

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	8,028969E+06	8,026623E+06	2,797943E+09	2,797751E+09	1,605559E+07	5,595694E+09	5,611750E+09
-2999	8,022883E+06	8,023697E+06	2,797707E+09	2,797830E+09	1,604658E+07	5,595537E+09	5,611584E+09
-2998	8,028632E+06	8,028529E+06	2,797644E+09	2,797654E+09	1,605716E+07	5,595298E+09	5,611355E+09
-2997	8,026830E+06	8,025884E+06	2,797670E+09	2,797471E+09	1,605271E+07	5,595141E+09	5,611194E+09
-2996	8,024687E+06	8,024815E+06	2,797402E+09	2,797582E+09	1,604950E+07	5,594984E+09	5,611033E+09
-2995	8,031452E+06	8,029824E+06	2,797457E+09	2,797342E+09	1,606128E+07	5,594800E+09	5,610861E+09
-2994	8,025349E+06	8,025983E+06	2,797371E+09	2,797317E+09	1,605133E+07	5,594688E+09	5,610739E+09
-2993	8,027171E+06	8,026778E+06	2,797205E+09	2,797410E+09	1,605395E+07	5,594615E+09	5,610669E+09
-2992	8,029944E+06	8,030751E+06	2,797399E+09	2,797223E+09	1,606069E+07	5,594622E+09	5,610682E+09
-2991	8,025095E+06	8,024170E+06	2,797320E+09	2,797396E+09	1,604926E+07	5,594716E+09	5,610765E+09
-2990	8,028951E+06	8,028493E+06	2,797345E+09	2,797436E+09	1,605744E+07	5,594782E+09	5,610839E+09
-2989	8,028782E+06	8,027732E+06	2,797570E+09	2,797387E+09	1,605651E+07	5,594957E+09	5,611014E+09
-2988	8,025266E+06	8,023623E+06	2,797472E+09	2,797676E+09	1,604889E+07	5,595148E+09	5,611196E+09
-2987	8,028917E+06	8,031032E+06	2,797656E+09	2,797606E+09	1,605995E+07	5,595262E+09	5,611322E+09
-2986	8,025795E+06	8,024827E+06	2,797777E+09	2,797641E+09	1,605062E+07	5,595418E+09	5,611468E+09
-2985	8,023693E+06	8,025305E+06	2,797649E+09	2,797850E+09	1,604900E+07	5,595499E+09	5,611548E+09
-2984	8,029605E+06	8,029045E+06	2,797832E+09	2,797691E+09	1,605865E+07	5,595523E+09	5,611581E+09
-2983	8,024837E+06	8,022628E+06	2,797741E+09	2,797765E+09	1,604746E+07	5,595506E+09	5,611554E+09
-2982	8,026123E+06	8,027218E+06	2,797587E+09	2,797750E+09	1,605334E+07	5,595337E+09	5,611391E+09
-2981	8,029778E+06	8,027222E+06	2,797716E+09	2,797509E+09	1,605700E+07	5,595224E+09	5,611281E+09
-2980	8,023406E+06	8,024263E+06	2,797490E+09	2,797605E+09	1,604767E+07	5,595095E+09	5,611142E+09
-2979	8,029375E+06	8,029472E+06	2,797461E+09	2,797428E+09	1,605885E+07	5,594889E+09	5,610948E+09
-2978	8,027489E+06	8,026890E+06	2,797477E+09	2,797259E+09	1,605438E+07	5,594736E+09	5,610791E+09
-2977	8,024960E+06	8,025463E+06	2,797174E+09	2,797384E+09	1,605042E+07	5,594558E+09	5,610608E+09
-2976	8,031656E+06	8,031055E+06	2,797241E+09	2,797155E+09	1,606271E+07	5,594396E+09	5,610459E+09
-2975	8,026064E+06	8,026550E+06	2,797177E+09	2,797129E+09	1,605261E+07	5,594306E+09	5,610358E+09
-2974	8,027618E+06	8,027030E+06	2,797003E+09	2,797201E+09	1,605465E+07	5,594204E+09	5,610259E+09
-2973	8,030883E+06	8,030790E+06	2,797227E+09	2,797028E+09	1,606167E+07	5,594255E+09	5,610317E+09
-2972	8,025977E+06	8,024191E+06	2,797150E+09	2,797239E+09	1,605017E+07	5,594389E+09	5,610439E+09
-2971	8,029342E+06	8,029661E+06	2,797207E+09	2,797281E+09	1,605900E+07	5,594488E+09	5,610547E+09
-2970	8,028820E+06	8,028810E+06	2,797432E+09	2,797237E+09	1,605763E+07	5,594669E+09	5,610727E+09
-2969	8,024713E+06	8,024239E+06	2,797312E+09	2,797528E+09	1,604895E+07	5,594840E+09	5,610889E+09
-2968	8,029116E+06	8,031446E+06	2,797505E+09	2,797469E+09	1,606056E+07	5,594974E+09	5,611035E+09
-2967	8,027169E+06	8,024410E+06	2,797615E+09	2,797496E+09	1,605158E+07	5,595111E+09	5,611163E+09
-2966	8,024829E+06	8,025081E+06	2,797436E+09	2,797667E+09	1,604991E+07	5,595104E+09	5,611153E+09
-2965	8,031033E+06	8,029219E+06	2,797620E+09	2,797487E+09	1,606025E+07	5,595108E+09	5,611168E+09
-2964	8,025331E+06	8,023487E+06	2,797530E+09	2,797558E+09	1,604882E+07	5,595088E+09	5,611137E+09
-2963	8,026241E+06	8,028799E+06	2,797418E+09	2,797520E+09	1,605504E+07	5,594939E+09	5,610994E+09
-2962	8,029722E+06	8,028435E+06	2,797547E+09	2,797287E+09	1,605816E+07	5,594834E+09	5,610893E+09
-2961	8,023344E+06	8,024757E+06	2,797286E+09	2,797402E+09	1,604810E+07	5,594688E+09	5,610736E+09
-2960	8,030075E+06	8,029987E+06	2,797243E+09	2,797246E+09	1,606006E+07	5,594488E+09	5,610548E+09
-2959	8,028745E+06	8,027301E+06	2,797241E+09	2,797069E+09	1,605605E+07	5,594311E+09	5,610367E+09
-2958	8,025683E+06	8,025892E+06	2,796909E+09	2,797155E+09	1,605157E+07	5,594064E+09	5,610115E+09
-2957	8,032426E+06	8,031538E+06	2,797011E+09	2,796916E+09	1,606396E+07	5,593926E+09	5,609990E+09
-2956	8,026676E+06	8,026941E+06	2,796979E+09	2,796919E+09	1,605362E+07	5,593898E+09	5,609952E+09
-2955	8,028282E+06	8,027972E+06	2,796861E+09	2,797003E+09	1,605625E+07	5,593863E+09	5,609919E+09
-2954	8,031312E+06	8,031653E+06	2,797089E+09	2,796866E+09	1,606296E+07	5,593955E+09	5,610018E+09
-2953	8,026059E+06	8,024820E+06	2,796998E+09	2,797103E+09	1,605088E+07	5,594100E+09	5,610151E+09
-2952	8,029277E+06	8,030641E+06	2,797065E+09	2,797159E+09	1,605992E+07	5,594224E+09	5,610284E+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	8,029536E+06	8,028894E+06	2,797291E+09	2,797110E+09	1,605843E+07	5,594401E+09	5,610460E+09
-2950	8,025163E+06	8,024094E+06	2,797135E+09	2,797364E+09	1,604926E+07	5,594499E+09	5,610548E+09
-2949	8,030267E+06	8,030968E+06	2,797319E+09	2,797294E+09	1,606123E+07	5,594613E+09	5,610674E+09
-2948	8,028198E+06	8,024425E+06	2,797415E+09	2,797324E+09	1,605262E+07	5,594739E+09	5,610791E+09
-2947	8,025381E+06	8,026428E+06	2,797257E+09	2,797460E+09	1,605181E+07	5,594717E+09	5,610769E+09
-2946	8,031029E+06	8,030603E+06	2,797442E+09	2,797276E+09	1,606163E+07	5,594718E+09	5,610779E+09
-2945	8,024826E+06	8,024565E+06	2,797344E+09	2,797349E+09	1,604939E+07	5,594693E+09	5,610742E+09
-2944	8,026385E+06	8,029523E+06	2,797242E+09	2,797332E+09	1,605591E+07	5,594574E+09	5,610630E+09
-2943	8,030922E+06	8,028502E+06	2,797352E+09	2,797107E+09	1,605942E+07	5,594459E+09	5,610518E+09
-2942	8,024425E+06	8,024875E+06	2,797035E+09	2,797190E+09	1,604930E+07	5,594226E+09	5,610275E+09
-2941	8,031478E+06	8,030257E+06	2,796989E+09	2,797021E+09	1,606173E+07	5,594010E+09	5,610072E+09
-2940	8,029426E+06	8,028243E+06	2,797000E+09	2,796843E+09	1,605767E+07	5,593843E+09	5,609900E+09
-2939	8,026110E+06	8,027245E+06	2,796722E+09	2,796907E+09	1,605336E+07	5,593629E+09	5,609683E+09
-2938	8,032485E+06	8,032423E+06	2,796843E+09	2,796697E+09	1,606491E+07	5,593540E+09	5,609605E+09
-2937	8,026815E+06	8,027147E+06	2,796802E+09	2,796738E+09	1,605396E+07	5,593540E+09	5,609594E+09
-2936	8,028829E+06	8,028362E+06	2,796695E+09	2,796865E+09	1,605719E+07	5,593560E+09	5,609617E+09
-2935	8,032354E+06	8,031890E+06	2,796916E+09	2,796739E+09	1,606424E+07	5,593655E+09	5,609719E+09
-2934	8,026628E+06	8,024975E+06	2,796796E+09	2,796944E+09	1,605160E+07	5,593740E+09	5,609791E+09
-2933	8,030073E+06	8,030628E+06	2,796884E+09	2,796988E+09	1,606070E+07	5,593872E+09	5,609933E+09
-2932	8,030332E+06	8,028836E+06	2,797119E+09	2,796945E+09	1,605917E+07	5,594065E+09	5,610124E+09
-2931	8,025865E+06	8,025005E+06	2,796992E+09	2,797174E+09	1,605087E+07	5,594166E+09	5,610217E+09
-2930	8,030559E+06	8,031891E+06	2,797167E+09	2,797115E+09	1,606245E+07	5,594282E+09	5,610344E+09
-2929	8,027922E+06	8,025582E+06	2,797248E+09	2,797148E+09	1,605350E+07	5,594396E+09	5,610450E+09
-2928	8,025088E+06	8,027854E+06	2,797110E+09	2,797292E+09	1,605294E+07	5,594402E+09	5,610455E+09
-2927	8,031489E+06	8,031062E+06	2,797287E+09	2,797106E+09	1,606255E+07	5,594393E+09	5,610456E+09
-2926	8,025303E+06	8,024528E+06	2,797140E+09	2,797152E+09	1,604983E+07	5,594292E+09	5,610342E+09
-2925	8,027841E+06	8,028958E+06	2,797015E+09	2,797129E+09	1,605680E+07	5,594144E+09	5,610201E+09
-2924	8,032141E+06	8,028639E+06	2,797101E+09	2,796904E+09	1,606078E+07	5,594004E+09	5,610065E+09
-2923	8,025291E+06	8,026289E+06	2,796801E+09	2,796943E+09	1,605158E+07	5,593744E+09	5,609795E+09
-2922	8,031637E+06	8,031459E+06	2,796759E+09	2,796773E+09	1,606310E+07	5,593531E+09	5,609595E+09
-2921	8,029206E+06	8,029269E+06	2,796782E+09	2,796607E+09	1,605847E+07	5,593389E+09	5,609448E+09
-2920	8,026543E+06	8,027776E+06	2,796543E+09	2,796706E+09	1,605432E+07	5,593249E+09	5,609303E+09
-2919	8,033593E+06	8,032425E+06	2,796667E+09	2,796530E+09	1,606602E+07	5,593198E+09	5,609264E+09
-2918	8,027848E+06	8,027151E+06	2,796599E+09	2,796568E+09	1,605500E+07	5,593167E+09	5,609222E+09
-2917	8,029887E+06	8,028588E+06	2,796502E+09	2,796699E+09	1,605848E+07	5,593202E+09	5,609260E+09
-2916	8,032752E+06	8,032645E+06	2,796738E+09	2,796582E+09	1,606540E+07	5,593320E+09	5,609385E+09
-2915	8,026903E+06	8,026262E+06	2,796659E+09	2,796751E+09	1,605316E+07	5,593410E+09	5,609463E+09
-2914	8,029880E+06	8,031284E+06	2,796745E+09	2,796812E+09	1,606116E+07	5,593557E+09	5,609618E+09
-2913	8,030295E+06	8,029156E+06	2,796961E+09	2,796785E+09	1,605945E+07	5,593746E+09	5,609806E+09
-2912	8,026068E+06	8,025727E+06	2,796844E+09	2,797028E+09	1,605179E+07	5,593872E+09	5,609924E+09
-2911	8,031163E+06	8,032288E+06	2,797003E+09	2,796970E+09	1,606345E+07	5,593973E+09	5,610036E+09
-2910	8,028294E+06	8,025848E+06	2,797051E+09	2,796966E+09	1,605414E+07	5,594018E+09	5,610072E+09
-2909	8,026062E+06	8,027760E+06	2,796918E+09	2,797101E+09	1,605382E+07	5,594019E+09	5,610073E+09
-2908	8,032545E+06	8,030899E+06	2,797085E+09	2,796920E+09	1,606344E+07	5,594005E+09	5,610068E+09
-2907	8,026471E+06	8,025415E+06	2,796941E+09	2,796928E+09	1,605189E+07	5,593869E+09	5,609921E+09
-2906	8,028610E+06	8,029696E+06	2,796795E+09	2,796908E+09	1,605831E+07	5,593703E+09	5,609761E+09
-2905	8,032137E+06	8,029894E+06	2,796862E+09	2,796675E+09	1,606203E+07	5,593536E+09	5,609598E+09
-2904	8,025333E+06	8,027664E+06	2,796598E+09	2,796717E+09	1,605300E+07	5,593315E+09	5,609368E+09
-2903	8,032181E+06	8,031980E+06	2,796562E+09	2,796559E+09	1,606416E+07	5,593121E+09	5,609185E+09

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	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2902	8,029688E+06	8,029239E+06	2,796560E+09	2,796391E+09	1,605893E+07	5,592950E+09	5,609009E+09
-2901	8,028011E+06	8,027332E+06	2,796329E+09	2,796511E+09	1,605534E+07	5,592840E+09	5,608895E+09
-2900	8,034502E+06	8,032732E+06	2,796452E+09	2,796360E+09	1,606723E+07	5,592812E+09	5,608879E+09
-2899	8,028599E+06	8,028566E+06	2,796415E+09	2,796368E+09	1,605717E+07	5,592782E+09	5,608840E+09
-2898	8,029755E+06	8,029698E+06	2,796335E+09	2,796510E+09	1,605945E+07	5,592845E+09	5,608904E+09
-2897	8,032289E+06	8,033521E+06	2,796579E+09	2,796407E+09	1,606581E+07	5,592986E+09	5,609051E+09
-2896	8,027068E+06	8,026802E+06	2,796534E+09	2,796600E+09	1,605387E+07	5,593134E+09	5,609188E+09
-2895	8,030631E+06	8,031319E+06	2,796604E+09	2,796681E+09	1,606195E+07	5,593284E+09	5,609346E+09
-2894	8,031054E+06	8,029110E+06	2,796781E+09	2,796637E+09	1,606016E+07	5,593419E+09	5,609479E+09
-2893	8,027098E+06	8,025928E+06	2,796672E+09	2,796868E+09	1,605303E+07	5,593539E+09	5,609592E+09
-2892	8,031588E+06	8,032727E+06	2,796836E+09	2,796807E+09	1,606432E+07	5,593642E+09	5,609707E+09
-2891	8,028909E+06	8,026937E+06	2,796900E+09	2,796758E+09	1,605585E+07	5,593658E+09	5,609714E+09
-2890	8,026274E+06	8,028136E+06	2,796742E+09	2,796898E+09	1,605441E+07	5,593640E+09	5,609694E+09
-2889	8,032738E+06	8,031320E+06	2,796870E+09	2,796723E+09	1,606406E+07	5,593593E+09	5,609657E+09
-2888	8,026877E+06	8,026557E+06	2,796728E+09	2,796726E+09	1,605343E+07	5,593454E+09	5,609507E+09
-2887	8,029293E+06	8,030402E+06	2,796560E+09	2,796699E+09	1,605970E+07	5,593260E+09	5,609319E+09
-2886	8,032452E+06	8,030462E+06	2,796606E+09	2,796435E+09	1,606291E+07	5,593041E+09	5,609104E+09
-2885	8,026464E+06	8,027673E+06	2,796367E+09	2,796475E+09	1,605414E+07	5,592841E+09	5,608896E+09
-2884	8,033120E+06	8,031999E+06	2,796344E+09	2,796344E+09	1,606512E+07	5,592688E+09	5,608753E+09
-2883	8,030797E+06	8,030346E+06	2,796363E+09	2,796162E+09	1,606114E+07	5,592525E+09	5,608586E+09
-2882	8,028549E+06	8,028284E+06	2,796139E+09	2,796311E+09	1,605683E+07	5,592449E+09	5,608506E+09
-2881	8,034118E+06	8,034194E+06	2,796266E+09	2,796178E+09	1,606831E+07	5,592444E+09	5,608513E+09
-2880	8,028546E+06	8,029832E+06	2,796274E+09	2,796202E+09	1,605838E+07	5,592476E+09	5,608534E+09
-2879	8,030074E+06	8,029914E+06	2,796191E+09	2,796362E+09	1,605999E+07	5,592553E+09	5,608613E+09
-2878	8,032792E+06	8,032954E+06	2,796395E+09	2,796252E+09	1,606575E+07	5,592648E+09	5,608713E+09
-2877	8,028528E+06	8,026102E+06	2,796350E+09	2,796449E+09	1,605463E+07	5,592799E+09	5,608854E+09
-2876	8,031467E+06	8,031469E+06	2,796416E+09	2,796536E+09	1,606294E+07	5,592952E+09	5,609015E+09
-2875	8,031859E+06	8,030367E+06	2,796611E+09	2,796446E+09	1,606223E+07	5,593058E+09	5,609120E+09
-2874	8,027182E+06	8,026923E+06	2,796515E+09	2,796677E+09	1,605411E+07	5,593191E+09	5,609245E+09
-2873	8,031293E+06	8,033477E+06	2,796670E+09	2,796620E+09	1,606477E+07	5,593290E+09	5,609355E+09
-2872	8,029266E+06	8,027659E+06	2,796751E+09	2,796583E+09	1,605693E+07	5,593334E+09	5,609391E+09
-2871	8,027036E+06	8,028470E+06	2,796556E+09	2,796729E+09	1,605551E+07	5,593285E+09	5,609341E+09
-2870	8,033288E+06	8,031582E+06	2,796630E+09	2,796525E+09	1,606487E+07	5,593155E+09	5,609220E+09
-2869	8,027850E+06	8,027218E+06	2,796493E+09	2,796505E+09	1,605507E+07	5,592998E+09	5,609053E+09
-2868	8,029890E+06	8,031022E+06	2,796335E+09	2,796471E+09	1,606091E+07	5,592806E+09	5,608867E+09
-2867	8,033176E+06	8,031686E+06	2,796400E+09	2,796171E+09	1,606486E+07	5,592571E+09	5,608636E+09
-2866	8,027048E+06	8,028069E+06	2,796164E+09	2,796236E+09	1,605512E+07	5,592400E+09	5,608455E+09
-2865	8,033192E+06	8,032647E+06	2,796130E+09	2,796136E+09	1,606584E+07	5,592266E+09	5,608332E+09
-2864	8,031140E+06	8,031557E+06	2,796177E+09	2,795980E+09	1,606270E+07	5,592157E+09	5,608220E+09
-2863	8,029066E+06	8,029031E+06	2,795947E+09	2,796143E+09	1,605810E+07	5,592090E+09	5,608148E+09
-2862	8,034284E+06	8,034457E+06	2,796056E+09	2,796000E+09	1,606874E+07	5,592055E+09	5,608124E+09
-2861	8,029846E+06	8,029484E+06	2,796082E+09	2,796026E+09	1,605933E+07	5,592109E+09	5,608168E+09
-2860	8,031106E+06	8,029631E+06	2,796007E+09	2,796203E+09	1,606074E+07	5,592211E+09	5,608271E+09
-2859	8,034003E+06	8,033726E+06	2,796224E+09	2,796068E+09	1,606773E+07	5,592291E+09	5,608359E+09
-2858	8,028997E+06	8,026898E+06	2,796192E+09	2,796271E+09	1,605589E+07	5,592463E+09	5,608519E+09
-2857	8,030833E+06	8,032940E+06	2,796268E+09	2,796368E+09	1,606377E+07	5,592636E+09	5,608700E+09
-2856	8,031689E+06	8,031734E+06	2,796504E+09	2,796287E+09	1,606342E+07	5,592791E+09	5,608855E+09
-2855	8,027268E+06	8,027399E+06	2,796385E+09	2,796528E+09	1,605467E+07	5,592913E+09	5,608967E+09
-2854	8,031685E+06	8,033036E+06	2,796477E+09	2,796461E+09	1,606472E+07	5,592937E+09	5,609002E+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							
-2853	8,030695E+06	8,027352E+06	2,796528E+09	2,796409E+09	1,605805E+07	5,592937E+09	5,608995E+09
-2852	8,027974E+06	8,028761E+06	2,796314E+09	2,796538E+09	1,605674E+07	5,592852E+09	5,608908E+09
-2851	8,034241E+06	8,032850E+06	2,796389E+09	2,796273E+09	1,606709E+07	5,592662E+09	5,608729E+09
-2850	8,028232E+06	8,028210E+06	2,796273E+09	2,796243E+09	1,605644E+07	5,592516E+09	5,608573E+09
-2849	8,029907E+06	8,031771E+06	2,796123E+09	2,796225E+09	1,606168E+07	5,592348E+09	5,608410E+09
-2848	8,033739E+06	8,032594E+06	2,796220E+09	2,795957E+09	1,606633E+07	5,592177E+09	5,608243E+09
-2847	8,027994E+06	8,028564E+06	2,795968E+09	2,796053E+09	1,605656E+07	5,592021E+09	5,608077E+09
-2846	8,033678E+06	8,032976E+06	2,795898E+09	2,795952E+09	1,606665E+07	5,591850E+09	5,607917E+09
-2845	8,032191E+06	8,032097E+06	2,795959E+09	2,795796E+09	1,606429E+07	5,591755E+09	5,607819E+09
-2844	8,029805E+06	8,029414E+06	2,795748E+09	2,795960E+09	1,605922E+07	5,591708E+09	5,607767E+09
-2843	8,035016E+06	8,035159E+06	2,795863E+09	2,795785E+09	1,607017E+07	5,591647E+09	5,607718E+09
-2842	8,030570E+06	8,029599E+06	2,795902E+09	2,795829E+09	1,606017E+07	5,591731E+09	5,607791E+09
-2841	8,031055E+06	8,030385E+06	2,795827E+09	2,796026E+09	1,606144E+07	5,591854E+09	5,607915E+09
-2840	8,034129E+06	8,034999E+06	2,796086E+09	2,795913E+09	1,606913E+07	5,591999E+09	5,608069E+09
-2839	8,029170E+06	8,027850E+06	2,796061E+09	2,796131E+09	1,605702E+07	5,592192E+09	5,608249E+09
-2838	8,030665E+06	8,033147E+06	2,796111E+09	2,796218E+09	1,606381E+07	5,592329E+09	5,608393E+09
-2837	8,032827E+06	8,031329E+06	2,796342E+09	2,796140E+09	1,606416E+07	5,592481E+09	5,608545E+09
-2836	8,028317E+06	8,027179E+06	2,796202E+09	2,796376E+09	1,605550E+07	5,592578E+09	5,608633E+09
-2835	8,032983E+06	8,033623E+06	2,796265E+09	2,796259E+09	1,606661E+07	5,592525E+09	5,608591E+09
-2834	8,031387E+06	8,028295E+06	2,796315E+09	2,796189E+09	1,605968E+07	5,592504E+09	5,608563E+09
-2833	8,027705E+06	8,030204E+06	2,796105E+09	2,796305E+09	1,605791E+07	5,592411E+09	5,608468E+09
-2832	8,034362E+06	8,034185E+06	2,796221E+09	2,796046E+09	1,606855E+07	5,592267E+09	5,608335E+09
-2831	8,028590E+06	8,028779E+06	2,796092E+09	2,796032E+09	1,605737E+07	5,592123E+09	5,608180E+09
-2830	8,030359E+06	8,031447E+06	2,795894E+09	2,796022E+09	1,606181E+07	5,591917E+09	5,607979E+09
-2829	8,035048E+06	8,032651E+06	2,795975E+09	2,795766E+09	1,606770E+07	5,591741E+09	5,607809E+09
-2828	8,029031E+06	8,029030E+06	2,795721E+09	2,795861E+09	1,605806E+07	5,591582E+09	5,607640E+09
-2827	8,034615E+06	8,034129E+06	2,795658E+09	2,795717E+09	1,606874E+07	5,591374E+09	5,607443E+09
-2826	8,032817E+06	8,032856E+06	2,795745E+09	2,795559E+09	1,606567E+07	5,591304E+09	5,607370E+09
-2825	8,029952E+06	8,030016E+06	2,795552E+09	2,795744E+09	1,605997E+07	5,591296E+09	5,607356E+09
-2824	8,035449E+06	8,035992E+06	2,795712E+09	2,795603E+09	1,607144E+07	5,591315E+09	5,607387E+09
-2823	8,031103E+06	8,030224E+06	2,795754E+09	2,795678E+09	1,606133E+07	5,591432E+09	5,607493E+09
-2822	8,031007E+06	8,030877E+06	2,795666E+09	2,795883E+09	1,606188E+07	5,591548E+09	5,607610E+09
-2821	8,034853E+06	8,035379E+06	2,795937E+09	2,795779E+09	1,607023E+07	5,591716E+09	5,607786E+09
-2820	8,029920E+06	8,027951E+06	2,795920E+09	2,795994E+09	1,605787E+07	5,591913E+09	5,607971E+09
-2819	8,031575E+06	8,033300E+06	2,795943E+09	2,796042E+09	1,606488E+07	5,591985E+09	5,608050E+09
-2818	8,033820E+06	8,031099E+06	2,796154E+09	2,795957E+09	1,606492E+07	5,592111E+09	5,608176E+09
-2817	8,028442E+06	8,027937E+06	2,795992E+09	2,796185E+09	1,605638E+07	5,592176E+09	5,608233E+09
-2816	8,033290E+06	8,034862E+06	2,796078E+09	2,796061E+09	1,606815E+07	5,592139E+09	5,608207E+09
-2815	8,031543E+06	8,029524E+06	2,796126E+09	2,795984E+09	1,606107E+07	5,592110E+09	5,608171E+09
-2814	8,027780E+06	8,030515E+06	2,795898E+09	2,796086E+09	1,605830E+07	5,591983E+09	5,608041E+09
-2813	8,035528E+06	8,034072E+06	2,796008E+09	2,795842E+09	1,606960E+07	5,591850E+09	5,607920E+09
-2812	8,029856E+06	8,028832E+06	2,795873E+09	2,795835E+09	1,605869E+07	5,591708E+09	5,607767E+09
-2811	8,031641E+06	8,032073E+06	2,795649E+09	2,795792E+09	1,606371E+07	5,591442E+09	5,607505E+09
-2810	8,035723E+06	8,033721E+06	2,795741E+09	2,795534E+09	1,606944E+07	5,591275E+09	5,607344E+09
-2809	8,028967E+06	8,030518E+06	2,795504E+09	2,795627E+09	1,605948E+07	5,591131E+09	5,607191E+09
-2808	8,034766E+06	8,035307E+06	2,795487E+09	2,795500E+09	1,607007E+07	5,590987E+09	5,607057E+09
-2807	8,033188E+06	8,033402E+06	2,795573E+09	2,795370E+09	1,606659E+07	5,590942E+09	5,607009E+09
-2806	8,030316E+06	8,029650E+06	2,795354E+09	2,795568E+09	1,605997E+07	5,590922E+09	5,606982E+09
-2805	8,036417E+06	8,035979E+06	2,795515E+09	2,795454E+09	1,607240E+07	5,590969E+09	5,607042E+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							
-2804	8,032052E+06	8,030509E+06	2,795577E+09	2,795533E+09	1,606256E+07	5,591111E+09	5,607173E+09
-2803	8,031710E+06	8,031685E+06	2,795494E+09	2,795702E+09	1,606339E+07	5,591196E+09	5,607259E+09
-2802	8,035483E+06	8,035657E+06	2,795781E+09	2,795601E+09	1,607114E+07	5,591382E+09	5,607453E+09
-2801	8,030165E+06	8,028443E+06	2,795762E+09	2,795821E+09	1,605861E+07	5,591583E+09	5,607642E+09
-2800	8,032050E+06	8,033946E+06	2,795798E+09	2,795881E+09	1,606600E+07	5,591680E+09	5,607746E+09
-2799	8,034196E+06	8,031905E+06	2,795987E+09	2,795795E+09	1,606610E+07	5,591782E+09	5,607848E+09
-2798	8,028188E+06	8,028735E+06	2,795801E+09	2,796000E+09	1,605692E+07	5,591800E+09	5,607857E+09
-2797	8,033820E+06	8,035449E+06	2,795886E+09	2,795874E+09	1,606927E+07	5,591761E+09	5,607830E+09
-2796	8,032226E+06	8,029832E+06	2,795938E+09	2,795785E+09	1,606206E+07	5,591723E+09	5,607785E+09
-2795	8,028893E+06	8,030661E+06	2,795679E+09	2,795853E+09	1,605955E+07	5,591532E+09	5,607592E+09
-2794	8,036595E+06	8,034054E+06	2,795772E+09	2,795611E+09	1,607065E+07	5,591383E+09	5,607453E+09
-2793	8,030247E+06	8,029801E+06	2,795625E+09	2,795607E+09	1,606005E+07	5,591232E+09	5,607292E+09
-2792	8,032176E+06	8,033379E+06	2,795435E+09	2,795570E+09	1,606555E+07	5,591005E+09	5,607070E+09
-2791	8,035878E+06	8,035013E+06	2,795532E+09	2,795315E+09	1,607089E+07	5,590847E+09	5,606918E+09
-2790	8,029216E+06	8,030724E+06	2,795288E+09	2,795408E+09	1,605994E+07	5,590695E+09	5,606755E+09
-2789	8,035930E+06	8,035083E+06	2,795270E+09	2,795310E+09	1,607101E+07	5,590580E+09	5,606651E+09
-2788	8,034529E+06	8,033347E+06	2,795368E+09	2,795195E+09	1,606788E+07	5,590563E+09	5,606631E+09
-2787	8,031527E+06	8,030096E+06	2,795149E+09	2,795371E+09	1,606162E+07	5,590520E+09	5,606582E+09
-2786	8,036876E+06	8,036811E+06	2,795341E+09	2,795268E+09	1,607369E+07	5,590609E+09	5,606683E+09
-2785	8,032004E+06	8,031700E+06	2,795432E+09	2,795358E+09	1,606370E+07	5,590791E+09	5,606854E+09
-2784	8,031711E+06	8,032685E+06	2,795387E+09	2,795542E+09	1,606440E+07	5,590929E+09	5,606993E+09
-2783	8,035543E+06	8,036068E+06	2,795651E+09	2,795460E+09	1,607161E+07	5,591111E+09	5,607183E+09
-2782	8,030245E+06	8,028386E+06	2,795586E+09	2,795671E+09	1,605863E+07	5,591258E+09	5,607316E+09
-2781	8,032663E+06	8,034092E+06	2,795597E+09	2,795737E+09	1,606675E+07	5,591333E+09	5,607400E+09
-2780	8,035024E+06	8,032341E+06	2,795790E+09	2,795628E+09	1,606736E+07	5,591418E+09	5,607485E+09
-2779	8,028972E+06	8,029363E+06	2,795592E+09	2,795774E+09	1,605834E+07	5,591366E+09	5,607424E+09
-2778	8,034653E+06	8,035495E+06	2,795689E+09	2,795643E+09	1,607015E+07	5,591332E+09	5,607402E+09
-2777	8,032779E+06	8,030450E+06	2,795737E+09	2,795561E+09	1,606323E+07	5,591298E+09	5,607361E+09
-2776	8,029667E+06	8,031499E+06	2,795492E+09	2,795642E+09	1,606117E+07	5,591135E+09	5,607196E+09
-2775	8,036869E+06	8,035236E+06	2,795566E+09	2,795412E+09	1,607210E+07	5,590978E+09	5,607050E+09
-2774	8,030190E+06	8,030825E+06	2,795400E+09	2,795392E+09	1,606102E+07	5,590792E+09	5,606853E+09
-2773	8,032897E+06	8,033917E+06	2,795209E+09	2,795365E+09	1,606681E+07	5,590574E+09	5,606641E+09
-2772	8,036804E+06	8,035252E+06	2,795313E+09	2,795106E+09	1,607206E+07	5,590420E+09	5,606492E+09
-2771	8,030490E+06	8,030616E+06	2,795049E+09	2,795169E+09	1,606111E+07	5,590219E+09	5,606280E+09
-2770	8,036894E+06	8,035100E+06	2,795041E+09	2,795087E+09	1,607199E+07	5,590128E+09	5,606200E+09
-2769	8,034801E+06	8,034449E+06	2,795159E+09	2,794992E+09	1,606925E+07	5,590151E+09	5,606221E+09
-2768	8,031766E+06	8,031560E+06	2,795001E+09	2,795188E+09	1,606333E+07	5,590189E+09	5,606252E+09
-2767	8,036552E+06	8,038128E+06	2,795210E+09	2,795108E+09	1,607468E+07	5,590318E+09	5,606392E+09
-2766	8,032012E+06	8,031857E+06	2,795291E+09	2,795207E+09	1,606387E+07	5,590498E+09	5,606562E+09
-2765	8,032436E+06	8,032471E+06	2,795227E+09	2,795418E+09	1,606491E+07	5,590645E+09	5,606710E+09
-2764	8,036613E+06	8,035814E+06	2,795474E+09	2,795329E+09	1,607243E+07	5,590803E+09	5,606876E+09
