,136047E+08	2,135921E+08	2,809714E+09	2,809655E+09	4,271967E+08	5,619369E+09	6,046566E+09
2470	2,135728E+08	2,135926E+08	2,809754E+09	2,809688E+09	4,271654E+08	5,619441E+09	6,046607E+09
2471	2,135673E+08	2,135559E+08	2,809696E+09	2,809785E+09	4,271231E+08	5,619481E+09	6,046604E+09
2472	2,136028E+08	2,135984E+08	2,809774E+09	2,809614E+09	4,272011E+08	5,619388E+09	6,046589E+09
2473	2,135594E+08	2,135833E+08	2,809620E+09	2,809671E+09	4,271427E+08	5,619291E+09	6,046434E+09
2474	2,135903E+08	2,135788E+08	2,809532E+09	2,809604E+09	4,271691E+08	5,619136E+09	6,046305E+09
2475	2,136132E+08	2,136277E+08	2,809559E+09	2,809406E+09	4,272408E+08	5,618965E+09	6,046206E+09
2476	2,135830E+08	2,135970E+08	2,809363E+09	2,809444E+09	4,271801E+08	5,618808E+09	6,045988E+09
2477	2,136351E+08	2,136175E+08	2,809313E+09	2,809272E+09	4,272526E+08	5,618585E+09	6,045837E+09
2478	2,136269E+08	2,136449E+08	2,809276E+09	2,809173E+09	4,272717E+08	5,618449E+09	6,045721E+09
2479	2,136177E+08	2,136124E+08	2,809111E+09	2,809256E+09	4,272301E+08	5,618367E+09	6,045597E+09
2480	2,136627E+08	2,136551E+08	2,809201E+09	2,809076E+09	4,273179E+08	5,618277E+09	6,045595E+09
2481	2,136229E+08	2,136526E+08	2,809162E+09	2,809140E+09	4,272755E+08	5,618302E+09	6,045577E+09
2482	2,136341E+08	2,136202E+08	2,809143E+09	2,809230E+09	4,272543E+08	5,618372E+09	6,045627E+09
2483	2,136555E+08	2,136583E+08	2,809301E+09	2,809160E+09	4,273138E+08	5,618461E+09	6,045774E+09
2484	2,136071E+08	2,136153E+08	2,809233E+09	2,809347E+09	4,272223E+08	5,618580E+09	6,045803E+09
2485	2,136343E+08	2,136088E+08	2,809281E+09	2,809351E+09	4,272431E+08	5,618633E+09	6,045876E+09
2486	2,136271E+08	2,136391E+08	2,809421E+09	2,809330E+09	4,272661E+08	5,618751E+09	6,046017E+09
2487	2,135903E+08	2,135907E+08	2,809385E+09	2,809511E+09	4,271810E+08	5,618896E+09	6,046077E+09
2488	2,136252E+08	2,136140E+08	2,809535E+09	2,809411E+09	4,272392E+08	5,618946E+09	6,046185E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2489	2,135911E+08	2,136166E+08	2,809554E+09	2,809456E+09	4,272077E+08	5,619011E+09	6,046218E+09
2490	2,135855E+08	2,135773E+08	2,809442E+09	2,809561E+09	4,271628E+08	5,619003E+09	6,046166E+09
2491	2,136256E+08	2,136260E+08	2,809513E+09	2,809405E+09	4,272516E+08	5,618918E+09	6,046169E+09
2492	2,135871E+08	2,136087E+08	2,809375E+09	2,809428E+09	4,271958E+08	5,618803E+09	6,045999E+09
2493	2,136189E+08	2,136034E+08	2,809260E+09	2,809331E+09	4,272223E+08	5,618592E+09	6,045814E+09
2494	2,136437E+08	2,136524E+08	2,809295E+09	2,809128E+09	4,272960E+08	5,618423E+09	6,045719E+09
2495	2,136123E+08	2,136204E+08	2,809090E+09	2,809181E+09	4,272327E+08	5,618272E+09	6,045505E+09
2496	2,136617E+08	2,136424E+08	2,809058E+09	2,809002E+09	4,273041E+08	5,618060E+09	6,045364E+09
2497	2,136504E+08	2,136761E+08	2,809025E+09	2,808913E+09	4,273265E+08	5,617939E+09	6,045265E+09
2498	2,136391E+08	2,136404E+08	2,808861E+09	2,809007E+09	4,272795E+08	5,617868E+09	6,045148E+09
2499	2,136850E+08	2,136822E+08	2,808983E+09	2,808864E+09	4,273672E+08	5,617847E+09	6,045214E+09
2500	2,136480E+08	2,136708E+08	2,808960E+09	2,808934E+09	4,273188E+08	5,617894E+09	6,045213E+09
2501	2,136574E+08	2,136359E+08	2,808892E+09	2,809015E+09	4,272933E+08	5,617907E+09	6,045200E+09
2502	2,136798E+08	2,136772E+08	2,809055E+09	2,808943E+09	4,273571E+08	5,617998E+09	6,045355E+09
2503	2,136305E+08	2,136385E+08	2,809003E+09	2,809128E+09	4,272690E+08	5,618132E+09	6,045401E+09
2504	2,136547E+08	2,136340E+08	2,809101E+09	2,809111E+09	4,272887E+08	5,618212E+09	6,045501E+09
2505	2,136447E+08	2,136659E+08	2,809264E+09	2,809105E+09	4,273105E+08	5,618369E+09	6,045680E+09
2506	2,136063E+08	2,136107E+08	2,809195E+09	2,809309E+09	4,272170E+08	5,618504E+09	6,045721E+09
2507	2,136434E+08	2,136336E+08	2,809327E+09	2,809244E+09	4,272770E+08	5,618571E+09	6,045848E+09
2508	2,136155E+08	2,136336E+08	2,809326E+09	2,809265E+09	4,272491E+08	5,618591E+09	6,045840E+09
2509	2,136114E+08	2,135989E+08	2,809146E+09	2,809319E+09	4,272103E+08	5,618465E+09	6,045675E+09
2510	2,136553E+08	2,136518E+08	2,809236E+09	2,809128E+09	4,273071E+08	5,618364E+09	6,045671E+09
2511	2,136174E+08	2,136356E+08	2,809110E+09	2,809138E+09	4,272530E+08	5,618248E+09	6,045501E+09
2512	2,136466E+08	2,136290E+08	2,809010E+09	2,809027E+09	4,272756E+08	5,618037E+09	6,045313E+09
2513	2,136679E+08	2,136813E+08	2,809039E+09	2,808847E+09	4,273493E+08	5,617886E+09	6,045235E+09
2514	2,136345E+08	2,136481E+08	2,808809E+09	2,808919E+09	4,272826E+08	5,617729E+09	6,045011E+09
2515	2,136844E+08	2,136742E+08	2,808805E+09	2,808778E+09	4,273586E+08	5,617582E+09	6,044941E+09
2516	2,136769E+08	2,137029E+08	2,808811E+09	2,808684E+09	4,273798E+08	5,617495E+09	6,044875E+09
2517	2,136647E+08	2,136634E+08	2,808622E+09	2,808772E+09	4,273281E+08	5,617394E+09	6,044722E+09
2518	2,137119E+08	2,137020E+08	2,808754E+09	2,808641E+09	4,274139E+08	5,617394E+09	6,044808E+09
2519	2,136744E+08	2,136889E+08	2,808721E+09	2,808721E+09	4,273634E+08	5,617442E+09	6,044805E+09
2520	2,136801E+08	2,136565E+08	2,808664E+09	2,808782E+09	4,273367E+08	5,617446E+09	6,044783E+09
2521	2,136990E+08	2,137042E+08	2,808841E+09	2,808712E+09	4,274032E+08	5,617554E+09	6,044957E+09
2522	2,136468E+08	2,136630E+08	2,808803E+09	2,808903E+09	4,273099E+08	5,617706E+09	6,045016E+09
2523	2,136714E+08	2,136575E+08	2,808933E+09	2,808924E+09	4,273289E+08	5,617857E+09	6,045185E+09
2524	2,136657E+08	2,136813E+08	2,809089E+09	2,808920E+09	4,273470E+08	5,618009E+09	6,045356E+09
2525	2,136282E+08	2,136259E+08	2,808949E+09	2,809110E+09	4,272541E+08	5,618058E+09	6,045313E+09
2526	2,136694E+08	2,136528E+08	2,809062E+09	2,809025E+09	4,273223E+08	5,618088E+09	6,045410E+09
2527	2,136435E+08	2,136577E+08	2,809057E+09	2,809024E+09	4,273012E+08	5,618081E+09	6,045382E+09
2528	2,136379E+08	2,136272E+08	2,808908E+09	2,809035E+09	4,272651E+08	5,617943E+09	6,045208E+09
2529	2,136795E+08	2,136815E+08	2,809006E+09	2,808847E+09	4,273610E+08	5,617853E+09	6,045214E+09
2530	2,136392E+08	2,136618E+08	2,808861E+09	2,808870E+09	4,273010E+08	5,617731E+09	6,045032E+09
2531	2,136687E+08	2,136558E+08	2,808762E+09	2,808797E+09	4,273245E+08	5,617559E+09	6,044883E+09
2532	2,136938E+08	2,137056E+08	2,808788E+09	2,808613E+09	4,273994E+08	5,617401E+09	6,044801E+09
2533	2,136610E+08	2,136749E+08	2,808521E+09	2,808666E+09	4,273359E+08	5,617186E+09	6,044522E+09
2534	2,137132E+08	2,137008E+08	2,808548E+09	2,808518E+09	4,274140E+08	5,617066E+09	6,044480E+09
2535	2,137067E+08	2,137265E+08	2,808569E+09	2,808434E+09	4,274331E+08	5,617003E+09	6,044437E+09
2536	2,136916E+08	2,136852E+08	2,808387E+09	2,808513E+09	4,273768E+08	5,616900E+09	6,044276E+09
2537	2,137343E+08	2,137249E+08	2,808514E+09	2,808403E+09	4,274593E+08	5,616917E+09	6,044376E+09

1	14	15	16	17	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	2,136937E+08	2,137125E+08	2,808472E+09	2,808494E+09	4,274061E+08	5,616967E+09	6,044373E+09
2539	2,136984E+08	2,136831E+08	2,808458E+09	2,808587E+09	4,273815E+08	5,617045E+09	6,044427E+09
2540	2,137198E+08	2,137257E+08	2,808677E+09	2,808521E+09	4,274455E+08	5,617198E+09	6,044644E+09
2541	2,136676E+08	2,136812E+08	2,808605E+09	2,808705E+09	4,273487E+08	5,617310E+09	6,044659E+09
2542	2,136936E+08	2,136735E+08	2,808732E+09	2,808734E+09	4,273671E+08	5,617465E+09	6,044833E+09
2543	2,136904E+08	2,136971E+08	2,808861E+09	2,808728E+09	4,273874E+08	5,617589E+09	6,044976E+09
2544	2,136520E+08	2,136476E+08	2,808701E+09	2,808871E+09	4,272995E+08	5,617572E+09	6,044871E+09
2545	2,136918E+08	2,136810E+08	2,808814E+09	2,808768E+09	4,273728E+08	5,617582E+09	6,044955E+09
2546	2,136643E+08	2,136860E+08	2,808810E+09	2,808750E+09	4,273503E+08	5,617560E+09	6,044910E+09
2547	2,136591E+08	2,136554E+08	2,808690E+09	2,808785E+09	4,273146E+08	5,617474E+09	6,044789E+09
2548	2,137035E+08	2,137036E+08	2,808782E+09	2,808602E+09	4,274070E+08	5,617384E+09	6,044791E+09
2549	2,136639E+08	2,136843E+08	2,808578E+09	2,808617E+09	4,273482E+08	5,617195E+09	6,044543E+09
2550	2,136961E+08	2,136818E+08	2,808484E+09	2,808545E+09	4,273779E+08	5,617029E+09	6,044406E+09
2551	2,137237E+08	2,137333E+08	2,808520E+09	2,808362E+09	4,274570E+08	5,616881E+09	6,044338E+09
2552	2,136904E+08	2,137040E+08	2,808280E+09	2,808390E+09	4,273944E+08	5,616671E+09	6,044065E+09
2553	2,137396E+08	2,137278E+08	2,808317E+09	2,808262E+09	4,274674E+08	5,616578E+09	6,044046E+09
2554	2,137299E+08	2,137487E+08	2,808318E+09	2,808199E+09	4,274786E+08	5,616518E+09	6,043996E+09
2555	2,137136E+08	2,137082E+08	2,808152E+09	2,808308E+09	4,274218E+08	5,616460E+09	6,043882E+09
2556	2,137570E+08	2,137451E+08	2,808281E+09	2,808194E+09	4,275021E+08	5,616475E+09	6,043977E+09
2557	2,137154E+08	2,137352E+08	2,808227E+09	2,808267E+09	4,274506E+08	5,616494E+09	6,043945E+09
2558	2,137210E+08	2,137056E+08	2,808260E+09	2,808362E+09	4,274265E+08	5,616622E+09	6,044048E+09
2559	2,137431E+08	2,137437E+08	2,808485E+09	2,808316E+09	4,274868E+08	5,616801E+09	6,044288E+09
2560	2,136901E+08	2,136997E+08	2,808407E+09	2,808486E+09	4,273898E+08	5,616893E+09	6,044283E+09
2561	2,137133E+08	2,136938E+08	2,808509E+09	2,808523E+09	4,274071E+08	5,617031E+09	6,044438E+09
2562	2,137086E+08	2,137199E+08	2,808617E+09	2,808508E+09	4,274284E+08	5,617125E+09	6,044553E+09
2563	2,136709E+08	2,136758E+08	2,808489E+09	2,808652E+09	4,273467E+08	5,617141E+09	6,044488E+09
2564	2,137136E+08	2,137043E+08	2,808617E+09	2,808541E+09	4,274180E+08	5,617158E+09	6,044576E+09
2565	2,136872E+08	2,137078E+08	2,808572E+09	2,808508E+09	4,273951E+08	5,617080E+09	6,044475E+09
2566	2,136848E+08	2,136764E+08	2,808446E+09	2,808546E+09	4,273612E+08	5,616992E+09	6,044354E+09
2567	2,137314E+08	2,137242E+08	2,808513E+09	2,808366E+09	4,274555E+08	5,616879E+09	6,044335E+09
2568	2,136929E+08	2,137119E+08	2,808298E+09	2,808340E+09	4,274048E+08	5,616638E+09	6,044043E+09
2569	2,137228E+08	2,137132E+08	2,808215E+09	2,808266E+09	4,274360E+08	5,616481E+09	6,043917E+09
2570	2,137485E+08	2,137626E+08	2,808259E+09	2,808085E+09	4,275111E+08	5,616344E+09	6,043856E+09
2571	2,137155E+08	2,137317E+08	2,808045E+09	2,808143E+09	4,274473E+08	5,616188E+09	6,043635E+09
2572	2,137653E+08	2,137486E+08	2,808074E+09	2,808031E+09	4,275139E+08	5,616105E+09	6,043619E+09
2573	2,137544E+08	2,137699E+08	2,808029E+09	2,807957E+09	4,275243E+08	5,615987E+09	6,043511E+09
2574	2,137384E+08	2,137327E+08	2,807896E+09	2,808071E+09	4,274710E+08	5,615966E+09	6,043437E+09
2575	2,137816E+08	2,137692E+08	2,808063E+09	2,807969E+09	4,275509E+08	5,616032E+09	6,043583E+09
2576	2,137392E+08	2,137601E+08	2,808043E+09	2,808028E+09	4,274993E+08	5,616071E+09	6,043570E+09
2577	2,137406E+08	2,137280E+08	2,808088E+09	2,808153E+09	4,274686E+08	5,616242E+09	6,043710E+09
2578	2,137599E+08	2,137621E+08	2,808286E+09	2,808128E+09	4,275220E+08	5,616413E+09	6,043936E+09
2579	2,137079E+08	2,137197E+08	2,808209E+09	2,808312E+09	4,274276E+08	5,616521E+09	6,043949E+09
2580	2,137325E+08	2,137131E+08	2,808292E+09	2,808333E+09	4,274456E+08	5,616625E+09	6,044070E+09
2581	2,137292E+08	2,137409E+08	2,808367E+09	2,808279E+09	4,274701E+08	5,616645E+09	6,044115E+09
2582	2,136946E+08	2,136985E+08	2,808269E+09	2,808407E+09	4,273932E+08	5,616676E+09	6,044069E+09
2583	2,137399E+08	2,137237E+08	2,808386E+09	2,808301E+09	4,274636E+08	5,616687E+09	6,044151E+09
2584	2,137145E+08	2,137309E+08	2,808321E+09	2,808241E+09	4,274454E+08	5,616562E+09	6,044007E+09
2585	2,137098E+08	2,137032E+08	2,808181E+09	2,808285E+09	4,274130E+08	5,616465E+09	6,043878E+09
2586	2,137540E+08	2,137532E+08	2,808234E+09	2,808107E+09	4,275072E+08	5,616341E+09	6,043848E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2587	2,137180E+08	2,137444E+08	2,808065E+09	2,808091E+09	4,274623E+08	5,616156E+09	6,043618E+09
2588	2,137488E+08	2,137397E+08	2,807987E+09	2,808021E+09	4,274885E+08	5,616008E+09	6,043496E+09
2589	2,137745E+08	2,137850E+08	2,807991E+09	2,807835E+09	4,275594E+08	5,615826E+09	6,043386E+09
2590	2,137435E+08	2,137541E+08	2,807782E+09	2,807900E+09	4,274976E+08	5,615682E+09	6,043180E+09
2591	2,137934E+08	2,137686E+08	2,807797E+09	2,807795E+09	4,275621E+08	5,615592E+09	6,043154E+09
2592	2,137817E+08	2,137969E+08	2,807766E+09	2,807689E+09	4,275786E+08	5,615456E+09	6,043034E+09
2593	2,137614E+08	2,137612E+08	2,807676E+09	2,807812E+09	4,275226E+08	5,615488E+09	6,043011E+09
2594	2,137997E+08	2,137936E+08	2,807868E+09	2,807737E+09	4,275933E+08	5,615605E+09	6,043199E+09
2595	2,137583E+08	2,137819E+08	2,807882E+09	2,807835E+09	4,275402E+08	5,615717E+09	6,043257E+09
2596	2,137588E+08	2,137441E+08	2,807903E+09	2,807982E+09	4,275028E+08	5,615886E+09	6,043388E+09
2597	2,137785E+08	2,137780E+08	2,808041E+09	2,807941E+09	4,275565E+08	5,615982E+09	6,043539E+09
2598	2,137299E+08	2,137408E+08	2,807976E+09	2,808109E+09	4,274707E+08	5,616086E+09	6,043557E+09
2599	2,137570E+08	2,137336E+08	2,808068E+09	2,808120E+09	4,274906E+08	5,616187E+09	6,043678E+09
2600	2,137553E+08	2,137646E+08	2,808150E+09	2,808024E+09	4,275199E+08	5,616174E+09	6,043694E+09
2601	2,137182E+08	2,137226E+08	2,808056E+09	2,808159E+09	4,274408E+08	5,616215E+09	6,043656E+09