-2763	8,031247E+06	8,028711E+06	2,795384E+09	2,795488E+09	1,605996E+07	5,590872E+09	5,606932E+09
-2762	8,033243E+06	8,034666E+06	2,795405E+09	2,795534E+09	1,606791E+07	5,590939E+09	5,607007E+09
-2761	8,035264E+06	8,033374E+06	2,795613E+09	2,795419E+09	1,606864E+07	5,591032E+09	5,607101E+09
-2760	8,029470E+06	8,030287E+06	2,795447E+09	2,795567E+09	1,605976E+07	5,591014E+09	5,607074E+09
-2759	8,034848E+06	8,035916E+06	2,795514E+09	2,795452E+09	1,607076E+07	5,590966E+09	5,607037E+09
-2758	8,033024E+06	8,030726E+06	2,795517E+09	2,795365E+09	1,606375E+07	5,590882E+09	5,606946E+09
-2757	8,030404E+06	8,031977E+06	2,795248E+09	2,795455E+09	1,606238E+07	5,590703E+09	5,606765E+09
-2756	8,037702E+06	8,035936E+06	2,795323E+09	2,795204E+09	1,607364E+07	5,590528E+09	5,606601E+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							
-2755	8,031199E+06	8,031512E+06	2,795144E+09	2,795135E+09	1,606271E+07	5,590278E+09	5,606341E+09
-2754	8,034060E+06	8,033987E+06	2,794968E+09	2,795107E+09	1,606805E+07	5,590076E+09	5,606144E+09
-2753	8,037461E+06	8,035978E+06	2,795084E+09	2,794868E+09	1,607344E+07	5,589952E+09	5,606025E+09
-2752	8,031304E+06	8,031643E+06	2,794868E+09	2,794950E+09	1,606295E+07	5,589818E+09	5,605881E+09
-2751	8,036613E+06	8,036558E+06	2,794876E+09	2,794902E+09	1,607317E+07	5,589778E+09	5,605851E+09
-2750	8,034439E+06	8,035548E+06	2,795003E+09	2,794822E+09	1,606999E+07	5,589825E+09	5,605895E+09
-2749	8,032076E+06	8,032085E+06	2,794855E+09	2,795051E+09	1,606416E+07	5,589906E+09	5,605971E+09
-2748	8,037289E+06	8,038063E+06	2,795061E+09	2,794980E+09	1,607535E+07	5,590041E+09	5,606116E+09
-2747	8,033317E+06	8,031242E+06	2,795095E+09	2,795042E+09	1,606456E+07	5,590137E+09	5,606202E+09
-2746	8,033461E+06	8,032098E+06	2,795019E+09	2,795244E+09	1,606556E+07	5,590263E+09	5,606329E+09
-2745	8,037073E+06	8,036536E+06	2,795270E+09	2,795148E+09	1,607361E+07	5,590417E+09	5,606491E+09
-2744	8,031603E+06	8,030073E+06	2,795230E+09	2,795290E+09	1,606168E+07	5,590519E+09	5,606581E+09
-2743	8,032950E+06	8,035890E+06	2,795262E+09	2,795342E+09	1,606884E+07	5,590604E+09	5,606673E+09
-2742	8,035398E+06	8,033774E+06	2,795449E+09	2,795230E+09	1,606917E+07	5,590679E+09	5,606748E+09
-2741	8,030266E+06	8,030507E+06	2,795260E+09	2,795403E+09	1,606077E+07	5,590663E+09	5,606723E+09
-2740	8,035890E+06	8,036095E+06	2,795305E+09	2,795282E+09	1,607199E+07	5,590586E+09	5,606658E+09
-2739	8,033940E+06	8,031421E+06	2,795270E+09	2,795142E+09	1,606536E+07	5,590412E+09	5,606477E+09
-2738	8,031141E+06	8,032669E+06	2,795008E+09	2,795211E+09	1,606381E+07	5,590219E+09	5,606283E+09
-2737	8,038031E+06	8,037027E+06	2,795093E+09	2,794955E+09	1,607506E+07	5,590047E+09	5,606123E+09
-2736	8,031893E+06	8,032600E+06	2,794948E+09	2,794883E+09	1,606449E+07	5,589831E+09	5,605896E+09
-2735	8,034293E+06	8,034660E+06	2,794764E+09	2,794881E+09	1,606895E+07	5,589644E+09	5,605713E+09
-2734	8,037564E+06	8,036553E+06	2,794863E+09	2,794662E+09	1,607412E+07	5,589524E+09	5,605598E+09
-2733	8,031951E+06	8,032263E+06	2,794660E+09	2,794781E+09	1,606421E+07	5,589441E+09	5,605506E+09
-2732	8,037211E+06	8,037056E+06	2,794689E+09	2,794740E+09	1,607427E+07	5,589429E+09	5,605503E+09
-2731	8,035540E+06	8,035522E+06	2,794805E+09	2,794637E+09	1,607106E+07	5,589442E+09	5,605513E+09
-2730	8,033426E+06	8,031655E+06	2,794667E+09	2,794869E+09	1,606508E+07	5,589536E+09	5,605601E+09
-2729	8,038090E+06	8,038273E+06	2,794868E+09	2,794811E+09	1,607636E+07	5,589678E+09	5,605755E+09
-2728	8,034237E+06	8,032145E+06	2,794935E+09	2,794866E+09	1,606638E+07	5,589801E+09	5,605868E+09
-2727	8,033069E+06	8,033560E+06	2,794867E+09	2,795072E+09	1,606663E+07	5,589939E+09	5,606006E+09
-2726	8,036681E+06	8,037633E+06	2,795120E+09	2,794974E+09	1,607431E+07	5,590094E+09	5,606168E+09
-2725	8,031798E+06	8,030814E+06	2,795091E+09	2,795134E+09	1,606261E+07	5,590225E+09	5,606287E+09
-2724	8,033511E+06	8,035965E+06	2,795110E+09	2,795187E+09	1,606948E+07	5,590297E+09	5,606366E+09
-2723	8,036535E+06	8,033431E+06	2,795236E+09	2,795041E+09	1,606997E+07	5,590278E+09	5,606347E+09
-2722	8,031315E+06	8,030547E+06	2,795025E+09	2,795196E+09	1,606186E+07	5,590221E+09	5,606283E+09
-2721	8,036430E+06	8,036996E+06	2,795059E+09	2,795065E+09	1,607343E+07	5,590124E+09	5,606197E+09
-2720	8,034562E+06	8,033081E+06	2,795060E+09	2,794896E+09	1,606764E+07	5,589957E+09	5,606024E+09
-2719	8,031152E+06	8,033870E+06	2,794806E+09	2,794967E+09	1,606502E+07	5,589774E+09	5,605839E+09
-2718	8,038328E+06	8,037496E+06	2,794874E+09	2,794721E+09	1,607582E+07	5,589594E+09	5,605670E+09
-2717	8,032751E+06	8,032947E+06	2,794727E+09	2,794681E+09	1,606570E+07	5,589408E+09	5,605474E+09
-2716	8,035296E+06	8,034920E+06	2,794548E+09	2,794692E+09	1,607022E+07	5,589240E+09	5,605311E+09
-2715	8,038439E+06	8,037037E+06	2,794627E+09	2,794453E+09	1,607548E+07	5,589080E+09	5,605156E+09
-2714	8,032992E+06	8,032601E+06	2,794456E+09	2,794575E+09	1,606559E+07	5,589031E+09	5,605097E+09
-2713	8,037695E+06	8,037738E+06	2,794503E+09	2,794552E+09	1,607543E+07	5,589055E+09	5,605130E+09
-2712	8,036421E+06	8,036217E+06	2,794647E+09	2,794448E+09	1,607264E+07	5,589095E+09	5,605167E+09
-2711	8,033487E+06	8,032307E+06	2,794500E+09	2,794696E+09	1,606579E+07	5,589196E+09	5,605262E+09
-2710	8,037877E+06	8,038893E+06	2,794678E+09	2,794644E+09	1,607677E+07	5,589322E+09	5,605399E+09
-2709	8,034402E+06	8,033052E+06	2,794764E+09	2,794717E+09	1,606745E+07	5,589481E+09	5,605548E+09
-2708	8,033316E+06	8,034337E+06	2,794719E+09	2,794917E+09	1,606765E+07	5,589636E+09	5,605704E+09
-2707	8,037533E+06	8,037586E+06	2,794947E+09	2,794794E+09	1,607512E+07	5,589741E+09	5,605816E+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							
-2706	8,033104E+06	8,030481E+06	2,794916E+09	2,794951E+09	1,606359E+07	5,589867E+09	5,605930E+09
-2705	8,034355E+06	8,036177E+06	2,794914E+09	2,795009E+09	1,607053E+07	5,589923E+09	5,605994E+09
-2704	8,037422E+06	8,034509E+06	2,795051E+09	2,794841E+09	1,607193E+07	5,589892E+09	5,605964E+09
-2703	8,031053E+06	8,032141E+06	2,794834E+09	2,794984E+09	1,606319E+07	5,589818E+09	5,605881E+09
-2702	8,036309E+06	8,037972E+06	2,794850E+09	2,794845E+09	1,607428E+07	5,589695E+09	5,605769E+09
-2701	8,035078E+06	8,033901E+06	2,794854E+09	2,794690E+09	1,606898E+07	5,589544E+09	5,605613E+09
-2700	8,032220E+06	8,033749E+06	2,794585E+09	2,794755E+09	1,606597E+07	5,589340E+09	5,605406E+09
-2699	8,039679E+06	8,037017E+06	2,794602E+09	2,794488E+09	1,607670E+07	5,589090E+09	5,605167E+09
-2698	8,034125E+06	8,032999E+06	2,794464E+09	2,794445E+09	1,606712E+07	5,588909E+09	5,604976E+09
-2697	8,035857E+06	8,035787E+06	2,794307E+09	2,794470E+09	1,607164E+07	5,588777E+09	5,604848E+09
-2696	8,039004E+06	8,038663E+06	2,794441E+09	2,794227E+09	1,607767E+07	5,588668E+09	5,604746E+09
-2695	8,033065E+06	8,033760E+06	2,794291E+09	2,794370E+09	1,606682E+07	5,588661E+09	5,604727E+09
-2694	8,037785E+06	8,038199E+06	2,794324E+09	2,794371E+09	1,607598E+07	5,588696E+09	5,604772E+09
-2693	8,037020E+06	8,036725E+06	2,794472E+09	2,794302E+09	1,607375E+07	5,588774E+09	5,604848E+09
-2692	8,033998E+06	8,032799E+06	2,794335E+09	2,794549E+09	1,606680E+07	5,588884E+09	5,604951E+09
-2691	8,038264E+06	8,039188E+06	2,794492E+09	2,794475E+09	1,607745E+07	5,588968E+09	5,605045E+09
-2690	8,035241E+06	8,033270E+06	2,794609E+09	2,794538E+09	1,606851E+07	5,589147E+09	5,605216E+09
-2689	8,033747E+06	8,034799E+06	2,794573E+09	2,794750E+09	1,606855E+07	5,589323E+09	5,605391E+09
-2688	8,038474E+06	8,038080E+06	2,794804E+09	2,794617E+09	1,607655E+07	5,589421E+09	5,605497E+09
-2687	8,033296E+06	8,031164E+06	2,794749E+09	2,794775E+09	1,606446E+07	5,589524E+09	5,605589E+09
-2686	8,034324E+06	8,036755E+06	2,794706E+09	2,794829E+09	1,607108E+07	5,589535E+09	5,605606E+09
-2685	8,037659E+06	8,035448E+06	2,794840E+09	2,794660E+09	1,607311E+07	5,589500E+09	5,605573E+09
-2684	8,031598E+06	8,032838E+06	2,794629E+09	2,794779E+09	1,606444E+07	5,589408E+09	5,605472E+09
-2683	8,037481E+06	8,037673E+06	2,794600E+09	2,794609E+09	1,607515E+07	5,589208E+09	5,605283E+09
-2682	8,036628E+06	8,033745E+06	2,794603E+09	2,794443E+09	1,607037E+07	5,589046E+09	5,605117E+09
-2681	8,033350E+06	8,034129E+06	2,794338E+09	2,794518E+09	1,606748E+07	5,588856E+09	5,604923E+09
-2680	8,040425E+06	8,038468E+06	2,794382E+09	2,794243E+09	1,607889E+07	5,588625E+09	5,604704E+09
-2679	8,033863E+06	8,034808E+06	2,794274E+09	2,794212E+09	1,606867E+07	5,588486E+09	5,604554E+09
-2678	8,035554E+06	8,036943E+06	2,794121E+09	2,794258E+09	1,607250E+07	5,588379E+09	5,604452E+09
-2677	8,039161E+06	8,039590E+06	2,794270E+09	2,794054E+09	1,607875E+07	5,588325E+09	5,604403E+09
-2676	8,033932E+06	8,033757E+06	2,794112E+09	2,794207E+09	1,606769E+07	5,588319E+09	5,604387E+09
-2675	8,038731E+06	8,037604E+06	2,794092E+09	2,794196E+09	1,607634E+07	5,588288E+09	5,604365E+09
-2674	8,038233E+06	8,036607E+06	2,794251E+09	2,794120E+09	1,607484E+07	5,588371E+09	5,604446E+09
-2673	8,034541E+06	8,033365E+06	2,794146E+09	2,794368E+09	1,606791E+07	5,588515E+09	5,604582E+09
-2672	8,038827E+06	8,040276E+06	2,794351E+09	2,794284E+09	1,607910E+07	5,588635E+09	5,604714E+09
-2671	8,035499E+06	8,034052E+06	2,794485E+09	2,794360E+09	1,606955E+07	5,588845E+09	5,604915E+09
-2670	8,033904E+06	8,035128E+06	2,794420E+09	2,794590E+09	1,606903E+07	5,589010E+09	5,605079E+09
-2669	8,038972E+06	8,038585E+06	2,794640E+09	2,794481E+09	1,607756E+07	5,589121E+09	5,605198E+09
-2668	8,033812E+06	8,031858E+06	2,794567E+09	2,794616E+09	1,606567E+07	5,589184E+09	5,605249E+09
-2667	8,034845E+06	8,036838E+06	2,794477E+09	2,794633E+09	1,607168E+07	5,589109E+09	5,605181E+09
-2666	8,038703E+06	8,035743E+06	2,794620E+09	2,794435E+09	1,607445E+07	5,589055E+09	5,605130E+09
-2665	8,032322E+06	8,033268E+06	2,794411E+09	2,794544E+09	1,606559E+07	5,588955E+09	5,605021E+09
-2664	8,038530E+06	8,038340E+06	2,794382E+09	2,794357E+09	1,607687E+07	5,588739E+09	5,604816E+09
-2663	8,036805E+06	8,034871E+06	2,794381E+09	2,794195E+09	1,607168E+07	5,588576E+09	5,604647E+09
-2662	8,033297E+06	8,035182E+06	2,794104E+09	2,794286E+09	1,606848E+07	5,588390E+09	5,604458E+09
-2661	8,040340E+06	8,039888E+06	2,794176E+09	2,794042E+09	1,608023E+07	5,588219E+09	5,604299E+09
-2660	8,034420E+06	8,035613E+06	2,794087E+09	2,794016E+09	1,607003E+07	5,588102E+09	5,604172E+09
-2659	8,036650E+06	8,036404E+06	2,793894E+09	2,794060E+09	1,607305E+07	5,587955E+09	5,604028E+09
-2658	8,040724E+06	8,039259E+06	2,794043E+09	2,793858E+09	1,607998E+07	5,587901E+09	5,603981E+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	8,035079E+06	8,033880E+06	2,793896E+09	2,794018E+09	1,606896E+07	5,587914E+09	5,603983E+09
-2656	8,039379E+06	8,038795E+06	2,793903E+09	2,793993E+09	1,607817E+07	5,587896E+09	5,603974E+09
-2655	8,038044E+06	8,038053E+06	2,794103E+09	2,793926E+09	1,607610E+07	5,588029E+09	5,604105E+09
-2654	8,034270E+06	8,034334E+06	2,794014E+09	2,794196E+09	1,606860E+07	5,588210E+09	5,604279E+09
-2653	8,038776E+06	8,040907E+06	2,794229E+09	2,794149E+09	1,607968E+07	5,588379E+09	5,604458E+09
-2652	8,036304E+06	8,034011E+06	2,794345E+09	2,794228E+09	1,607032E+07	5,588573E+09	5,604643E+09
-2651	8,034605E+06	8,034610E+06	2,794207E+09	2,794435E+09	1,606921E+07	5,588641E+09	5,604711E+09
-2650	8,039910E+06	8,038614E+06	2,794413E+09	2,794299E+09	1,607852E+07	5,588713E+09	5,604791E+09
-2649	8,034311E+06	8,032698E+06	2,794354E+09	2,794412E+09	1,606701E+07	5,588765E+09	5,604832E+09
-2648	8,035571E+06	8,037896E+06	2,794277E+09	2,794392E+09	1,607347E+07	5,588669E+09	5,604742E+09
-2647	8,039099E+06	8,036703E+06	2,794427E+09	2,794192E+09	1,607580E+07	5,588619E+09	5,604695E+09
-2646	8,032702E+06	8,033926E+06	2,794199E+09	2,794311E+09	1,606663E+07	5,588510E+09	5,604576E+09
-2645	8,038795E+06	8,039241E+06	2,794178E+09	2,794153E+09	1,607804E+07	5,588330E+09	5,604408E+09
-2644	8,037207E+06	8,035927E+06	2,794179E+09	2,793991E+09	1,607313E+07	5,588170E+09	5,604243E+09
-2643	8,033906E+06	8,035319E+06	2,793868E+09	2,794072E+09	1,606923E+07	5,587940E+09	5,604009E+09
-2642	8,041414E+06	8,040118E+06	2,793948E+09	2,793829E+09	1,608153E+07	5,587777E+09	5,603858E+09
-2641	8,035633E+06	8,035734E+06	2,793862E+09	2,793807E+09	1,607137E+07	5,587669E+09	5,603740E+09
-2640	8,037981E+06	8,036773E+06	2,793666E+09	2,793837E+09	1,607475E+07	5,587503E+09	5,603577E+09
-2639	8,041066E+06	8,040183E+06	2,793824E+09	2,793638E+09	1,608125E+07	5,587462E+09	5,603543E+09
-2638	8,034990E+06	8,034826E+06	2,793689E+09	2,793810E+09	1,606982E+07	5,587499E+09	5,603569E+09
-2637	8,038998E+06	8,040174E+06	2,793751E+09	2,793822E+09	1,607917E+07	5,587574E+09	5,603653E+09
-2636	8,038472E+06	8,038770E+06	2,793977E+09	2,793770E+09	1,607724E+07	5,587747E+09	5,603824E+09
-2635	8,035086E+06	8,033817E+06	2,793849E+09	2,794047E+09	1,606890E+07	5,587896E+09	5,603965E+09
-2634	8,040016E+06	8,040657E+06	2,794052E+09	2,794005E+09	1,608067E+07	5,588057E+09	5,604138E+09
-2633	8,037266E+06	8,034229E+06	2,794161E+09	2,794074E+09	1,607150E+07	5,588235E+09	5,604306E+09
-2632	8,035050E+06	8,035739E+06	2,794022E+09	2,794240E+09	1,607079E+07	5,588262E+09	5,604333E+09
-2631	8,039776E+06	8,039867E+06	2,794242E+09	2,794085E+09	1,607964E+07	5,588327E+09	5,604407E+09
-2630	8,034145E+06	8,033782E+06	2,794178E+09	2,794194E+09	1,606793E+07	5,588372E+09	5,604440E+09
-2629	8,035700E+06	8,038627E+06	2,794106E+09	2,794198E+09	1,607433E+07	5,588305E+09	5,604379E+09
-2628	8,039952E+06	8,037060E+06	2,794231E+09	2,793997E+09	1,607701E+07	5,588228E+09	5,604305E+09
-2627	8,033566E+06	8,033629E+06	2,793942E+09	2,794102E+09	1,606719E+07	5,588043E+09	5,604111E+09
-2626	8,039750E+06	8,039470E+06	2,793918E+09	2,793933E+09	1,607922E+07	5,587851E+09	5,603931E+09
-2625	8,037986E+06	8,036710E+06	2,793941E+09	2,793765E+09	1,607470E+07	5,587706E+09	5,603781E+09
-2624	8,035029E+06	8,036190E+06	2,793641E+09	2,793821E+09	1,607122E+07	5,587462E+09	5,603533E+09
-2623	8,042007E+06	8,040957E+06	2,793729E+09	2,793585E+09	1,608296E+07	5,587314E+09	5,603397E+09
-2622	8,036208E+06	8,036545E+06	2,793634E+09	2,793582E+09	1,607275E+07	5,587216E+09	5,603289E+09
-2621	8,038130E+06	8,037900E+06	2,793465E+09	2,793641E+09	1,607603E+07	5,587107E+09	5,603183E+09
-2620	8,041226E+06	8,041348E+06	2,793648E+09	2,793455E+09	1,608257E+07	5,587103E+09	5,603185E+09
-2619	8,035344E+06	8,034953E+06	2,793510E+09	2,793630E+09	1,607030E+07	5,587140E+09	5,603210E+09
-2618	8,039585E+06	8,040353E+06	2,793593E+09	2,793660E+09	1,607994E+07	5,587252E+09	5,603332E+09
-2617	8,039543E+06	8,038639E+06	2,793822E+09	2,793625E+09	1,607818E+07	5,587447E+09	5,603525E+09
-2616	8,036205E+06	8,034114E+06	2,793673E+09	2,793878E+09	1,607032E+07	5,587551E+09	5,603621E+09
-2615	8,040288E+06	8,041374E+06	2,793866E+09	2,793827E+09	1,608166E+07	5,587693E+09	5,603774E+09
-2614	8,037253E+06	8,035202E+06	2,793967E+09	2,793887E+09	1,607246E+07	5,587854E+09	5,603926E+09
-2613	8,034752E+06	8,036967E+06	2,793861E+09	2,794060E+09	1,607172E+07	5,587921E+09	5,603992E+09
-2612	8,040381E+06	8,040380E+06	2,794080E+09	2,793902E+09	1,608076E+07	5,587982E+09	5,604063E+09
-2611	8,035110E+06	8,033343E+06	2,793968E+09	2,793996E+09	1,606845E+07	5,587965E+09	5,604033E+09
-2610	8,037000E+06	8,038521E+06	2,793880E+09	2,793999E+09	1,607552E+07	5,587878E+09	5,603954E+09
-2609	8,041042E+06	8,037609E+06	2,794000E+09	2,793790E+09	1,607865E+07	5,587790E+09	5,603869E+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	8,034303E+06	8,034926E+06	2,793713E+09	2,793859E+09	1,606923E+07	5,587572E+09	5,603641E+09
-2607	8,039887E+06	8,040786E+06	2,793707E+09	2,793685E+09	1,608067E+07	5,587392E+09	5,603473E+09
-2606	8,038105E+06	8,037856E+06	2,793723E+09	2,793525E+09	1,607596E+07	5,587248E+09	5,603324E+09
-2605	8,035413E+06	8,036966E+06	2,793439E+09	2,793610E+09	1,607238E+07	5,587048E+09	5,603121E+09
-2604	8,042735E+06	8,041492E+06	2,793508E+09	2,793379E+09	1,608423E+07	5,586888E+09	5,602972E+09
-2603	8,036878E+06	8,036473E+06	2,793378E+09	2,793371E+09	1,607335E+07	5,586749E+09	5,602822E+09
-2602	8,038823E+06	8,038360E+06	2,793237E+09	2,793440E+09	1,607718E+07	5,586677E+09	5,602754E+09
-2601	8,041957E+06	8,041905E+06	2,793461E+09	2,793269E+09	1,608386E+07	5,586730E+09	5,602814E+09
-2600	8,036518E+06	8,035447E+06	2,793345E+09	2,793435E+09	1,607197E+07	5,586781E+09	5,602853E+09
-2599	8,040163E+06	8,040839E+06	2,793439E+09	2,793481E+09	1,608100E+07	5,586920E+09	5,603001E+09
-2598	8,040048E+06	8,039150E+06	2,793654E+09	2,793464E+09	1,607920E+07	5,587118E+09	5,603197E+09
-2597	8,036140E+06	8,035248E+06	2,793525E+09	2,793732E+09	1,607139E+07	5,587257E+09	5,603328E+09
-2596	8,040300E+06	8,042361E+06	2,793714E+09	2,793673E+09	1,608266E+07	5,587386E+09	5,603469E+09
-2595	8,037541E+06	8,035287E+06	2,793784E+09	2,793713E+09	1,607283E+07	5,587497E+09	5,603570E+09
-2594	8,035454E+06	8,037115E+06	2,793675E+09	2,793879E+09	1,607257E+07	5,587554E+09	5,603627E+09
-2593	8,041634E+06	8,040247E+06	2,793884E+09	2,793719E+09	1,608188E+07	5,587603E+09	5,603685E+09
-2592	8,036321E+06	8,033862E+06	2,793745E+09	2,793772E+09	1,607018E+07	5,587517E+09	5,603587E+09
-2591	8,037302E+06	8,039388E+06	2,793651E+09	2,793761E+09	1,607669E+07	5,587412E+09	5,603489E+09
-2590	8,041007E+06	8,038955E+06	2,793769E+09	2,793555E+09	1,607996E+07	5,587324E+09	5,603404E+09
-2589	8,034253E+06	8,036371E+06	2,793517E+09	2,793634E+09	1,607062E+07	5,587151E+09	5,603222E+09
-2588	8,040636E+06	8,041395E+06	2,793503E+09	2,793469E+09	1,608203E+07	5,586973E+09	5,603055E+09
-2587	8,039226E+06	8,037711E+06	2,793472E+09	2,793308E+09	1,607694E+07	5,586780E+09	5,602857E+09
-2586	8,036778E+06	8,036989E+06	2,793182E+09	2,793395E+09	1,607377E+07	5,586576E+09	5,602650E+09
-2585	8,043786E+06	8,041929E+06	2,793267E+09	2,793169E+09	1,608571E+07	5,586436E+09	5,602522E+09
-2584	8,037748E+06	8,037469E+06	2,793160E+09	2,793133E+09	1,607522E+07	5,586293E+09	5,602368E+09
-2583	8,039034E+06	8,039319E+06	2,793064E+09	2,793216E+09	1,607835E+07	5,586280E+09	5,602359E+09
-2582	8,042161E+06	8,042683E+06	2,793297E+09	2,793084E+09	1,608484E+07	5,586381E+09	5,602466E+09
-2581	8,036976E+06	8,036067E+06	2,793208E+09	2,793285E+09	1,607304E+07	5,586493E+09	5,602566E+09
-2580	8,040619E+06	8,041272E+06	2,793278E+09	2,793343E+09	1,608189E+07	5,586621E+09	5,602703E+09
-2579	8,040474E+06	8,039003E+06	2,793448E+09	2,793312E+09	1,607948E+07	5,586760E+09	5,602839E+09
-2578	8,036500E+06	8,035757E+06	2,793330E+09	2,793566E+09	1,607226E+07	5,586896E+09	5,602969E+09
-2577	8,041018E+06	8,042605E+06	2,793535E+09	2,793501E+09	1,608362E+07	5,587035E+09	5,603119E+09
-2576	8,038674E+06	8,035705E+06	2,793602E+09	2,793505E+09	1,607438E+07	5,587106E+09	5,603181E+09
-2575	8,036204E+06	8,037653E+06	2,793497E+09	2,793666E+09	1,607386E+07	5,587162E+09	5,603236E+09
-2574	8,042117E+06	8,040988E+06	2,793681E+09	2,793515E+09	1,608310E+07	5,587197E+09	5,603280E+09
-2573	8,036338E+06	8,035293E+06	2,793571E+09	2,793575E+09	1,607163E+07	5,587146E+09	5,603217E+09
-2572	8,037402E+06	8,040505E+06	2,793470E+09	2,793560E+09	1,607791E+07	5,587030E+09	5,603108E+09
-2571	8,041281E+06	8,039212E+06	2,793548E+09	2,793344E+09	1,608049E+07	5,586892E+09	5,602973E+09
-2570	8,035199E+06	8,036588E+06	2,793285E+09	2,793423E+09	1,607179E+07	5,586708E+09	5,602780E+09
-2569	8,042215E+06	8,041098E+06	2,793249E+09	2,793258E+09	1,608331E+07	5,586508E+09	5,602591E+09
-2568	8,040671E+06	8,038232E+06	2,793193E+09	2,793054E+09	1,607890E+07	5,586247E+09	5,602326E+09
-2567	8,037451E+06	8,037754E+06	2,792927E+09	2,793130E+09	1,607520E+07	5,586057E+09	5,602133E+09
-2566	8,043754E+06	8,043174E+06	2,793040E+09	2,792927E+09	1,608693E+07	5,585967E+09	5,602054E+09
-2565	8,037847E+06	8,038768E+06	2,793005E+09	2,792926E+09	1,607661E+07	5,585931E+09	5,602008E+09
-2564	8,039487E+06	8,039969E+06	2,792920E+09	2,793043E+09	1,607946E+07	5,585964E+09	5,602043E+09
-2563	8,042798E+06	8,042569E+06	2,793113E+09	2,792934E+09	1,608537E+07	5,586046E+09	5,602132E+09
-2562	8,037914E+06	8,036322E+06	2,793018E+09	2,793143E+09	1,607424E+07	5,586161E+09	5,602235E+09
-2561	8,041272E+06	8,041568E+06	2,793093E+09	2,793198E+09	1,608284E+07	5,586290E+09	5,602373E+09
-2560	8,041154E+06	8,039720E+06	2,793262E+09	2,793119E+09	1,608087E+07	5,586381E+09	5,602462E+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							
-2559	8,036680E+06	8,036418E+06	2,793171E+09	2,793358E+09	1,607310E+07	5,586529E+09	5,602602E+09
-2558	8,041257E+06	8,043025E+06	2,793367E+09	2,793313E+09	1,608428E+07	5,586680E+09	5,602764E+09
-2557	8,039207E+06	8,036379E+06	2,793452E+09	2,793326E+09	1,607559E+07	5,586778E+09	5,602854E+09
-2556	8,036660E+06	8,038287E+06	2,793318E+09	2,793490E+09	1,607495E+07	5,586808E+09	5,602883E+09
-2555	8,042419E+06	8,041141E+06	2,793455E+09	2,793330E+09	1,608356E+07	5,586785E+09	5,602868E+09
-2554	8,036858E+06	8,035966E+06	2,793346E+09	2,793377E+09	1,607282E+07	5,586723E+09	5,602796E+09
-2553	8,038595E+06	8,040445E+06	2,793245E+09	2,793355E+09	1,607904E+07	5,586600E+09	5,602679E+09
-2552	8,042793E+06	8,039500E+06	2,793296E+09	2,793095E+09	1,608229E+07	5,586390E+09	5,602473E+09
-2551	8,036403E+06	8,037065E+06	2,793035E+09	2,793158E+09	1,607347E+07	5,586193E+09	5,602266E+09
-2550	8,042841E+06	8,041995E+06	2,792989E+09	2,793008E+09	1,608484E+07	5,585997E+09	5,602082E+09
-2549	8,040686E+06	8,040018E+06	2,792989E+09	2,792812E+09	1,608070E+07	5,585801E+09	5,601882E+09
-2548	8,037441E+06	8,039067E+06	2,792750E+09	2,792909E+09	1,607651E+07	5,585659E+09	5,601735E+09
-2547	8,043653E+06	8,043613E+06	2,792852E+09	2,792732E+09	1,608727E+07	5,585583E+09	5,601671E+09
-2546	8,038636E+06	8,038980E+06	2,792827E+09	2,792761E+09	1,607762E+07	5,585588E+09	5,601666E+09
-2545	8,040765E+06	8,039615E+06	2,792730E+09	2,792897E+09	1,608038E+07	5,585627E+09	5,601707E+09
-2544	8,043869E+06	8,042827E+06	2,792889E+09	2,792752E+09	1,608670E+07	5,585641E+09	5,601728E+09
-2543	8,038465E+06	8,036919E+06	2,792817E+09	2,792941E+09	1,607538E+07	5,585758E+09	5,601834E+09
-2542	8,041160E+06	8,042371E+06	2,792900E+09	2,793006E+09	1,608353E+07	5,585905E+09	5,601989E+09
-2541	8,041424E+06	8,040639E+06	2,793129E+09	2,792936E+09	1,608206E+07	5,586065E+09	5,602147E+09
-2540	8,037200E+06	8,036970E+06	2,793041E+09	2,793188E+09	1,607417E+07	5,586229E+09	5,602303E+09
-2539	8,041710E+06	8,042856E+06	2,793189E+09	2,793153E+09	1,608457E+07	5,586343E+09	5,602427E+09
-2538	8,040005E+06	8,036874E+06	2,793266E+09	2,793168E+09	1,607688E+07	5,586434E+09	5,602510E+09
-2537	8,037420E+06	8,038643E+06	2,793123E+09	2,793319E+09	1,607606E+07	5,586442E+09	5,602518E+09
-2536	8,043129E+06	8,041800E+06	2,793234E+09	2,793108E+09	1,608493E+07	5,586342E+09	5,602426E+09
-2535	8,037458E+06	8,036725E+06	2,793133E+09	2,793130E+09	1,607418E+07	5,586263E+09	5,602337E+09
-2534	8,039184E+06	8,040865E+06	2,793006E+09	2,793120E+09	1,608005E+07	5,586126E+09	5,602206E+09
-2533	8,043418E+06	8,040577E+06	2,793076E+09	2,792855E+09	1,608399E+07	5,585932E+09	5,602016E+09
-2532	8,036791E+06	8,038135E+06	2,792806E+09	2,792914E+09	1,607493E+07	5,585720E+09	5,601795E+09
-2531	8,042749E+06	8,042623E+06	2,792738E+09	2,792772E+09	1,608537E+07	5,585510E+09	5,601595E+09
-2530	8,040972E+06	8,041016E+06	2,792770E+09	2,792595E+09	1,608199E+07	5,585365E+09	5,601447E+09
-2529	8,038599E+06	8,039022E+06	2,792554E+09	2,792718E+09	1,607762E+07	5,585272E+09	5,601350E+09
-2528	8,044950E+06	8,043762E+06	2,792635E+09	2,792531E+09	1,608871E+07	5,585165E+09	5,601254E+09
-2527	8,039991E+06	8,039110E+06	2,792618E+09	2,792558E+09	1,607910E+07	5,585177E+09	5,601256E+09
-2526	8,041325E+06	8,040123E+06	2,792516E+09	2,792714E+09	1,608145E+07	5,585230E+09	5,601312E+09