2602	2,137600E+08	2,137467E+08	2,808145E+09	2,808063E+09	4,275067E+08	5,616208E+09	6,043714E+09
2603	2,137371E+08	2,137576E+08	2,808084E+09	2,808005E+09	4,274947E+08	5,616089E+09	6,043584E+09
2604	2,137327E+08	2,137312E+08	2,807930E+09	2,808044E+09	4,274638E+08	5,615974E+09	6,043438E+09
2605	2,137780E+08	2,137805E+08	2,807955E+09	2,807838E+09	4,275584E+08	5,615793E+09	6,043352E+09
2606	2,137459E+08	2,137713E+08	2,807811E+09	2,807823E+09	4,275172E+08	5,615633E+09	6,043150E+09
2607	2,137793E+08	2,137612E+08	2,807720E+09	2,807768E+09	4,275405E+08	5,615488E+09	6,043029E+09
2608	2,138050E+08	2,138088E+08	2,807703E+09	2,807554E+09	4,276138E+08	5,615257E+09	6,042871E+09
2609	2,137705E+08	2,137817E+08	2,807509E+09	2,807624E+09	4,275522E+08	5,615133E+09	6,042686E+09
2610	2,138148E+08	2,137977E+08	2,807541E+09	2,807536E+09	4,276125E+08	5,615076E+09	6,042689E+09
2611	2,138037E+08	2,138263E+08	2,807582E+09	2,807459E+09	4,276300E+08	5,615041E+09	6,042671E+09
2612	2,137812E+08	2,137845E+08	2,807512E+09	2,807616E+09	4,275657E+08	5,615128E+09	6,042694E+09
2613	2,138182E+08	2,138104E+08	2,807662E+09	2,807555E+09	4,276285E+08	5,615218E+09	6,042846E+09
2614	2,137805E+08	2,137978E+08	2,807674E+09	2,807665E+09	4,275783E+08	5,615339E+09	6,042917E+09
2615	2,137828E+08	2,137588E+08	2,807664E+09	2,807805E+09	4,275415E+08	5,615469E+09	6,043011E+09
2616	2,138035E+08	2,137995E+08	2,807792E+09	2,807707E+09	4,276030E+08	5,615499E+09	6,043102E+09
2617	2,137528E+08	2,137664E+08	2,807761E+09	2,807853E+09	4,275192E+08	5,615614E+09	6,043133E+09
2618	2,137758E+08	2,137575E+08	2,807855E+09	2,807871E+09	4,275333E+08	5,615725E+09	6,043259E+09
2619	2,137764E+08	2,137887E+08	2,807962E+09	2,807794E+09	4,275651E+08	5,615757E+09	6,043322E+09
2620	2,137382E+08	2,137452E+08	2,807838E+09	2,807939E+09	4,274834E+08	5,615777E+09	6,043261E+09
2621	2,137792E+08	2,137694E+08	2,807876E+09	2,807828E+09	4,275486E+08	5,615704E+09	6,043253E+09
2622	2,137620E+08	2,137853E+08	2,807834E+09	2,807766E+09	4,275472E+08	5,615600E+09	6,043147E+09
2623	2,137612E+08	2,137558E+08	2,807680E+09	2,807801E+09	4,275170E+08	5,615481E+09	6,042998E+09
2624	2,138090E+08	2,138061E+08	2,807696E+09	2,807561E+09	4,276151E+08	5,615257E+09	6,042872E+09
2625	2,137759E+08	2,137971E+08	2,807549E+09	2,807548E+09	4,275730E+08	5,615097E+09	6,042670E+09
2626	2,138046E+08	2,137860E+08	2,807435E+09	2,807506E+09	4,275906E+08	5,614941E+09	6,042532E+09
2627	2,138307E+08	2,138365E+08	2,807448E+09	2,807296E+09	4,276673E+08	5,614744E+09	6,042411E+09
2628	2,137933E+08	2,138109E+08	2,807270E+09	2,807375E+09	4,276042E+08	5,614645E+09	6,042250E+09
2629	2,138346E+08	2,138230E+08	2,807307E+09	2,807288E+09	4,276576E+08	5,614594E+09	6,042252E+09
2630	2,138274E+08	2,138494E+08	2,807382E+09	2,807244E+09	4,276768E+08	5,614626E+09	6,042303E+09
2631	2,138067E+08	2,138010E+08	2,807299E+09	2,807430E+09	4,276077E+08	5,614729E+09	6,042337E+09
2632	2,138438E+08	2,138287E+08	2,807417E+09	2,807342E+09	4,276726E+08	5,614760E+09	6,042432E+09
2633	2,138043E+08	2,138199E+08	2,807436E+09	2,807443E+09	4,276242E+08	5,614879E+09	6,042503E+09
2634	2,138018E+08	2,137839E+08	2,807435E+09	2,807580E+09	4,275856E+08	5,615015E+09	6,042600E+09
2635	2,138235E+08	2,138244E+08	2,807618E+09	2,807479E+09	4,276480E+08	5,615097E+09	6,042745E+09

1	14	15	16	17	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	2,137705E+08	2,137899E+08	2,807595E+09	2,807641E+09	4,275603E+08	5,615236E+09	6,042797E+09
2637	2,137921E+08	2,137766E+08	2,807644E+09	2,807660E+09	4,275687E+08	5,615303E+09	6,042872E+09
2638	2,137980E+08	2,138086E+08	2,807738E+09	2,807595E+09	4,276066E+08	5,615334E+09	6,042940E+09
2639	2,137638E+08	2,137653E+08	2,807585E+09	2,807732E+09	4,275291E+08	5,615317E+09	6,042846E+09
2640	2,138071E+08	2,137949E+08	2,807599E+09	2,807564E+09	4,276020E+08	5,615163E+09	6,042765E+09
2641	2,137905E+08	2,138128E+08	2,807583E+09	2,807482E+09	4,276033E+08	5,615065E+09	6,042668E+09
2642	2,137869E+08	2,137827E+08	2,807417E+09	2,807524E+09	4,275696E+08	5,614941E+09	6,042511E+09
2643	2,138366E+08	2,138312E+08	2,807449E+09	2,807294E+09	4,276678E+08	5,614743E+09	6,042411E+09
2644	2,138005E+08	2,138246E+08	2,807285E+09	2,807289E+09	4,276251E+08	5,614574E+09	6,042199E+09
2645	2,138267E+08	2,138131E+08	2,807144E+09	2,807240E+09	4,276398E+08	5,614384E+09	6,042024E+09
2646	2,138561E+08	2,138660E+08	2,807201E+09	2,807052E+09	4,277220E+08	5,614254E+09	6,041976E+09
2647	2,138209E+08	2,138352E+08	2,807052E+09	2,807152E+09	4,276561E+08	5,614204E+09	6,041860E+09
2648	2,138614E+08	2,138457E+08	2,807086E+09	2,807056E+09	4,277071E+08	5,614142E+09	6,041849E+09
2649	2,138534E+08	2,138701E+08	2,807170E+09	2,807029E+09	4,277235E+08	5,614199E+09	6,041922E+09
2650	2,138279E+08	2,138210E+08	2,807059E+09	2,807226E+09	4,276489E+08	5,614284E+09	6,041933E+09
2651	2,138654E+08	2,138504E+08	2,807202E+09	2,807131E+09	4,277158E+08	5,614332E+09	6,042048E+09
2652	2,138227E+08	2,138451E+08	2,807229E+09	2,807221E+09	4,276678E+08	5,614451E+09	6,042118E+09
2653	2,138170E+08	2,138052E+08	2,807226E+09	2,807347E+09	4,276222E+08	5,614573E+09	6,042195E+09
2654	2,138434E+08	2,138444E+08	2,807432E+09	2,807277E+09	4,276879E+08	5,614708E+09	6,042396E+09
2655	2,137941E+08	2,138054E+08	2,807386E+09	2,807451E+09	4,275995E+08	5,614837E+09	6,042436E+09
2656	2,138163E+08	2,137963E+08	2,807393E+09	2,807434E+09	4,276126E+08	5,614827E+09	6,042439E+09
2657	2,138233E+08	2,138331E+08	2,807490E+09	2,807352E+09	4,276564E+08	5,614842E+09	6,042498E+09
2658	2,137869E+08	2,137935E+08	2,807333E+09	2,807482E+09	4,275804E+08	5,614815E+09	6,042396E+09
2659	2,138328E+08	2,138217E+08	2,807385E+09	2,807307E+09	4,276545E+08	5,614692E+09	6,042347E+09
2660	2,138146E+08	2,138401E+08	2,807355E+09	2,807233E+09	4,276547E+08	5,614588E+09	6,042243E+09
2661	2,138092E+08	2,138065E+08	2,807143E+09	2,807268E+09	4,276157E+08	5,614411E+09	6,042027E+09
2662	2,138630E+08	2,138561E+08	2,807170E+09	2,807051E+09	4,277192E+08	5,614221E+09	6,041940E+09
2663	2,138297E+08	2,138503E+08	2,807001E+09	2,807039E+09	4,276800E+08	5,614040E+09	6,041720E+09
2664	2,138551E+08	2,138426E+08	2,806867E+09	2,806952E+09	4,276978E+08	5,613820E+09	6,041517E+09
2665	2,138835E+08	2,138936E+08	2,806971E+09	2,806776E+09	4,277771E+08	5,613748E+09	6,041525E+09
2666	2,138455E+08	2,138603E+08	2,806827E+09	2,806912E+09	4,277058E+08	5,613739E+09	6,041445E+09
2667	2,138858E+08	2,138664E+08	2,806876E+09	2,806834E+09	4,277521E+08	5,613710E+09	6,041463E+09