-2525	8,043979E+06	8,044189E+06	2,792727E+09	2,792565E+09	1,608817E+07	5,585292E+09	5,601381E+09
-2524	8,038404E+06	8,037931E+06	2,792677E+09	2,792758E+09	1,607633E+07	5,585435E+09	5,601511E+09
-2523	8,040962E+06	8,042605E+06	2,792740E+09	2,792841E+09	1,608357E+07	5,585581E+09	5,601665E+09
-2522	8,042199E+06	8,040799E+06	2,792969E+09	2,792792E+09	1,608300E+07	5,585761E+09	5,601844E+09
-2521	8,038483E+06	8,036711E+06	2,792866E+09	2,793046E+09	1,607519E+07	5,585911E+09	5,601986E+09
-2520	8,042588E+06	8,043114E+06	2,792969E+09	2,792965E+09	1,608570E+07	5,585934E+09	5,602020E+09
-2519	8,040591E+06	8,037628E+06	2,793059E+09	2,792947E+09	1,607822E+07	5,586006E+09	5,602084E+09
-2518	8,037430E+06	8,039503E+06	2,792912E+09	2,793102E+09	1,607693E+07	5,586014E+09	5,602091E+09
-2517	8,043488E+06	8,042926E+06	2,793058E+09	2,792883E+09	1,608641E+07	5,585940E+09	5,602027E+09
-2516	8,037988E+06	8,037718E+06	2,792942E+09	2,792905E+09	1,607571E+07	5,585847E+09	5,601923E+09
-2515	8,039669E+06	8,041150E+06	2,792764E+09	2,792900E+09	1,608082E+07	5,585664E+09	5,601745E+09
-2514	8,044005E+06	8,041585E+06	2,792836E+09	2,792641E+09	1,608559E+07	5,585477E+09	5,601562E+09
-2513	8,037692E+06	8,038604E+06	2,792583E+09	2,792696E+09	1,607630E+07	5,585278E+09	5,601355E+09
-2512	8,043350E+06	8,043076E+06	2,792503E+09	2,792529E+09	1,608643E+07	5,585032E+09	5,601118E+09
-2511	8,041903E+06	8,041401E+06	2,792562E+09	2,792358E+09	1,608330E+07	5,584920E+09	5,601003E+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							
-2510	8,039518E+06	8,039137E+06	2,792332E+09	2,792515E+09	1,607865E+07	5,584847E+09	5,600925E+09
-2509	8,045668E+06	8,044707E+06	2,792438E+09	2,792335E+09	1,609038E+07	5,584773E+09	5,600863E+09
-2508	8,040447E+06	8,040109E+06	2,792421E+09	2,792367E+09	1,608056E+07	5,584788E+09	5,600869E+09
-2507	8,041041E+06	8,040700E+06	2,792304E+09	2,792529E+09	1,608174E+07	5,584833E+09	5,600915E+09
-2506	8,044148E+06	8,044954E+06	2,792549E+09	2,792396E+09	1,608910E+07	5,584946E+09	5,601035E+09
-2505	8,039484E+06	8,037749E+06	2,792523E+09	2,792598E+09	1,607723E+07	5,585122E+09	5,601199E+09
-2504	8,041913E+06	8,042668E+06	2,792558E+09	2,792663E+09	1,608458E+07	5,585221E+09	5,601306E+09
-2503	8,043411E+06	8,041126E+06	2,792794E+09	2,792607E+09	1,608454E+07	5,585401E+09	5,601485E+09
-2502	8,038783E+06	8,037596E+06	2,792680E+09	2,792870E+09	1,607638E+07	5,585550E+09	5,601626E+09
-2501	8,042518E+06	8,044662E+06	2,792819E+09	2,792774E+09	1,608718E+07	5,585593E+09	5,601681E+09
-2500	8,040470E+06	8,038885E+06	2,792908E+09	2,792746E+09	1,607936E+07	5,585654E+09	5,601733E+09
-2499	8,037248E+06	8,039779E+06	2,792716E+09	2,792906E+09	1,607703E+07	5,585622E+09	5,601699E+09
-2498	8,044307E+06	8,043174E+06	2,792839E+09	2,792694E+09	1,608748E+07	5,585533E+09	5,601620E+09
-2497	8,039426E+06	8,037658E+06	2,792700E+09	2,792703E+09	1,607708E+07	5,585402E+09	5,601480E+09
-2496	8,040754E+06	8,041390E+06	2,792480E+09	2,792652E+09	1,608214E+07	5,585132E+09	5,601214E+09
-2495	8,044939E+06	8,042266E+06	2,792574E+09	2,792371E+09	1,608720E+07	5,584945E+09	5,601032E+09
-2494	8,038346E+06	8,039181E+06	2,792341E+09	2,792449E+09	1,607753E+07	5,584790E+09	5,600868E+09
-2493	8,044071E+06	8,044092E+06	2,792312E+09	2,792292E+09	1,608816E+07	5,584605E+09	5,600693E+09
-2492	8,042593E+06	8,042331E+06	2,792369E+09	2,792145E+09	1,608492E+07	5,584514E+09	5,600599E+09
-2491	8,039906E+06	8,039631E+06	2,792109E+09	2,792325E+09	1,607954E+07	5,584434E+09	5,600513E+09
-2490	8,045909E+06	8,045852E+06	2,792226E+09	2,792162E+09	1,609176E+07	5,584388E+09	5,600480E+09
-2489	8,041196E+06	8,040611E+06	2,792234E+09	2,792191E+09	1,608181E+07	5,584426E+09	5,600508E+09
-2488	8,041427E+06	8,041086E+06	2,792109E+09	2,792328E+09	1,608251E+07	5,584437E+09	5,600520E+09
-2487	8,045020E+06	8,045104E+06	2,792382E+09	2,792201E+09	1,609012E+07	5,584583E+09	5,600673E+09
-2486	8,040278E+06	8,037837E+06	2,792354E+09	2,792432E+09	1,607811E+07	5,584787E+09	5,600865E+09
-2485	8,042310E+06	8,043758E+06	2,792412E+09	2,792492E+09	1,608607E+07	5,584904E+09	5,600991E+09
-2484	8,043515E+06	8,042234E+06	2,792639E+09	2,792436E+09	1,608575E+07	5,585075E+09	5,601161E+09
-2483	8,038303E+06	8,038378E+06	2,792497E+09	2,792697E+09	1,607668E+07	5,585194E+09	5,601271E+09
-2482	8,042718E+06	8,045296E+06	2,792641E+09	2,792610E+09	1,608801E+07	5,585251E+09	5,601339E+09
-2481	8,041826E+06	8,038735E+06	2,792717E+09	2,792572E+09	1,608056E+07	5,585289E+09	5,601370E+09
-2480	8,038512E+06	8,039540E+06	2,792466E+09	2,792689E+09	1,607805E+07	5,585155E+09	5,601234E+09
-2479	8,045898E+06	8,043341E+06	2,792586E+09	2,792454E+09	1,608924E+07	5,585039E+09	5,601129E+09
-2478	8,040100E+06	8,038563E+06	2,792446E+09	2,792457E+09	1,607866E+07	5,584903E+09	5,600981E+09
-2477	8,040975E+06	8,042982E+06	2,792276E+09	2,792390E+09	1,608396E+07	5,584666E+09	5,600750E+09
-2476	8,044913E+06	8,043755E+06	2,792385E+09	2,792125E+09	1,608867E+07	5,584511E+09	5,600599E+09
-2475	8,038360E+06	8,039720E+06	2,792127E+09	2,792232E+09	1,607808E+07	5,584359E+09	5,600437E+09
-2474	8,044723E+06	8,044673E+06	2,792092E+09	2,792108E+09	1,608940E+07	5,584200E+09	5,600289E+09
-2473	8,043921E+06	8,042578E+06	2,792136E+09	2,791961E+09	1,608650E+07	5,584097E+09	5,600183E+09
-2472	8,040687E+06	8,039964E+06	2,791846E+09	2,792105E+09	1,608065E+07	5,583951E+09	5,600031E+09
-2471	8,046622E+06	8,046382E+06	2,791999E+09	2,791931E+09	1,609300E+07	5,583930E+09	5,600023E+09
-2470	8,041771E+06	8,041018E+06	2,792040E+09	2,791985E+09	1,608279E+07	5,584024E+09	5,600107E+09
-2469	8,042013E+06	8,042039E+06	2,791970E+09	2,792132E+09	1,608405E+07	5,584102E+09	5,600186E+09
-2468	8,045571E+06	8,045896E+06	2,792245E+09	2,792034E+09	1,609147E+07	5,584279E+09	5,600371E+09
-2467	8,040447E+06	8,038362E+06	2,792193E+09	2,792286E+09	1,607881E+07	5,584479E+09	5,600558E+09
-2466	8,042342E+06	8,044764E+06	2,792256E+09	2,792359E+09	1,608711E+07	5,584616E+09	5,600703E+09
-2465	8,044263E+06	8,042392E+06	2,792480E+09	2,792290E+09	1,608666E+07	5,584770E+09	5,600856E+09
-2464	8,038835E+06	8,038390E+06	2,792294E+09	2,792509E+09	1,607723E+07	5,584803E+09	5,600880E+09
-2463	8,044033E+06	8,044934E+06	2,792422E+09	2,792401E+09	1,608897E+07	5,584823E+09	5,600912E+09
-2462	8,042999E+06	8,038843E+06	2,792476E+09	2,792362E+09	1,608184E+07	5,584837E+09	5,600919E+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							
-2461	8,039300E+06	8,040824E+06	2,792245E+09	2,792443E+09	1,608012E+07	5,584688E+09	5,600769E+09
-2460	8,046010E+06	8,044814E+06	2,792364E+09	2,792202E+09	1,609082E+07	5,584566E+09	5,600657E+09
-2459	8,039660E+06	8,039757E+06	2,792223E+09	2,792212E+09	1,607942E+07	5,584435E+09	5,600514E+09
-2458	8,041136E+06	8,043884E+06	2,792074E+09	2,792176E+09	1,608502E+07	5,584250E+09	5,600335E+09
-2457	8,046096E+06	8,043967E+06	2,792177E+09	2,791928E+09	1,609006E+07	5,584105E+09	5,600195E+09
-2456	8,039625E+06	8,039757E+06	2,791869E+09	2,792015E+09	1,607938E+07	5,583884E+09	5,599963E+09
-2455	8,046169E+06	8,044939E+06	2,791837E+09	2,791882E+09	1,609111E+07	5,583719E+09	5,599810E+09
-2454	8,044629E+06	8,043459E+06	2,791894E+09	2,791741E+09	1,608809E+07	5,583636E+09	5,599724E+09
-2453	8,041030E+06	8,041386E+06	2,791666E+09	2,791865E+09	1,608242E+07	5,583531E+09	5,599614E+09
-2452	8,046505E+06	8,047441E+06	2,791843E+09	2,791720E+09	1,609395E+07	5,583563E+09	5,599657E+09
-2451	8,041819E+06	8,041302E+06	2,791877E+09	2,791810E+09	1,608312E+07	5,583688E+09	5,599771E+09
-2450	8,042406E+06	8,042550E+06	2,791816E+09	2,791999E+09	1,608496E+07	5,583815E+09	5,599899E+09
-2449	8,046640E+06	8,045993E+06	2,792076E+09	2,791908E+09	1,609263E+07	5,583984E+09	5,600077E+09
-2448	8,041069E+06	8,038474E+06	2,791982E+09	2,792118E+09	1,607954E+07	5,584100E+09	5,600179E+09
-2447	8,043161E+06	8,044807E+06	2,792057E+09	2,792170E+09	1,608797E+07	5,584227E+09	5,600315E+09
-2446	8,045078E+06	8,042485E+06	2,792282E+09	2,792098E+09	1,608756E+07	5,584380E+09	5,600468E+09
-2445	8,039545E+06	8,039385E+06	2,792119E+09	2,792287E+09	1,607893E+07	5,584406E+09	5,600485E+09
-2444	8,044544E+06	8,045872E+06	2,792231E+09	2,792186E+09	1,609042E+07	5,584417E+09	5,600508E+09
-2443	8,042910E+06	8,039990E+06	2,792262E+09	2,792145E+09	1,608290E+07	5,584407E+09	5,600490E+09
-2442	8,039210E+06	8,042269E+06	2,792051E+09	2,792236E+09	1,608148E+07	5,584287E+09	5,600369E+09
-2441	8,046588E+06	8,045422E+06	2,792171E+09	2,791995E+09	1,609201E+07	5,584165E+09	5,600257E+09
-2440	8,040248E+06	8,039874E+06	2,791991E+09	2,791982E+09	1,608012E+07	5,583973E+09	5,600053E+09
-2439	8,042665E+06	8,043467E+06	2,791830E+09	2,791948E+09	1,608613E+07	5,583778E+09	5,599864E+09
-2438	8,047371E+06	8,044156E+06	2,791911E+09	2,791710E+09	1,609153E+07	5,583621E+09	5,599712E+09
-2437	8,040641E+06	8,041037E+06	2,791624E+09	2,791764E+09	1,608168E+07	5,583388E+09	5,599469E+09
-2436	8,046385E+06	8,046214E+06	2,791601E+09	2,791636E+09	1,609260E+07	5,583237E+09	5,599330E+09
-2435	8,044371E+06	8,044494E+06	2,791677E+09	2,791511E+09	1,608887E+07	5,583187E+09	5,599276E+09
-2434	8,041323E+06	8,042053E+06	2,791496E+09	2,791675E+09	1,608338E+07	5,583171E+09	5,599254E+09
-2433	8,047540E+06	8,047367E+06	2,791678E+09	2,791563E+09	1,609491E+07	5,583240E+09	5,599335E+09
-2432	8,042981E+06	8,041095E+06	2,791681E+09	2,791648E+09	1,608408E+07	5,583328E+09	5,599412E+09
-2431	8,043564E+06	8,042716E+06	2,791624E+09	2,791831E+09	1,608628E+07	5,583456E+09	5,599542E+09
-2430	8,047101E+06	8,046615E+06	2,791891E+09	2,791745E+09	1,609372E+07	5,583636E+09	5,599730E+09
-2429	8,041351E+06	8,039911E+06	2,791836E+09	2,791916E+09	1,608126E+07	5,583752E+09	5,599833E+09
-2428	8,042968E+06	8,045600E+06	2,791904E+09	2,791976E+09	1,608857E+07	5,583880E+09	5,599969E+09
-2427	8,045064E+06	8,042869E+06	2,792101E+09	2,791913E+09	1,608793E+07	5,584014E+09	5,600101E+09
-2426	8,039836E+06	8,040172E+06	2,791937E+09	2,792110E+09	1,608001E+07	5,584047E+09	5,600127E+09
-2425	8,045363E+06	8,046217E+06	2,792026E+09	2,792002E+09	1,609158E+07	5,584029E+09	5,600120E+09
-2424	8,043382E+06	8,040400E+06	2,792020E+09	2,791922E+09	1,608378E+07	5,583942E+09	5,600026E+09
-2423	8,040259E+06	8,042371E+06	2,791822E+09	2,792000E+09	1,608263E+07	5,583822E+09	5,599905E+09
-2422	8,047567E+06	8,045523E+06	2,791939E+09	2,791773E+09	1,609309E+07	5,583711E+09	5,599804E+09
-2421	8,041451E+06	8,040896E+06	2,791772E+09	2,791731E+09	1,608235E+07	5,583503E+09	5,599586E+09
-2420	8,043494E+06	8,044291E+06	2,791594E+09	2,791710E+09	1,608779E+07	5,583305E+09	5,599392E+09
-2419	8,047390E+06	8,045483E+06	2,791662E+09	2,791474E+09	1,609287E+07	5,583136E+09	5,599229E+09
-2418	8,040649E+06	8,042451E+06	2,791415E+09	2,791541E+09	1,608310E+07	5,582956E+09	5,599039E+09
-2417	8,046874E+06	8,046792E+06	2,791405E+09	2,791429E+09	1,609367E+07	5,582834E+09	5,598928E+09
-2416	8,044912E+06	8,044440E+06	2,791457E+09	2,791300E+09	1,608935E+07	5,582757E+09	5,598847E+09
-2415	8,042789E+06	8,041565E+06	2,791291E+09	2,791484E+09	1,608435E+07	5,582775E+09	5,598859E+09
-2414	8,048483E+06	8,047559E+06	2,791472E+09	2,791396E+09	1,609604E+07	5,582868E+09	5,598964E+09
-2413	8,043775E+06	8,042350E+06	2,791502E+09	2,791450E+09	1,608613E+07	5,582952E+09	5,599038E+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							
-2412	8,043378E+06	8,043901E+06	2,791457E+09	2,791641E+09	1,608728E+07	5,583098E+09	5,599186E+09
-2411	8,046606E+06	8,047456E+06	2,791723E+09	2,791563E+09	1,609406E+07	5,583286E+09	5,599380E+09
-2410	8,041474E+06	8,040595E+06	2,791693E+09	2,791752E+09	1,608207E+07	5,583446E+09	5,599528E+09
-2409	8,043903E+06	8,045518E+06	2,791735E+09	2,791823E+09	1,608942E+07	5,583558E+09	5,599648E+09
-2408	8,046081E+06	8,042740E+06	2,791882E+09	2,791732E+09	1,608882E+07	5,583613E+09	5,599702E+09
-2407	8,041082E+06	8,040397E+06	2,791722E+09	2,791907E+09	1,608148E+07	5,583629E+09	5,599711E+09
-2406	8,045933E+06	8,046718E+06	2,791814E+09	2,791793E+09	1,609265E+07	5,583608E+09	5,599700E+09
-2405	8,043974E+06	8,041771E+06	2,791833E+09	2,791672E+09	1,608574E+07	5,583504E+09	5,599590E+09
-2404	8,040564E+06	8,043075E+06	2,791620E+09	2,791763E+09	1,608364E+07	5,583383E+09	5,599467E+09
-2403	8,047718E+06	8,046174E+06	2,791703E+09	2,791550E+09	1,609389E+07	5,583253E+09	5,599347E+09
-2402	8,041954E+06	8,042076E+06	2,791541E+09	2,791518E+09	1,608403E+07	5,583058E+09	5,599142E+09
-2401	8,044352E+06	8,044852E+06	2,791341E+09	2,791492E+09	1,608920E+07	5,582833E+09	5,598922E+09
-2400	8,047813E+06	8,045995E+06	2,791389E+09	2,791227E+09	1,609381E+07	5,582616E+09	5,598710E+09
-2399	8,041850E+06	8,042475E+06	2,791176E+09	2,791290E+09	1,608432E+07	5,582466E+09	5,598550E+09
-2398	8,047742E+06	8,046841E+06	2,791187E+09	2,791212E+09	1,609458E+07	5,582399E+09	5,598494E+09
-2397	8,046084E+06	8,045477E+06	2,791272E+09	2,791078E+09	1,609156E+07	5,582351E+09	5,598442E+09
-2396	8,043361E+06	8,042470E+06	2,791114E+09	2,791293E+09	1,608583E+07	5,582407E+09	5,598493E+09
-2395	8,048086E+06	8,048920E+06	2,791295E+09	2,791226E+09	1,609701E+07	5,582521E+09	5,598618E+09
-2394	8,043675E+06	8,043596E+06	2,791368E+09	2,791292E+09	1,608727E+07	5,582660E+09	5,598747E+09
-2393	8,043590E+06	8,044179E+06	2,791314E+09	2,791493E+09	1,608777E+07	5,582807E+09	5,598895E+09
-2392	8,047100E+06	8,046945E+06	2,791532E+09	2,791399E+09	1,609404E+07	5,582931E+09	5,599025E+09
-2391	8,042927E+06	8,040052E+06	2,791493E+09	2,791578E+09	1,608298E+07	5,583071E+09	5,599154E+09
-2390	8,044846E+06	8,045627E+06	2,791518E+09	2,791648E+09	1,609047E+07	5,583165E+09	5,599256E+09
-2389	8,046992E+06	8,044134E+06	2,791677E+09	2,791503E+09	1,609113E+07	5,583180E+09	5,599271E+09
-2388	8,041131E+06	8,041654E+06	2,791529E+09	2,791674E+09	1,608279E+07	5,583203E+09	5,599286E+09
-2387	8,045567E+06	8,047683E+06	2,791617E+09	2,791569E+09	1,609325E+07	5,583186E+09	5,599279E+09
-2386	8,044237E+06	8,042718E+06	2,791654E+09	2,791465E+09	1,608695E+07	5,583119E+09	5,599206E+09
-2385	8,041566E+06	8,043303E+06	2,791405E+09	2,791569E+09	1,608487E+07	5,582974E+09	5,599059E+09
-2384	8,048570E+06	8,046381E+06	2,791428E+09	2,791328E+09	1,609495E+07	5,582755E+09	5,598850E+09
-2383	8,043224E+06	8,042642E+06	2,791273E+09	2,791274E+09	1,608587E+07	5,582547E+09	5,598633E+09
-2382	8,045140E+06	8,045477E+06	2,791090E+09	2,791248E+09	1,609062E+07	5,582338E+09	5,598428E+09
-2381	8,048522E+06	8,047301E+06	2,791170E+09	2,790953E+09	1,609582E+07	5,582123E+09	5,598219E+09
-2380	8,042430E+06	8,042951E+06	2,790975E+09	2,791049E+09	1,608538E+07	5,582025E+09	5,598110E+09
-2379	8,047778E+06	8,047484E+06	2,790981E+09	2,791009E+09	1,609526E+07	5,581990E+09	5,598085E+09
-2378	8,046501E+06	8,046532E+06	2,791096E+09	2,790908E+09	1,609303E+07	5,582004E+09	5,598097E+09
-2377	8,043965E+06	8,043079E+06	2,790930E+09	2,791137E+09	1,608704E+07	5,582067E+09	5,598154E+09
-2376	8,048269E+06	8,049162E+06	2,791087E+09	2,791052E+09	1,609743E+07	5,582140E+09	5,598237E+09
-2375	8,044917E+06	8,043302E+06	2,791177E+09	2,791115E+09	1,608822E+07	5,582292E+09	5,598380E+09
-2374	8,044541E+06	8,043950E+06	2,791123E+09	2,791325E+09	1,608849E+07	5,582448E+09	5,598537E+09
-2373	8,048343E+06	8,047693E+06	2,791347E+09	2,791197E+09	1,609604E+07	5,582543E+09	5,598639E+09
-2372	8,043453E+06	8,041026E+06	2,791315E+09	2,791376E+09	1,608448E+07	5,582691E+09	5,598776E+09
-2371	8,044259E+06	8,047152E+06	2,791341E+09	2,791450E+09	1,609141E+07	5,582791E+09	5,598883E+09
-2370	8,046823E+06	8,045700E+06	2,791539E+09	2,791314E+09	1,609252E+07	5,582853E+09	5,598946E+09
-2369	8,041336E+06	8,042200E+06	2,791366E+09	2,791493E+09	1,608354E+07	5,582859E+09	5,598942E+09
-2368	8,046123E+06	8,047282E+06	2,791392E+09	2,791375E+09	1,609340E+07	5,582767E+09	5,598860E+09
-2367	8,045861E+06	8,042542E+06	2,791400E+09	2,791256E+09	1,608840E+07	5,582657E+09	5,598745E+09
-2366	8,042740E+06	8,043513E+06	2,791128E+09	2,791347E+09	1,608625E+07	5,582475E+09	5,598561E+09
-2365	8,049603E+06	8,047782E+06	2,791158E+09	2,791050E+09	1,609739E+07	5,582207E+09	5,598305E+09
-2364	8,043602E+06	8,043814E+06	2,791029E+09	2,790991E+09	1,608742E+07	5,582019E+09	5,598106E+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	8,045073E+06	8,046397E+06	2,790864E+09	2,790988E+09	1,609147E+07	5,581851E+09	5,597943E+09
-2362	8,048989E+06	8,048297E+06	2,790987E+09	2,790736E+09	1,609729E+07	5,581723E+09	5,597820E+09
-2361	8,043472E+06	8,043298E+06	2,790785E+09	2,790869E+09	1,608677E+07	5,581654E+09	5,597741E+09
-2360	8,048277E+06	8,047784E+06	2,790758E+09	2,790832E+09	1,609606E+07	5,581591E+09	5,597687E+09
-2359	8,047570E+06	8,046976E+06	2,790889E+09	2,790731E+09	1,609455E+07	5,581620E+09	5,597715E+09
-2358	8,044574E+06	8,043498E+06	2,790740E+09	2,790963E+09	1,608807E+07	5,581702E+09	5,597790E+09
-2357	8,048892E+06	8,050038E+06	2,790905E+09	2,790843E+09	1,609893E+07	5,581748E+09	5,597847E+09
-2356	8,045484E+06	8,043578E+06	2,791002E+09	2,790918E+09	1,608906E+07	5,581920E+09	5,598009E+09
-2355	8,044432E+06	8,044762E+06	2,790939E+09	2,791142E+09	1,608919E+07	5,582081E+09	5,598170E+09
-2354	8,048564E+06	8,048856E+06	2,791189E+09	2,791028E+09	1,609742E+07	5,582217E+09	5,598315E+09
-2353	8,043782E+06	8,041884E+06	2,791153E+09	2,791209E+09	1,608567E+07	5,582362E+09	5,598448E+09
-2352	8,044285E+06	8,047355E+06	2,791145E+09	2,791263E+09	1,609164E+07	5,582408E+09	5,598500E+09
-2351	8,048062E+06	8,045426E+06	2,791338E+09	2,791125E+09	1,609349E+07	5,582463E+09	5,598556E+09
-2350	8,042592E+06	8,042032E+06	2,791145E+09	2,791304E+09	1,608462E+07	5,582449E+09	5,598534E+09
-2349	8,047687E+06	8,047895E+06	2,791143E+09	2,791138E+09	1,609558E+07	5,582281E+09	5,598377E+09
-2348	8,046765E+06	8,043612E+06	2,791149E+09	2,791005E+09	1,609038E+07	5,582154E+09	5,598244E+09
-2347	8,042670E+06	8,044967E+06	2,790881E+09	2,791086E+09	1,608764E+07	5,581967E+09	5,598055E+09
-2346	8,049724E+06	8,049285E+06	2,790959E+09	2,790798E+09	1,609901E+07	5,581757E+09	5,597856E+09
-2345	8,044023E+06	8,044463E+06	2,790828E+09	2,790761E+09	1,608849E+07	5,581589E+09	5,597678E+09
-2344	8,045558E+06	8,046165E+06	2,790628E+09	2,790772E+09	1,609172E+07	5,581399E+09	5,597491E+09
-2343	8,050345E+06	8,048357E+06	2,790745E+09	2,790542E+09	1,609870E+07	5,581287E+09	5,597386E+09
-2342	8,044638E+06	8,043666E+06	2,790546E+09	2,790682E+09	1,608830E+07	5,581228E+09	5,597317E+09
-2341	8,049076E+06	8,049040E+06	2,790532E+09	2,790607E+09	1,609812E+07	5,581139E+09	5,597237E+09
-2340	8,048025E+06	8,047802E+06	2,790693E+09	2,790509E+09	1,609583E+07	5,581202E+09	5,597298E+09
-2339	8,044446E+06	8,044203E+06	2,790558E+09	2,790760E+09	1,608865E+07	5,581318E+09	5,597407E+09
-2338	8,049248E+06	8,050773E+06	2,790761E+09	2,790673E+09	1,610002E+07	5,581434E+09	5,597534E+09
-2337	8,046201E+06	8,043981E+06	2,790845E+09	2,790766E+09	1,609018E+07	5,581611E+09	5,597701E+09
-2336	8,044600E+06	8,045144E+06	2,790756E+09	2,790983E+09	1,608974E+07	5,581739E+09	5,597829E+09
-2335	8,049476E+06	8,049257E+06	2,791015E+09	2,790866E+09	1,609873E+07	5,581881E+09	5,597980E+09
-2334	8,044514E+06	8,042141E+06	2,790983E+09	2,791039E+09	1,608665E+07	5,582022E+09	5,598109E+09
-2333	8,045189E+06	8,047781E+06	2,790953E+09	2,791053E+09	1,609297E+07	5,582006E+09	5,598098E+09
-2332	8,048985E+06	8,045485E+06	2,791124E+09	2,790909E+09	1,609447E+07	5,582033E+09	5,598127E+09
-2331	8,042798E+06	8,042920E+06	2,790903E+09	2,791080E+09	1,608572E+07	5,581983E+09	5,598068E+09
-2330	8,048170E+06	8,049204E+06	2,790917E+09	2,790910E+09	1,609737E+07	5,581827E+09	5,597924E+09
-2329	8,047043E+06	8,044957E+06	2,790920E+09	2,790766E+09	1,609200E+07	5,581685E+09	5,597777E+09
-2328	8,042824E+06	8,045366E+06	2,790638E+09	2,790832E+09	1,608819E+07	5,581470E+09	5,597558E+09
-2327	8,050859E+06	8,049343E+06	2,790722E+09	2,790563E+09	1,610020E+07	5,581285E+09	5,597385E+09
-2326	8,045321E+06	8,044502E+06	2,790595E+09	2,790546E+09	1,608982E+07	5,581141E+09	5,597231E+09
-2325	8,046919E+06	8,046908E+06	2,790384E+09	2,790536E+09	1,609383E+07	5,580920E+09	5,597014E+09
-2324	8,050971E+06	8,049477E+06	2,790519E+09	2,790316E+09	1,610045E+07	5,580835E+09	5,596935E+09
-2323	8,044556E+06	8,045111E+06	2,790340E+09	2,790464E+09	1,608967E+07	5,580805E+09	5,596894E+09
-2322	8,049096E+06	8,050181E+06	2,790372E+09	2,790408E+09	1,609928E+07	5,580779E+09	5,596879E+09
-2321	8,048462E+06	8,048119E+06	2,790528E+09	2,790334E+09	1,609658E+07	5,580862E+09	5,596959E+09
-2320	8,044892E+06	8,043763E+06	2,790361E+09	2,790587E+09	1,608866E+07	5,580948E+09	5,597037E+09
-2319	8,050373E+06	8,050566E+06	2,790555E+09	2,790519E+09	1,610094E+07	5,581074E+09	5,597175E+09
-2318	8,047321E+06	8,044192E+06	2,790652E+09	2,790609E+09	1,609151E+07	5,581261E+09	5,597352E+09
-2317	8,045360E+06	8,046107E+06	2,790564E+09	2,790779E+09	1,609147E+07	5,581343E+09	5,597434E+09
-2316	8,050047E+06	8,049694E+06	2,790838E+09	2,790660E+09	1,609974E+07	5,581498E+09	5,597598E+09
-2315	8,044696E+06	8,042822E+06	2,790800E+09	2,790837E+09	1,608752E+07	5,581637E+09	5,597724E+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							
-2314	8,045759E+06	8,048472E+06	2,790780E+09	2,790862E+09	1,609423E+07	5,581642E+09	5,597736E+09
-2313	8,049568E+06	8,046335E+06	2,790921E+09	2,790716E+09	1,609590E+07	5,581638E+09	5,597734E+09
-2312	8,042803E+06	8,043753E+06	2,790669E+09	2,790858E+09	1,608656E+07	5,581527E+09	5,597613E+09
-2311	8,048890E+06	8,049879E+06	2,790683E+09	2,790685E+09	1,609877E+07	5,581369E+09	5,597467E+09
-2310	8,047779E+06	8,045501E+06	2,790697E+09	2,790531E+09	1,609328E+07	5,581228E+09	5,597322E+09
-2309	8,043915E+06	8,045747E+06	2,790400E+09	2,790570E+09	1,608966E+07	5,580970E+09	5,597060E+09
-2308	8,051818E+06	8,049542E+06	2,790480E+09	2,790318E+09	1,610136E+07	5,580798E+09	5,596899E+09
-2307	8,045736E+06	8,045414E+06	2,790347E+09	2,790315E+09	1,609115E+07	5,580662E+09	5,596753E+09
-2306	8,047458E+06	8,048161E+06	2,790173E+09	2,790320E+09	1,609562E+07	5,580493E+09	5,596589E+09
-2305	8,051160E+06	8,050692E+06	2,790310E+09	2,790107E+09	1,610185E+07	5,580418E+09	5,596520E+09
-2304	8,044791E+06	8,045249E+06	2,790126E+09	2,790255E+09	1,609004E+07	5,580381E+09	5,596471E+09
-2303	8,050179E+06	8,049956E+06	2,790162E+09	2,790227E+09	1,610013E+07	5,580389E+09	5,596489E+09
-2302	8,049830E+06	8,047897E+06	2,790327E+09	2,790165E+09	1,609773E+07	5,580493E+09	5,596590E+09
-2301	8,046120E+06	8,044285E+06	2,790159E+09	2,790390E+09	1,609041E+07	5,580549E+09	5,596639E+09
-2300	8,050828E+06	8,051386E+06	2,790378E+09	2,790325E+09	1,610221E+07	5,580703E+09	5,596805E+09
-2299	8,047205E+06	8,045494E+06	2,790497E+09	2,790418E+09	1,609270E+07	5,580916E+09	5,597008E+09
-2298	8,045281E+06	8,047300E+06	2,790443E+09	2,790601E+09	1,609258E+07	5,581044E+09	5,597137E+09
-2297	8,050122E+06	8,050174E+06	2,790688E+09	2,790495E+09	1,610030E+07	5,581183E+09	5,597283E+09
-2296	8,044868E+06	8,042876E+06	2,790595E+09	2,790658E+09	1,608774E+07	5,581254E+09	5,597341E+09
-2295	8,046665E+06	8,048569E+06	2,790542E+09	2,790681E+09	1,609523E+07	5,581223E+09	5,597318E+09
-2294	8,050546E+06	8,046844E+06	2,790680E+09	2,790509E+09	1,609739E+07	5,581189E+09	5,597286E+09
-2293	8,043687E+06	8,044645E+06	2,790421E+09	2,790590E+09	1,608833E+07	5,581011E+09	5,597099E+09
-2292	8,049679E+06	8,050133E+06	2,790451E+09	2,790416E+09	1,609981E+07	5,580867E+09	5,596967E+09
-2291	8,048286E+06	8,046208E+06	2,790467E+09	2,790279E+09	1,609449E+07	5,580746E+09	5,596840E+09
-2290	8,044878E+06	8,046465E+06	2,790191E+09	2,790340E+09	1,609134E+07	5,580531E+09	5,596622E+09
-2289	8,052331E+06	8,050595E+06	2,790256E+09	2,790108E+09	1,610293E+07	5,580365E+09	5,596468E+09
-2288	8,045977E+06	8,046313E+06	2,790109E+09	2,790096E+09	1,609229E+07	5,580205E+09	5,596297E+09
-2287	8,048231E+06	8,048664E+06	2,789942E+09	2,790116E+09	1,609690E+07	5,580059E+09	5,596156E+09
-2286	8,052037E+06	8,050975E+06	2,790096E+09	2,789906E+09	1,610301E+07	5,580002E+09	5,596105E+09
-2285	8,045972E+06	8,045259E+06	2,789899E+09	2,790025E+09	1,609123E+07	5,579923E+09	5,596015E+09
-2284	8,051031E+06	8,050023E+06	2,789944E+09	2,790014E+09	1,610105E+07	5,579958E+09	5,596059E+09
-2283	8,050152E+06	8,048902E+06	2,790124E+09	2,789969E+09	1,609905E+07	5,580094E+09	5,596193E+09
-2282	8,046331E+06	8,045772E+06	2,790013E+09	2,790205E+09	1,609210E+07	5,580219E+09	5,596311E+09
-2281	8,050474E+06	8,052685E+06	2,790242E+09	2,790157E+09	1,610316E+07	5,580399E+09	5,596502E+09
-2280	8,047169E+06	8,045756E+06	2,790346E+09	2,790249E+09	1,609293E+07	5,580594E+09	5,596687E+09
-2279	8,045994E+06	8,047121E+06	2,790268E+09	2,790455E+09	1,609311E+07	5,580722E+09	5,596815E+09
-2278	8,051338E+06	8,049953E+06	2,790489E+09	2,790339E+09	1,610129E+07	5,580828E+09	5,596929E+09
-2277	8,045960E+06	8,043473E+06	2,790364E+09	2,790444E+09	1,608943E+07	5,580809E+09	5,596898E+09
-2276	8,047358E+06	8,049242E+06	2,790316E+09	2,790447E+09	1,609660E+07	5,580763E+09	5,596860E+09
-2275	8,050750E+06	8,048037E+06	2,790463E+09	2,790264E+09	1,609879E+07	5,580727E+09	5,596826E+09
-2274	8,044196E+06	8,045658E+06	2,790241E+09	2,790346E+09	1,608985E+07	5,580587E+09	5,596677E+09
-2273	8,049942E+06	8,050622E+06	2,790245E+09	2,790190E+09	1,610056E+07	5,580436E+09	5,596536E+09
-2272	8,048631E+06	8,046507E+06	2,790220E+09	2,790056E+09	1,609514E+07	5,580276E+09	5,596371E+09
-2271	8,045876E+06	8,046915E+06	2,789927E+09	2,790136E+09	1,609279E+07	5,580063E+09	5,596156E+09
-2270	8,053211E+06	8,051367E+06	2,789998E+09	2,789892E+09	1,610458E+07	5,579890E+09	5,595995E+09
-2269	8,046986E+06	8,047122E+06	2,789849E+09	2,789835E+09	1,609411E+07	5,579684E+09	5,595778E+09
-2268	8,049238E+06	8,048805E+06	2,789704E+09	2,789862E+09	1,609804E+07	5,579565E+09	5,595663E+09
-2267	8,052571E+06	8,051649E+06	2,789873E+09	2,789674E+09	1,610422E+07	5,579547E+09	5,595651E+09
-2266	8,046788E+06	8,046164E+06	2,789726E+09	2,789815E+09	1,609295E+07	5,579541E+09	5,595634E+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	8,050844E+06	8,051398E+06	2,789783E+09	2,789834E+09	1,610224E+07	5,579617E+09	5,595720E+09
-2264	8,049923E+06	8,049922E+06	2,789967E+09	2,789800E+09	1,609984E+07	5,579767E+09	5,595867E+09
-2263	8,046688E+06	8,046370E+06	2,789866E+09	2,790063E+09	1,609306E+07	5,579928E+09	5,596021E+09
-2262	8,051164E+06	8,052655E+06	2,790088E+09	2,790018E+09	1,610382E+07	5,580107E+09	5,596210E+09
-2261	8,048442E+06	8,045364E+06	2,790145E+09	2,790069E+09	1,609381E+07	5,580214E+09	5,596308E+09
-2260	8,047021E+06	8,046759E+06	2,790043E+09	2,790263E+09	1,609378E+07	5,580306E+09	5,596400E+09
-2259	8,051960E+06	8,050613E+06	2,790253E+09	2,790134E+09	1,610257E+07	5,580386E+09	5,596489E+09
-2258	8,046477E+06	8,044901E+06	2,790167E+09	2,790211E+09	1,609138E+07	5,580378E+09	5,596469E+09
-2257	8,047269E+06	8,050444E+06	2,790124E+09	2,790214E+09	1,609771E+07	5,580338E+09	5,596436E+09
-2256	8,050988E+06	8,048616E+06	2,790255E+09	2,790030E+09	1,609960E+07	5,580285E+09	5,596384E+09
-2255	8,045134E+06	8,045869E+06	2,790017E+09	2,790141E+09	1,609100E+07	5,580158E+09	5,596249E+09
-2254	8,051131E+06	8,050826E+06	2,790007E+09	2,789990E+09	1,610196E+07	5,579997E+09	5,596099E+09
-2253	8,049681E+06	8,047349E+06	2,789953E+09	2,789811E+09	1,609703E+07	5,579763E+09	5,595860E+09
-2252	8,046716E+06	8,047679E+06	2,789674E+09	2,789880E+09	1,609440E+07	5,579554E+09	5,595649E+09
-2251	8,053462E+06	8,052641E+06	2,789761E+09	2,789639E+09	1,610610E+07	5,579399E+09	5,595506E+09
-2250	8,047620E+06	8,048239E+06	2,789655E+09	2,789585E+09	1,609586E+07	5,579241E+09	5,595336E+09
-2249	8,049405E+06	8,049488E+06	2,789505E+09	2,789643E+09	1,609889E+07	5,579148E+09	5,595247E+09
-2248	8,052729E+06	8,052144E+06	2,789659E+09	2,789475E+09	1,610487E+07	5,579133E+09	5,595238E+09
-2247	8,047482E+06	8,046701E+06	2,789526E+09	2,789652E+09	1,609418E+07	5,579179E+09	5,595273E+09
-2246	8,051376E+06	8,052026E+06	2,789606E+09	2,789678E+09	1,610340E+07	5,579284E+09	5,595387E+09
-2245	8,050843E+06	8,050092E+06	2,789781E+09	2,789615E+09	1,610094E+07	5,579396E+09	5,595497E+09
-2244	8,047782E+06	8,046084E+06	2,789685E+09	2,789880E+09	1,609387E+07	5,579565E+09	5,595659E+09
-2243	8,051903E+06	8,052809E+06	2,789890E+09	2,789842E+09	1,610471E+07	5,579732E+09	5,595837E+09
-2242	8,049465E+06	8,046188E+06	2,789968E+09	2,789879E+09	1,609565E+07	5,579847E+09	5,595943E+09
-2241	8,046852E+06	8,048172E+06	2,789859E+09	2,790066E+09	1,609502E+07	5,579925E+09	5,596020E+09
-2240	8,051739E+06	8,051733E+06	2,790060E+09	2,789924E+09	1,610347E+07	5,579984E+09	5,596087E+09
-2239	8,046754E+06	8,045840E+06	2,789985E+09	2,790014E+09	1,609259E+07	5,579999E+09	5,596092E+09
-2238	8,047907E+06	8,050619E+06	2,789932E+09	2,790016E+09	1,609853E+07	5,579948E+09	5,596046E+09
-2237	8,052137E+06	8,048558E+06	2,790009E+09	2,789801E+09	1,610070E+07	5,579810E+09	5,595911E+09
-2236	8,046351E+06	8,045934E+06	2,789753E+09	2,789903E+09	1,609229E+07	5,579656E+09	5,595749E+09
-2235	8,051800E+06	8,051814E+06	2,789735E+09	2,789748E+09	1,610361E+07	5,579482E+09	5,595586E+09
-2234	8,050369E+06	8,049090E+06	2,789722E+09	2,789547E+09	1,609946E+07	5,579269E+09	5,595368E+09
-2233	8,046808E+06	8,048900E+06	2,789454E+09	2,789624E+09	1,609571E+07	5,579078E+09	5,595173E+09
-2232	8,053712E+06	8,053135E+06	2,789530E+09	2,789397E+09	1,610685E+07	5,578927E+09	5,595034E+09
-2231	8,048613E+06	8,048499E+06	2,789430E+09	2,789384E+09	1,609711E+07	5,578814E+09	5,594911E+09
-2230	8,050476E+06	8,049721E+06	2,789292E+09	2,789460E+09	1,610020E+07	5,578752E+09	5,594852E+09
-2229	8,053684E+06	8,052671E+06	2,789436E+09	2,789275E+09	1,610635E+07	5,578711E+09	5,594817E+09
-2228	8,048487E+06	8,047015E+06	2,789335E+09	2,789456E+09	1,609550E+07	5,578791E+09	5,594887E+09
-2227	8,051722E+06	8,052772E+06	2,789431E+09	2,789497E+09	1,610449E+07	5,578928E+09	5,595033E+09
-2226	8,051659E+06	8,050701E+06	2,789630E+09	2,789428E+09	1,610236E+07	5,579058E+09	5,595161E+09
-2225	8,047827E+06	8,046674E+06	2,789513E+09	2,789705E+09	1,609450E+07	5,579218E+09	5,595313E+09
-2224	8,051888E+06	8,053351E+06	2,789685E+09	2,789665E+09	1,610524E+07	5,579350E+09	5,595455E+09
-2223	8,049804E+06	8,047106E+06	2,789768E+09	2,789709E+09	1,609691E+07	5,579477E+09	5,595573E+09
-2222	8,047228E+06	8,049025E+06	2,789675E+09	2,789880E+09	1,609625E+07	5,579555E+09	5,595651E+09
-2221	8,052631E+06	8,051906E+06	2,789851E+09	2,789702E+09	1,610454E+07	5,579553E+09	5,595658E+09
-2220	8,047996E+06	8,045671E+06	2,789776E+09	2,789788E+09	1,609367E+07	5,579564E+09	5,595658E+09
-2219	8,048819E+06	8,050914E+06	2,789704E+09	2,789799E+09	1,609973E+07	5,579503E+09	5,595603E+09
-2218	8,053102E+06	8,049780E+06	2,789794E+09	2,789568E+09	1,610288E+07	5,579362E+09	5,595464E+09
-2217	8,046286E+06	8,047581E+06	2,789532E+09	2,789667E+09	1,609387E+07	5,579199E+09	5,595293E+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							
-2216	8,051795E+06	8,052980E+06	2,789500E+09	2,789504E+09	1,610477E+07	5,579005E+09	5,595109E+09
-2215	8,050871E+06	8,050101E+06	2,789497E+09	2,789324E+09	1,610097E+07	5,578821E+09	5,594922E+09
-2214	8,047839E+06	8,048921E+06	2,789226E+09	2,789403E+09	1,609676E+07	5,578630E+09	5,594727E+09
-2213	8,054912E+06	8,052808E+06	2,789260E+09	2,789163E+09	1,610772E+07	5,578423E+09	5,594531E+09
-2212	8,049999E+06	8,048454E+06	2,789175E+09	2,789154E+09	1,609845E+07	5,578329E+09	5,594427E+09
-2211	8,051015E+06	8,050608E+06	2,789058E+09	2,789244E+09	1,610162E+07	5,578302E+09	5,594404E+09
-2210	8,054230E+06	8,054194E+06	2,789259E+09	2,789058E+09	1,610842E+07	5,578317E+09	5,594425E+09
-2209	8,048538E+06	8,048149E+06	2,789179E+09	2,789258E+09	1,609669E+07	5,578437E+09	5,594534E+09
-2208	8,051694E+06	8,053185E+06	2,789258E+09	2,789319E+09	1,610488E+07	5,578576E+09	5,594681E+09
-2207	8,052312E+06	8,051048E+06	2,789453E+09	2,789283E+09	1,610336E+07	5,578736E+09	5,594840E+09
-2206	8,048435E+06	8,047133E+06	2,789334E+09	2,789550E+09	1,609557E+07	5,578884E+09	5,594980E+09
-2205	8,052457E+06	8,053682E+06	2,789475E+09	2,789477E+09	1,610614E+07	5,578952E+09	5,595058E+09
-2204	8,050712E+06	8,047444E+06	2,789581E+09	2,789501E+09	1,609816E+07	5,579082E+09	5,595180E+09
-2203	8,047696E+06	8,049663E+06	2,789494E+09	2,789673E+09	1,609736E+07	5,579167E+09	5,595264E+09
-2202	8,053587E+06	8,052518E+06	2,789676E+09	2,789484E+09	1,610611E+07	5,579161E+09	5,595267E+09
-2201	8,048290E+06	8,046417E+06	2,789574E+09	2,789574E+09	1,609471E+07	5,579148E+09	5,595242E+09
-2200	8,049018E+06	8,051527E+06	2,789460E+09	2,789583E+09	1,610054E+07	5,579043E+09	5,595143E+09
-2199	8,053504E+06	8,050956E+06	2,789549E+09	2,789358E+09	1,610446E+07	5,578906E+09	5,595011E+09
-2198	8,046917E+06	8,048467E+06	2,789297E+09	2,789437E+09	1,609538E+07	5,578733E+09	5,594829E+09
-2197	8,052953E+06	8,052923E+06	2,789230E+09	2,789247E+09	1,610588E+07	5,578477E+09	5,594583E+09
-2196	8,052391E+06	8,049948E+06	2,789231E+09	2,789063E+09	1,610234E+07	5,578293E+09	5,594396E+09
-2195	8,049041E+06	8,049209E+06	2,788969E+09	2,789159E+09	1,609825E+07	5,578128E+09	5,594226E+09
-2194	8,055753E+06	8,054186E+06	2,789039E+09	2,788916E+09	1,610994E+07	5,577955E+09	5,594065E+09
-2193	8,049863E+06	8,050124E+06	2,788987E+09	2,788928E+09	1,609999E+07	5,577915E+09	5,594015E+09
-2192	8,050688E+06	8,051866E+06	2,788885E+09	2,789042E+09	1,610255E+07	5,577926E+09	5,594029E+09
-2191	8,054289E+06	8,055102E+06	2,789101E+09	2,788898E+09	1,610939E+07	5,577999E+09	5,594109E+09
-2190	8,049312E+06	8,048149E+06	2,789014E+09	2,789107E+09	1,609746E+07	5,578122E+09	5,594219E+09
-2189	8,052595E+06	8,052569E+06	2,789032E+09	2,789149E+09	1,610516E+07	5,578182E+09	5,594287E+09
-2188	8,053570E+06	8,050820E+06	2,789229E+09	2,789097E+09	1,610439E+07	5,578326E+09	5,594430E+09
-2187	8,048941E+06	8,047881E+06	2,789129E+09	2,789354E+09	1,609682E+07	5,578483E+09	5,594580E+09
-2186	8,052996E+06	8,054864E+06	2,789310E+09	2,789258E+09	1,610786E+07	5,578568E+09	5,594676E+09
-2185	8,050859E+06	8,048406E+06	2,789428E+09	2,789289E+09	1,609927E+07	5,578717E+09	5,594817E+09
-2184	8,047891E+06	8,050137E+06	2,789312E+09	2,789474E+09	1,609803E+07	5,578786E+09	5,594884E+09
-2183	8,054126E+06	8,053117E+06	2,789479E+09	2,789314E+09	1,610724E+07	5,578793E+09	5,594900E+09
-2182	8,048952E+06	8,047270E+06	2,789362E+09	2,789385E+09	1,609622E+07	5,578747E+09	5,594843E+09
-2181	8,049708E+06	8,051756E+06	2,789200E+09	2,789357E+09	1,610146E+07	5,578557E+09	5,594658E+09
-2180	8,054588E+06	8,051411E+06	2,789298E+09	2,789106E+09	1,610600E+07	5,578403E+09	5,594509E+09
-2179	8,047719E+06	8,049004E+06	2,789047E+09	2,789174E+09	1,609672E+07	5,578222E+09	5,594319E+09
-2178	8,054048E+06	8,053587E+06	2,788988E+09	2,788974E+09	1,610763E+07	5,577962E+09	5,594069E+09
-2177	8,052701E+06	8,051032E+06	2,788991E+09	2,788802E+09	1,610373E+07	5,577793E+09	5,593896E+09
-2176	8,049140E+06	8,050167E+06	2,788726E+09	2,788918E+09	1,609931E+07	5,577645E+09	5,593744E+09
-2175	8,055707E+06	8,055618E+06	2,788832E+09	2,788718E+09	1,611133E+07	5,577550E+09	5,593661E+09
-2174	8,050468E+06	8,050875E+06	2,788806E+09	2,788739E+09	1,610134E+07	5,577546E+09	5,593647E+09
-2173	8,051665E+06	8,051392E+06	2,788670E+09	2,788852E+09	1,610306E+07	5,577522E+09	5,593625E+09
-2172	8,055797E+06	8,054610E+06	2,788884E+09	2,788713E+09	1,611041E+07	5,577598E+09	5,593708E+09
-2171	8,050460E+06	8,048227E+06	2,788802E+09	2,788924E+09	1,609869E+07	5,577725E+09	5,593824E+09
-2170	8,053296E+06	8,053670E+06	2,788840E+09	2,788946E+09	1,610697E+07	5,577786E+09	5,593893E+09
-2169	8,053497E+06	8,052257E+06	2,789067E+09	2,788893E+09	1,610575E+07	5,577959E+09	5,594065E+09
-2168	8,048653E+06	8,049038E+06	2,788979E+09	2,789158E+09	1,609769E+07	5,578136E+09	5,594234E+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							
-2167	8,052927E+06	8,055637E+06	2,789169E+09	2,789097E+09	1,610856E+07	5,578266E+09	5,594375E+09
-2166	8,051580E+06	8,048569E+06	2,789266E+09	2,789128E+09	1,610015E+07	5,578394E+09	5,594494E+09
-2165	8,048704E+06	8,049714E+06	2,789074E+09	2,789290E+09	1,609842E+07	5,578364E+09	5,594463E+09
-2164	8,055235E+06	8,053151E+06	2,789220E+09	2,789101E+09	1,610839E+07	5,578321E+09	5,594430E+09
-2163	8,049628E+06	8,048242E+06	2,789110E+09	2,789147E+09	1,609787E+07	5,578257E+09	5,594355E+09
-2162	8,050618E+06	8,052891E+06	2,788964E+09	2,789082E+09	1,610351E+07	5,578045E+09	5,594149E+09
-2161	8,054966E+06	8,052481E+06	2,789070E+09	2,788830E+09	1,610745E+07	5,577900E+09	5,594008E+09
-2160	8,048182E+06	8,049674E+06	2,788809E+09	2,788913E+09	1,609786E+07	5,577722E+09	5,593820E+09
-2159	8,054397E+06	8,054491E+06	2,788761E+09	2,788754E+09	1,610889E+07	5,577515E+09	5,593624E+09
-2158	8,053203E+06	8,052115E+06	2,788778E+09	2,788591E+09	1,610532E+07	5,577369E+09	5,593474E+09
-2157	8,049825E+06	8,050401E+06	2,788491E+09	2,788704E+09	1,610023E+07	5,577195E+09	5,593295E+09
-2156	8,056666E+06	8,055963E+06	2,788615E+09	2,788509E+09	1,611263E+07	5,577124E+09	5,593236E+09
-2155	8,051547E+06	8,051044E+06	2,788598E+09	2,788541E+09	1,610259E+07	5,577138E+09	5,593241E+09
-2154	8,052786E+06	8,051747E+06	2,788459E+09	2,788640E+09	1,610453E+07	5,577099E+09	5,593204E+09
-2153	8,056071E+06	8,055407E+06	2,788674E+09	2,788505E+09	1,611148E+07	5,577180E+09	5,593291E+09
-2152	8,050384E+06	8,049241E+06	2,788598E+09	2,788718E+09	1,609962E+07	5,577316E+09	5,593416E+09
-2151	8,052851E+06	8,055144E+06	2,788681E+09	2,788772E+09	1,610799E+07	5,577453E+09	5,593561E+09
-2150	8,053900E+06	8,053102E+06	2,788930E+09	2,788725E+09	1,610700E+07	5,577654E+09	5,593761E+09
-2149	8,049406E+06	8,048633E+06	2,788797E+09	2,788986E+09	1,609804E+07	5,577783E+09	5,593881E+09
-2148	8,054239E+06	8,055228E+06	2,788969E+09	2,788925E+09	1,610947E+07	5,577894E+09	5,594003E+09
-2147	8,052710E+06	8,048826E+06	2,789049E+09	2,788941E+09	1,610154E+07	5,577990E+09	5,594092E+09
-2146	8,049411E+06	8,050790E+06	2,788852E+09	2,789061E+09	1,610020E+07	5,577913E+09	5,594014E+09
-2145	8,055318E+06	8,054555E+06	2,789009E+09	2,788854E+09	1,610987E+07	5,577863E+09	5,593973E+09
-2144	8,049601E+06	8,049520E+06	2,788894E+09	2,788891E+09	1,609912E+07	5,577785E+09	5,593884E+09
-2143	8,050905E+06	8,053665E+06	2,788754E+09	2,788856E+09	1,610457E+07	5,577610E+09	5,593715E+09
-2142	8,055901E+06	8,052869E+06	2,788841E+09	2,788606E+09	1,610877E+07	5,577446E+09	5,593555E+09
-2141	8,049246E+06	8,049337E+06	2,788527E+09	2,788678E+09	1,609858E+07	5,577205E+09	5,593304E+09
-2140	8,055460E+06	8,054751E+06	2,788486E+09	2,788517E+09	1,611021E+07	5,577004E+09	5,593114E+09
-2139	8,054006E+06	8,053008E+06	2,788533E+09	2,788356E+09	1,610701E+07	5,576888E+09	5,592995E+09
-2138	8,050897E+06	8,051348E+06	2,788270E+09	2,788454E+09	1,610224E+07	5,576724E+09	5,592826E+09
-2137	8,057123E+06	8,056893E+06	2,788407E+09	2,788274E+09	1,611402E+07	5,576681E+09	5,592795E+09
-2136	8,052057E+06	8,051755E+06	2,788384E+09	2,788327E+09	1,610381E+07	5,576711E+09	5,592815E+09
-2135	8,052883E+06	8,052825E+06	2,788271E+09	2,788462E+09	1,610571E+07	5,576734E+09	5,592839E+09
-2134	8,056249E+06	8,056475E+06	2,788506E+09	2,788335E+09	1,611272E+07	5,576841E+09	5,592954E+09
-2133	8,050747E+06	8,049417E+06	2,788421E+09	2,788541E+09	1,610016E+07	5,576962E+09	5,593062E+09
-2132	8,053452E+06	8,055335E+06	2,788515E+09	2,788599E+09	1,610879E+07	5,577115E+09	5,593223E+09
-2131	8,054985E+06	8,053028E+06	2,788763E+09	2,788560E+09	1,610801E+07	5,577323E+09	5,593431E+09
-2130	8,050572E+06	8,048992E+06	2,788606E+09	2,788793E+09	1,609956E+07	5,577398E+09	5,593498E+09
-2129	8,054598E+06	8,055927E+06	2,788758E+09	2,788720E+09	1,611053E+07	5,577478E+09	5,593589E+09
-2128	8,052786E+06	8,050016E+06	2,788825E+09	2,788723E+09	1,610280E+07	5,577548E+09	5,593651E+09
-2127	8,049202E+06	8,052130E+06	2,788653E+09	2,788850E+09	1,610133E+07	5,577502E+09	5,593604E+09
-2126	8,055943E+06	8,055268E+06	2,788809E+09	2,788634E+09	1,611121E+07	5,577443E+09	5,593554E+09
-2125	8,050596E+06	8,049258E+06	2,788646E+09	2,788655E+09	1,609985E+07	5,577301E+09	5,593401E+09
-2124	8,052332E+06	8,053537E+06	2,788493E+09	2,788618E+09	1,610587E+07	5,577111E+09	5,593217E+09
-2123	8,057058E+06	8,053535E+06	2,788581E+09	2,788369E+09	1,611059E+07	5,576950E+09	5,593060E+09
-2122	8,050142E+06	8,050660E+06	2,788281E+09	2,788413E+09	1,610080E+07	5,576694E+09	5,592795E+09
-2121	8,055527E+06	8,056257E+06	2,788268E+09	2,788259E+09	1,611178E+07	5,576527E+09	5,592639E+09
-2120	8,054062E+06	8,054335E+06	2,788321E+09	2,788114E+09	1,610840E+07	5,576435E+09	5,592544E+09
-2119	8,051124E+06	8,052173E+06	2,788079E+09	2,788254E+09	1,610330E+07	5,576333E+09	5,592436E+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							
-2118	8,057743E+06	8,057380E+06	2,788200E+09	2,788086E+09	1,611512E+07	5,576287E+09	5,592402E+09
-2117	8,052827E+06	8,051470E+06	2,788135E+09	2,788131E+09	1,610430E+07	5,576266E+09	5,592371E+09
-2116	8,053673E+06	8,053153E+06	2,788043E+09	2,788269E+09	1,610683E+07	5,576313E+09	5,592420E+09
-2115	8,057100E+06	8,057004E+06	2,788314E+09	2,788147E+09	1,611410E+07	5,576461E+09	5,592575E+09
-2114	8,051908E+06	8,049911E+06	2,788250E+09	2,788335E+09	1,610182E+07	5,576585E+09	5,592687E+09
-2113	8,054005E+06	8,055862E+06	2,788353E+09	2,788407E+09	1,610987E+07	5,576760E+09	5,592870E+09
-2112	8,055539E+06	8,053527E+06	2,788579E+09	2,788380E+09	1,610907E+07	5,576958E+09	5,593067E+09
-2111	8,050618E+06	8,050118E+06	2,788433E+09	2,788627E+09	1,610074E+07	5,577060E+09	5,593161E+09
-2110	8,054852E+06	8,056937E+06	2,788575E+09	2,788541E+09	1,611179E+07	5,577116E+09	5,593227E+09
-2109	8,053227E+06	8,050340E+06	2,788606E+09	2,788515E+09	1,610357E+07	5,577121E+09	5,593225E+09
-2108	8,050030E+06	8,052399E+06	2,788429E+09	2,788630E+09	1,610243E+07	5,577059E+09	5,593161E+09
-2107	8,057226E+06	8,055320E+06	2,788573E+09	2,788409E+09	1,611255E+07	5,576982E+09	5,593094E+09
-2106	8,051843E+06	8,049856E+06	2,788389E+09	2,788392E+09	1,610170E+07	5,576781E+09	5,592883E+09
-2105	8,052755E+06	8,054514E+06	2,788237E+09	2,788349E+09	1,610727E+07	5,576586E+09	5,592694E+09
-2104	8,057005E+06	8,055130E+06	2,788331E+09	2,788110E+09	1,611214E+07	5,576441E+09	5,592553E+09
-2103	8,050122E+06	8,052221E+06	2,788078E+09	2,788182E+09	1,610234E+07	5,576259E+09	5,592362E+09
-2102	8,056148E+06	8,056987E+06	2,788066E+09	2,788044E+09	1,611314E+07	5,576110E+09	5,592223E+09
-2101	8,055172E+06	8,054067E+06	2,788074E+09	2,787905E+09	1,610924E+07	5,575980E+09	5,592089E+09
-2100	8,052559E+06	8,052010E+06	2,787824E+09	2,788049E+09	1,610457E+07	5,575873E+09	5,591978E+09
-2099	8,058828E+06	8,057702E+06	2,787960E+09	2,787886E+09	1,611653E+07	5,575847E+09	5,591963E+09
-2098	8,053787E+06	8,052433E+06	2,787924E+09	2,787901E+09	1,610622E+07	5,575825E+09	5,591931E+09
-2097	8,053778E+06	8,054283E+06	2,787877E+09	2,788049E+09	1,610806E+07	5,575926E+09	5,592034E+09
-2096	8,057215E+06	8,057899E+06	2,788158E+09	2,787959E+09	1,611511E+07	5,576117E+09	5,592232E+09
-2095	8,052241E+06	8,050554E+06	2,788114E+09	2,788182E+09	1,610279E+07	5,576296E+09	5,592399E+09
-2094	8,054447E+06	8,056285E+06	2,788187E+09	2,788259E+09	1,611073E+07	5,576446E+09	5,592557E+09
-2093	8,056053E+06	8,053373E+06	2,788355E+09	2,788210E+09	1,610943E+07	5,576565E+09	5,592675E+09
-2092	8,051069E+06	8,050733E+06	2,788209E+09	2,788435E+09	1,610180E+07	5,576644E+09	5,592746E+09
-2091	8,055683E+06	8,057345E+06	2,788360E+09	2,788334E+09	1,611303E+07	5,576694E+09	5,592807E+09
-2090	8,054401E+06	8,051000E+06	2,788385E+09	2,788264E+09	1,610540E+07	5,576649E+09	5,592754E+09
-2089	8,050814E+06	8,053016E+06	2,788210E+09	2,788373E+09	1,610383E+07	5,576583E+09	5,592687E+09
-2088	8,057788E+06	8,056220E+06	2,788335E+09	2,788165E+09	1,611401E+07	5,576500E+09	5,592614E+09
-2087	8,051914E+06	8,051326E+06	2,788183E+09	2,788166E+09	1,610324E+07	5,576348E+09	5,592452E+09
-2086	8,052998E+06	8,055695E+06	2,788032E+09	2,788129E+09	1,610869E+07	5,576161E+09	5,592270E+09
-2085	8,057377E+06	8,055484E+06	2,788091E+09	2,787883E+09	1,611286E+07	5,575974E+09	5,592087E+09
-2084	8,051261E+06	8,052362E+06	2,787832E+09	2,787963E+09	1,610362E+07	5,575795E+09	5,591898E+09
-2083	8,057790E+06	8,056711E+06	2,787805E+09	2,787829E+09	1,611450E+07	5,575634E+09	5,591749E+09
-2082	8,056715E+06	8,054428E+06	2,787793E+09	2,787654E+09	1,611114E+07	5,575447E+09	5,591559E+09
-2081	8,053265E+06	8,052768E+06	2,787571E+09	2,787793E+09	1,610603E+07	5,575364E+09	5,591470E+09
-2080	8,058742E+06	8,059009E+06	2,787737E+09	2,787651E+09	1,611775E+07	5,575388E+09	5,591506E+09
-2079	8,053809E+06	8,053747E+06	2,787777E+09	2,787702E+09	1,610756E+07	5,575479E+09	5,591586E+09
-2078	8,054122E+06	8,055038E+06	2,787742E+09	2,787880E+09	1,610916E+07	5,575622E+09	5,591731E+09
-2077	8,057843E+06	8,057666E+06	2,787978E+09	2,787806E+09	1,611551E+07	5,575784E+09	5,591899E+09
-2076	8,053233E+06	8,050744E+06	2,787921E+09	2,788033E+09	1,610398E+07	5,575954E+09	5,592058E+09
-2075	8,055198E+06	8,056585E+06	2,787987E+09	2,788099E+09	1,611178E+07	5,576086E+09	5,592198E+09
-2074	8,056803E+06	8,054185E+06	2,788149E+09	2,787996E+09	1,611099E+07	5,576145E+09	5,592256E+09
-2073	8,051250E+06	8,051726E+06	2,788025E+09	2,788198E+09	1,610298E+07	5,576223E+09	5,592326E+09
-2072	8,055879E+06	8,058025E+06	2,788163E+09	2,788111E+09	1,611390E+07	5,576274E+09	5,592388E+09
-2071	8,054833E+06	8,051852E+06	2,788205E+09	2,788053E+09	1,610669E+07	5,576258E+09	5,592365E+09
-2070	8,051365E+06	8,053628E+06	2,787999E+09	2,788163E+09	1,610499E+07	5,576162E+09	5,592267E+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							
-2069	8,058240E+06	8,056384E+06	2,788074E+09	2,787946E+09	1,611462E+07	5,576020E+09	5,592135E+09
-2068	8,052620E+06	8,052049E+06	2,787925E+09	2,787937E+09	1,610467E+07	5,575862E+09	5,591967E+09
-2067	8,054271E+06	8,055783E+06	2,787782E+09	2,787899E+09	1,611005E+07	5,575681E+09	5,591791E+09
-2066	8,058871E+06	8,055968E+06	2,787824E+09	2,787619E+09	1,611484E+07	5,575443E+09	5,591558E+09
-2065	8,052465E+06	8,052832E+06	2,787573E+09	2,787691E+09	1,610530E+07	5,575264E+09	5,591369E+09
-2064	8,058397E+06	8,057622E+06	2,787541E+09	2,787579E+09	1,611602E+07	5,575119E+09	5,591235E+09
-2063	8,056778E+06	8,056094E+06	2,787589E+09	2,787421E+09	1,611287E+07	5,575010E+09	5,591122E+09
-2062	8,053256E+06	8,054114E+06	2,787401E+09	2,787579E+09	1,610737E+07	5,574980E+09	5,591088E+09
-2061	8,058609E+06	8,059479E+06	2,787559E+09	2,787462E+09	1,611809E+07	5,575021E+09	5,591139E+09
-2060	8,054582E+06	8,053929E+06	2,787608E+09	2,787541E+09	1,610851E+07	5,575149E+09	5,591258E+09
-2059	8,055292E+06	8,054730E+06	2,787560E+09	2,787734E+09	1,611002E+07	5,575294E+09	5,591404E+09
-2058	8,058968E+06	8,057833E+06	2,787757E+09	2,787620E+09	1,611680E+07	5,575377E+09	5,591494E+09
-2057	8,053763E+06	8,051442E+06	2,787711E+09	2,787823E+09	1,610520E+07	5,575534E+09	5,591639E+09
-2056	8,055120E+06	8,057520E+06	2,787779E+09	2,787891E+09	1,611264E+07	5,575670E+09	5,591783E+09
-2055	8,057029E+06	8,055187E+06	2,787991E+09	2,787792E+09	1,611222E+07	5,575783E+09	5,591896E+09
-2054	8,051808E+06	8,052345E+06	2,787862E+09	2,787999E+09	1,610415E+07	5,575861E+09	5,591965E+09
-2053	8,056570E+06	8,057700E+06	2,787942E+09	2,787912E+09	1,611427E+07	5,575854E+09	5,591968E+09
-2052	8,055866E+06	8,052255E+06	2,787971E+09	2,787854E+09	1,610812E+07	5,575825E+09	5,591933E+09
-2051	8,052451E+06	8,054035E+06	2,787762E+09	2,787953E+09	1,610649E+07	5,575714E+09	5,591821E+09