2668	2,138737E+08	2,138929E+08	2,806945E+09	2,806824E+09	4,277666E+08	5,613768E+09	6,041535E+09
2669	2,138449E+08	2,138434E+08	2,806814E+09	2,807009E+09	4,276883E+08	5,613823E+09	6,041512E+09
2670	2,138854E+08	2,138727E+08	2,806992E+09	2,806933E+09	4,277581E+08	5,613925E+09	6,041683E+09
2671	2,138458E+08	2,138634E+08	2,807044E+09	2,807029E+09	4,277092E+08	5,614073E+09	6,041782E+09
2672	2,138401E+08	2,138238E+08	2,807021E+09	2,807132E+09	4,276639E+08	5,614154E+09	6,041817E+09
2673	2,138667E+08	2,138622E+08	2,807228E+09	2,807067E+09	4,277290E+08	5,614295E+09	6,042024E+09
2674	2,138154E+08	2,138265E+08	2,807152E+09	2,807242E+09	4,276420E+08	5,614394E+09	6,042036E+09
2675	2,138385E+08	2,138201E+08	2,807171E+09	2,807204E+09	4,276586E+08	5,614375E+09	6,042034E+09
2676	2,138431E+08	2,138614E+08	2,807268E+09	2,807109E+09	4,277046E+08	5,614377E+09	6,042081E+09
2677	2,138062E+08	2,138191E+08	2,807090E+09	2,807221E+09	4,276253E+08	5,614311E+09	6,041936E+09
2678	2,138579E+08	2,138451E+08	2,807139E+09	2,807073E+09	4,277030E+08	5,614212E+09	6,041915E+09
2679	2,138439E+08	2,138611E+08	2,807083E+09	2,806995E+09	4,277050E+08	5,614079E+09	6,041784E+09
2680	2,138387E+08	2,138323E+08	2,806839E+09	2,806988E+09	4,276709E+08	5,613827E+09	6,041497E+09
2681	2,138920E+08	2,138851E+08	2,806893E+09	2,806763E+09	4,277771E+08	5,613656E+09	6,041433E+09
2682	2,138559E+08	2,138812E+08	2,806746E+09	2,806762E+09	4,277372E+08	5,613508E+09	6,041245E+09
2683	2,138810E+08	2,138699E+08	2,806666E+09	2,806694E+09	4,277509E+08	5,613360E+09	6,041111E+09
2684	2,139056E+08	2,139199E+08	2,806764E+09	2,806553E+09	4,278255E+08	5,613317E+09	6,041143E+09

1	14	15	16	17	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	2,138654E+08	2,138807E+08	2,806582E+09	2,806700E+09	4,277461E+08	5,613282E+09	6,041028E+09
2686	2,139088E+08	2,138860E+08	2,806630E+09	2,806649E+09	4,277948E+08	5,613278E+09	6,041073E+09
2687	2,138996E+08	2,139119E+08	2,806694E+09	2,806624E+09	4,278115E+08	5,613317E+09	6,041129E+09
2688	2,138692E+08	2,138660E+08	2,806572E+09	2,806761E+09	4,277353E+08	5,613334E+09	6,041069E+09
2689	2,139086E+08	2,138935E+08	2,806792E+09	2,806689E+09	4,278021E+08	5,613482E+09	6,041284E+09
2690	2,138667E+08	2,138845E+08	2,806844E+09	2,806811E+09	4,277511E+08	5,613655E+09	6,041406E+09
2691	2,138605E+08	2,138438E+08	2,806837E+09	2,806919E+09	4,277043E+08	5,613756E+09	6,041460E+09
2692	2,138832E+08	2,138870E+08	2,807020E+09	2,806863E+09	4,277703E+08	5,613883E+09	6,041654E+09
2693	2,138314E+08	2,138516E+08	2,806921E+09	2,807020E+09	4,276831E+08	5,613942E+09	6,041625E+09
2694	2,138591E+08	2,138447E+08	2,806957E+09	2,806998E+09	4,277038E+08	5,613955E+09	6,041658E+09
2695	2,138691E+08	2,138816E+08	2,807049E+09	2,806896E+09	4,277506E+08	5,613945E+09	6,041696E+09
2696	2,138337E+08	2,138416E+08	2,806832E+09	2,806967E+09	4,276753E+08	5,613799E+09	6,041474E+09
2697	2,138867E+08	2,138665E+08	2,806869E+09	2,806811E+09	4,277532E+08	5,613679E+09	6,041433E+09
2698	2,138718E+08	2,138880E+08	2,806791E+09	2,806727E+09	4,277598E+08	5,613518E+09	6,041278E+09
2699	2,138664E+08	2,138617E+08	2,806577E+09	2,806695E+09	4,277281E+08	5,613272E+09	6,041000E+09
2700	2,139140E+08	2,139171E+08	2,806653E+09	2,806483E+09	4,278311E+08	5,613136E+09	6,040967E+09
2701	2,138772E+08	2,139084E+08	2,806509E+09	2,806496E+09	4,277856E+08	5,613005E+09	6,040791E+09
2702	2,139057E+08	2,138925E+08	2,806430E+09	2,806484E+09	4,277981E+08	5,612915E+09	6,040713E+09
2703	2,139335E+08	2,139382E+08	2,806510E+09	2,806356E+09	4,278717E+08	5,612865E+09	6,040737E+09
2704	2,138932E+08	2,139035E+08	2,806299E+09	2,806461E+09	4,277966E+08	5,612760E+09	6,040556E+09
2705	2,139351E+08	2,139093E+08	2,806380E+09	2,806404E+09	4,278444E+08	5,612784E+09	6,040628E+09
2706	2,139229E+08	2,139370E+08	2,806475E+09	2,806387E+09	4,278598E+08	5,612862E+09	6,040722E+09
2707	2,138909E+08	2,138883E+08	2,806409E+09	2,806530E+09	4,277793E+08	5,612939E+09	6,040719E+09
2708	2,139240E+08	2,139162E+08	2,806627E+09	2,806493E+09	4,278402E+08	5,613120E+09	6,040960E+09
2709	2,138814E+08	2,139037E+08	2,806646E+09	2,806620E+09	4,277850E+08	5,613266E+09	6,041051E+09
2710	2,138786E+08	2,138642E+08	2,806626E+09	2,806754E+09	4,277427E+08	5,613380E+09	6,041123E+09
2711	2,139056E+08	2,139066E+08	2,806795E+09	2,806676E+09	4,278122E+08	5,613471E+09	6,041283E+09
2712	2,138558E+08	2,138739E+08	2,806679E+09	2,806774E+09	4,277297E+08	5,613454E+09	6,041183E+09
2713	2,138858E+08	2,138648E+08	2,806726E+09	2,806744E+09	4,277506E+08	5,613470E+09	6,041220E+09
2714	2,138962E+08	2,139029E+08	2,806787E+09	2,806644E+09	4,277990E+08	5,613431E+09	6,041230E+09
2715	2,138611E+08	2,138656E+08	2,806579E+09	2,806692E+09	4,277267E+08	5,613271E+09	6,040997E+09
2716	2,139088E+08	2,138975E+08	2,806601E+09	2,806538E+09	4,278063E+08	5,613139E+09	6,040946E+09
2717	2,138927E+08	2,139191E+08	2,806523E+09	2,806445E+09	4,278117E+08	5,612968E+09	6,040780E+09
2718	2,138905E+08	2,138913E+08	2,806345E+09	2,806457E+09	4,277818E+08	5,612801E+09	6,040583E+09
2719	2,139413E+08	2,139403E+08	2,806421E+09	2,806262E+09	4,278816E+08	5,612683E+09	6,040565E+09
2720	2,139065E+08	2,139312E+08	2,806246E+09	2,806255E+09	4,278377E+08	5,612501E+09	6,040338E+09
2721	2,139351E+08	2,139131E+08	2,806164E+09	2,806246E+09	4,278482E+08	5,612410E+09	6,040258E+09
2722	2,139609E+08	2,139625E+08	2,806228E+09	2,806116E+09	4,279234E+08	5,612344E+09	6,040267E+09
2723	2,139187E+08	2,139306E+08	2,806066E+09	2,806191E+09	4,278493E+08	5,612257E+09	6,040107E+09
2724	2,139528E+08	2,139380E+08	2,806179E+09	2,806151E+09	4,278909E+08	5,612330E+09	6,040221E+09
2725	2,139387E+08	2,139599E+08	2,806287E+09	2,806156E+09	4,278986E+08	5,612443E+09	6,040341E+09
2726	2,139092E+08	2,139078E+08	2,806230E+09	2,806359E+09	4,278170E+08	5,612589E+09	6,040406E+09
2727	2,139442E+08	2,139319E+08	2,806427E+09	2,806335E+09	4,278760E+08	5,612761E+09	6,040637E+09
2728	2,139041E+08	2,139235E+08	2,806412E+09	2,806418E+09	4,278276E+08	5,612830E+09	6,040658E+09
2729	2,139022E+08	2,138844E+08	2,806404E+09	2,806535E+09	4,277866E+08	5,612939E+09	6,040726E+09
2730	2,139300E+08	2,139281E+08	2,806573E+09	2,806453E+09	4,278580E+08	5,613026E+09	6,040884E+09
2731	2,138814E+08	2,138960E+08	2,806475E+09	2,806522E+09	4,277775E+08	5,612998E+09	6,040775E+09
2732	2,139062E+08	2,138895E+08	2,806496E+09	2,806504E+09	4,277957E+08	5,613000E+09	6,040796E+09
2733	2,139167E+08	2,139266E+08	2,806526E+09	2,806393E+09	4,278433E+08	5,612919E+09	6,040762E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2734	2,138849E+08	2,138930E+08	2,806313E+09	2,806458E+09	4,277778E+08	5,612772E+09	6,040549E+09
2735	2,139340E+08	2,139240E+08	2,806343E+09	2,806290E+09	4,278581E+08	5,612633E+09	6,040491E+09
2736	2,139202E+08	2,139468E+08	2,806261E+09	2,806159E+09	4,278670E+08	5,612420E+09	6,040287E+09
2737	2,139196E+08	2,139155E+08	2,806098E+09	2,806189E+09	4,278351E+08	5,612287E+09	6,040122E+09
2738	2,139704E+08	2,139638E+08	2,806150E+09	2,806016E+09	4,279342E+08	5,612167E+09	6,040101E+09
2739	2,139362E+08	2,139566E+08	2,805986E+09	2,805989E+09	4,278928E+08	5,611976E+09	6,039868E+09
2740	2,139575E+08	2,139437E+08	2,805905E+09	2,805991E+09	4,279011E+08	5,611895E+09	6,039797E+09
2741	2,139804E+08	2,139899E+08	2,805987E+09	2,805858E+09	4,279704E+08	5,611846E+09	6,039816E+09
2742	2,139394E+08	2,139559E+08	2,805875E+09	2,805983E+09	4,278953E+08	5,611858E+09	6,039753E+09
2743	2,139737E+08	2,139566E+08	2,805999E+09	2,805969E+09	4,279303E+08	5,611968E+09	6,039899E+09
2744	2,139616E+08	2,139767E+08	2,806077E+09	2,805963E+09	4,279383E+08	5,612039E+09	6,039978E+09
2745	2,139333E+08	2,139238E+08	2,806017E+09	2,806172E+09	4,278571E+08	5,612189E+09	6,040046E+09
2746	2,139678E+08	2,139514E+08	2,806183E+09	2,806138E+09	4,279191E+08	5,612321E+09	6,040240E+09
2747	2,139283E+08	2,139461E+08	2,806201E+09	2,806173E+09	4,278745E+08	5,612375E+09	6,040249E+09
2748	2,139202E+08	2,139107E+08	2,806200E+09	2,806291E+09	4,278309E+08	5,612491E+09	6,040322E+09
2749	2,139478E+08	2,139490E+08	2,806351E+09	2,806209E+09	4,278968E+08	5,612559E+09	6,040456E+09
2750	2,139029E+08	2,139188E+08	2,806249E+09	2,806312E+09	4,278217E+08	5,612561E+09	6,040383E+09
2751	2,139295E+08	2,139120E+08	2,806243E+09	2,806285E+09	4,278415E+08	5,612528E+09	6,040370E+09
2752	2,139426E+08	2,139536E+08	2,806249E+09	2,806127E+09	4,278963E+08	5,612376E+09	6,040272E+09
2753	2,139122E+08	2,139206E+08	2,806067E+09	2,806186E+09	4,278329E+08	5,612253E+09	6,040086E+09
2754	2,139611E+08	2,139508E+08	2,806099E+09	2,806033E+09	4,279119E+08	5,612131E+09	6,040043E+09
2755	2,139493E+08	2,139728E+08	2,806036E+09	2,805889E+09	4,279221E+08	5,611926E+09	6,039848E+09
2756	2,139435E+08	2,139435E+08	2,805848E+09	2,805942E+09	4,278870E+08	5,611790E+09	6,039677E+09
2757	2,139937E+08	2,139882E+08	2,805873E+09	2,805768E+09	4,279819E+08	5,611641E+09	6,039622E+09
2758	2,139620E+08	2,139844E+08	2,805719E+09	2,805761E+09	4,279464E+08	5,611481E+09	6,039427E+09
2759	2,139822E+08	2,139684E+08	2,805660E+09	2,805756E+09	4,279505E+08	5,611416E+09	6,039366E+09
2760	2,140057E+08	2,140122E+08	2,805753E+09	2,805604E+09	4,280179E+08	5,611357E+09	6,039375E+09
2761	2,139650E+08	2,139744E+08	2,805665E+09	2,805754E+09	4,279394E+08	5,611419E+09	6,039359E+09
2762	2,139974E+08	2,139748E+08	2,805775E+09	2,805773E+09	4,279722E+08	5,611548E+09	6,039520E+09
2763	2,139863E+08	2,139980E+08	2,805865E+09	2,805743E+09	4,279843E+08	5,611608E+09	6,039592E+09
2764	2,139510E+08	2,139505E+08	2,805805E+09	2,805959E+09	4,279015E+08	5,611764E+09	6,039665E+09
2765	2,139839E+08	2,139743E+08	2,805980E+09	2,805919E+09	4,279582E+08	5,611899E+09	6,039857E+09
2766	2,139479E+08	2,139682E+08	2,806018E+09	2,805984E+09	4,279161E+08	5,612001E+09	6,039917E+09
2767	2,139403E+08	2,139292E+08	2,806002E+09	2,806104E+09	4,278695E+08	5,612106E+09	6,039976E+09
2768	2,139711E+08	2,139668E+08	2,806108E+09	2,805986E+09	4,279379E+08	5,612094E+09	6,040032E+09
2769	2,139286E+08	2,139397E+08	2,806000E+09	2,806075E+09	4,278684E+08	5,612075E+09	6,039943E+09
2770	2,139551E+08	2,139379E+08	2,805974E+09	2,806035E+09	4,278930E+08	5,612009E+09	6,039902E+09
2771	2,139700E+08	2,139823E+08	2,806012E+09	2,805834E+09	4,279523E+08	5,611846E+09	6,039798E+09
2772	2,139347E+08	2,139513E+08	2,805839E+09	2,805909E+09	4,278861E+08	5,611748E+09	6,039634E+09
2773	2,139836E+08	2,139749E+08	2,805847E+09	2,805772E+09	4,279585E+08	5,611620E+09	6,039578E+09
2774	2,139759E+08	2,139978E+08	2,805775E+09	2,805669E+09	4,279737E+08	5,611445E+09	6,039418E+09
2775	2,139707E+08	2,139688E+08	2,805568E+09	2,805715E+09	4,279396E+08	5,611283E+09	6,039222E+09
2776	2,140220E+08	2,140136E+08	2,805576E+09	2,805499E+09	4,280356E+08	5,611075E+09	6,039110E+09
2777	2,139910E+08	2,140105E+08	2,805471E+09	2,805493E+09	4,280015E+08	5,610964E+09	6,038965E+09
2778	2,140091E+08	2,139925E+08	2,805426E+09	2,805511E+09	4,280015E+08	5,610936E+09	6,038938E+09
2779	2,140319E+08	2,140346E+08	2,805551E+09	2,805359E+09	4,280665E+08	5,610910E+09	6,038976E+09
2780	2,139848E+08	2,139990E+08	2,805465E+09	2,805545E+09	4,279838E+08	5,611009E+09	6,038993E+09
2781	2,140142E+08	2,139957E+08	2,805554E+09	2,805571E+09	4,280099E+08	5,611125E+09	6,039134E+09
2782	2,140055E+08	2,140219E+08	2,805660E+09	2,805564E+09	4,280274E+08	5,611224E+09	6,039251E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2783	2,139695E+08	2,139724E+08	2,805609E+09	2,805763E+09	4,279419E+08	5,611372E+09	6,039314E+09
2784	2,140045E+08	2,139912E+08	2,805767E+09	2,805695E+09	4,279957E+08	5,611462E+09	6,039457E+09
2785	2,139715E+08	2,139847E+08	2,805806E+09	2,805766E+09	4,279562E+08	5,611572E+09	6,039528E+09
2786	2,139646E+08	2,139480E+08	2,805758E+09	2,805890E+09	4,279126E+08	5,611648E+09	6,039561E+09
2787	2,139969E+08	2,139907E+08	2,805868E+09	2,805731E+09	4,279876E+08	5,611599E+09	6,039586E+09
2788	2,139497E+08	2,139709E+08	2,805767E+09	2,805816E+09	4,279207E+08	5,611583E+09	6,039504E+09
2789	2,139744E+08	2,139652E+08	2,805748E+09	2,805777E+09	4,279396E+08	5,611525E+09	6,039465E+09
2790	2,139933E+08	2,140088E+08	2,805799E+09	2,805614E+09	4,280021E+08	5,611414E+09	6,039416E+09
2791	2,139597E+08	2,139745E+08	2,805602E+09	2,805697E+09	4,279343E+08	5,611299E+09	6,039233E+09
2792	2,140124E+08	2,139948E+08	2,805559E+09	2,805531E+09	4,280071E+08	5,611089E+09	6,039097E+09
2793	2,140076E+08	2,140213E+08	2,805474E+09	2,805411E+09	4,280289E+08	5,610885E+09	6,038914E+09
2794	2,140014E+08	2,139966E+08	2,805265E+09	2,805441E+09	4,279980E+08	5,610707E+09	6,038705E+09
2795	2,140513E+08	2,140422E+08	2,805323E+09	2,805189E+09	4,280935E+08	5,610512E+09	6,038605E+09
2796	2,140132E+08	2,140401E+08	2,805251E+09	2,805215E+09	4,280533E+08	5,610466E+09	6,038519E+09
2797	2,140277E+08	2,140155E+08	2,805212E+09	2,805273E+09	4,280432E+08	5,610485E+09	6,038528E+09
2798	2,140524E+08	2,140574E+08	2,805344E+09	2,805178E+09	4,281098E+08	5,610523E+09	6,038633E+09
2799	2,140050E+08	2,140214E+08	2,805256E+09	2,805370E+09	4,280264E+08	5,610626E+09	6,038652E+09
2800	2,140349E+08	2,140149E+08	2,805329E+09	2,805367E+09	4,280499E+08	5,610696E+09	6,038746E+09