-2050	8,059078E+06	8,057241E+06	2,787819E+09	2,787690E+09	1,611632E+07	5,575509E+09	5,591625E+09
-2049	8,053286E+06	8,053051E+06	2,787689E+09	2,787665E+09	1,610634E+07	5,575354E+09	5,591460E+09
-2048	8,054883E+06	8,056367E+06	2,787527E+09	2,787645E+09	1,611125E+07	5,575172E+09	5,591283E+09
-2047	8,059418E+06	8,057088E+06	2,787594E+09	2,787372E+09	1,611651E+07	5,574966E+09	5,591082E+09
-2046	8,052932E+06	8,053834E+06	2,787337E+09	2,787447E+09	1,610677E+07	5,574783E+09	5,590890E+09
-2045	8,058371E+06	8,058226E+06	2,787286E+09	2,787343E+09	1,611660E+07	5,574628E+09	5,590745E+09
-2044	8,057125E+06	8,057070E+06	2,787371E+09	2,787208E+09	1,611419E+07	5,574580E+09	5,590694E+09
-2043	8,054359E+06	8,054189E+06	2,787216E+09	2,787391E+09	1,610855E+07	5,574607E+09	5,590716E+09
-2042	8,059755E+06	8,059665E+06	2,787358E+09	2,787266E+09	1,611942E+07	5,574624E+09	5,590744E+09
-2041	8,055849E+06	8,054085E+06	2,787418E+09	2,787346E+09	1,610993E+07	5,574764E+09	5,590874E+09
-2040	8,055663E+06	8,055315E+06	2,787357E+09	2,787557E+09	1,611098E+07	5,574914E+09	5,591025E+09
-2039	8,058986E+06	8,059130E+06	2,787598E+09	2,787440E+09	1,611812E+07	5,575038E+09	5,591156E+09
-2038	8,053671E+06	8,052584E+06	2,787561E+09	2,787633E+09	1,610626E+07	5,575194E+09	5,591300E+09
-2037	8,055030E+06	8,057718E+06	2,787596E+09	2,787707E+09	1,611275E+07	5,575303E+09	5,591416E+09
-2036	8,057930E+06	8,055374E+06	2,787798E+09	2,787615E+09	1,611330E+07	5,575413E+09	5,591527E+09
-2035	8,053180E+06	8,052118E+06	2,787649E+09	2,787815E+09	1,610530E+07	5,575464E+09	5,591570E+09
-2034	8,057597E+06	8,057983E+06	2,787684E+09	2,787683E+09	1,611558E+07	5,575367E+09	5,591483E+09
-2033	8,056476E+06	8,053225E+06	2,787726E+09	2,787594E+09	1,610970E+07	5,575321E+09	5,591430E+09
-2032	8,052557E+06	8,055115E+06	2,787518E+09	2,787699E+09	1,610767E+07	5,575218E+09	5,591326E+09
-2031	8,059414E+06	8,058577E+06	2,787615E+09	2,787437E+09	1,611799E+07	5,575053E+09	5,591171E+09
-2030	8,053885E+06	8,054140E+06	2,787473E+09	2,787418E+09	1,610802E+07	5,574892E+09	5,591000E+09
-2029	8,055545E+06	8,056538E+06	2,787261E+09	2,787409E+09	1,611208E+07	5,574670E+09	5,590782E+09
-2028	8,060144E+06	8,057986E+06	2,787332E+09	2,787145E+09	1,611813E+07	5,574478E+09	5,590596E+09
-2027	8,053966E+06	8,054251E+06	2,787101E+09	2,787221E+09	1,610822E+07	5,574322E+09	5,590431E+09
-2026	8,059013E+06	8,058855E+06	2,787053E+09	2,787097E+09	1,611787E+07	5,574151E+09	5,590269E+09
-2025	8,057974E+06	8,057604E+06	2,787177E+09	2,786976E+09	1,611558E+07	5,574153E+09	5,590268E+09
-2024	8,055141E+06	8,054434E+06	2,787016E+09	2,787199E+09	1,610958E+07	5,574215E+09	5,590325E+09
-2023	8,060320E+06	8,060479E+06	2,787180E+09	2,787088E+09	1,612080E+07	5,574268E+09	5,590389E+09
-2022	8,056350E+06	8,054895E+06	2,787230E+09	2,787169E+09	1,611125E+07	5,574399E+09	5,590510E+09
-2021	8,055452E+06	8,055735E+06	2,787139E+09	2,787374E+09	1,611119E+07	5,574513E+09	5,590624E+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							
-2020	8,059276E+06	8,059770E+06	2,787403E+09	2,787262E+09	1,611905E+07	5,574665E+09	5,590784E+09
-2019	8,054807E+06	8,052575E+06	2,787387E+09	2,787452E+09	1,610738E+07	5,574838E+09	5,590946E+09
-2018	8,056060E+06	8,057802E+06	2,787387E+09	2,787498E+09	1,611386E+07	5,574885E+09	5,590999E+09
-2017	8,059212E+06	8,055813E+06	2,787592E+09	2,787396E+09	1,611503E+07	5,574988E+09	5,591103E+09
-2016	8,053587E+06	8,053077E+06	2,787430E+09	2,787603E+09	1,610666E+07	5,575033E+09	5,591139E+09
-2015	8,057590E+06	8,059581E+06	2,787503E+09	2,787459E+09	1,611717E+07	5,574962E+09	5,591079E+09
-2014	8,056397E+06	8,054769E+06	2,787546E+09	2,787363E+09	1,611117E+07	5,574909E+09	5,591020E+09
-2013	8,052519E+06	8,055506E+06	2,787293E+09	2,787473E+09	1,610803E+07	5,574767E+09	5,590875E+09
-2012	8,060270E+06	8,058968E+06	2,787369E+09	2,787224E+09	1,611924E+07	5,574593E+09	5,590712E+09
-2011	8,055450E+06	8,054142E+06	2,787207E+09	2,787192E+09	1,610959E+07	5,574399E+09	5,590508E+09
-2010	8,056724E+06	8,056825E+06	2,786958E+09	2,787143E+09	1,611355E+07	5,574101E+09	5,590214E+09
-2009	8,061023E+06	8,058873E+06	2,787064E+09	2,786866E+09	1,611990E+07	5,573930E+09	5,590050E+09
-2008	8,054487E+06	8,054989E+06	2,786866E+09	2,786972E+09	1,610948E+07	5,573838E+09	5,589947E+09
-2007	8,059479E+06	8,059965E+06	2,786878E+09	2,786872E+09	1,611944E+07	5,573750E+09	5,589869E+09
-2006	8,058611E+06	8,058403E+06	2,787000E+09	2,786777E+09	1,611701E+07	5,573777E+09	5,589894E+09
-2005	8,055591E+06	8,054670E+06	2,786803E+09	2,787023E+09	1,611026E+07	5,573826E+09	5,589937E+09
-2004	8,060687E+06	8,061449E+06	2,786972E+09	2,786926E+09	1,612214E+07	5,573898E+09	5,590020E+09
-2003	8,057177E+06	8,055304E+06	2,787041E+09	2,786996E+09	1,611248E+07	5,574037E+09	5,590150E+09
-2002	8,055843E+06	8,056240E+06	2,786938E+09	2,787168E+09	1,611208E+07	5,574107E+09	5,590219E+09
-2001	8,060129E+06	8,060038E+06	2,787223E+09	2,787051E+09	1,612017E+07	5,574274E+09	5,590394E+09
-2000	8,055516E+06	8,052835E+06	2,787199E+09	2,787260E+09	1,610835E+07	5,574458E+09	5,590567E+09
-1999	8,056495E+06	8,058834E+06	2,787216E+09	2,787298E+09	1,611533E+07	5,574514E+09	5,590629E+09
-1998	8,059429E+06	8,057026E+06	2,787405E+09	2,787191E+09	1,611646E+07	5,574595E+09	5,590712E+09
-1997	8,053292E+06	8,053909E+06	2,787209E+09	2,787394E+09	1,610720E+07	5,574603E+09	5,590710E+09
-1996	8,057977E+06	8,060328E+06	2,787286E+09	2,787257E+09	1,611831E+07	5,574543E+09	5,590661E+09
-1995	8,057847E+06	8,054820E+06	2,787319E+09	2,787152E+09	1,611267E+07	5,574471E+09	5,590584E+09
-1994	8,053990E+06	8,055359E+06	2,787012E+09	2,787224E+09	1,610935E+07	5,574236E+09	5,590345E+09
-1993	8,061873E+06	8,059273E+06	2,787088E+09	2,786955E+09	1,612115E+07	5,574043E+09	5,590164E+09
-1992	8,056182E+06	8,055133E+06	2,786933E+09	2,786926E+09	1,611131E+07	5,573859E+09	5,589971E+09
-1991	8,056958E+06	8,058427E+06	2,786742E+09	2,786871E+09	1,611538E+07	5,573613E+09	5,589728E+09
-1990	8,061025E+06	8,060441E+06	2,786872E+09	2,786619E+09	1,612147E+07	5,573491E+09	5,589613E+09
-1989	8,054631E+06	8,055458E+06	2,786656E+09	2,786757E+09	1,611009E+07	5,573413E+09	5,589523E+09
-1988	8,060076E+06	8,060490E+06	2,786667E+09	2,786697E+09	1,612057E+07	5,573364E+09	5,589484E+09
-1987	8,059991E+06	8,058462E+06	2,786780E+09	2,786607E+09	1,611845E+07	5,573387E+09	5,589505E+09
-1986	8,056364E+06	8,054930E+06	2,786550E+09	2,786816E+09	1,611129E+07	5,573366E+09	5,589477E+09
-1985	8,061331E+06	8,062032E+06	2,786751E+09	2,786704E+09	1,612336E+07	5,573455E+09	5,589578E+09
-1984	8,057675E+06	8,055820E+06	2,786848E+09	2,786789E+09	1,611350E+07	5,573637E+09	5,589750E+09
-1983	8,056296E+06	8,057283E+06	2,786794E+09	2,786964E+09	1,611358E+07	5,573758E+09	5,589872E+09
-1982	8,060698E+06	8,060855E+06	2,787072E+09	2,786868E+09	1,612155E+07	5,573940E+09	5,590062E+09
-1981	8,055748E+06	8,053345E+06	2,787014E+09	2,787086E+09	1,610909E+07	5,574100E+09	5,590209E+09
-1980	8,056629E+06	8,059846E+06	2,787030E+09	2,787136E+09	1,611648E+07	5,574166E+09	5,590282E+09
-1979	8,060264E+06	8,057420E+06	2,787216E+09	2,787010E+09	1,611768E+07	5,574226E+09	5,590344E+09
-1978	8,053873E+06	8,054203E+06	2,786978E+09	2,787171E+09	1,610808E+07	5,574148E+09	5,590256E+09
-1977	8,059324E+06	8,060295E+06	2,787043E+09	2,787016E+09	1,611962E+07	5,574059E+09	5,590178E+09
-1976	8,058976E+06	8,055168E+06	2,787050E+09	2,786912E+09	1,611414E+07	5,573962E+09	5,590076E+09
-1975	8,054862E+06	8,056541E+06	2,786761E+09	2,786954E+09	1,611140E+07	5,573715E+09	5,589827E+09
-1974	8,062095E+06	8,060752E+06	2,786834E+09	2,786679E+09	1,612285E+07	5,573513E+09	5,589636E+09
-1973	8,055901E+06	8,056247E+06	2,786682E+09	2,786660E+09	1,611215E+07	5,573342E+09	5,589455E+09
-1972	8,057205E+06	8,059434E+06	2,786526E+09	2,786643E+09	1,611664E+07	5,573169E+09	5,589286E+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							
-1971	8,062209E+06	8,060670E+06	2,786662E+09	2,786416E+09	1,612288E+07	5,573078E+09	5,589201E+09
-1970	8,056005E+06	8,055390E+06	2,786404E+09	2,786546E+09	1,611140E+07	5,572951E+09	5,589062E+09
-1969	8,061488E+06	8,060710E+06	2,786421E+09	2,786482E+09	1,612220E+07	5,572904E+09	5,589026E+09
-1968	8,060697E+06	8,059209E+06	2,786548E+09	2,786400E+09	1,611991E+07	5,572948E+09	5,589068E+09
-1967	8,056615E+06	8,056343E+06	2,786378E+09	2,786590E+09	1,611296E+07	5,572967E+09	5,589080E+09
-1966	8,061191E+06	8,063144E+06	2,786597E+09	2,786497E+09	1,612433E+07	5,573095E+09	5,589219E+09
-1965	8,057748E+06	8,056101E+06	2,786680E+09	2,786609E+09	1,611385E+07	5,573290E+09	5,589404E+09
-1964	8,056746E+06	8,057838E+06	2,786627E+09	2,786815E+09	1,611458E+07	5,573443E+09	5,589557E+09
-1963	8,061889E+06	8,060882E+06	2,786884E+09	2,786719E+09	1,612277E+07	5,573603E+09	5,589725E+09
-1962	8,056476E+06	8,053602E+06	2,786780E+09	2,786892E+09	1,611008E+07	5,573672E+09	5,589782E+09
-1961	8,057442E+06	8,060135E+06	2,786807E+09	2,786917E+09	1,611758E+07	5,573724E+09	5,589842E+09
-1960	8,060998E+06	8,057818E+06	2,786994E+09	2,786789E+09	1,611882E+07	5,573783E+09	5,589901E+09
-1959	8,054602E+06	8,055267E+06	2,786771E+09	2,786919E+09	1,610987E+07	5,573691E+09	5,589801E+09
-1958	8,060059E+06	8,061206E+06	2,786814E+09	2,786771E+09	1,612126E+07	5,573584E+09	5,589705E+09
-1957	8,059143E+06	8,056287E+06	2,786794E+09	2,786661E+09	1,611543E+07	5,573455E+09	5,589570E+09
-1956	8,054988E+06	8,057917E+06	2,786528E+09	2,786717E+09	1,611291E+07	5,573244E+09	5,589357E+09
-1955	8,062768E+06	8,061503E+06	2,786616E+09	2,786448E+09	1,612427E+07	5,573063E+09	5,589188E+09
-1954	8,056545E+06	8,056483E+06	2,786438E+09	2,786415E+09	1,611303E+07	5,572853E+09	5,588966E+09
-1953	8,058641E+06	8,059239E+06	2,786286E+09	2,786409E+09	1,611788E+07	5,572695E+09	5,588813E+09
-1952	8,063354E+06	8,060934E+06	2,786405E+09	2,786203E+09	1,612429E+07	5,572609E+09	5,588733E+09
-1951	8,056976E+06	8,056564E+06	2,786172E+09	2,786309E+09	1,611354E+07	5,572481E+09	5,588594E+09
-1950	8,061595E+06	8,061995E+06	2,786197E+09	2,786251E+09	1,612359E+07	5,572448E+09	5,588572E+09
-1949	8,060419E+06	8,060157E+06	2,786336E+09	2,786180E+09	1,612058E+07	5,572516E+09	5,588637E+09
-1948	8,056763E+06	8,057128E+06	2,786212E+09	2,786405E+09	1,611389E+07	5,572616E+09	5,588730E+09
-1947	8,062193E+06	8,063094E+06	2,786435E+09	2,786337E+09	1,612529E+07	5,572772E+09	5,588898E+09
-1946	8,058888E+06	8,055905E+06	2,786481E+09	2,786436E+09	1,611479E+07	5,572917E+09	5,589032E+09
-1945	8,057893E+06	8,058135E+06	2,786430E+09	2,786633E+09	1,611603E+07	5,573063E+09	5,589179E+09
-1944	8,062326E+06	8,061529E+06	2,786684E+09	2,786537E+09	1,612385E+07	5,573221E+09	5,589344E+09
-1943	8,056766E+06	8,055130E+06	2,786613E+09	2,786670E+09	1,611190E+07	5,573282E+09	5,589394E+09
-1942	8,057409E+06	8,061026E+06	2,786623E+09	2,786694E+09	1,611844E+07	5,573318E+09	5,589436E+09
-1941	8,061111E+06	8,058255E+06	2,786773E+09	2,786569E+09	1,611937E+07	5,573343E+09	5,589462E+09
-1940	8,055094E+06	8,056106E+06	2,786547E+09	2,786707E+09	1,611120E+07	5,573254E+09	5,589366E+09
-1939	8,061135E+06	8,061490E+06	2,786564E+09	2,786548E+09	1,612262E+07	5,573112E+09	5,589235E+09
-1938	8,059771E+06	8,056773E+06	2,786511E+09	2,786401E+09	1,611654E+07	5,572912E+09	5,589029E+09
-1937	8,056169E+06	8,058133E+06	2,786269E+09	2,786448E+09	1,611430E+07	5,572717E+09	5,588831E+09
-1936	8,063697E+06	8,061813E+06	2,786366E+09	2,786203E+09	1,612551E+07	5,572569E+09	5,588695E+09
-1935	8,057775E+06	8,057485E+06	2,786213E+09	2,786157E+09	1,611526E+07	5,572370E+09	5,588485E+09
-1934	8,059513E+06	8,060046E+06	2,786049E+09	2,786172E+09	1,611956E+07	5,572221E+09	5,588341E+09
-1933	8,063425E+06	8,062128E+06	2,786157E+09	2,785976E+09	1,612555E+07	5,572133E+09	5,588259E+09
-1932	8,057048E+06	8,057949E+06	2,785967E+09	2,786097E+09	1,611500E+07	5,572064E+09	5,588179E+09
-1931	8,062017E+06	8,062616E+06	2,786009E+09	2,786055E+09	1,612463E+07	5,572064E+09	5,588188E+09
-1930	8,060970E+06	8,060177E+06	2,786130E+09	2,785979E+09	1,612115E+07	5,572109E+09	5,588230E+09
-1929	8,058066E+06	8,056804E+06	2,786021E+09	2,786217E+09	1,611487E+07	5,572239E+09	5,588354E+09
-1928	8,063039E+06	8,063215E+06	2,786237E+09	2,786172E+09	1,612625E+07	5,572409E+09	5,588535E+09
-1927	8,059702E+06	8,057042E+06	2,786299E+09	2,786233E+09	1,611674E+07	5,572532E+09	5,588649E+09
-1926	8,057773E+06	8,059318E+06	2,786248E+09	2,786430E+09	1,611709E+07	5,572678E+09	5,588795E+09
-1925	8,061947E+06	8,062400E+06	2,786493E+09	2,786332E+09	1,612435E+07	5,572826E+09	5,588950E+09
-1924	8,056907E+06	8,056011E+06	2,786440E+09	2,786479E+09	1,611292E+07	5,572919E+09	5,589032E+09
-1923	8,058515E+06	8,060946E+06	2,786421E+09	2,786511E+09	1,611946E+07	5,572932E+09	5,589051E+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	8,062271E+06	8,058175E+06	2,786514E+09	2,786351E+09	1,612045E+07	5,572865E+09	5,588986E+09
-1921	8,056444E+06	8,056423E+06	2,786293E+09	2,786462E+09	1,611287E+07	5,572755E+09	5,588868E+09
-1920	8,061760E+06	8,062123E+06	2,786315E+09	2,786301E+09	1,612388E+07	5,572616E+09	5,588740E+09
-1919	8,060310E+06	8,058355E+06	2,786297E+09	2,786120E+09	1,611866E+07	5,572416E+09	5,588535E+09
-1918	8,056514E+06	8,059041E+06	2,786051E+09	2,786189E+09	1,611556E+07	5,572240E+09	5,588356E+09
-1917	8,063830E+06	8,062594E+06	2,786120E+09	2,785967E+09	1,612642E+07	5,572086E+09	5,588213E+09
-1916	8,058333E+06	8,058611E+06	2,785976E+09	2,785941E+09	1,611694E+07	5,571917E+09	5,588034E+09
-1915	8,060440E+06	8,060579E+06	2,785797E+09	2,785958E+09	1,612102E+07	5,571755E+09	5,587876E+09
-1914	8,063777E+06	8,062663E+06	2,785888E+09	2,785737E+09	1,612644E+07	5,571625E+09	5,587751E+09
-1913	8,058124E+06	8,058073E+06	2,785740E+09	2,785856E+09	1,611620E+07	5,571596E+09	5,587712E+09
-1912	8,062728E+06	8,062714E+06	2,785801E+09	2,785847E+09	1,612544E+07	5,571648E+09	5,587774E+09
-1911	8,062180E+06	8,061045E+06	2,785953E+09	2,785766E+09	1,612322E+07	5,571719E+09	5,587842E+09
-1910	8,058744E+06	8,057626E+06	2,785845E+09	2,786027E+09	1,611637E+07	5,571872E+09	5,587988E+09
-1909	8,062763E+06	8,064339E+06	2,786052E+09	2,785995E+09	1,612710E+07	5,572047E+09	5,588174E+09
-1908	8,059697E+06	8,058309E+06	2,786152E+09	2,786067E+09	1,611801E+07	5,572218E+09	5,588336E+09
-1907	8,058057E+06	8,059632E+06	2,786087E+09	2,786265E+09	1,611769E+07	5,572351E+09	5,588469E+09
-1906	8,062550E+06	8,061992E+06	2,786279E+09	2,786144E+09	1,612454E+07	5,572423E+09	5,588547E+09
-1905	8,058434E+06	8,055670E+06	2,786210E+09	2,786271E+09	1,611410E+07	5,572481E+09	5,588596E+09
-1904	8,059636E+06	8,061034E+06	2,786165E+09	2,786297E+09	1,612067E+07	5,572463E+09	5,588584E+09
-1903	8,063285E+06	8,059635E+06	2,786267E+09	2,786083E+09	1,612292E+07	5,572351E+09	5,588474E+09
-1902	8,056598E+06	8,057805E+06	2,786060E+09	2,786188E+09	1,611440E+07	5,572248E+09	5,588362E+09
-1901	8,061404E+06	8,063219E+06	2,786085E+09	2,786040E+09	1,612462E+07	5,572125E+09	5,588249E+09
-1900	8,060566E+06	8,059532E+06	2,786095E+09	2,785887E+09	1,612010E+07	5,571982E+09	5,588102E+09
-1899	8,057636E+06	8,059308E+06	2,785822E+09	2,785979E+09	1,611694E+07	5,571801E+09	5,587918E+09
-1898	8,064745E+06	8,062902E+06	2,785839E+09	2,785740E+09	1,612765E+07	5,571578E+09	5,587706E+09
-1897	8,059658E+06	8,059133E+06	2,785707E+09	2,785700E+09	1,611879E+07	5,571407E+09	5,587526E+09
-1896	8,061199E+06	8,061160E+06	2,785548E+09	2,785724E+09	1,612236E+07	5,571271E+09	5,587394E+09
-1895	8,064454E+06	8,063929E+06	2,785675E+09	2,785473E+09	1,612838E+07	5,571148E+09	5,587276E+09
-1894	8,058668E+06	8,058554E+06	2,785550E+09	2,785625E+09	1,611722E+07	5,571174E+09	5,587291E+09
-1893	8,062723E+06	8,063379E+06	2,785607E+09	2,785652E+09	1,612610E+07	5,571259E+09	5,587385E+09
-1892	8,062611E+06	8,062002E+06	2,785785E+09	2,785602E+09	1,612461E+07	5,571387E+09	5,587512E+09
-1891	8,059368E+06	8,058206E+06	2,785665E+09	2,785873E+09	1,611757E+07	5,571539E+09	5,587656E+09
-1890	8,062956E+06	8,064578E+06	2,785839E+09	2,785817E+09	1,612753E+07	5,571656E+09	5,587784E+09
-1889	8,060862E+06	8,058191E+06	2,785953E+09	2,785874E+09	1,611905E+07	5,571827E+09	5,587946E+09
-1888	8,058940E+06	8,059479E+06	2,785878E+09	2,786076E+09	1,611842E+07	5,571954E+09	5,588072E+09
-1887	8,063860E+06	8,062739E+06	2,786066E+09	2,785913E+09	1,612660E+07	5,571979E+09	5,588106E+09
-1886	8,059055E+06	8,056766E+06	2,785995E+09	2,786034E+09	1,611582E+07	5,572029E+09	5,588145E+09
-1885	8,059252E+06	8,062542E+06	2,785946E+09	2,786057E+09	1,612179E+07	5,572003E+09	5,588125E+09
-1884	8,063160E+06	8,061402E+06	2,786088E+09	2,785855E+09	1,612456E+07	5,571943E+09	5,588068E+09
-1883	8,056945E+06	8,058539E+06	2,785867E+09	2,785971E+09	1,611548E+07	5,571839E+09	5,587954E+09
-1882	8,061952E+06	8,063043E+06	2,785837E+09	2,785818E+09	1,612500E+07	5,571656E+09	5,587781E+09
-1881	8,062191E+06	8,059475E+06	2,785828E+09	2,785659E+09	1,612167E+07	5,571487E+09	5,587609E+09
-1880	8,058981E+06	8,059374E+06	2,785528E+09	2,785746E+09	1,611835E+07	5,571274E+09	5,587393E+09
-1879	8,065891E+06	8,064214E+06	2,785554E+09	2,785456E+09	1,613010E+07	5,571010E+09	5,587140E+09
-1878	8,060197E+06	8,060282E+06	2,785452E+09	2,785413E+09	1,612048E+07	5,570865E+09	5,586986E+09
-1877	8,061144E+06	8,062073E+06	2,785315E+09	2,785464E+09	1,612322E+07	5,570779E+09	5,586902E+09
-1876	8,064926E+06	8,064909E+06	2,785496E+09	2,785264E+09	1,612983E+07	5,570760E+09	5,586890E+09
-1875	8,059796E+06	8,058751E+06	2,785368E+09	2,785453E+09	1,611855E+07	5,570820E+09	5,586939E+09
-1874	8,063248E+06	8,063631E+06	2,785393E+09	2,785482E+09	1,612688E+07	5,570876E+09	5,587002E+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							
-1873	8,063711E+06	8,062363E+06	2,785586E+09	2,785428E+09	1,612607E+07	5,571014E+09	5,587140E+09
-1872	8,059903E+06	8,058672E+06	2,785477E+09	2,785698E+09	1,611857E+07	5,571175E+09	5,587294E+09
-1871	8,063564E+06	8,065544E+06	2,785655E+09	2,785602E+09	1,612911E+07	5,571257E+09	5,587386E+09
-1870	8,061419E+06	8,058661E+06	2,785766E+09	2,785662E+09	1,612008E+07	5,571427E+09	5,587547E+09
-1869	8,058858E+06	8,060316E+06	2,785669E+09	2,785870E+09	1,611917E+07	5,571539E+09	5,587659E+09
-1868	8,064210E+06	8,063963E+06	2,785878E+09	2,785714E+09	1,612817E+07	5,571592E+09	5,587720E+09
-1867	8,059421E+06	8,057750E+06	2,785798E+09	2,785830E+09	1,611717E+07	5,571627E+09	5,587744E+09
-1866	8,059333E+06	8,062916E+06	2,785717E+09	2,785833E+09	1,612225E+07	5,571550E+09	5,587673E+09
-1865	8,064329E+06	8,061416E+06	2,785858E+09	2,785630E+09	1,612575E+07	5,571489E+09	5,587614E+09
-1864	8,058287E+06	8,058399E+06	2,785619E+09	2,785755E+09	1,611669E+07	5,571375E+09	5,587491E+09
-1863	8,063683E+06	8,063692E+06	2,785564E+09	2,785558E+09	1,612738E+07	5,571122E+09	5,587249E+09
-1862	8,063236E+06	8,060564E+06	2,785552E+09	2,785390E+09	1,612380E+07	5,570942E+09	5,587066E+09
-1861	8,059055E+06	8,060819E+06	2,785263E+09	2,785473E+09	1,611987E+07	5,570736E+09	5,586856E+09
-1860	8,065934E+06	8,065804E+06	2,785344E+09	2,785200E+09	1,613174E+07	5,570543E+09	5,586675E+09
-1859	8,060636E+06	8,060967E+06	2,785252E+09	2,785185E+09	1,612160E+07	5,570436E+09	5,586558E+09
-1858	8,061582E+06	8,061951E+06	2,785088E+09	2,785252E+09	1,612353E+07	5,570340E+09	5,586463E+09
-1857	8,066259E+06	8,064944E+06	2,785270E+09	2,785076E+09	1,613120E+07	5,570346E+09	5,586477E+09
-1856	8,060986E+06	8,058987E+06	2,785142E+09	2,785276E+09	1,611997E+07	5,570418E+09	5,586538E+09
-1855	8,063966E+06	8,064889E+06	2,785178E+09	2,785263E+09	1,612885E+07	5,570440E+09	5,586569E+09
-1854	8,064062E+06	8,063183E+06	2,785396E+09	2,785208E+09	1,612724E+07	5,570604E+09	5,586731E+09
-1853	8,059665E+06	8,059504E+06	2,785293E+09	2,785490E+09	1,611917E+07	5,570783E+09	5,586902E+09
-1852	8,063892E+06	8,066291E+06	2,785499E+09	2,785422E+09	1,613018E+07	5,570920E+09	5,587050E+09
-1851	8,062271E+06	8,059095E+06	2,785589E+09	2,785492E+09	1,612137E+07	5,571081E+09	5,587202E+09
-1850	8,059178E+06	8,060695E+06	2,785456E+09	2,785684E+09	1,611987E+07	5,571139E+09	5,587259E+09
-1849	8,065267E+06	8,064381E+06	2,785668E+09	2,785519E+09	1,612965E+07	5,571187E+09	5,587317E+09
-1848	8,060260E+06	8,058037E+06	2,785588E+09	2,785622E+09	1,611830E+07	5,571209E+09	5,587328E+09
-1847	8,060413E+06	8,063420E+06	2,785490E+09	2,785585E+09	1,612383E+07	5,571075E+09	5,587199E+09
-1846	8,065352E+06	8,061741E+06	2,785614E+09	2,785380E+09	1,612709E+07	5,570994E+09	5,587121E+09
-1845	8,058678E+06	8,059301E+06	2,785345E+09	2,785503E+09	1,611798E+07	5,570849E+09	5,586967E+09
-1844	8,064341E+06	8,065047E+06	2,785310E+09	2,785310E+09	1,612939E+07	5,570620E+09	5,586749E+09
-1843	8,063666E+06	8,061930E+06	2,785297E+09	2,785134E+09	1,612560E+07	5,570431E+09	5,586557E+09
-1842	8,059261E+06	8,061285E+06	2,785001E+09	2,785207E+09	1,612055E+07	5,570208E+09	5,586329E+09
-1841	8,066987E+06	8,065981E+06	2,785101E+09	2,784957E+09	1,613297E+07	5,570059E+09	5,586192E+09
-1840	8,061943E+06	8,060937E+06	2,785023E+09	2,784970E+09	1,612288E+07	5,569993E+09	5,586116E+09
-1839	8,062933E+06	8,062720E+06	2,784858E+09	2,785023E+09	1,612565E+07	5,569881E+09	5,586007E+09
-1838	8,066903E+06	8,066000E+06	2,785057E+09	2,784861E+09	1,613290E+07	5,569918E+09	5,586051E+09
-1837	8,060869E+06	8,060383E+06	2,784949E+09	2,785071E+09	1,612125E+07	5,570020E+09	5,586142E+09
-1836	8,063836E+06	8,066146E+06	2,785031E+09	2,785077E+09	1,612998E+07	5,570108E+09	5,586238E+09
-1835	8,064372E+06	8,063536E+06	2,785241E+09	2,785041E+09	1,612791E+07	5,570281E+09	5,586409E+09
-1834	8,059972E+06	8,059221E+06	2,785097E+09	2,785317E+09	1,611919E+07	5,570414E+09	5,586534E+09
-1833	8,065060E+06	8,066020E+06	2,785280E+09	2,785254E+09	1,613108E+07	5,570535E+09	5,586666E+09
-1832	8,063500E+06	8,059234E+06	2,785368E+09	2,785311E+09	1,612273E+07	5,570679E+09	5,586802E+09
-1831	8,060093E+06	8,061735E+06	2,785229E+09	2,785444E+09	1,612183E+07	5,570673E+09	5,586795E+09
-1830	8,065858E+06	8,064970E+06	2,785455E+09	2,785273E+09	1,613083E+07	5,570728E+09	5,586859E+09
-1829	8,060443E+06	8,058924E+06	2,785371E+09	2,785383E+09	1,611937E+07	5,570755E+09	5,586874E+09
-1828	8,061074E+06	8,064186E+06	2,785286E+09	2,785362E+09	1,612526E+07	5,570648E+09	5,586773E+09
-1827	8,066080E+06	8,062683E+06	2,785379E+09	2,785159E+09	1,612876E+07	5,570538E+09	5,586667E+09
-1826	8,058914E+06	8,060144E+06	2,785077E+09	2,785256E+09	1,611906E+07	5,570333E+09	5,586452E+09
-1825	8,065206E+06	8,065800E+06	2,785047E+09	2,785061E+09	1,613101E+07	5,570107E+09	5,586238E+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	8,064453E+06	8,062559E+06	2,785051E+09	2,784882E+09	1,612701E+07	5,569934E+09	5,586061E+09
-1823	8,060381E+06	8,061782E+06	2,784755E+09	2,784930E+09	1,612216E+07	5,569685E+09	5,585807E+09
-1822	8,067862E+06	8,066272E+06	2,784862E+09	2,784708E+09	1,613413E+07	5,569570E+09	5,585704E+09
-1821	8,062435E+06	8,061783E+06	2,784784E+09	2,784744E+09	1,612422E+07	5,569528E+09	5,585652E+09
-1820	8,063385E+06	8,063984E+06	2,784661E+09	2,784819E+09	1,612737E+07	5,569480E+09	5,585608E+09
-1819	8,067058E+06	8,067152E+06	2,784864E+09	2,784670E+09	1,613421E+07	5,569534E+09	5,585669E+09
-1818	8,061009E+06	8,060522E+06	2,784745E+09	2,784876E+09	1,612153E+07	5,569621E+09	5,585743E+09
-1817	8,064855E+06	8,065837E+06	2,784826E+09	2,784905E+09	1,613069E+07	5,569732E+09	5,585862E+09
-1816	8,065868E+06	8,063093E+06	2,785031E+09	2,784871E+09	1,612896E+07	5,569902E+09	5,586031E+09
-1815	8,061342E+06	8,059698E+06	2,784878E+09	2,785105E+09	1,612104E+07	5,569983E+09	5,586104E+09
-1814	8,065698E+06	8,066811E+06	2,785079E+09	2,785037E+09	1,613251E+07	5,570116E+09	5,586248E+09
-1813	8,063412E+06	8,060638E+06	2,785184E+09	2,785090E+09	1,612405E+07	5,570274E+09	5,586398E+09