2801	2,140284E+08	2,140402E+08	2,805462E+09	2,805360E+09	4,280686E+08	5,610822E+09	6,038891E+09
2802	2,139923E+08	2,139904E+08	2,805404E+09	2,805565E+09	4,279827E+08	5,610968E+09	6,038951E+09
2803	2,140287E+08	2,140089E+08	2,805559E+09	2,805469E+09	4,280376E+08	5,611029E+09	6,039066E+09
2804	2,139917E+08	2,140077E+08	2,805588E+09	2,805543E+09	4,279994E+08	5,611131E+09	6,039131E+09
2805	2,139831E+08	2,139716E+08	2,805518E+09	2,805656E+09	4,279547E+08	5,611174E+09	6,039129E+09
2806	2,140177E+08	2,140181E+08	2,805644E+09	2,805511E+09	4,280358E+08	5,611155E+09	6,039191E+09
2807	2,139713E+08	2,139976E+08	2,805554E+09	2,805583E+09	4,279690E+08	5,611137E+09	6,039106E+09
2808	2,139982E+08	2,139856E+08	2,805499E+09	2,805524E+09	4,279838E+08	5,611023E+09	6,039006E+09
2809	2,140216E+08	2,140296E+08	2,805536E+09	2,805372E+09	4,280512E+08	5,610908E+09	6,038960E+09
2810	2,139904E+08	2,139993E+08	2,805301E+09	2,805445E+09	4,279896E+08	5,610746E+09	6,038736E+09
2811	2,140439E+08	2,140230E+08	2,805261E+09	2,805234E+09	4,280669E+08	5,610495E+09	6,038562E+09
2812	2,140336E+08	2,140556E+08	2,805208E+09	2,805112E+09	4,280892E+08	5,610320E+09	6,038409E+09
2813	2,140236E+08	2,140259E+08	2,805026E+09	2,805155E+09	4,280496E+08	5,610181E+09	6,038230E+09
2814	2,140733E+08	2,140688E+08	2,805122E+09	2,804962E+09	4,281422E+08	5,610084E+09	6,038226E+09
2815	2,140347E+08	2,140631E+08	2,805052E+09	2,805018E+09	4,280978E+08	5,610070E+09	6,038168E+09
2816	2,140497E+08	2,140328E+08	2,804977E+09	2,805074E+09	4,280825E+08	5,610052E+09	6,038134E+09
2817	2,140770E+08	2,140771E+08	2,805107E+09	2,804987E+09	4,281541E+08	5,610093E+09	6,038247E+09
2818	2,140306E+08	2,140429E+08	2,805017E+09	2,805164E+09	4,280735E+08	5,610181E+09	6,038255E+09
2819	2,140598E+08	2,140350E+08	2,805119E+09	2,805121E+09	4,280948E+08	5,610240E+09	6,038334E+09
2820	2,140485E+08	2,140615E+08	2,805263E+09	2,805127E+09	4,281101E+08	5,610390E+09	6,038500E+09
2821	2,140098E+08	2,140094E+08	2,805192E+09	2,805345E+09	4,280192E+08	5,610537E+09	6,038556E+09
2822	2,140476E+08	2,140311E+08	2,805350E+09	2,805279E+09	4,280787E+08	5,610629E+09	6,038708E+09
2823	2,140107E+08	2,140332E+08	2,805376E+09	2,805341E+09	4,280440E+08	5,610717E+09	6,038761E+09
2824	2,140036E+08	2,139946E+08	2,805293E+09	2,805424E+09	4,279982E+08	5,610717E+09	6,038715E+09
2825	2,140414E+08	2,140405E+08	2,805426E+09	2,805282E+09	4,280819E+08	5,610708E+09	6,038790E+09
2826	2,139984E+08	2,140194E+08	2,805316E+09	2,805358E+09	4,280177E+08	5,610674E+09	6,038692E+09
2827	2,140274E+08	2,140074E+08	2,805242E+09	2,805265E+09	4,280348E+08	5,610508E+09	6,038542E+09
2828	2,140480E+08	2,140558E+08	2,805259E+09	2,805107E+09	4,281038E+08	5,610366E+09	6,038470E+09
2829	2,140151E+08	2,140284E+08	2,805011E+09	2,805163E+09	4,280435E+08	5,610174E+09	6,038218E+09
2830	2,140691E+08	2,140543E+08	2,805002E+09	2,804963E+09	4,281234E+08	5,609965E+09	6,038088E+09
2831	2,140571E+08	2,140850E+08	2,804981E+09	2,804844E+09	4,281421E+08	5,609825E+09	6,037967E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2832	2,140473E+08	2,140472E+08	2,804787E+09	2,804897E+09	4,280946E+08	5,609684E+09	6,037779E+09
2833	2,140986E+08	2,140887E+08	2,804880E+09	2,804748E+09	4,281872E+08	5,609628E+09	6,037815E+09
2834	2,140627E+08	2,140848E+08	2,804797E+09	2,804815E+09	4,281476E+08	5,609612E+09	6,037760E+09
2835	2,140774E+08	2,140567E+08	2,804730E+09	2,804837E+09	4,281341E+08	5,609567E+09	6,037701E+09
2836	2,140995E+08	2,141037E+08	2,804889E+09	2,804753E+09	4,282031E+08	5,609641E+09	6,037844E+09
2837	2,140499E+08	2,140660E+08	2,804817E+09	2,804935E+09	4,281159E+08	5,609751E+09	6,037867E+09
2838	2,140785E+08	2,140557E+08	2,804938E+09	2,804932E+09	4,281342E+08	5,609870E+09	6,038004E+09
2839	2,140666E+08	2,140813E+08	2,805079E+09	2,804946E+09	4,281479E+08	5,610025E+09	6,038173E+09
2840	2,140287E+08	2,140261E+08	2,804967E+09	2,805140E+09	4,280548E+08	5,610107E+09	6,038162E+09
2841	2,140683E+08	2,140527E+08	2,805121E+09	2,805075E+09	4,281210E+08	5,610196E+09	6,038317E+09
2842	2,140353E+08	2,140576E+08	2,805150E+09	2,805113E+09	4,280929E+08	5,610263E+09	6,038356E+09
2843	2,140285E+08	2,140176E+08	2,805073E+09	2,805158E+09	4,280461E+08	5,610231E+09	6,038277E+09
2844	2,140642E+08	2,140639E+08	2,805202E+09	2,805030E+09	4,281281E+08	5,610231E+09	6,038359E+09
2845	2,140216E+08	2,140425E+08	2,805057E+09	2,805107E+09	4,280640E+08	5,610164E+09	6,038228E+09
2846	2,140524E+08	2,140339E+08	2,804978E+09	2,805029E+09	4,280864E+08	5,610007E+09	6,038093E+09
2847	2,140726E+08	2,140860E+08	2,804997E+09	2,804851E+09	4,281585E+08	5,609848E+09	6,038007E+09
2848	2,140402E+08	2,140551E+08	2,804747E+09	2,804880E+09	4,280953E+08	5,609628E+09	6,037723E+09
2849	2,140949E+08	2,140800E+08	2,804758E+09	2,804708E+09	4,281750E+08	5,609466E+09	6,037641E+09
2850	2,140863E+08	2,141086E+08	2,804737E+09	2,804610E+09	4,281949E+08	5,609346E+09	6,037541E+09
2851	2,140766E+08	2,140697E+08	2,804539E+09	2,804651E+09	4,281463E+08	5,609189E+09	6,037335E+09
2852	2,141238E+08	2,141137E+08	2,804628E+09	2,804515E+09	4,282376E+08	5,609143E+09	6,037380E+09
2853	2,140864E+08	2,141113E+08	2,804544E+09	2,804580E+09	4,281977E+08	5,609124E+09	6,037322E+09
2854	2,140992E+08	2,140832E+08	2,804519E+09	2,804615E+09	4,281824E+08	5,609134E+09	6,037316E+09
2855	2,141181E+08	2,141263E+08	2,804700E+09	2,804533E+09	4,282444E+08	5,609233E+09	6,037477E+09
2856	2,140687E+08	2,140821E+08	2,804610E+09	2,804715E+09	4,281508E+08	5,609325E+09	6,037476E+09
2857	2,140985E+08	2,140731E+08	2,804717E+09	2,804742E+09	4,281716E+08	5,609460E+09	6,037631E+09
2858	2,140904E+08	2,141012E+08	2,804850E+09	2,804752E+09	4,281916E+08	5,609603E+09	6,037794E+09
2859	2,140529E+08	2,140499E+08	2,804750E+09	2,804905E+09	4,281028E+08	5,609654E+09	6,037757E+09
2860	2,140884E+08	2,140777E+08	2,804922E+09	2,804840E+09	4,281662E+08	5,609762E+09	6,037928E+09
2861	2,140555E+08	2,140805E+08	2,804951E+09	2,804883E+09	4,281360E+08	5,609834E+09	6,037970E+09
2862	2,140497E+08	2,140398E+08	2,804870E+09	2,804951E+09	4,280895E+08	5,609821E+09	6,037911E+09
2863	2,140860E+08	2,140857E+08	2,804970E+09	2,804817E+09	4,281717E+08	5,609788E+09	6,037959E+09
2864	2,140461E+08	2,140642E+08	2,804776E+09	2,804857E+09	4,281103E+08	5,609633E+09	6,037743E+09
2865	2,140795E+08	2,140613E+08	2,804686E+09	2,804775E+09	4,281408E+08	5,609460E+09	6,037601E+09
2866	2,141029E+08	2,141140E+08	2,804723E+09	2,804573E+09	4,282170E+08	5,609296E+09	6,037513E+09
2867	2,140702E+08	2,140825E+08	2,804491E+09	2,804573E+09	4,281527E+08	5,609064E+09	6,037217E+09