-1812	8,060050E+06	8,063108E+06	2,785082E+09	2,785235E+09	1,612316E+07	5,570317E+09	5,586440E+09
-1811	8,065991E+06	8,065609E+06	2,785278E+09	2,785078E+09	1,613160E+07	5,570355E+09	5,586487E+09
-1810	8,060704E+06	8,059134E+06	2,785138E+09	2,785174E+09	1,611984E+07	5,570312E+09	5,586432E+09
-1809	8,062219E+06	8,064283E+06	2,785016E+09	2,785152E+09	1,612650E+07	5,570168E+09	5,586295E+09
-1808	8,067193E+06	8,063253E+06	2,785102E+09	2,784922E+09	1,613045E+07	5,570024E+09	5,586154E+09
-1807	8,059898E+06	8,061160E+06	2,784798E+09	2,784957E+09	1,612106E+07	5,569755E+09	5,585876E+09
-1806	8,065990E+06	8,066268E+06	2,784790E+09	2,784765E+09	1,613226E+07	5,569555E+09	5,585687E+09
-1805	8,064858E+06	8,063399E+06	2,784808E+09	2,784613E+09	1,612826E+07	5,569421E+09	5,585549E+09
-1804	8,061333E+06	8,062585E+06	2,784549E+09	2,784697E+09	1,612392E+07	5,569246E+09	5,585370E+09
-1803	8,068308E+06	8,067348E+06	2,784649E+09	2,784507E+09	1,613566E+07	5,569156E+09	5,585292E+09
-1802	8,062697E+06	8,062550E+06	2,784561E+09	2,784541E+09	1,612525E+07	5,569102E+09	5,585227E+09
-1801	8,064083E+06	8,064414E+06	2,784444E+09	2,784632E+09	1,612850E+07	5,569075E+09	5,585204E+09
-1800	8,067904E+06	8,067287E+06	2,784660E+09	2,784484E+09	1,613519E+07	5,569144E+09	5,585279E+09
-1799	8,062173E+06	8,060623E+06	2,784527E+09	2,784653E+09	1,612280E+07	5,569180E+09	5,585302E+09
-1798	8,065655E+06	8,065873E+06	2,784608E+09	2,784692E+09	1,613153E+07	5,569301E+09	5,585432E+09
-1797	8,066281E+06	8,064028E+06	2,784819E+09	2,784667E+09	1,613031E+07	5,569486E+09	5,585617E+09
-1796	8,061572E+06	8,061223E+06	2,784715E+09	2,784903E+09	1,612279E+07	5,569618E+09	5,585741E+09
-1795	8,065375E+06	8,068104E+06	2,784920E+09	2,784844E+09	1,613348E+07	5,569764E+09	5,585897E+09
-1794	8,063360E+06	8,061065E+06	2,785004E+09	2,784889E+09	1,612443E+07	5,569894E+09	5,586018E+09
-1793	8,060858E+06	8,063011E+06	2,784877E+09	2,785054E+09	1,612387E+07	5,569932E+09	5,586056E+09
-1792	8,067390E+06	8,065412E+06	2,785043E+09	2,784889E+09	1,613280E+07	5,569933E+09	5,586066E+09
-1791	8,062059E+06	8,059853E+06	2,784868E+09	2,784924E+09	1,612191E+07	5,569791E+09	5,585913E+09
-1790	8,063158E+06	8,064953E+06	2,784749E+09	2,784883E+09	1,612811E+07	5,569632E+09	5,585760E+09
-1789	8,067470E+06	8,064626E+06	2,784849E+09	2,784642E+09	1,613210E+07	5,569492E+09	5,585624E+09
-1788	8,060381E+06	8,062334E+06	2,784594E+09	2,784685E+09	1,612272E+07	5,569280E+09	5,585402E+09
-1787	8,066216E+06	8,066933E+06	2,784573E+09	2,784524E+09	1,613315E+07	5,569097E+09	5,585230E+09
-1786	8,065216E+06	8,063691E+06	2,784556E+09	2,784384E+09	1,612891E+07	5,568940E+09	5,585069E+09
-1785	8,062512E+06	8,062891E+06	2,784286E+09	2,784497E+09	1,612540E+07	5,568783E+09	5,584909E+09
-1784	8,069295E+06	8,068023E+06	2,784391E+09	2,784299E+09	1,613732E+07	5,568690E+09	5,584827E+09
-1783	8,063757E+06	8,063289E+06	2,784306E+09	2,784289E+09	1,612705E+07	5,568596E+09	5,584723E+09
-1782	8,064945E+06	8,064593E+06	2,784217E+09	2,784388E+09	1,612954E+07	5,568606E+09	5,584735E+09
-1781	8,068328E+06	8,067869E+06	2,784446E+09	2,784262E+09	1,613620E+07	5,568708E+09	5,584845E+09
-1780	8,062942E+06	8,061500E+06	2,784362E+09	2,784450E+09	1,612444E+07	5,568812E+09	5,584936E+09
-1779	8,065554E+06	8,067179E+06	2,784444E+09	2,784514E+09	1,613273E+07	5,568958E+09	5,585091E+09
-1778	8,066163E+06	8,065034E+06	2,784651E+09	2,784487E+09	1,613120E+07	5,569139E+09	5,585270E+09
-1777	8,061959E+06	8,061919E+06	2,784552E+09	2,784742E+09	1,612388E+07	5,569294E+09	5,585418E+09
-1776	8,066079E+06	8,068126E+06	2,784747E+09	2,784679E+09	1,613420E+07	5,569427E+09	5,585561E+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							
-1775	8,064594E+06	8,060963E+06	2,784784E+09	2,784680E+09	1,612556E+07	5,569464E+09	5,585590E+09
-1774	8,061955E+06	8,062781E+06	2,784628E+09	2,784831E+09	1,612474E+07	5,569459E+09	5,585583E+09
-1773	8,068067E+06	8,066213E+06	2,784775E+09	2,784650E+09	1,613428E+07	5,569426E+09	5,585560E+09
-1772	8,062622E+06	8,061521E+06	2,784638E+09	2,784658E+09	1,612414E+07	5,569297E+09	5,585421E+09
-1771	8,063116E+06	8,066274E+06	2,784523E+09	2,784620E+09	1,612939E+07	5,569142E+09	5,585272E+09
-1770	8,067650E+06	8,065323E+06	2,784611E+09	2,784381E+09	1,613297E+07	5,568992E+09	5,585125E+09
-1769	8,061448E+06	8,062446E+06	2,784346E+09	2,784457E+09	1,612389E+07	5,568803E+09	5,584927E+09
-1768	8,067548E+06	8,067015E+06	2,784317E+09	2,784309E+09	1,613456E+07	5,568626E+09	5,584761E+09
-1767	8,066469E+06	8,064535E+06	2,784281E+09	2,784132E+09	1,613100E+07	5,568413E+09	5,584544E+09
-1766	8,063433E+06	8,063606E+06	2,784032E+09	2,784243E+09	1,612704E+07	5,568275E+09	5,584402E+09
-1765	8,069463E+06	8,069372E+06	2,784160E+09	2,784055E+09	1,613883E+07	5,568215E+09	5,584354E+09
-1764	8,064325E+06	8,064374E+06	2,784125E+09	2,784054E+09	1,612870E+07	5,568179E+09	5,584307E+09
-1763	8,065010E+06	8,065276E+06	2,784030E+09	2,784185E+09	1,613029E+07	5,568214E+09	5,584345E+09
-1762	8,068535E+06	8,068205E+06	2,784238E+09	2,784072E+09	1,613674E+07	5,568310E+09	5,584447E+09
-1761	8,063747E+06	8,061915E+06	2,784161E+09	2,784287E+09	1,612566E+07	5,568448E+09	5,584573E+09
-1760	8,066179E+06	8,067749E+06	2,784257E+09	2,784348E+09	1,613393E+07	5,568605E+09	5,584739E+09
-1759	8,067153E+06	8,065352E+06	2,784452E+09	2,784282E+09	1,613250E+07	5,568733E+09	5,584866E+09
-1758	8,062989E+06	8,061781E+06	2,784355E+09	2,784536E+09	1,612477E+07	5,568890E+09	5,585015E+09
-1757	8,066863E+06	8,068393E+06	2,784530E+09	2,784479E+09	1,613526E+07	5,569009E+09	5,585144E+09
-1756	8,065635E+06	8,061948E+06	2,784585E+09	2,784464E+09	1,612758E+07	5,569048E+09	5,585176E+09
-1755	8,061955E+06	8,064202E+06	2,784413E+09	2,784609E+09	1,612616E+07	5,569021E+09	5,585147E+09
-1754	8,067999E+06	8,067348E+06	2,784542E+09	2,784408E+09	1,613535E+07	5,568950E+09	5,585085E+09
-1753	8,063055E+06	8,062503E+06	2,784415E+09	2,784426E+09	1,612556E+07	5,568841E+09	5,584967E+09
-1752	8,063954E+06	8,066484E+06	2,784293E+09	2,784386E+09	1,613044E+07	5,568679E+09	5,584809E+09
-1751	8,068864E+06	8,065446E+06	2,784339E+09	2,784121E+09	1,613431E+07	5,568460E+09	5,584595E+09
-1750	8,062828E+06	8,062510E+06	2,784068E+09	2,784201E+09	1,612534E+07	5,568269E+09	5,584395E+09
-1749	8,068231E+06	8,068054E+06	2,784037E+09	2,784058E+09	1,613628E+07	5,568095E+09	5,584231E+09
-1748	8,067123E+06	8,066283E+06	2,784052E+09	2,783870E+09	1,613341E+07	5,567922E+09	5,584055E+09
-1747	8,063464E+06	8,064865E+06	2,783817E+09	2,783996E+09	1,612833E+07	5,567813E+09	5,583941E+09
-1746	8,069553E+06	8,069901E+06	2,783938E+09	2,783824E+09	1,613945E+07	5,567762E+09	5,583902E+09
-1745	8,065318E+06	8,064518E+06	2,783909E+09	2,783866E+09	1,612984E+07	5,567775E+09	5,583905E+09
-1744	8,066117E+06	8,065442E+06	2,783822E+09	2,784010E+09	1,613156E+07	5,567832E+09	5,583964E+09
-1743	8,069572E+06	8,068717E+06	2,784019E+09	2,783874E+09	1,613829E+07	5,567893E+09	5,584031E+09
-1742	8,064732E+06	8,062332E+06	2,783974E+09	2,784085E+09	1,612706E+07	5,568059E+09	5,584186E+09
-1741	8,066329E+06	8,068694E+06	2,784084E+09	2,784157E+09	1,613502E+07	5,568241E+09	5,584376E+09
-1740	8,067790E+06	8,066153E+06	2,784303E+09	2,784085E+09	1,613394E+07	5,568387E+09	5,584521E+09
-1739	8,062933E+06	8,062483E+06	2,784173E+09	2,784348E+09	1,612542E+07	5,568521E+09	5,584647E+09
-1738	8,067022E+06	8,068851E+06	2,784301E+09	2,784282E+09	1,613587E+07	5,568583E+09	5,584719E+09
-1737	8,066243E+06	8,062858E+06	2,784343E+09	2,784264E+09	1,612910E+07	5,568607E+09	5,584736E+09
-1736	8,062589E+06	8,064959E+06	2,784179E+09	2,784383E+09	1,612755E+07	5,568563E+09	5,584690E+09
-1735	8,069045E+06	8,067729E+06	2,784288E+09	2,784141E+09	1,613677E+07	5,568429E+09	5,584566E+09
-1734	8,064294E+06	8,062447E+06	2,784167E+09	2,784157E+09	1,612674E+07	5,568324E+09	5,584451E+09
-1733	8,064944E+06	8,066845E+06	2,784036E+09	2,784136E+09	1,613179E+07	5,568172E+09	5,584303E+09
-1732	8,069926E+06	8,066729E+06	2,784102E+09	2,783867E+09	1,613665E+07	5,567969E+09	5,584105E+09
-1731	8,062995E+06	8,064101E+06	2,783831E+09	2,783955E+09	1,612710E+07	5,567786E+09	5,583913E+09
-1730	8,068310E+06	8,069254E+06	2,783793E+09	2,783811E+09	1,613756E+07	5,567604E+09	5,583742E+09
-1729	8,067689E+06	8,067256E+06	2,783823E+09	2,783649E+09	1,613494E+07	5,567472E+09	5,583607E+09
-1728	8,064482E+06	8,064873E+06	2,783591E+09	2,783783E+09	1,612936E+07	5,567374E+09	5,583504E+09
-1727	8,070722E+06	8,069643E+06	2,783677E+09	2,783596E+09	1,614037E+07	5,567273E+09	5,583413E+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							
-1726	8,066718E+06	8,064402E+06	2,783664E+09	2,783644E+09	1,613112E+07	5,567308E+09	5,583439E+09
-1725	8,066613E+06	8,066477E+06	2,783601E+09	2,783801E+09	1,613309E+07	5,567402E+09	5,583535E+09
-1724	8,069997E+06	8,070273E+06	2,783854E+09	2,783662E+09	1,614027E+07	5,567516E+09	5,583657E+09
-1723	8,064645E+06	8,063514E+06	2,783825E+09	2,783890E+09	1,612816E+07	5,567716E+09	5,583844E+09
-1722	8,066254E+06	8,069052E+06	2,783907E+09	2,783973E+09	1,613531E+07	5,567880E+09	5,584015E+09
-1721	8,068570E+06	8,066325E+06	2,784110E+09	2,783929E+09	1,613489E+07	5,568038E+09	5,584173E+09
-1720	8,063793E+06	8,062885E+06	2,783965E+09	2,784173E+09	1,612668E+07	5,568138E+09	5,584264E+09
-1719	8,067879E+06	8,069196E+06	2,784054E+09	2,784063E+09	1,613708E+07	5,568116E+09	5,584253E+09
-1718	8,067259E+06	8,063388E+06	2,784117E+09	2,784020E+09	1,613065E+07	5,568136E+09	5,584267E+09
-1717	8,063091E+06	8,065769E+06	2,783960E+09	2,784135E+09	1,612886E+07	5,568095E+09	5,584224E+09
-1716	8,069926E+06	8,068571E+06	2,784084E+09	2,783885E+09	1,613850E+07	5,567969E+09	5,584107E+09
-1715	8,064580E+06	8,063300E+06	2,783940E+09	2,783913E+09	1,612788E+07	5,567853E+09	5,583981E+09
-1714	8,065272E+06	8,067506E+06	2,783771E+09	2,783895E+09	1,613278E+07	5,567665E+09	5,583798E+09
-1713	8,070407E+06	8,068005E+06	2,783836E+09	2,783642E+09	1,613841E+07	5,567479E+09	5,583617E+09
-1712	8,063764E+06	8,065004E+06	2,783577E+09	2,783715E+09	1,612877E+07	5,567292E+09	5,583421E+09
-1711	8,069403E+06	8,069365E+06	2,783515E+09	2,783547E+09	1,613877E+07	5,567062E+09	5,583201E+09
-1710	8,069154E+06	8,067159E+06	2,783560E+09	2,783388E+09	1,613631E+07	5,566948E+09	5,583084E+09
-1709	8,065547E+06	8,065219E+06	2,783344E+09	2,783544E+09	1,613077E+07	5,566888E+09	5,583018E+09
-1708	8,071478E+06	8,070992E+06	2,783472E+09	2,783362E+09	1,614247E+07	5,566833E+09	5,582976E+09
-1707	8,066603E+06	8,065944E+06	2,783488E+09	2,783431E+09	1,613255E+07	5,566919E+09	5,583052E+09
-1706	8,066280E+06	8,067714E+06	2,783435E+09	2,783608E+09	1,613399E+07	5,567043E+09	5,583177E+09
-1705	8,070120E+06	8,071063E+06	2,783697E+09	2,783506E+09	1,614118E+07	5,567203E+09	5,583344E+09
-1704	8,065460E+06	8,063447E+06	2,783654E+09	2,783736E+09	1,612891E+07	5,567390E+09	5,583519E+09
-1703	8,067276E+06	8,068424E+06	2,783671E+09	2,783792E+09	1,613570E+07	5,567464E+09	5,583599E+09
-1702	8,069974E+06	8,066022E+06	2,783863E+09	2,783722E+09	1,613600E+07	5,567586E+09	5,583722E+09
-1701	8,064397E+06	8,063765E+06	2,783727E+09	2,783948E+09	1,612816E+07	5,567675E+09	5,583803E+09
-1700	8,068528E+06	8,070459E+06	2,783851E+09	2,783808E+09	1,613899E+07	5,567658E+09	5,583797E+09
-1699	8,067382E+06	8,064538E+06	2,783923E+09	2,783768E+09	1,613192E+07	5,567692E+09	5,583824E+09
-1698	8,063386E+06	8,066307E+06	2,783740E+09	2,783896E+09	1,612969E+07	5,567637E+09	5,583766E+09
-1697	8,070604E+06	8,069211E+06	2,783851E+09	2,783679E+09	1,613981E+07	5,567531E+09	5,583671E+09
-1696	8,065471E+06	8,064131E+06	2,783696E+09	2,783696E+09	1,612960E+07	5,567393E+09	5,583522E+09
-1695	8,066204E+06	8,067891E+06	2,783487E+09	2,783645E+09	1,613410E+07	5,567132E+09	5,583266E+09
-1694	8,071457E+06	8,068673E+06	2,783571E+09	2,783374E+09	1,614013E+07	5,566945E+09	5,583085E+09
-1693	8,064515E+06	8,065764E+06	2,783325E+09	2,783447E+09	1,613028E+07	5,566772E+09	5,582903E+09
-1692	8,070317E+06	8,070145E+06	2,783279E+09	2,783278E+09	1,614046E+07	5,566557E+09	5,582697E+09
-1691	8,069451E+06	8,068120E+06	2,783328E+09	2,783141E+09	1,613757E+07	5,566469E+09	5,582607E+09
-1690	8,065749E+06	8,066016E+06	2,783108E+09	2,783314E+09	1,613176E+07	5,566423E+09	5,582555E+09
-1689	8,071513E+06	8,072251E+06	2,783270E+09	2,783176E+09	1,614376E+07	5,566446E+09	5,582590E+09
-1688	8,067292E+06	8,066633E+06	2,783315E+09	2,783251E+09	1,613392E+07	5,566567E+09	5,582701E+09
-1687	8,067111E+06	8,067348E+06	2,783230E+09	2,783420E+09	1,613446E+07	5,566650E+09	5,582784E+09
-1686	8,071534E+06	8,070513E+06	2,783487E+09	2,783322E+09	1,614205E+07	5,566809E+09	5,582951E+09
-1685	8,066562E+06	8,063604E+06	2,783437E+09	2,783549E+09	1,613017E+07	5,566985E+09	5,583116E+09
-1684	8,068026E+06	8,069483E+06	2,783466E+09	2,783577E+09	1,613751E+07	5,567043E+09	5,583181E+09
-1683	8,069975E+06	8,067496E+06	2,783676E+09	2,783497E+09	1,613747E+07	5,567173E+09	5,583311E+09
-1682	8,064138E+06	8,065077E+06	2,783545E+09	2,783716E+09	1,612921E+07	5,567261E+09	5,583391E+09
-1681	8,068508E+06	8,071322E+06	2,783674E+09	2,783609E+09	1,613983E+07	5,567283E+09	5,583423E+09
-1680	8,068129E+06	8,064860E+06	2,783726E+09	2,783567E+09	1,613299E+07	5,567293E+09	5,583426E+09
-1679	8,064362E+06	8,065982E+06	2,783471E+09	2,783674E+09	1,613034E+07	5,567145E+09	5,583276E+09
-1678	8,071854E+06	8,069420E+06	2,783565E+09	2,783437E+09	1,614127E+07	5,567002E+09	5,583143E+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	8,066191E+06	8,065311E+06	2,783419E+09	2,783434E+09	1,613150E+07	5,566854E+09	5,582985E+09
-1676	8,067128E+06	8,069133E+06	2,783234E+09	2,783354E+09	1,613626E+07	5,566588E+09	5,582724E+09
-1675	8,071761E+06	8,069774E+06	2,783326E+09	2,783088E+09	1,614153E+07	5,566414E+09	5,582556E+09
-1674	8,065084E+06	8,066254E+06	2,783074E+09	2,783180E+09	1,613134E+07	5,566254E+09	5,582385E+09
-1673	8,070877E+06	8,070901E+06	2,783041E+09	2,783058E+09	1,614178E+07	5,566099E+09	5,582241E+09
-1672	8,070212E+06	8,068983E+06	2,783109E+09	2,782935E+09	1,613919E+07	5,566044E+09	5,582183E+09
-1671	8,066592E+06	8,066250E+06	2,782880E+09	2,783106E+09	1,613284E+07	5,565986E+09	5,582119E+09
-1670	8,072430E+06	8,072579E+06	2,783065E+09	2,782974E+09	1,614501E+07	5,566039E+09	5,582184E+09
-1669	8,068267E+06	8,066863E+06	2,783122E+09	2,783060E+09	1,613513E+07	5,566182E+09	5,582317E+09
-1668	8,068051E+06	8,067724E+06	2,783032E+09	2,783214E+09	1,613578E+07	5,566246E+09	5,582382E+09
-1667	8,071793E+06	8,071195E+06	2,783279E+09	2,783116E+09	1,614299E+07	5,566396E+09	5,582539E+09
-1666	8,066557E+06	8,064657E+06	2,783222E+09	2,783335E+09	1,613121E+07	5,566556E+09	5,582688E+09
-1665	8,067726E+06	8,070935E+06	2,783279E+09	2,783384E+09	1,613866E+07	5,566663E+09	5,582802E+09
-1664	8,070451E+06	8,068424E+06	2,783506E+09	2,783299E+09	1,613887E+07	5,566805E+09	5,582944E+09
-1663	8,064933E+06	8,064884E+06	2,783334E+09	2,783504E+09	1,612982E+07	5,566838E+09	5,582968E+09
-1662	8,069794E+06	8,070964E+06	2,783447E+09	2,783397E+09	1,614076E+07	5,566844E+09	5,582985E+09
-1661	8,069269E+06	8,065334E+06	2,783483E+09	2,783348E+09	1,613460E+07	5,566832E+09	5,582966E+09
-1660	8,065228E+06	8,067110E+06	2,783223E+09	2,783420E+09	1,613234E+07	5,566643E+09	5,582776E+09
-1659	8,072041E+06	8,070943E+06	2,783326E+09	2,783170E+09	1,614298E+07	5,566496E+09	5,582639E+09
-1658	8,066321E+06	8,066675E+06	2,783174E+09	2,783157E+09	1,613300E+07	5,566331E+09	5,582464E+09
-1657	8,067530E+06	8,069887E+06	2,782999E+09	2,783111E+09	1,613742E+07	5,566110E+09	5,582248E+09
-1656	8,072737E+06	8,070183E+06	2,783082E+09	2,782852E+09	1,614292E+07	5,565934E+09	5,582077E+09
-1655	8,066238E+06	8,065860E+06	2,782787E+09	2,782937E+09	1,613210E+07	5,565723E+09	5,581856E+09
-1654	8,071943E+06	8,071191E+06	2,782770E+09	2,782822E+09	1,614313E+07	5,565592E+09	5,581735E+09
-1653	8,070989E+06	8,069943E+06	2,782873E+09	2,782706E+09	1,614093E+07	5,565579E+09	5,581720E+09
-1652	8,067515E+06	8,067302E+06	2,782676E+09	2,782867E+09	1,613482E+07	5,565543E+09	5,581677E+09
-1651	8,072681E+06	8,073528E+06	2,782874E+09	2,782754E+09	1,614621E+07	5,565627E+09	5,581774E+09
-1650	8,068722E+06	8,067440E+06	2,782920E+09	2,782855E+09	1,613616E+07	5,565775E+09	5,581911E+09
-1649	8,068149E+06	8,068643E+06	2,782843E+09	2,783044E+09	1,613679E+07	5,565887E+09	5,582023E+09
-1648	8,072159E+06	8,072134E+06	2,783098E+09	2,782941E+09	1,614429E+07	5,566039E+09	5,582183E+09
-1647	8,066978E+06	8,064979E+06	2,783025E+09	2,783138E+09	1,613196E+07	5,566163E+09	5,582295E+09
-1646	8,068380E+06	8,071267E+06	2,783093E+09	2,783185E+09	1,613965E+07	5,566278E+09	5,582417E+09
-1645	8,071466E+06	8,068611E+06	2,783316E+09	2,783103E+09	1,614008E+07	5,566419E+09	5,582559E+09
-1644	8,066108E+06	8,065301E+06	2,783120E+09	2,783281E+09	1,613141E+07	5,566401E+09	5,582532E+09
-1643	8,070329E+06	8,071570E+06	2,783203E+09	2,783164E+09	1,614190E+07	5,566367E+09	5,582509E+09
-1642	8,069591E+06	8,066528E+06	2,783221E+09	2,783099E+09	1,613612E+07	5,566320E+09	5,582456E+09
-1641	8,065341E+06	8,068447E+06	2,782982E+09	2,783178E+09	1,613379E+07	5,566160E+09	5,582294E+09
-1640	8,072793E+06	8,071764E+06	2,783087E+09	2,782919E+09	1,614456E+07	5,566005E+09	5,582150E+09
-1639	8,067430E+06	8,066530E+06	2,782897E+09	2,782893E+09	1,613396E+07	5,565790E+09	5,581924E+09
-1638	8,069077E+06	8,069713E+06	2,782715E+09	2,782853E+09	1,613879E+07	5,565568E+09	5,581707E+09
-1637	8,073955E+06	8,070878E+06	2,782810E+09	2,782603E+09	1,614483E+07	5,565413E+09	5,581558E+09
-1636	8,067256E+06	8,067145E+06	2,782541E+09	2,782670E+09	1,613440E+07	5,565211E+09	5,581345E+09
-1635	8,071925E+06	8,072800E+06	2,782562E+09	2,782570E+09	1,614473E+07	5,565132E+09	5,581276E+09
-1634	8,070976E+06	8,071269E+06	2,782678E+09	2,782476E+09	1,614224E+07	5,565155E+09	5,581297E+09
-1633	8,067647E+06	8,068101E+06	2,782501E+09	2,782683E+09	1,613575E+07	5,565184E+09	5,581319E+09
-1632	8,073243E+06	8,073909E+06	2,782681E+09	2,782582E+09	1,614715E+07	5,565263E+09	5,581410E+09
-1631	8,069585E+06	8,067107E+06	2,782681E+09	2,782668E+09	1,613669E+07	5,565349E+09	5,581485E+09
-1630	8,068901E+06	8,069003E+06	2,782615E+09	2,782851E+09	1,613790E+07	5,565466E+09	5,581604E+09
-1629	8,072967E+06	8,072786E+06	2,782900E+09	2,782744E+09	1,614575E+07	5,565643E+09	5,581789E+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	8,067999E+06	8,065634E+06	2,782841E+09	2,782912E+09	1,613363E+07	5,565753E+09	5,581887E+09
-1627	8,068891E+06	8,071802E+06	2,782910E+09	2,782968E+09	1,614069E+07	5,565878E+09	5,582019E+09
-1626	8,072123E+06	8,069163E+06	2,783103E+09	2,782891E+09	1,614129E+07	5,565994E+09	5,582135E+09
-1625	8,066353E+06	8,066357E+06	2,782910E+09	2,783086E+09	1,613271E+07	5,565997E+09	5,582129E+09
-1624	8,070872E+06	8,072637E+06	2,782984E+09	2,782954E+09	1,614351E+07	5,565938E+09	5,582082E+09
-1623	8,070174E+06	8,067085E+06	2,782966E+09	2,782856E+09	1,613726E+07	5,565822E+09	5,581959E+09
-1622	8,066274E+06	8,068838E+06	2,782726E+09	2,782925E+09	1,613511E+07	5,565651E+09	5,581786E+09
-1621	8,074030E+06	8,072019E+06	2,782822E+09	2,782663E+09	1,614605E+07	5,565485E+09	5,581631E+09
-1620	8,068690E+06	8,067183E+06	2,782620E+09	2,782606E+09	1,613587E+07	5,565226E+09	5,581362E+09
-1619	8,069575E+06	8,070710E+06	2,782445E+09	2,782571E+09	1,614029E+07	5,565016E+09	5,581157E+09
-1618	8,073968E+06	8,072514E+06	2,782553E+09	2,782336E+09	1,614648E+07	5,564889E+09	5,581035E+09
-1617	8,067303E+06	8,068647E+06	2,782338E+09	2,782442E+09	1,613595E+07	5,564779E+09	5,580915E+09
-1616	8,072460E+06	8,073622E+06	2,782369E+09	2,782362E+09	1,614608E+07	5,564731E+09	5,580877E+09
-1615	8,071989E+06	8,070906E+06	2,782446E+09	2,782277E+09	1,614289E+07	5,564724E+09	5,580867E+09
-1614	8,069040E+06	8,067856E+06	2,782261E+09	2,782494E+09	1,613690E+07	5,564755E+09	5,580892E+09
-1613	8,074322E+06	8,074138E+06	2,782447E+09	2,782396E+09	1,614846E+07	5,564843E+09	5,580992E+09
-1612	8,070640E+06	8,067975E+06	2,782469E+09	2,782445E+09	1,613861E+07	5,564915E+09	5,581053E+09
-1611	8,069068E+06	8,070172E+06	2,782438E+09	2,782625E+09	1,613924E+07	5,565062E+09	5,581202E+09
-1610	8,073172E+06	8,073687E+06	2,782727E+09	2,782537E+09	1,614686E+07	5,565264E+09	5,581411E+09
-1609	8,068360E+06	8,066343E+06	2,782686E+09	2,782735E+09	1,613470E+07	5,565422E+09	5,581556E+09
-1608	8,069424E+06	8,072199E+06	2,782720E+09	2,782793E+09	1,614162E+07	5,565513E+09	5,581654E+09
-1607	8,072789E+06	8,069112E+06	2,782852E+09	2,782692E+09	1,614190E+07	5,565544E+09	5,581686E+09
-1606	8,066991E+06	8,067067E+06	2,782651E+09	2,782864E+09	1,613406E+07	5,565515E+09	5,581649E+09
-1605	8,071828E+06	8,073263E+06	2,782733E+09	2,782713E+09	1,614509E+07	5,565446E+09	5,581591E+09
-1604	8,071366E+06	8,067993E+06	2,782712E+09	2,782570E+09	1,613936E+07	5,565282E+09	5,581421E+09
-1603	8,067105E+06	8,069485E+06	2,782475E+09	2,782636E+09	1,613659E+07	5,565112E+09	5,581248E+09
-1602	8,074654E+06	8,072951E+06	2,782557E+09	2,782391E+09	1,614761E+07	5,564948E+09	5,581096E+09
-1601	8,068918E+06	8,068582E+06	2,782392E+09	2,782361E+09	1,613750E+07	5,564753E+09	5,580890E+09
-1600	8,069902E+06	8,071962E+06	2,782230E+09	2,782341E+09	1,614186E+07	5,564571E+09	5,580713E+09
-1599	8,074336E+06	8,073071E+06	2,782317E+09	2,782110E+09	1,614741E+07	5,564427E+09	5,580575E+09
-1598	8,068361E+06	8,068873E+06	2,782107E+09	2,782233E+09	1,613723E+07	5,564340E+09	5,580477E+09
-1597	8,073851E+06	8,073436E+06	2,782130E+09	2,782164E+09	1,614729E+07	5,564295E+09	5,580442E+09
-1596	8,073474E+06	8,071068E+06	2,782184E+09	2,782045E+09	1,614454E+07	5,564229E+09	5,580373E+09
-1595	8,069723E+06	8,068501E+06	2,782017E+09	2,782254E+09	1,613822E+07	5,564271E+09	5,580410E+09
-1594	8,074304E+06	8,075410E+06	2,782223E+09	2,782165E+09	1,614971E+07	5,564389E+09	5,580538E+09
-1593	8,070643E+06	8,069268E+06	2,782314E+09	2,782242E+09	1,613991E+07	5,564557E+09	5,580696E+09
-1592	8,069364E+06	8,071056E+06	2,782295E+09	2,782443E+09	1,614042E+07	5,564738E+09	5,580878E+09
-1591	8,073825E+06	8,073405E+06	2,782534E+09	2,782363E+09	1,614723E+07	5,564897E+09	5,581045E+09
-1590	8,069438E+06	8,066506E+06	2,782473E+09	2,782564E+09	1,613594E+07	5,565037E+09	5,581173E+09
-1589	8,070363E+06	8,072515E+06	2,782493E+09	2,782607E+09	1,614288E+07	5,565099E+09	5,581242E+09
-1588	8,073673E+06	8,070079E+06	2,782614E+09	2,782447E+09	1,614375E+07	5,565061E+09	5,581205E+09
-1587	8,067268E+06	8,068265E+06	2,782430E+09	2,782594E+09	1,613553E+07	5,565024E+09	5,581160E+09
-1586	8,072179E+06	8,074106E+06	2,782497E+09	2,782451E+09	1,614628E+07	5,564948E+09	5,581094E+09
-1585	8,071825E+06	8,068909E+06	2,782493E+09	2,782324E+09	1,614073E+07	5,564818E+09	5,580958E+09
-1584	8,067862E+06	8,070075E+06	2,782234E+09	2,782394E+09	1,613794E+07	5,564628E+09	5,580766E+09
-1583	8,075207E+06	8,073193E+06	2,782272E+09	2,782147E+09	1,614840E+07	5,564419E+09	5,580567E+09
-1582	8,069735E+06	8,069363E+06	2,782121E+09	2,782120E+09	1,613910E+07	5,564241E+09	5,580380E+09
-1581	8,071129E+06	8,072217E+06	2,781976E+09	2,782107E+09	1,614335E+07	5,564083E+09	5,580226E+09
-1580	8,075748E+06	8,073587E+06	2,782055E+09	2,781851E+09	1,614934E+07	5,563906E+09	5,580055E+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							
-1579	8,069587E+06	8,069225E+06	2,781853E+09	2,781973E+09	1,613881E+07	5,563825E+09	5,579964E+09
-1578	8,074485E+06	8,074174E+06	2,781870E+09	2,781926E+09	1,614866E+07	5,563796E+09	5,579945E+09
-1577	8,073678E+06	8,072525E+06	2,781984E+09	2,781827E+09	1,614620E+07	5,563811E+09	5,579957E+09
-1576	8,069721E+06	8,069860E+06	2,781852E+09	2,782047E+09	1,613958E+07	5,563899E+09	5,580039E+09
-1575	8,074165E+06	8,075912E+06	2,782050E+09	2,781977E+09	1,615008E+07	5,564026E+09	5,580176E+09
-1574	8,071394E+06	8,069502E+06	2,782147E+09	2,782076E+09	1,614090E+07	5,564223E+09	5,580364E+09
-1573	8,070463E+06	8,070862E+06	2,782111E+09	2,782285E+09	1,614133E+07	5,564396E+09	5,580537E+09
-1572	8,074998E+06	8,073524E+06	2,782304E+09	2,782163E+09	1,614852E+07	5,564467E+09	5,580616E+09
-1571	8,070037E+06	8,067299E+06	2,782242E+09	2,782333E+09	1,613734E+07	5,564575E+09	5,580712E+09
-1570	8,070409E+06	8,073553E+06	2,782255E+09	2,782370E+09	1,614396E+07	5,564625E+09	5,580769E+09
-1569	8,073905E+06	8,071298E+06	2,782421E+09	2,782209E+09	1,614520E+07	5,564630E+09	5,580775E+09
-1568	8,067779E+06	8,069083E+06	2,782232E+09	2,782356E+09	1,613686E+07	5,564588E+09	5,580725E+09
-1567	8,072949E+06	8,073895E+06	2,782242E+09	2,782216E+09	1,614684E+07	5,564458E+09	5,580605E+09
-1566	8,072880E+06	8,069377E+06	2,782227E+09	2,782095E+09	1,614226E+07	5,564322E+09	5,580465E+09
-1565	8,069100E+06	8,070505E+06	2,781972E+09	2,782161E+09	1,613960E+07	5,564133E+09	5,580272E+09
-1564	8,076114E+06	8,074163E+06	2,782000E+09	2,781873E+09	1,615028E+07	5,563873E+09	5,580024E+09
-1563	8,070473E+06	8,070392E+06	2,781876E+09	2,781840E+09	1,614087E+07	5,563716E+09	5,579857E+09
-1562	8,071755E+06	8,072916E+06	2,781722E+09	2,781850E+09	1,614467E+07	5,563571E+09	5,579716E+09
-1561	8,076197E+06	8,074614E+06	2,781828E+09	2,781612E+09	1,615081E+07	5,563440E+09	5,579591E+09
-1560	8,070104E+06	8,070107E+06	2,781623E+09	2,781741E+09	1,614021E+07	5,563365E+09	5,579505E+09
-1559	8,074508E+06	8,074680E+06	2,781618E+09	2,781702E+09	1,614919E+07	5,563321E+09	5,579470E+09
-1558	8,074112E+06	8,073418E+06	2,781769E+09	2,781623E+09	1,614753E+07	5,563392E+09	5,579540E+09
-1557	8,070769E+06	8,070048E+06	2,781672E+09	2,781860E+09	1,614082E+07	5,563532E+09	5,579673E+09
-1556	8,075243E+06	8,076061E+06	2,781854E+09	2,781775E+09	1,615130E+07	5,563629E+09	5,579780E+09
-1555	8,072648E+06	8,069601E+06	2,781954E+09	2,781874E+09	1,614225E+07	5,563828E+09	5,579971E+09
-1554	8,070937E+06	8,071416E+06	2,781895E+09	2,782094E+09	1,614235E+07	5,563988E+09	5,580131E+09
-1553	8,075146E+06	8,074741E+06	2,782122E+09	2,781966E+09	1,614989E+07	5,564088E+09	5,580238E+09
-1552	8,070074E+06	8,068695E+06	2,782066E+09	2,782120E+09	1,613877E+07	5,564185E+09	5,580324E+09
-1551	8,070419E+06	8,073886E+06	2,782041E+09	2,782154E+09	1,614430E+07	5,564196E+09	5,580340E+09
-1550	8,074815E+06	8,071656E+06	2,782195E+09	2,781999E+09	1,614647E+07	5,564194E+09	5,580341E+09
-1549	8,069201E+06	8,068897E+06	2,781984E+09	2,782135E+09	1,613810E+07	5,564119E+09	5,580257E+09
-1548	8,074160E+06	8,074110E+06	2,781951E+09	2,781952E+09	1,614827E+07	5,563903E+09	5,580051E+09
-1547	8,073643E+06	8,070422E+06	2,781949E+09	2,781805E+09	1,614406E+07	5,563754E+09	5,579898E+09
-1546	8,069379E+06	8,071683E+06	2,781703E+09	2,781882E+09	1,614106E+07	5,563585E+09	5,579726E+09
-1545	8,076426E+06	8,075677E+06	2,781782E+09	2,781609E+09	1,615210E+07	5,563391E+09	5,579543E+09
-1544	8,071089E+06	8,071472E+06	2,781655E+09	2,781589E+09	1,614256E+07	5,563244E+09	5,579387E+09
-1543	8,072459E+06	8,072954E+06	2,781455E+09	2,781617E+09	1,614541E+07	5,563073E+09	5,579218E+09
-1542	8,077001E+06	8,075339E+06	2,781567E+09	2,781395E+09	1,615234E+07	5,562962E+09	5,579115E+09
-1541	8,071201E+06	8,070484E+06	2,781393E+09	2,781525E+09	1,614168E+07	5,562919E+09	5,579060E+09
-1540	8,075123E+06	8,075421E+06	2,781396E+09	2,781467E+09	1,615054E+07	5,562863E+09	5,579013E+09
-1539	8,074912E+06	8,074046E+06	2,781587E+09	2,781396E+09	1,614896E+07	5,562983E+09	5,579132E+09
-1538	8,071394E+06	8,070434E+06	2,781485E+09	2,781670E+09	1,614183E+07	5,563155E+09	5,579297E+09
-1537	8,075688E+06	8,076836E+06	2,781686E+09	2,781598E+09	1,615252E+07	5,563283E+09	5,579436E+09
-1536	8,073078E+06	8,070448E+06	2,781769E+09	2,781692E+09	1,614353E+07	5,563460E+09	5,579604E+09
-1535	8,070720E+06	8,071895E+06	2,781668E+09	2,781901E+09	1,614261E+07	5,563569E+09	5,579711E+09
-1534	8,075443E+06	8,075464E+06	2,781906E+09	2,781771E+09	1,615091E+07	5,563677E+09	5,579827E+09
-1533	8,071193E+06	8,068903E+06	2,781861E+09	2,781910E+09	1,614010E+07	5,563771E+09	5,579911E+09
-1532	8,071608E+06	8,073933E+06	2,781793E+09	2,781908E+09	1,614554E+07	5,563701E+09	5,579847E+09
-1531	8,076234E+06	8,072056E+06	2,781946E+09	2,781739E+09	1,614829E+07	5,563684E+09	5,579833E+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	8,069857E+06	8,069852E+06	2,781725E+09	2,781881E+09	1,613971E+07	5,563606E+09	5,579745E+09
-1529	8,074262E+06	8,075710E+06	2,781734E+09	2,781694E+09	1,614997E+07	5,563428E+09	5,579578E+09
-1528	8,073635E+06	8,072171E+06	2,781743E+09	2,781549E+09	1,614581E+07	5,563291E+09	5,579437E+09
-1527	8,069508E+06	8,072153E+06	2,781458E+09	2,781638E+09	1,614166E+07	5,563097E+09	5,579238E+09
-1526	8,077291E+06	8,076166E+06	2,781524E+09	2,781386E+09	1,615346E+07	5,562910E+09	5,579063E+09
-1525	8,072770E+06	8,071385E+06	2,781382E+09	2,781360E+09	1,614416E+07	5,562742E+09	5,578886E+09
-1524	8,073777E+06	8,073136E+06	2,781148E+09	2,781353E+09	1,614691E+07	5,562501E+09	5,578648E+09
-1523	8,077915E+06	8,076181E+06	2,781298E+09	2,781121E+09	1,615410E+07	5,562419E+09	5,578573E+09
-1522	8,071715E+06	8,071315E+06	2,781164E+09	2,781278E+09	1,614303E+07	5,562442E+09	5,578585E+09
-1521	8,075371E+06	8,076650E+06	2,781234E+09	2,781246E+09	1,615202E+07	5,562480E+09	5,578632E+09
-1520	8,075458E+06	8,074909E+06	2,781428E+09	2,781206E+09	1,615037E+07	5,562634E+09	5,578784E+09
-1519	8,071758E+06	8,070618E+06	2,781285E+09	2,781500E+09	1,614238E+07	5,562785E+09	5,578927E+09
-1518	8,076108E+06	8,077654E+06	2,781480E+09	2,781442E+09	1,615376E+07	5,562922E+09	5,579076E+09
-1517	8,074015E+06	8,070825E+06	2,781570E+09	2,781514E+09	1,614484E+07	5,563084E+09	5,579229E+09
-1516	8,071238E+06	8,072393E+06	2,781447E+09	2,781680E+09	1,614363E+07	5,563127E+09	5,579270E+09
-1515	8,076427E+06	8,075834E+06	2,781697E+09	2,781532E+09	1,615226E+07	5,563230E+09	5,579382E+09
-1514	8,071906E+06	8,069317E+06	2,781640E+09	2,781681E+09	1,614122E+07	5,563321E+09	5,579462E+09
-1513	8,072134E+06	8,074919E+06	2,781589E+09	2,781672E+09	1,614705E+07	5,563261E+09	5,579408E+09
-1512	8,076566E+06	8,073387E+06	2,781723E+09	2,781498E+09	1,614995E+07	5,563221E+09	5,579371E+09
-1511	8,069738E+06	8,070740E+06	2,781470E+09	2,781639E+09	1,614048E+07	5,563109E+09	5,579250E+09
-1510	8,074713E+06	8,076644E+06	2,781487E+09	2,781465E+09	1,615136E+07	5,562952E+09	5,579104E+09
-1509	8,075060E+06	8,072437E+06	2,781496E+09	2,781313E+09	1,614750E+07	5,562809E+09	5,578957E+09
-1508	8,071056E+06	8,072038E+06	2,781161E+09	2,781374E+09	1,614309E+07	5,562535E+09	5,578678E+09
-1507	8,078898E+06	8,076489E+06	2,781229E+09	2,781107E+09	1,615539E+07	5,562337E+09	5,578492E+09
-1506	8,073575E+06	8,072333E+06	2,781099E+09	2,781091E+09	1,614591E+07	5,562190E+09	5,578336E+09
-1505	8,073992E+06	8,074831E+06	2,780935E+09	2,781085E+09	1,614882E+07	5,562019E+09	5,578168E+09
-1504	8,077795E+06	8,077917E+06	2,781120E+09	2,780882E+09	1,615571E+07	5,562002E+09	5,578157E+09
-1503	8,071769E+06	8,071853E+06	2,780976E+09	2,781076E+09	1,614362E+07	5,562052E+09	5,578196E+09
-1502	8,075778E+06	8,077163E+06	2,781042E+09	2,781087E+09	1,615294E+07	5,562129E+09	5,578282E+09
-1501	8,076852E+06	8,074710E+06	2,781222E+09	2,781048E+09	1,615156E+07	5,562270E+09	5,578421E+09
-1500	8,072649E+06	8,070734E+06	2,781030E+09	2,781297E+09	1,614338E+07	5,562328E+09	5,578471E+09
-1499	8,076878E+06	8,078143E+06	2,781246E+09	2,781214E+09	1,615502E+07	5,562460E+09	5,578615E+09
-1498	8,074586E+06	8,071504E+06	2,781357E+09	2,781290E+09	1,614609E+07	5,562646E+09	5,578792E+09
-1497	8,071656E+06	8,073477E+06	2,781276E+09	2,781450E+09	1,614513E+07	5,562726E+09	5,578871E+09
-1496	8,077084E+06	8,076687E+06	2,781515E+09	2,781317E+09	1,615377E+07	5,562832E+09	5,578986E+09
-1495	8,072292E+06	8,069782E+06	2,781416E+09	2,781471E+09	1,614207E+07	5,562886E+09	5,579028E+09
-1494	8,072505E+06	8,075891E+06	2,781362E+09	2,781474E+09	1,614840E+07	5,562836E+09	5,578984E+09
-1493	8,077547E+06	8,073980E+06	2,781497E+09	2,781282E+09	1,615153E+07	5,562780E+09	5,578931E+09
-1492	8,070520E+06	8,071207E+06	2,781207E+09	2,781383E+09	1,614173E+07	5,562589E+09	5,578731E+09
-1491	8,076132E+06	8,076854E+06	2,781220E+09	2,781196E+09	1,615299E+07	5,562416E+09	5,578569E+09
-1490	8,076208E+06	8,072993E+06	2,781208E+09	2,781049E+09	1,614920E+07	5,562258E+09	5,578407E+09
-1489	8,071920E+06	8,073185E+06	2,780897E+09	2,781091E+09	1,614510E+07	5,561989E+09	5,578134E+09
-1488	8,079099E+06	8,078081E+06	2,780970E+09	2,780828E+09	1,615718E+07	5,561797E+09	5,577955E+09
-1487	8,073298E+06	8,073459E+06	2,780848E+09	2,780828E+09	1,614676E+07	5,561675E+09	5,577822E+09
-1486	8,074154E+06	8,075928E+06	2,780727E+09	2,780867E+09	1,615008E+07	5,561594E+09	5,577744E+09
-1485	8,078964E+06	8,078060E+06	2,780922E+09	2,780690E+09	1,615702E+07	5,561612E+09	5,577769E+09
-1484	8,073239E+06	8,071552E+06	2,780739E+09	2,780878E+09	1,614479E+07	5,561617E+09	5,577761E+09
-1483	8,077226E+06	8,077275E+06	2,780808E+09	2,780883E+09	1,615450E+07	5,561692E+09	5,577846E+09
-1482	8,077571E+06	8,075306E+06	2,780993E+09	2,780848E+09	1,615288E+07	5,561842E+09	5,577994E+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							
-1481	8,072802E+06	8,072216E+06	2,780858E+09	2,781075E+09	1,614502E+07	5,561933E+09	5,578078E+09
-1480	8,076717E+06	8,079385E+06	2,781083E+09	2,781001E+09	1,615610E+07	5,562085E+09	5,578241E+09
-1479	8,074635E+06	8,071938E+06	2,781173E+09	2,781091E+09	1,614657E+07	5,562264E+09	5,578411E+09
-1478	8,072119E+06	8,074098E+06	2,781085E+09	2,781275E+09	1,614622E+07	5,562361E+09	5,578507E+09
-1477	8,078380E+06	8,076707E+06	2,781299E+09	2,781133E+09	1,615509E+07	5,562431E+09	5,578586E+09
-1476	8,073133E+06	8,070108E+06	2,781148E+09	2,781240E+09	1,614324E+07	5,562388E+09	5,578531E+09
-1475	8,073444E+06	8,076372E+06	2,781104E+09	2,781216E+09	1,614982E+07	5,562320E+09	5,578470E+09
-1474	8,078207E+06	8,074742E+06	2,781243E+09	2,781025E+09	1,615295E+07	5,562268E+09	5,578421E+09
-1473	8,071247E+06	8,072469E+06	2,780977E+09	2,781104E+09	1,614372E+07	5,562081E+09	5,578224E+09
-1472	8,076883E+06	8,077894E+06	2,780970E+09	2,780929E+09	1,615478E+07	5,561898E+09	5,578053E+09
-1471	8,076491E+06	8,074067E+06	2,780931E+09	2,780785E+09	1,615056E+07	5,561716E+09	5,577866E+09
-1470	8,072210E+06	8,074425E+06	2,780642E+09	2,780846E+09	1,614664E+07	5,561488E+09	5,577635E+09
-1469	8,079887E+06	8,078769E+06	2,780739E+09	2,780592E+09	1,615866E+07	5,561331E+09	5,577489E+09
-1468	8,074130E+06	8,073661E+06	2,780602E+09	2,780580E+09	1,614779E+07	5,561182E+09	5,577330E+09
-1467	8,075562E+06	8,075797E+06	2,780496E+09	2,780636E+09	1,615136E+07	5,561132E+09	5,577283E+09
-1466	8,080077E+06	8,078260E+06	2,780682E+09	2,780488E+09	1,615834E+07	5,561170E+09	5,577328E+09
-1465	8,074209E+06	8,072524E+06	2,780520E+09	2,780656E+09	1,614673E+07	5,561176E+09	5,577323E+09
-1464	8,077299E+06	8,078507E+06	2,780592E+09	2,780665E+09	1,615581E+07	5,561257E+09	5,577413E+09
-1463	8,077332E+06	8,076180E+06	2,780780E+09	2,780632E+09	1,615351E+07	5,561412E+09	5,577565E+09
-1462	8,072863E+06	8,073167E+06	2,780682E+09	2,780884E+09	1,614603E+07	5,561567E+09	5,577713E+09
-1461	8,077743E+06	8,079346E+06	2,780906E+09	2,780825E+09	1,615709E+07	5,561730E+09	5,577887E+09
-1460	8,075863E+06	8,071739E+06	2,780950E+09	2,780890E+09	1,614760E+07	5,561840E+09	5,577988E+09
-1459	8,073402E+06	8,074414E+06	2,780860E+09	2,781060E+09	1,614782E+07	5,561919E+09	5,578067E+09
-1458	8,078932E+06	8,077509E+06	2,781069E+09	2,780915E+09	1,615644E+07	5,561984E+09	5,578140E+09
-1457	8,073385E+06	8,071860E+06	2,780954E+09	2,780986E+09	1,614525E+07	5,561940E+09	5,578085E+09
-1456	8,073463E+06	8,077568E+06	2,780900E+09	2,780967E+09	1,615103E+07	5,561866E+09	5,578017E+09
-1455	8,078294E+06	8,075397E+06	2,780999E+09	2,780781E+09	1,615369E+07	5,561780E+09	5,577934E+09
-1454	8,071849E+06	8,073280E+06	2,780725E+09	2,780873E+09	1,614513E+07	5,561597E+09	5,577743E+09
-1453	8,078216E+06	8,078057E+06	2,780689E+09	2,780686E+09	1,615627E+07	5,561374E+09	5,577531E+09
-1452	8,077325E+06	8,074474E+06	2,780619E+09	2,780506E+09	1,615180E+07	5,561125E+09	5,577277E+09
-1451	8,073492E+06	8,074770E+06	2,780370E+09	2,780561E+09	1,614826E+07	5,560931E+09	5,577080E+09
-1450	8,080655E+06	8,079283E+06	2,780489E+09	2,780339E+09	1,615994E+07	5,560829E+09	5,576989E+09
-1449	8,075241E+06	8,074655E+06	2,780390E+09	2,780329E+09	1,614990E+07	5,560720E+09	5,576870E+09
-1448	8,076307E+06	8,076622E+06	2,780277E+09	2,780412E+09	1,615293E+07	5,560689E+09	5,576842E+09
-1447	8,080121E+06	8,079286E+06	2,780448E+09	2,780278E+09	1,615941E+07	5,560725E+09	5,576885E+09
-1446	8,074264E+06	8,073872E+06	2,780322E+09	2,780463E+09	1,614814E+07	5,560785E+09	5,576933E+09
-1445	8,077691E+06	8,079109E+06	2,780408E+09	2,780476E+09	1,615680E+07	5,560885E+09	5,577041E+09
-1444	8,077914E+06	8,076213E+06	2,780573E+09	2,780428E+09	1,615413E+07	5,561001E+09	5,577155E+09
-1443	8,074106E+06	8,073034E+06	2,780487E+09	2,780680E+09	1,614714E+07	5,561167E+09	5,577314E+09
-1442	8,078541E+06	8,079469E+06	2,780694E+09	2,780636E+09	1,615801E+07	5,561330E+09	5,577488E+09
-1441	8,076673E+06	8,072949E+06	2,780751E+09	2,780664E+09	1,614962E+07	5,561415E+09	5,577564E+09
-1440	8,073307E+06	8,075754E+06	2,780654E+09	2,780831E+09	1,614906E+07	5,561485E+09	5,577634E+09
-1439	8,078606E+06	8,078505E+06	2,780849E+09	2,780684E+09	1,615711E+07	5,561534E+09	5,577691E+09
-1438	8,073615E+06	8,072884E+06	2,780745E+09	2,780767E+09	1,614650E+07	5,561513E+09	5,577659E+09
-1437	8,074861E+06	8,077356E+06	2,780659E+09	2,780751E+09	1,615222E+07	5,561410E+09	5,577562E+09
-1436	8,079743E+06	8,075270E+06	2,780697E+09	2,780529E+09	1,615501E+07	5,561226E+09	5,577381E+09
-1435	8,073444E+06	8,073526E+06	2,780430E+09	2,780593E+09	1,614697E+07	5,561023E+09	5,577170E+09
-1434	8,078988E+06	8,078793E+06	2,780409E+09	2,780412E+09	1,615778E+07	5,560820E+09	5,576978E+09
-1433	8,077868E+06	8,076170E+06	2,780388E+09	2,780208E+09	1,615404E+07	5,560595E+09	5,576750E+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							
-1432	8,073845E+06	8,075870E+06	2,780153E+09	2,780295E+09	1,614971E+07	5,560448E+09	5,576598E+09
-1431	8,080693E+06	8,080149E+06	2,780252E+09	2,780107E+09	1,616084E+07	5,560359E+09	5,576520E+09
-1430	8,075806E+06	8,075647E+06	2,780166E+09	2,780128E+09	1,615145E+07	5,560294E+09	5,576445E+09
-1429	8,077244E+06	8,076994E+06	2,780038E+09	2,780216E+09	1,615424E+07	5,560253E+09	5,576408E+09
-1428	8,080521E+06	8,079686E+06	2,780185E+09	2,780052E+09	1,616021E+07	5,560237E+09	5,576397E+09
-1427	8,075252E+06	8,074093E+06	2,780103E+09	2,780227E+09	1,614935E+07	5,560330E+09	5,576480E+09
-1426	8,078283E+06	8,079376E+06	2,780206E+09	2,780269E+09	1,615766E+07	5,560475E+09	5,576633E+09
-1425	8,079017E+06	8,077098E+06	2,780400E+09	2,780211E+09	1,615612E+07	5,560610E+09	5,576766E+09
-1424	8,074740E+06	8,073929E+06	2,780308E+09	2,780481E+09	1,614867E+07	5,560789E+09	5,576938E+09
-1423	8,078313E+06	8,080443E+06	2,780494E+09	2,780444E+09	1,615876E+07	5,560938E+09	5,577097E+09
-1422	8,076734E+06	8,074267E+06	2,780578E+09	2,780480E+09	1,615100E+07	5,561058E+09	5,577209E+09
-1421	8,073784E+06	8,076131E+06	2,780463E+09	2,780638E+09	1,614991E+07	5,561101E+09	5,577251E+09
-1420	8,079362E+06	8,078230E+06	2,780602E+09	2,780463E+09	1,615759E+07	5,561064E+09	5,577222E+09
-1419	8,075243E+06	8,072789E+06	2,780484E+09	2,780523E+09	1,614803E+07	5,561008E+09	5,577156E+09
-1418	8,076114E+06	8,077444E+06	2,780367E+09	2,780503E+09	1,615356E+07	5,560870E+09	5,577024E+09
-1417	8,080793E+06	8,076778E+06	2,780417E+09	2,780229E+09	1,615757E+07	5,560646E+09	5,576804E+09
-1416	8,073667E+06	8,075009E+06	2,780168E+09	2,780290E+09	1,614868E+07	5,560458E+09	5,576607E+09
-1415	8,078585E+06	8,080064E+06	2,780159E+09	2,780127E+09	1,615865E+07	5,560287E+09	5,576445E+09
-1414	8,078048E+06	8,077485E+06	2,780177E+09	2,779965E+09	1,615553E+07	5,560143E+09	5,576298E+09
-1413	8,075068E+06	8,076068E+06	2,779925E+09	2,780083E+09	1,615114E+07	5,560008E+09	5,576159E+09
-1412	8,081674E+06	8,080352E+06	2,779975E+09	2,779886E+09	1,616203E+07	5,559861E+09	5,576023E+09
-1411	8,077250E+06	8,076048E+06	2,779905E+09	2,779895E+09	1,615330E+07	5,559800E+09	5,575953E+09
-1410	8,077885E+06	8,077585E+06	2,779797E+09	2,779993E+09	1,615547E+07	5,559789E+09	5,575945E+09
-1409	8,081098E+06	8,080997E+06	2,779987E+09	2,779802E+09	1,616209E+07	5,559789E+09	5,575951E+09
-1408	8,075647E+06	8,074728E+06	2,779926E+09	2,780004E+09	1,615038E+07	5,559930E+09	5,576081E+09
-1407	8,078226E+06	8,079989E+06	2,780017E+09	2,780077E+09	1,615822E+07	5,560094E+09	5,576252E+09
-1406	8,079594E+06	8,077901E+06	2,780222E+09	2,780043E+09	1,615749E+07	5,560265E+09	5,576422E+09
-1405	8,075580E+06	8,074347E+06	2,780109E+09	2,780312E+09	1,614993E+07	5,560421E+09	5,576571E+09
-1404	8,078731E+06	8,080664E+06	2,780255E+09	2,780242E+09	1,615940E+07	5,560497E+09	5,576656E+09
-1403	8,077909E+06	8,074395E+06	2,780352E+09	2,780254E+09	1,615230E+07	5,560606E+09	5,576759E+09
-1402	8,074672E+06	8,076151E+06	2,780225E+09	2,780417E+09	1,615082E+07	5,560641E+09	5,576792E+09
-1401	8,080730E+06	8,079064E+06	2,780357E+09	2,780199E+09	1,615979E+07	5,560555E+09	5,576715E+09
-1400	8,075979E+06	8,074007E+06	2,780234E+09	2,780251E+09	1,614999E+07	5,560484E+09	5,576634E+09
-1399	8,075949E+06	8,078916E+06	2,780108E+09	2,780229E+09	1,615486E+07	5,560337E+09	5,576492E+09
-1398	8,080732E+06	8,078676E+06	2,780203E+09	2,779972E+09	1,615941E+07	5,560175E+09	5,576334E+09
-1397	8,074164E+06	8,075802E+06	2,779954E+09	2,780050E+09	1,614997E+07	5,560004E+09	5,576154E+09
-1396	8,079167E+06	8,080051E+06	2,779901E+09	2,779889E+09	1,615922E+07	5,559790E+09	5,575949E+09
-1395	8,079622E+06	8,077488E+06	2,779912E+09	2,779731E+09	1,615711E+07	5,559643E+09	5,575800E+09
-1394	8,076438E+06	8,076140E+06	2,779640E+09	2,779856E+09	1,615258E+07	5,559496E+09	5,575648E+09
-1393	8,082678E+06	8,081700E+06	2,779703E+09	2,779617E+09	1,616438E+07	5,559320E+09	5,575484E+09
-1392	8,077696E+06	8,077239E+06	2,779665E+09	2,779627E+09	1,615494E+07	5,559292E+09	5,575447E+09
-1391	8,077665E+06	8,078538E+06	2,779575E+09	2,779748E+09	1,615620E+07	5,559323E+09	5,575480E+09
-1390	8,081505E+06	8,081883E+06	2,779816E+09	2,779606E+09	1,616339E+07	5,559421E+09	5,575585E+09
-1389	8,076861E+06	8,074801E+06	2,779748E+09	2,779834E+09	1,615166E+07	5,559582E+09	5,575734E+09
-1388	8,078841E+06	8,080102E+06	2,779798E+09	2,779901E+09	1,615894E+07	5,559699E+09	5,575858E+09
-1387	8,080784E+06	8,078268E+06	2,780016E+09	2,779855E+09	1,615905E+07	5,559871E+09	5,576030E+09
-1386	8,076093E+06	8,074918E+06	2,779906E+09	2,780120E+09	1,615101E+07	5,560025E+09	5,576176E+09
-1385	8,079362E+06	8,081776E+06	2,780055E+09	2,780006E+09	1,616114E+07	5,560061E+09	5,576222E+09
-1384	8,078467E+06	8,075157E+06	2,780142E+09	2,780016E+09	1,615362E+07	5,560158E+09	5,576312E+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	8,074677E+06	8,076995E+06	2,779985E+09	2,780179E+09	1,615167E+07	5,560164E+09	5,576315E+09
-1382	8,081222E+06	8,080271E+06	2,780127E+09	2,779967E+09	1,616149E+07	5,560094E+09	5,576255E+09
-1381	8,076542E+06	8,074978E+06	2,779991E+09	2,780007E+09	1,615152E+07	5,559998E+09	5,576150E+09
-1380	8,076211E+06	8,079342E+06	2,779839E+09	2,779965E+09	1,615555E+07	5,559804E+09	5,575960E+09
-1379	8,081926E+06	8,078998E+06	2,779947E+09	2,779711E+09	1,616092E+07	5,559658E+09	5,575819E+09
-1378	8,075514E+06	8,075770E+06	2,779691E+09	2,779812E+09	1,615128E+07	5,559503E+09	5,575654E+09
-1377	8,080873E+06	8,080798E+06	2,779625E+09	2,779623E+09	1,616167E+07	5,559248E+09	5,575410E+09
-1376	8,080696E+06	8,078520E+06	2,779635E+09	2,779466E+09	1,615922E+07	5,559101E+09	5,575260E+09
-1375	8,076601E+06	8,077429E+06	2,779372E+09	2,779595E+09	1,615403E+07	5,558967E+09	5,575121E+09
-1374	8,082728E+06	8,083229E+06	2,779491E+09	2,779373E+09	1,616596E+07	5,558864E+09	5,575030E+09
-1373	8,078248E+06	8,077820E+06	2,779469E+09	2,779408E+09	1,615607E+07	5,558877E+09	5,575033E+09
-1372	8,078125E+06	8,078521E+06	2,779357E+09	2,779543E+09	1,615665E+07	5,558900E+09	5,575057E+09
-1371	8,082833E+06	8,081866E+06	2,779600E+09	2,779420E+09	1,616470E+07	5,559020E+09	5,575185E+09
-1370	8,078051E+06	8,074965E+06	2,779529E+09	2,779659E+09	1,615302E+07	5,559188E+09	5,575341E+09
-1369	8,079524E+06	8,081373E+06	2,779582E+09	2,779679E+09	1,616090E+07	5,559261E+09	5,575422E+09
-1368	8,081059E+06	8,079220E+06	2,779820E+09	2,779626E+09	1,616028E+07	5,559445E+09	5,575606E+09
-1367	8,075776E+06	8,075915E+06	2,779708E+09	2,779896E+09	1,615169E+07	5,559603E+09	5,575755E+09
-1366	8,079753E+06	8,082563E+06	2,779875E+09	2,779804E+09	1,616232E+07	5,559679E+09	5,575841E+09
-1365	8,079479E+06	8,075620E+06	2,779933E+09	2,779817E+09	1,615510E+07	5,559750E+09	5,575905E+09
-1364	8,075244E+06	8,077351E+06	2,779729E+09	2,779954E+09	1,615259E+07	5,559683E+09	5,575836E+09
-1363	8,082362E+06	8,080842E+06	2,779878E+09	2,779729E+09	1,616320E+07	5,559607E+09	5,575770E+09
-1362	8,077349E+06	8,075525E+06	2,779751E+09	2,779763E+09	1,615287E+07	5,559513E+09	5,575666E+09
-1361	8,077207E+06	8,080145E+06	2,779594E+09	2,779689E+09	1,615735E+07	5,559283E+09	5,575440E+09
-1360	8,082818E+06	8,079626E+06	2,779693E+09	2,779445E+09	1,616244E+07	5,559138E+09	5,575301E+09
-1359	8,076008E+06	8,076606E+06	2,779407E+09	2,779552E+09	1,615261E+07	5,558959E+09	5,575111E+09
-1358	8,081625E+06	8,082034E+06	2,779361E+09	2,779374E+09	1,616366E+07	5,558736E+09	5,574899E+09
-1357	8,081312E+06	8,079769E+06	2,779371E+09	2,779212E+09	1,616108E+07	5,558583E+09	5,574744E+09
-1356	8,076805E+06	8,077904E+06	2,779105E+09	2,779331E+09	1,615471E+07	5,558436E+09	5,574591E+09
-1355	8,083655E+06	8,083514E+06	2,779255E+09	2,779135E+09	1,616717E+07	5,558390E+09	5,574558E+09
-1354	8,079502E+06	8,077728E+06	2,779250E+09	2,779201E+09	1,615723E+07	5,558451E+09	5,574608E+09
-1353	8,079424E+06	8,079307E+06	2,779141E+09	2,779321E+09	1,615873E+07	5,558462E+09	5,574621E+09
-1352	8,083519E+06	8,082816E+06	2,779396E+09	2,779211E+09	1,616633E+07	5,558607E+09	5,574774E+09
-1351	8,077963E+06	8,076300E+06	2,779337E+09	2,779455E+09	1,615426E+07	5,558792E+09	5,574946E+09
-1350	8,079374E+06	8,082648E+06	2,779431E+09	2,779490E+09	1,616202E+07	5,558921E+09	5,575083E+09
-1349	8,081444E+06	8,079601E+06	2,779652E+09	2,779445E+09	1,616105E+07	5,559096E+09	5,575257E+09
-1348	8,076114E+06	8,075750E+06	2,779489E+09	2,779701E+09	1,615186E+07	5,559189E+09	5,575341E+09
-1347	8,081117E+06	8,082353E+06	2,779629E+09	2,779606E+09	1,616347E+07	5,559235E+09	5,575398E+09
-1346	8,080768E+06	8,075863E+06	2,779675E+09	2,779600E+09	1,615663E+07	5,559276E+09	5,575432E+09
-1345	8,076246E+06	8,078523E+06	2,779468E+09	2,779678E+09	1,615477E+07	5,559146E+09	5,575301E+09
-1344	8,082923E+06	8,081668E+06	2,779631E+09	2,779447E+09	1,616459E+07	5,559078E+09	5,575243E+09
-1343	8,077542E+06	8,076513E+06	2,779504E+09	2,779493E+09	1,615406E+07	5,558998E+09	5,575152E+09
-1342	8,078012E+06	8,080946E+06	2,779365E+09	2,779441E+09	1,615896E+07	5,558806E+09	5,574965E+09
-1341	8,083710E+06	8,080521E+06	2,779436E+09	2,779207E+09	1,616423E+07	5,558643E+09	5,574807E+09
-1340	8,076512E+06	8,077378E+06	2,779119E+09	2,779295E+09	1,615389E+07	5,558414E+09	5,574568E+09
-1339	8,082571E+06	8,082804E+06	2,779086E+09	2,779120E+09	1,616538E+07	5,558206E+09	5,574371E+09
-1338	8,082116E+06	8,080418E+06	2,779123E+09	2,778962E+09	1,616253E+07	5,558086E+09	5,574248E+09
-1337	8,077862E+06	8,078531E+06	2,778869E+09	2,779060E+09	1,615639E+07	5,557929E+09	5,574085E+09