2868	2,141201E+08	2,141066E+08	2,804511E+09	2,804433E+09	4,282267E+08	5,608945E+09	6,037171E+09
2869	2,141111E+08	2,141352E+08	2,804479E+09	2,804358E+09	4,282463E+08	5,608837E+09	6,037084E+09
2870	2,141010E+08	2,140981E+08	2,804297E+09	2,804427E+09	4,281992E+08	5,608724E+09	6,036923E+09
2871	2,141458E+08	2,141427E+08	2,804405E+09	2,804292E+09	4,282885E+08	5,608697E+09	6,036986E+09
2872	2,141087E+08	2,141336E+08	2,804320E+09	2,804342E+09	4,282423E+08	5,608662E+09	6,036904E+09
2873	2,141208E+08	2,141036E+08	2,804307E+09	2,804414E+09	4,282244E+08	5,608720E+09	6,036945E+09
2874	2,141427E+08	2,141430E+08	2,804488E+09	2,804342E+09	4,282857E+08	5,608830E+09	6,037116E+09
2875	2,140928E+08	2,140995E+08	2,804391E+09	2,804497E+09	4,281923E+08	5,608888E+09	6,037080E+09
2876	2,141187E+08	2,140947E+08	2,804501E+09	2,804529E+09	4,282133E+08	5,609030E+09	6,037244E+09
2877	2,141108E+08	2,141258E+08	2,804634E+09	2,804530E+09	4,282366E+08	5,609164E+09	6,037400E+09
2878	2,140725E+08	2,140748E+08	2,804570E+09	2,804688E+09	4,281473E+08	5,609258E+09	6,037406E+09
2879	2,141058E+08	2,140997E+08	2,804742E+09	2,804627E+09	4,282055E+08	5,609369E+09	6,037575E+09
2880	2,140758E+08	2,140968E+08	2,804723E+09	2,804661E+09	4,281726E+08	5,609385E+09	6,037557E+09

1	14	15	16	17	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	2,140728E+08	2,140609E+08	2,804605E+09	2,804746E+09	4,281338E+08	5,609350E+09	6,037484E+09
2882	2,141152E+08	2,141091E+08	2,804688E+09	2,804583E+09	4,282243E+08	5,609271E+09	6,037495E+09
2883	2,140762E+08	2,140935E+08	2,804501E+09	2,804563E+09	4,281696E+08	5,609064E+09	6,037233E+09
2884	2,141057E+08	2,140918E+08	2,804438E+09	2,804479E+09	4,281975E+08	5,608917E+09	6,037115E+09
2885	2,141284E+08	2,141424E+08	2,804483E+09	2,804297E+09	4,282708E+08	5,608780E+09	6,037051E+09
2886	2,140952E+08	2,141094E+08	2,804271E+09	2,804332E+09	4,282046E+08	5,608603E+09	6,036808E+09
2887	2,141419E+08	2,141320E+08	2,804276E+09	2,804208E+09	4,282739E+08	5,608484E+09	6,036758E+09
2888	2,141354E+08	2,141583E+08	2,804211E+09	2,804123E+09	4,282937E+08	5,608333E+09	6,036627E+09
2889	2,141266E+08	2,141253E+08	2,804029E+09	2,804204E+09	4,282518E+08	5,608233E+09	6,036485E+09
2890	2,141737E+08	2,141644E+08	2,804162E+09	2,804056E+09	4,283381E+08	5,608218E+09	6,036556E+09
2891	2,141360E+08	2,141541E+08	2,804091E+09	2,804082E+09	4,282901E+08	5,608172E+09	6,036462E+09
2892	2,141434E+08	2,141230E+08	2,804082E+09	2,804179E+09	4,282664E+08	5,608261E+09	6,036528E+09
2893	2,141640E+08	2,141637E+08	2,804259E+09	2,804129E+09	4,283277E+08	5,608388E+09	6,036716E+09
2894	2,141129E+08	2,141244E+08	2,804196E+09	2,804294E+09	4,282373E+08	5,608489E+09	6,036727E+09
2895	2,141341E+08	2,141212E+08	2,804326E+09	2,804328E+09	4,282553E+08	5,608654E+09	6,036910E+09
2896	2,141280E+08	2,141460E+08	2,804450E+09	2,804320E+09	4,282740E+08	5,608770E+09	6,037044E+09
2897	2,140919E+08	2,140952E+08	2,804371E+09	2,804509E+09	4,281872E+08	5,608880E+09	6,037067E+09
2898	2,141309E+08	2,141155E+08	2,804518E+09	2,804440E+09	4,282463E+08	5,608958E+09	6,037205E+09
2899	2,141034E+08	2,141164E+08	2,804461E+09	2,804421E+09	4,282198E+08	5,608883E+09	6,037102E+09
2900	2,140983E+08	2,140871E+08	2,804332E+09	2,804485E+09	4,281855E+08	5,608817E+09	6,037002E+09
2901	2,141409E+08	2,141390E+08	2,804417E+09	2,804301E+09	4,282799E+08	5,608719E+09	6,036999E+09
2902	2,141006E+08	2,141241E+08	2,804278E+09	2,804275E+09	4,282247E+08	5,608553E+09	6,036777E+09
2903	2,141263E+08	2,141202E+08	2,804224E+09	2,804211E+09	4,282465E+08	5,608435E+09	6,036682E+09
2904	2,141512E+08	2,141642E+08	2,804226E+09	2,804041E+09	4,283154E+08	5,608268E+09	6,036583E+09
2905	2,141208E+08	2,141349E+08	2,803993E+09	2,804117E+09	4,282557E+08	5,608110E+09	6,036366E+09
2906	2,141725E+08	2,141562E+08	2,803999E+09	2,803983E+09	4,283287E+08	5,607983E+09	6,036311E+09
2907	2,141664E+08	2,141845E+08	2,803940E+09	2,803855E+09	4,283510E+08	5,607795E+09	6,036146E+09
2908	2,141533E+08	2,141511E+08	2,803792E+09	2,803944E+09	4,283044E+08	5,607736E+09	6,036040E+09
2909	2,141983E+08	2,141868E+08	2,803931E+09	2,803817E+09	4,283850E+08	5,607748E+09	6,036133E+09
2910	2,141583E+08	2,141758E+08	2,803893E+09	2,803864E+09	4,283341E+08	5,607758E+09	6,036092E+09
2911	2,141601E+08	2,141457E+08	2,803889E+09	2,803979E+09	4,283059E+08	5,607867E+09	6,036173E+09
2912	2,141815E+08	2,141841E+08	2,804042E+09	2,803926E+09	4,283656E+08	5,607968E+09	6,036334E+09
2913	2,141319E+08	2,141490E+08	2,803992E+09	2,804112E+09	4,282810E+08	5,608103E+09	6,036384E+09
2914	2,141563E+08	2,141394E+08	2,804138E+09	2,804134E+09	4,282957E+08	5,608272E+09	6,036567E+09
2915	2,141516E+08	2,141629E+08	2,804240E+09	2,804095E+09	4,283145E+08	5,608336E+09	6,036650E+09
2916	2,141143E+08	2,141142E+08	2,804140E+09	2,804286E+09	4,282285E+08	5,608426E+09	6,036654E+09
2917	2,141546E+08	2,141368E+08	2,804257E+09	2,804212E+09	4,282914E+08	5,608469E+09	6,036760E+09
2918	2,141279E+08	2,141440E+08	2,804227E+09	2,804171E+09	4,282720E+08	5,608398E+09	6,036670E+09
2919	2,141186E+08	2,141177E+08	2,804111E+09	2,804221E+09	4,282364E+08	5,608331E+09	6,036568E+09
2920	2,141619E+08	2,141634E+08	2,804186E+09	2,804036E+09	4,283253E+08	5,608222E+09	6,036547E+09
2921	2,141245E+08	2,141502E+08	2,804038E+09	2,804051E+09	4,282747E+08	5,608088E+09	6,036363E+09
2922	2,141543E+08	2,141400E+08	2,803969E+09	2,803992E+09	4,282943E+08	5,607960E+09	6,036254E+09
2923	2,141815E+08	2,141870E+08	2,803938E+09	2,803788E+09	4,283685E+08	5,607726E+09	6,036094E+09
2924	2,141509E+08	2,141632E+08	2,803701E+09	2,803851E+09	4,283141E+08	5,607551E+09	6,035866E+09
2925	2,142016E+08	2,141847E+08	2,803720E+09	2,803709E+09	4,283863E+08	5,607429E+09	6,035816E+09
2926	2,141929E+08	2,142123E+08	2,803715E+09	2,803578E+09	4,284052E+08	5,607293E+09	6,035698E+09
2927	2,141730E+08	2,141771E+08	2,803583E+09	2,803691E+09	4,283501E+08	5,607274E+09	6,035624E+09
2928	2,142165E+08	2,142061E+08	2,803699E+09	2,803589E+09	4,284226E+08	5,607288E+09	6,035711E+09
2929	2,141781E+08	2,142002E+08	2,803665E+09	2,803681E+09	4,283784E+08	5,607346E+09	6,035725E+09

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2930	2,141827E+08	2,141674E+08	2,803685E+09	2,803793E+09	4,283501E+08	5,607478E+09	6,035828E+09
2931	2,142045E+08	2,142060E+08	2,803842E+09	2,803710E+09	4,284105E+08	5,607552E+09	6,035962E+09
2932	2,141539E+08	2,141695E+08	2,803809E+09	2,803904E+09	4,283234E+08	5,607713E+09	6,036037E+09
2933	2,141777E+08	2,141567E+08	2,803935E+09	2,803940E+09	4,283344E+08	5,607874E+09	6,036209E+09
2934	2,141733E+08	2,141802E+08	2,804038E+09	2,803890E+09	4,283535E+08	5,607928E+09	6,036282E+09
2935	2,141325E+08	2,141377E+08	2,803918E+09	2,804068E+09	4,282702E+08	5,607986E+09	6,036256E+09
2936	2,141746E+08	2,141597E+08	2,803996E+09	2,803969E+09	4,283343E+08	5,607964E+09	6,036298E+09
2937	2,141503E+08	2,141727E+08	2,803980E+09	2,803934E+09	4,283230E+08	5,607915E+09	6,036238E+09
2938	2,141448E+08	2,141404E+08	2,803887E+09	2,803972E+09	4,282851E+08	5,607859E+09	6,036144E+09
2939	2,141889E+08	2,141845E+08	2,803928E+09	2,803768E+09	4,283734E+08	5,607697E+09	6,036070E+09
2940	2,141523E+08	2,141742E+08	2,803768E+09	2,803794E+09	4,283265E+08	5,607562E+09	6,035889E+09
2941	2,141828E+08	2,141668E+08	2,803675E+09	2,803739E+09	4,283496E+08	5,607414E+09	6,035763E+09
2942	2,142097E+08	2,142177E+08	2,803679E+09	2,803516E+09	4,284275E+08	5,607196E+09	6,035623E+09
2943	2,141742E+08	2,141966E+08	2,803470E+09	2,803577E+09	4,283707E+08	5,607047E+09	6,035418E+09
2944	2,142236E+08	2,142090E+08	2,803480E+09	2,803449E+09	4,284326E+08	5,606930E+09	6,035362E+09
2945	2,142156E+08	2,142370E+08	2,803483E+09	2,803369E+09	4,284526E+08	5,606852E+09	6,035305E+09
2946	2,141979E+08	2,141949E+08	2,803361E+09	2,803491E+09	4,283928E+08	5,606852E+09	6,035245E+09
2947	2,142407E+08	2,142256E+08	2,803455E+09	2,803371E+09	4,284663E+08	5,606827E+09	6,035293E+09
2948	2,142025E+08	2,142244E+08	2,803442E+09	2,803462E+09	4,284269E+08	5,606904E+09	6,035331E+09
2949	2,142053E+08	2,141901E+08	2,803477E+09	2,803577E+09	4,283953E+08	5,607053E+09	6,035449E+09
2950	2,142259E+08	2,142263E+08	2,803672E+09	2,803490E+09	4,284522E+08	5,607162E+09	6,035614E+09
2951	2,141709E+08	2,141899E+08	2,803623E+09	2,803694E+09	4,283609E+08	5,607317E+09	6,035678E+09
2952	2,141947E+08	2,141723E+08	2,803697E+09	2,803736E+09	4,283670E+08	5,607432E+09	6,035799E+09
2953	2,141937E+08	2,142037E+08	2,803790E+09	2,803701E+09	4,283974E+08	5,607491E+09	6,035888E+09
2954	2,141567E+08	2,141607E+08	2,803687E+09	2,803846E+09	4,283174E+08	5,607534E+09	6,035851E+09
2955	2,141993E+08	2,141841E+08	2,803761E+09	2,803708E+09	4,283833E+08	5,607469E+09	6,035852E+09
2956	2,141762E+08	2,141981E+08	2,803758E+09	2,803675E+09	4,283744E+08	5,607433E+09	6,035807E+09
2957	2,141704E+08	2,141639E+08	2,803646E+09	2,803730E+09	4,283343E+08	5,607375E+09	6,035710E+09
2958	2,142142E+08	2,142086E+08	2,803690E+09	2,803518E+09	4,284227E+08	5,607208E+09	6,035631E+09
2959	2,141754E+08	2,142045E+08	2,803512E+09	2,803539E+09	4,283798E+08	5,607051E+09	6,035431E+09
2960	2,142062E+08	2,141949E+08	2,803391E+09	2,803473E+09	4,284011E+08	5,606864E+09	6,035265E+09
2961	2,142350E+08	2,142483E+08	2,803418E+09	2,803267E+09	4,284833E+08	5,606885E+09	6,035168E+09
2962	2,142021E+08	2,142197E+08	2,803237E+09	2,803322E+09	4,284218E+08	5,606559E+09	6,034981E+09
2963	2,142505E+08	2,142291E+08	2,803218E+09	2,803190E+09	4,284796E+08	5,606407E+09	6,034887E+09
2964	2,142426E+08	2,142590E+08	2,803229E+09	2,803130E+09	4,285016E+08	5,606359E+09	6,034861E+09
2965	2,142239E+08	2,142191E+08	2,803113E+09	2,803270E+09	4,284430E+08	5,606384E+09	6,034827E+09
2966	2,142637E+08	2,142510E+08	2,803254E+09	2,803142E+09	4,285147E+08	5,606396E+09	6,034911E+09
2967	2,142212E+08	2,142513E+08	2,803273E+09	2,803246E+09	4,284725E+08	5,606519E+09	6,034992E+09
2968	2,142220E+08	2,142086E+08	2,803284E+09	2,803378E+09	4,284306E+08	5,606662E+09	6,035092E+09
2969	2,142441E+08	2,142444E+08	2,803468E+09	2,803331E+09	4,284885E+08	5,606799E+09	6,035287E+09
2970	2,141931E+08	2,142044E+08	2,803415E+09	2,803516E+09	4,283976E+08	5,606931E+09	6,035328E+09
2971	2,142179E+08	2,141906E+08	2,803438E+09	2,803516E+09	4,284085E+08	5,606953E+09	6,035362E+09
2972	2,142188E+08	2,142285E+08	2,803549E+09	2,803456E+09	4,284472E+08	5,607005E+09	6,035452E+09
2973	2,141811E+08	2,141866E+08	2,803464E+09	2,803589E+09	4,283677E+08	5,607053E+09	6,035420E+09
2974	2,142212E+08	2,142082E+08	2,803565E+09	2,803442E+09	4,284295E+08	5,607007E+09	6,035436E+09
2975	2,141958E+08	2,142247E+08	2,803547E+09	2,803425E+09	4,284205E+08	5,606972E+09	6,035392E+09
2976	2,141905E+08	2,141870E+08	2,803380E+09	2,803491E+09	4,283775E+08	5,606871E+09	6,035249E+09
2977	2,142383E+08	2,142374E+08	2,803416E+09	2,803301E+09	4,284757E+08	5,606718E+09	6,035193E+09
2978	2,142047E+08	2,142313E+08	2,803257E+09	2,803293E+09	4,284359E+08	5,606550E+09	6,034986E+09

1	14	15	16	17	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	2,142357E+08	2,142202E+08	2,803118E+09	2,803200E+09	4,284558E+08	5,606318E+09	6,034774E+09
2980	2,142652E+08	2,142727E+08	2,803162E+09	2,802999E+09	4,285380E+08	5,606161E+09	6,034699E+09
2981	2,142310E+08	2,142424E+08	2,802975E+09	2,803072E+09	4,284734E+08	5,606047E+09	6,034520E+09
2982	2,142761E+08	2,142523E+08	2,802980E+09	2,802938E+09	4,285283E+08	5,605918E+09	6,034446E+09
2983	2,142646E+08	2,142884E+08	2,802998E+09	2,802888E+09	4,285530E+08	5,605886E+09	6,034439E+09
2984	2,142432E+08	2,142450E+08	2,802882E+09	2,803039E+09	4,284881E+08	5,605921E+09	6,034409E+09
2985	2,142830E+08	2,142769E+08	2,803057E+09	2,802949E+09	4,285599E+08	5,606006E+09	6,034566E+09
2986	2,142436E+08	2,142680E+08	2,803092E+09	2,803054E+09	4,285116E+08	5,606145E+09	6,034657E+09
2987	2,142433E+08	2,142232E+08	2,803053E+09	2,803175E+09	4,284665E+08	5,606228E+09	6,034695E+09
2988	2,142674E+08	2,142621E+08	2,803230E+09	2,803122E+09	4,285295E+08	5,606351E+09	6,034881E+09
2989	2,142168E+08	2,142275E+08	2,803178E+09	2,803294E+09	4,284442E+08	5,606473E+09	6,034917E+09
2990	2,142392E+08	2,142169E+08	2,803242E+09	2,803265E+09	4,284562E+08	5,606507E+09	6,034963E+09
2991	2,142374E+08	2,142572E+08	2,803374E+09	2,803212E+09	4,284946E+08	5,606587E+09	6,035081E+09
2992	2,141985E+08	2,142088E+08	2,803261E+09	2,803365E+09	4,284074E+08	5,606626E+09	6,035033E+09
2993	2,142406E+08	2,142306E+08	2,803344E+09	2,803257E+09	4,284712E+08	5,606600E+09	6,035072E+09
2994	2,142213E+08	2,142438E+08	2,803309E+09	2,803221E+09	4,284651E+08	5,606530E+09	6,034995E+09
2995	2,142182E+08	2,142104E+08	2,803081E+09	2,803244E+09	4,284287E+08	5,606325E+09	6,034754E+09
2996	2,142696E+08	2,142642E+08	2,803130E+09	2,803026E+09	4,285338E+08	5,606156E+09	6,034690E+09
2997	2,142367E+08	2,142590E+08	2,802987E+09	2,803004E+09	4,284957E+08	5,605991E+09	6,034487E+09
2998	2,142644E+08	2,142459E+08	2,802867E+09	2,802899E+09	4,285102E+08	5,605765E+09	6,034275E+09
2999	2,142892E+08	2,143007E+08	2,802912E+09	2,802725E+09	4,285899E+08	5,605637E+09	6,034227E+09