-1336	8,084382E+06	8,083890E+06	2,779033E+09	2,778895E+09	1,616827E+07	5,557929E+09	5,574097E+09
-1335	8,079977E+06	8,078463E+06	2,779029E+09	2,778988E+09	1,615844E+07	5,558017E+09	5,574175E+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							
-1334	8,079821E+06	8,080528E+06	2,778958E+09	2,779128E+09	1,616035E+07	5,558086E+09	5,574246E+09
-1333	8,083666E+06	8,083855E+06	2,779210E+09	2,779027E+09	1,616752E+07	5,558238E+09	5,574405E+09
-1332	8,078033E+06	8,076605E+06	2,779133E+09	2,779258E+09	1,615464E+07	5,558391E+09	5,574546E+09
-1331	8,080238E+06	8,082479E+06	2,779222E+09	2,779308E+09	1,616272E+07	5,558530E+09	5,574693E+09
-1330	8,082880E+06	8,079247E+06	2,779431E+09	2,779261E+09	1,616213E+07	5,558692E+09	5,574854E+09
-1329	8,077455E+06	8,076351E+06	2,779249E+09	2,779465E+09	1,615381E+07	5,558714E+09	5,574868E+09
-1328	8,081860E+06	8,083131E+06	2,779396E+09	2,779360E+09	1,616499E+07	5,558755E+09	5,574920E+09
-1327	8,080762E+06	8,077328E+06	2,779450E+09	2,779343E+09	1,615809E+07	5,558793E+09	5,574951E+09
-1326	8,076351E+06	8,079932E+06	2,779284E+09	2,779432E+09	1,615628E+07	5,558715E+09	5,574872E+09
-1325	8,083193E+06	8,082496E+06	2,779422E+09	2,779217E+09	1,616569E+07	5,558639E+09	5,574805E+09
-1324	8,077901E+06	8,076809E+06	2,779242E+09	2,779255E+09	1,615471E+07	5,558497E+09	5,574652E+09
-1323	8,079348E+06	8,081065E+06	2,779073E+09	2,779210E+09	1,616041E+07	5,558282E+09	5,574443E+09
-1322	8,084919E+06	8,081102E+06	2,779135E+09	2,778954E+09	1,616602E+07	5,558089E+09	5,574255E+09
-1321	8,077587E+06	8,078454E+06	2,778824E+09	2,778985E+09	1,615604E+07	5,557809E+09	5,573965E+09
-1320	8,083304E+06	8,083431E+06	2,778821E+09	2,778819E+09	1,616674E+07	5,557640E+09	5,573806E+09
-1319	8,082490E+06	8,081268E+06	2,778879E+09	2,778693E+09	1,616376E+07	5,557572E+09	5,573736E+09
-1318	8,078806E+06	8,079270E+06	2,778672E+09	2,778834E+09	1,615808E+07	5,557507E+09	5,573665E+09
-1317	8,084907E+06	8,084823E+06	2,778830E+09	2,778704E+09	1,616973E+07	5,557534E+09	5,573704E+09
-1316	8,080306E+06	8,079094E+06	2,778814E+09	2,778794E+09	1,615940E+07	5,557609E+09	5,573768E+09
-1315	8,080443E+06	8,081068E+06	2,778754E+09	2,778949E+09	1,616151E+07	5,557702E+09	5,573864E+09
-1314	8,084382E+06	8,084034E+06	2,779015E+09	2,778847E+09	1,616842E+07	5,557863E+09	5,574031E+09
-1313	8,079067E+06	8,076940E+06	2,778922E+09	2,779035E+09	1,615601E+07	5,557957E+09	5,574113E+09
-1312	8,081008E+06	8,082502E+06	2,778996E+09	2,779088E+09	1,616351E+07	5,558084E+09	5,574247E+09
-1311	8,083437E+06	8,080044E+06	2,779196E+09	2,779039E+09	1,616348E+07	5,558235E+09	5,574399E+09
-1310	8,077854E+06	8,077852E+06	2,779053E+09	2,779233E+09	1,615571E+07	5,558286E+09	5,574442E+09
-1309	8,081683E+06	8,084384E+06	2,779198E+09	2,779129E+09	1,616607E+07	5,558327E+09	5,574493E+09
-1308	8,080728E+06	8,077975E+06	2,779236E+09	2,779104E+09	1,615870E+07	5,558340E+09	5,574498E+09
-1307	8,077257E+06	8,079977E+06	2,779049E+09	2,779216E+09	1,615723E+07	5,558264E+09	5,574421E+09
-1306	8,084683E+06	8,082416E+06	2,779160E+09	2,779001E+09	1,616710E+07	5,558161E+09	5,574328E+09
-1305	8,079439E+06	8,077624E+06	2,778946E+09	2,778982E+09	1,615706E+07	5,557928E+09	5,574085E+09
-1304	8,080438E+06	8,081768E+06	2,778781E+09	2,778922E+09	1,616221E+07	5,557703E+09	5,573865E+09
-1303	8,085162E+06	8,082583E+06	2,778863E+09	2,778661E+09	1,616775E+07	5,557524E+09	5,573691E+09
-1302	8,078045E+06	8,079699E+06	2,778612E+09	2,778703E+09	1,615774E+07	5,557314E+09	5,573472E+09
-1301	8,083469E+06	8,084216E+06	2,778606E+09	2,778575E+09	1,616768E+07	5,557180E+09	5,573348E+09
-1300	8,082853E+06	8,081607E+06	2,778639E+09	2,778469E+09	1,616446E+07	5,557108E+09	5,573272E+09
-1299	8,079940E+06	8,079587E+06	2,778428E+09	2,778644E+09	1,615953E+07	5,557072E+09	5,573232E+09
-1298	8,085795E+06	8,085474E+06	2,778592E+09	2,778514E+09	1,617127E+07	5,557105E+09	5,573277E+09
-1297	8,081253E+06	8,079842E+06	2,778577E+09	2,778558E+09	1,616110E+07	5,557135E+09	5,573296E+09
-1296	8,081092E+06	8,081259E+06	2,778538E+09	2,778716E+09	1,616235E+07	5,557255E+09	5,573417E+09
-1295	8,084778E+06	8,084494E+06	2,778800E+09	2,778627E+09	1,616927E+07	5,557427E+09	5,573596E+09
-1294	8,079883E+06	8,077736E+06	2,778745E+09	2,778824E+09	1,615762E+07	5,557568E+09	5,573726E+09
-1293	8,081160E+06	8,083685E+06	2,778808E+09	2,778891E+09	1,616484E+07	5,557699E+09	5,573864E+09
-1292	8,083502E+06	8,081021E+06	2,778994E+09	2,778830E+09	1,616452E+07	5,557824E+09	5,573989E+09
-1291	8,078353E+06	8,078650E+06	2,778856E+09	2,779038E+09	1,615700E+07	5,557894E+09	5,574051E+09
-1290	8,082464E+06	8,084490E+06	2,778992E+09	2,778929E+09	1,616695E+07	5,557921E+09	5,574088E+09
-1289	8,081978E+06	8,078170E+06	2,778988E+09	2,778859E+09	1,616015E+07	5,557847E+09	5,574007E+09
-1288	8,078503E+06	8,079836E+06	2,778772E+09	2,778961E+09	1,615834E+07	5,557733E+09	5,573891E+09
-1287	8,085514E+06	8,083295E+06	2,778860E+09	2,778733E+09	1,616881E+07	5,557593E+09	5,573762E+09
-1286	8,080147E+06	8,079344E+06	2,778685E+09	2,778691E+09	1,615949E+07	5,557376E+09	5,573535E+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							
-1285	8,080549E+06	8,083184E+06	2,778526E+09	2,778635E+09	1,616373E+07	5,557161E+09	5,573325E+09
-1284	8,085235E+06	8,083438E+06	2,778606E+09	2,778381E+09	1,616867E+07	5,556987E+09	5,573155E+09
-1283	8,079085E+06	8,079916E+06	2,778363E+09	2,778467E+09	1,615900E+07	5,556830E+09	5,572989E+09
-1282	8,084691E+06	8,084334E+06	2,778359E+09	2,778364E+09	1,616902E+07	5,556723E+09	5,572892E+09
-1281	8,084145E+06	8,082382E+06	2,778381E+09	2,778230E+09	1,616653E+07	5,556611E+09	5,572778E+09
-1280	8,080895E+06	8,080197E+06	2,778188E+09	2,778408E+09	1,616109E+07	5,556596E+09	5,572757E+09
-1279	8,085927E+06	8,086721E+06	2,778374E+09	2,778287E+09	1,617265E+07	5,556660E+09	5,572833E+09
-1278	8,081816E+06	8,080900E+06	2,778409E+09	2,778335E+09	1,616272E+07	5,556744E+09	5,572907E+09
-1277	8,081057E+06	8,081930E+06	2,778356E+09	2,778520E+09	1,616299E+07	5,556876E+09	5,573039E+09
-1276	8,085015E+06	8,084744E+06	2,778589E+09	2,778436E+09	1,616976E+07	5,557025E+09	5,573195E+09
-1275	8,080739E+06	8,078162E+06	2,778530E+09	2,778647E+09	1,615890E+07	5,557178E+09	5,573337E+09
-1274	8,081847E+06	8,084264E+06	2,778599E+09	2,778702E+09	1,616611E+07	5,557301E+09	5,573468E+09
-1273	8,084500E+06	8,081620E+06	2,778770E+09	2,778593E+09	1,616612E+07	5,557363E+09	5,573529E+09
-1272	8,079314E+06	8,078736E+06	2,778634E+09	2,778797E+09	1,615805E+07	5,557432E+09	5,573590E+09
-1271	8,083245E+06	8,084880E+06	2,778749E+09	2,778696E+09	1,616813E+07	5,557445E+09	5,573613E+09
-1270	8,083074E+06	8,079293E+06	2,778759E+09	2,778611E+09	1,616237E+07	5,557370E+09	5,573532E+09
-1269	8,078704E+06	8,081238E+06	2,778522E+09	2,778710E+09	1,615994E+07	5,557232E+09	5,573392E+09
-1268	8,085569E+06	8,084583E+06	2,778595E+09	2,778462E+09	1,617015E+07	5,557056E+09	5,573227E+09
-1267	8,080588E+06	8,080504E+06	2,778436E+09	2,778433E+09	1,616109E+07	5,556869E+09	5,573030E+09
-1266	8,081388E+06	8,083535E+06	2,778282E+09	2,778385E+09	1,616492E+07	5,556667E+09	5,572832E+09
-1265	8,086409E+06	8,083696E+06	2,778329E+09	2,778112E+09	1,617010E+07	5,556441E+09	5,572611E+09
-1264	8,080579E+06	8,079834E+06	2,778087E+09	2,778212E+09	1,616041E+07	5,556300E+09	5,572460E+09
-1263	8,085425E+06	8,085291E+06	2,778083E+09	2,778119E+09	1,617072E+07	5,556202E+09	5,572373E+09
-1262	8,084824E+06	8,083924E+06	2,778159E+09	2,777979E+09	1,616875E+07	5,556137E+09	5,572306E+09
-1261	8,080910E+06	8,081439E+06	2,777983E+09	2,778175E+09	1,616235E+07	5,556158E+09	5,572320E+09
-1260	8,085923E+06	8,087211E+06	2,778159E+09	2,778067E+09	1,617313E+07	5,556227E+09	5,572400E+09
-1259	8,082829E+06	8,080957E+06	2,778198E+09	2,778156E+09	1,616379E+07	5,556354E+09	5,572517E+09
-1258	8,082236E+06	8,082007E+06	2,778143E+09	2,778347E+09	1,616424E+07	5,556490E+09	5,572654E+09
-1257	8,086216E+06	8,085235E+06	2,778359E+09	2,778226E+09	1,617145E+07	5,556585E+09	5,572756E+09
-1256	8,081752E+06	8,078659E+06	2,778326E+09	2,778426E+09	1,616041E+07	5,556752E+09	5,572912E+09
-1255	8,082011E+06	8,085315E+06	2,778405E+09	2,778483E+09	1,616733E+07	5,556887E+09	5,573055E+09
-1254	8,085085E+06	8,082638E+06	2,778601E+09	2,778366E+09	1,616772E+07	5,556967E+09	5,573135E+09
-1253	8,079318E+06	8,079638E+06	2,778430E+09	2,778581E+09	1,615896E+07	5,557010E+09	5,573169E+09
-1252	8,083527E+06	8,085435E+06	2,778493E+09	2,778470E+09	1,616896E+07	5,556963E+09	5,573132E+09
-1251	8,083822E+06	8,080379E+06	2,778488E+09	2,778385E+09	1,616420E+07	5,556873E+09	5,573037E+09
-1250	8,079455E+06	8,082010E+06	2,778254E+09	2,778458E+09	1,616147E+07	5,556712E+09	5,572873E+09
-1249	8,086633E+06	8,085128E+06	2,778311E+09	2,778167E+09	1,617176E+07	5,556477E+09	5,572649E+09
-1248	8,081853E+06	8,080499E+06	2,778164E+09	2,778138E+09	1,616235E+07	5,556302E+09	5,572464E+09
-1247	8,082435E+06	8,083877E+06	2,778009E+09	2,778118E+09	1,616631E+07	5,556127E+09	5,572293E+09
-1246	8,087549E+06	8,084986E+06	2,778088E+09	2,777852E+09	1,617253E+07	5,555940E+09	5,572113E+09
-1245	8,080873E+06	8,081323E+06	2,777851E+09	2,777972E+09	1,616220E+07	5,555823E+09	5,571985E+09
-1244	8,085422E+06	8,086539E+06	2,777848E+09	2,777884E+09	1,617196E+07	5,555733E+09	5,571905E+09
-1243	8,085309E+06	8,084845E+06	2,777943E+09	2,777774E+09	1,617015E+07	5,555717E+09	5,571887E+09
-1242	8,081781E+06	8,081492E+06	2,777773E+09	2,777978E+09	1,616327E+07	5,555751E+09	5,571914E+09
-1241	8,086989E+06	8,087012E+06	2,777912E+09	2,777851E+09	1,617400E+07	5,555762E+09	5,571936E+09
-1240	8,084233E+06	8,080785E+06	2,777960E+09	2,777937E+09	1,616502E+07	5,555897E+09	5,572062E+09
-1239	8,082728E+06	8,083082E+06	2,777918E+09	2,778132E+09	1,616581E+07	5,556050E+09	5,572216E+09
-1238	8,086652E+06	8,086827E+06	2,778184E+09	2,777998E+09	1,617348E+07	5,556182E+09	5,572355E+09
-1237	8,081545E+06	8,080008E+06	2,778162E+09	2,778209E+09	1,616155E+07	5,556371E+09	5,572533E+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							
-1236	8,081883E+06	8,085856E+06	2,778212E+09	2,778274E+09	1,616774E+07	5,556487E+09	5,572654E+09
-1235	8,085826E+06	8,082952E+06	2,778388E+09	2,778186E+09	1,616878E+07	5,556573E+09	5,572742E+09
-1234	8,080329E+06	8,080040E+06	2,778192E+09	2,778382E+09	1,616037E+07	5,556574E+09	5,572735E+09
-1233	8,084693E+06	8,085786E+06	2,778206E+09	2,778220E+09	1,617048E+07	5,556426E+09	5,572597E+09
-1232	8,085043E+06	8,080956E+06	2,778218E+09	2,778106E+09	1,616600E+07	5,556324E+09	5,572490E+09
-1231	8,080152E+06	8,082878E+06	2,777994E+09	2,778173E+09	1,616303E+07	5,556167E+09	5,572330E+09
-1230	8,087520E+06	8,086088E+06	2,778077E+09	2,777878E+09	1,617361E+07	5,555955E+09	5,572128E+09
-1229	8,082203E+06	8,081396E+06	2,777919E+09	2,777874E+09	1,616360E+07	5,555793E+09	5,571956E+09
-1228	8,082864E+06	8,084544E+06	2,777734E+09	2,777866E+09	1,616741E+07	5,555600E+09	5,571767E+09
-1227	8,088097E+06	8,086267E+06	2,777820E+09	2,777628E+09	1,617436E+07	5,555448E+09	5,571622E+09
-1226	8,081741E+06	8,082174E+06	2,777599E+09	2,777740E+09	1,616391E+07	5,555339E+09	5,571503E+09
-1225	8,086396E+06	8,086764E+06	2,777580E+09	2,777629E+09	1,617316E+07	5,555209E+09	5,571382E+09
-1224	8,086679E+06	8,084691E+06	2,777693E+09	2,777526E+09	1,617137E+07	5,555219E+09	5,571390E+09
-1223	8,082744E+06	8,081837E+06	2,777536E+09	2,777748E+09	1,616458E+07	5,555284E+09	5,571448E+09
-1222	8,087722E+06	8,088251E+06	2,777715E+09	2,777623E+09	1,617597E+07	5,555338E+09	5,571514E+09
-1221	8,084184E+06	8,082338E+06	2,777787E+09	2,777726E+09	1,616652E+07	5,555513E+09	5,571680E+09
-1220	8,082308E+06	8,084472E+06	2,777752E+09	2,777932E+09	1,616678E+07	5,555684E+09	5,571851E+09
-1219	8,086720E+06	8,087712E+06	2,778025E+09	2,777834E+09	1,617443E+07	5,555859E+09	5,572034E+09
-1218	8,082305E+06	8,080037E+06	2,777981E+09	2,778044E+09	1,616234E+07	5,556025E+09	5,572187E+09
-1217	8,083004E+06	8,085248E+06	2,777960E+09	2,778075E+09	1,616825E+07	5,556035E+09	5,572203E+09
-1216	8,087405E+06	8,082661E+06	2,778111E+09	2,777953E+09	1,617007E+07	5,556064E+09	5,572234E+09
-1215	8,081088E+06	8,080969E+06	2,777914E+09	2,778123E+09	1,616206E+07	5,556037E+09	5,572199E+09
-1214	8,085494E+06	8,087192E+06	2,777964E+09	2,777927E+09	1,617269E+07	5,555891E+09	5,572064E+09
-1213	8,085101E+06	8,082320E+06	2,777987E+09	2,777817E+09	1,616742E+07	5,555804E+09	5,571971E+09
-1212	8,080459E+06	8,083515E+06	2,777746E+09	2,777900E+09	1,616397E+07	5,555647E+09	5,571811E+09
-1211	8,088224E+06	8,086807E+06	2,777822E+09	2,777651E+09	1,617503E+07	5,555473E+09	5,571648E+09
-1210	8,083245E+06	8,082152E+06	2,777660E+09	2,777645E+09	1,616540E+07	5,555306E+09	5,571471E+09
-1209	8,083918E+06	8,085007E+06	2,777445E+09	2,777611E+09	1,616892E+07	5,555055E+09	5,571224E+09
-1208	8,089123E+06	8,086981E+06	2,777555E+09	2,777361E+09	1,617610E+07	5,554916E+09	5,571092E+09
-1207	8,082432E+06	8,082996E+06	2,777353E+09	2,777480E+09	1,616543E+07	5,554833E+09	5,570999E+09
-1206	8,087172E+06	8,087625E+06	2,777357E+09	2,777370E+09	1,617480E+07	5,554727E+09	5,570902E+09
-1205	8,086898E+06	8,085588E+06	2,777475E+09	2,777292E+09	1,617249E+07	5,554766E+09	5,570939E+09
-1204	8,082902E+06	8,082673E+06	2,777315E+09	2,777529E+09	1,616558E+07	5,554844E+09	5,571009E+09
-1203	8,087716E+06	8,089437E+06	2,777520E+09	2,777445E+09	1,617715E+07	5,554965E+09	5,571142E+09
-1202	8,084884E+06	8,082961E+06	2,777615E+09	2,777547E+09	1,616784E+07	5,555163E+09	5,571331E+09
-1201	8,083142E+06	8,084174E+06	2,777540E+09	2,777733E+09	1,616732E+07	5,555274E+09	5,571441E+09
-1200	8,088207E+06	8,087045E+06	2,777801E+09	2,777634E+09	1,617525E+07	5,555435E+09	5,571610E+09
-1199	8,083543E+06	8,080278E+06	2,777740E+09	2,777834E+09	1,616382E+07	5,555573E+09	5,571737E+09
-1198	8,083955E+06	8,086234E+06	2,777722E+09	2,777833E+09	1,617019E+07	5,555555E+09	5,571725E+09
-1197	8,087533E+06	8,084243E+06	2,777885E+09	2,777697E+09	1,617178E+07	5,555582E+09	5,571754E+09
-1196	8,080906E+06	8,082422E+06	2,777692E+09	2,777852E+09	1,616333E+07	5,555544E+09	5,571707E+09
-1195	8,085554E+06	8,088200E+06	2,777751E+09	2,777691E+09	1,617375E+07	5,555442E+09	5,571615E+09
-1194	8,085866E+06	8,082786E+06	2,777758E+09	2,777583E+09	1,616865E+07	5,555341E+09	5,571510E+09
-1193	8,081608E+06	8,083267E+06	2,777456E+09	2,777650E+09	1,616487E+07	5,555106E+09	5,571271E+09
-1192	8,089559E+06	8,087088E+06	2,777520E+09	2,777390E+09	1,617665E+07	5,554911E+09	5,571087E+09
-1191	8,084065E+06	8,083381E+06	2,777371E+09	2,777373E+09	1,616745E+07	5,554744E+09	5,570911E+09
-1190	8,084782E+06	8,086331E+06	2,777190E+09	2,777317E+09	1,617111E+07	5,554507E+09	5,570678E+09
-1189	8,089261E+06	8,088232E+06	2,777318E+09	2,777081E+09	1,617749E+07	5,554399E+09	5,570577E+09
-1188	8,082827E+06	8,083539E+06	2,777116E+09	2,777224E+09	1,616637E+07	5,554340E+09	5,570506E+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							
-1187	8,087638E+06	8,088359E+06	2,777134E+09	2,777170E+09	1,617600E+07	5,554304E+09	5,570480E+09
-1186	8,087771E+06	8,086250E+06	2,777265E+09	2,777104E+09	1,617402E+07	5,554369E+09	5,570543E+09
-1185	8,083823E+06	8,082866E+06	2,777094E+09	2,777330E+09	1,616669E+07	5,554424E+09	5,570591E+09
-1184	8,088634E+06	8,089702E+06	2,777320E+09	2,777244E+09	1,617834E+07	5,554564E+09	5,570742E+09
-1183	8,085774E+06	8,083256E+06	2,777423E+09	2,777350E+09	1,616903E+07	5,554773E+09	5,570942E+09
-1182	8,083979E+06	8,084648E+06	2,777343E+09	2,777519E+09	1,616863E+07	5,554863E+09	5,571031E+09
-1181	8,088471E+06	8,087714E+06	2,777582E+09	2,777416E+09	1,617618E+07	5,554998E+09	5,571174E+09
-1180	8,083618E+06	8,081450E+06	2,777501E+09	2,777599E+09	1,616507E+07	5,555100E+09	5,571265E+09
-1179	8,083836E+06	8,087674E+06	2,777498E+09	2,777613E+09	1,617151E+07	5,555110E+09	5,571282E+09
-1178	8,088094E+06	8,085271E+06	2,777675E+09	2,777461E+09	1,617336E+07	5,555135E+09	5,571309E+09
-1177	8,081752E+06	8,082373E+06	2,777443E+09	2,777597E+09	1,616413E+07	5,555040E+09	5,571204E+09
-1176	8,086899E+06	8,087870E+06	2,777489E+09	2,777438E+09	1,617477E+07	5,554927E+09	5,571102E+09
-1175	8,087051E+06	8,083361E+06	2,777485E+09	2,777332E+09	1,617041E+07	5,554817E+09	5,570988E+09
-1174	8,082709E+06	8,084468E+06	2,777187E+09	2,777373E+09	1,616718E+07	5,554560E+09	5,570727E+09
-1173	8,089748E+06	8,088800E+06	2,777265E+09	2,777111E+09	1,617855E+07	5,554377E+09	5,570555E+09
-1172	8,084224E+06	8,084859E+06	2,777122E+09	2,777092E+09	1,616908E+07	5,554214E+09	5,570383E+09
-1171	8,085128E+06	8,087104E+06	2,776954E+09	2,777081E+09	1,617223E+07	5,554035E+09	5,570207E+09
-1170	8,090225E+06	8,088500E+06	2,777077E+09	2,776857E+09	1,617872E+07	5,553934E+09	5,570113E+09
-1169	8,084133E+06	8,082987E+06	2,776834E+09	2,776988E+09	1,616712E+07	5,553822E+09	5,569989E+09
-1168	8,088815E+06	8,088508E+06	2,776868E+09	2,776941E+09	1,617732E+07	5,553809E+09	5,569987E+09
-1167	8,088657E+06	8,087222E+06	2,777036E+09	2,776880E+09	1,617588E+07	5,553916E+09	5,570092E+09
-1166	8,084636E+06	8,084004E+06	2,776901E+09	2,777093E+09	1,616864E+07	5,553993E+09	5,570162E+09
-1165	8,088725E+06	8,090697E+06	2,777137E+09	2,777027E+09	1,617942E+07	5,554164E+09	5,570343E+09
-1164	8,086148E+06	8,083844E+06	2,777223E+09	2,777142E+09	1,616999E+07	5,554365E+09	5,570535E+09
-1163	8,084092E+06	8,085491E+06	2,777143E+09	2,777342E+09	1,616958E+07	5,554486E+09	5,570655E+09
-1162	8,089034E+06	8,088562E+06	2,777378E+09	2,777225E+09	1,617760E+07	5,554603E+09	5,570780E+09
-1161	8,084186E+06	8,081921E+06	2,777274E+09	2,777372E+09	1,616611E+07	5,554645E+09	5,570811E+09
-1160	8,084626E+06	8,088058E+06	2,777278E+09	2,777376E+09	1,617268E+07	5,554653E+09	5,570826E+09
-1159	8,089117E+06	8,085739E+06	2,777449E+09	2,777224E+09	1,617486E+07	5,554673E+09	5,570848E+09
-1158	8,082893E+06	8,082948E+06	2,777202E+09	2,777336E+09	1,616584E+07	5,554539E+09	5,570704E+09
-1157	8,087426E+06	8,088660E+06	2,777226E+09	2,777177E+09	1,617609E+07	5,554404E+09	5,570580E+09
-1156	8,087334E+06	8,084746E+06	2,777207E+09	2,777061E+09	1,617208E+07	5,554267E+09	5,570439E+09
-1155	8,082900E+06	8,085867E+06	2,776930E+09	2,777122E+09	1,616877E+07	5,554051E+09	5,570220E+09
-1154	8,090496E+06	8,089693E+06	2,777011E+09	2,776852E+09	1,618019E+07	5,553863E+09	5,570044E+09
-1153	8,085422E+06	8,084666E+06	2,776834E+09	2,776823E+09	1,617009E+07	5,553657E+09	5,569827E+09
-1152	8,086767E+06	8,086855E+06	2,776665E+09	2,776822E+09	1,617362E+07	5,553487E+09	5,569660E+09
-1151	8,091459E+06	8,089103E+06	2,776804E+09	2,776611E+09	1,618056E+07	5,553415E+09	5,569596E+09
-1150	8,085206E+06	8,084223E+06	2,776599E+09	2,776730E+09	1,616943E+07	5,553329E+09	5,569498E+09
-1149	8,088679E+06	8,090183E+06	2,776674E+09	2,776700E+09	1,617886E+07	5,553374E+09	5,569552E+09
-1148	8,088557E+06	8,088559E+06	2,776858E+09	2,776660E+09	1,617712E+07	5,553518E+09	5,569695E+09
-1147	8,084655E+06	8,084835E+06	2,776737E+09	2,776920E+09	1,616949E+07	5,553657E+09	5,569826E+09
-1146	8,089285E+06	8,090982E+06	2,776949E+09	2,776860E+09	1,618027E+07	5,553808E+09	5,569988E+09
-1145	8,087124E+06	8,083481E+06	2,776977E+09	2,776950E+09	1,617061E+07	5,553927E+09	5,570097E+09
-1144	8,084985E+06	8,085775E+06	2,776893E+09	2,777131E+09	1,617076E+07	5,554024E+09	5,570195E+09
-1143	8,089939E+06	8,089274E+06	2,777147E+09	2,776998E+09	1,617921E+07	5,554145E+09	5,570324E+09
-1142	8,085190E+06	8,082846E+06	2,777060E+09	2,777107E+09	1,616804E+07	5,554167E+09	5,570335E+09
-1141	8,085065E+06	8,088758E+06	2,777064E+09	2,777121E+09	1,617382E+07	5,554185E+09	5,570359E+09
-1140	8,089762E+06	8,086502E+06	2,777209E+09	2,776978E+09	1,617626E+07	5,554187E+09	5,570364E+09
-1139	8,083305E+06	8,083968E+06	2,776961E+09	2,777116E+09	1,616727E+07	5,554077E+09	5,570245E+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							
-1138	8,088229E+06	8,089684E+06	2,776976E+09	2,776946E+09	1,617791E+07	5,553921E+09	5,570099E+09
-1137	8,088152E+06	8,085381E+06	2,776922E+09	2,776794E+09	1,617353E+07	5,553716E+09	5,569890E+09
-1136	8,084020E+06	8,086221E+06	2,776649E+09	2,776849E+09	1,617024E+07	5,553498E+09	5,569668E+09
-1135	8,091721E+06	8,090103E+06	2,776733E+09	2,776584E+09	1,618182E+07	5,553316E+09	5,569498E+09
-1134	8,086688E+06	8,085320E+06	2,776554E+09	2,776531E+09	1,617201E+07	5,553085E+09	5,569257E+09
-1133	8,087251E+06	8,087888E+06	2,776400E+09	2,776545E+09	1,617514E+07	5,552944E+09	5,569120E+09
-1132	8,091499E+06	8,090722E+06	2,776556E+09	2,776354E+09	1,618222E+07	5,552910E+09	5,569092E+09
-1131	8,085252E+06	8,085672E+06	2,776410E+09	2,776515E+09	1,617092E+07	5,552925E+09	5,569096E+09
-1130	8,089062E+06	8,091036E+06	2,776499E+09	2,776506E+09	1,618010E+07	5,553004E+09	5,569184E+09
-1129	8,089490E+06	8,088097E+06	2,776642E+09	2,776470E+09	1,617759E+07	5,553112E+09	5,569289E+09
-1128	8,085977E+06	8,084514E+06	2,776505E+09	2,776737E+09	1,617049E+07	5,553242E+09	5,569412E+09
-1127	8,090426E+06	8,091209E+06	2,776711E+09	2,776671E+09	1,618164E+07	5,553383E+09	5,569564E+09
-1126	8,088178E+06	8,084480E+06	2,776755E+09	2,776716E+09	1,617266E+07	5,553471E+09	5,569643E+09
-1125	8,085078E+06	8,087176E+06	2,776700E+09	2,776888E+09	1,617225E+07	5,553588E+09	5,569761E+09
-1124	8,090063E+06	8,090375E+06	2,776955E+09	2,776764E+09	1,618044E+07	5,553719E+09	5,569899E+09
-1123	8,085462E+06	8,083651E+06	2,776880E+09	2,776904E+09	1,616911E+07	5,553784E+09	5,569953E+09
-1122	8,085738E+06	8,089097E+06	2,776844E+09	2,776915E+09	1,617484E+07	5,553759E+09	5,569934E+09
-1121	8,090637E+06	8,086491E+06	2,776924E+09	2,776747E+09	1,617713E+07	5,553671E+09	5,569848E+09
-1120	8,084248E+06	8,084708E+06	2,776666E+09	2,776863E+09	1,616896E+07	5,553529E+09	5,569698E+09
-1119	8,089317E+06	8,090478E+06	2,776690E+09	2,776675E+09	1,617980E+07	5,553365E+09	5,569545E+09
-1118	8,089337E+06	8,086507E+06	2,776644E+09	2,776484E+09	1,617584E+07	5,553127E+09	5,569303E+09
-1117	8,084816E+06	8,086925E+06	2,776380E+09	2,776543E+09	1,617174E+07	5,552923E+09	5,569095E+09
-1116	8,092315E+06	8,091063E+06	2,776457E+09	2,776301E+09	1,618338E+07	5,552757E+09	5,568941E+09
-1115	8,087032E+06	8,086594E+06	2,776320E+09	2,776287E+09	1,617363E+07	5,552607E+09	5,568780E+09
-1114	8,087669E+06	8,089122E+06	2,776188E+09	2,776320E+09	1,617679E+07	5,552508E+09	5,568685E+09
-1113	8,091917E+06	8,091255E+06	2,776331E+09	2,776137E+09	1,618317E+07	5,552468E+09	5,568651E+09
-1112	8,086347E+06	8,085849E+06	2,776193E+09	2,776317E+09	1,617220E+07	5,552510E+09	5,568682E+09
-1111	8,090273E+06	8,090896E+06	2,776275E+09	2,776319E+09	1,618117E+07	5,552593E+09	5,568775E+09
-1110	8,090910E+06	8,088228E+06	2,776396E+09	2,776248E+09	1,617914E+07	5,552644E+09	5,568823E+09
-1109	8,086505E+06	8,085261E+06	2,776268E+09	2,776503E+09	1,617177E+07	5,552771E+09	5,568943E+09
-1108	8,090411E+06	8,092520E+06	2,776483E+09	2,776439E+09	1,618293E+07	5,552922E+09	5,569104E+09
-1107	8,088184E+06	8,085805E+06	2,776581E+09	2,776500E+09	1,617399E+07	5,553081E+09	5,569255E+09
-1106	8,085443E+06	8,088067E+06	2,776533E+09	2,776681E+09	1,617351E+07	5,553214E+09	5,569388E+09
-1105	8,090858E+06	8,090103E+06	2,776732E+09	2,776556E+09	1,618096E+07	5,553288E+09	5,569469E+09
-1104	8,086668E+06	8,083763E+06	2,776633E+09	2,776697E+09	1,617043E+07	5,553330E+09	5,569500E+09
-1103	8,086916E+06	8,089482E+06	2,776585E+09	2,776696E+09	1,617640E+07	5,553281E+09	5,569457E+09
-1102	8,091625E+06	8,087668E+06	2,776656E+09	2,776472E+09	1,617929E+07	5,553128E+09	5,569307E+09
-1101	8,084601E+06	8,086102E+06	2,776417E+09	2,776568E+09	1,617070E+07	5,552985E+09	5,569156E+09
-1100	8,089740E+06	8,091521E+06	2,776429E+09	2,776389E+09	1,618126E+07	5,552818E+09	5,568999E+09
-1099	8,089774E+06	8,087509E+06	2,776404E+09	2,776221E+09	1,617728E+07	5,552625E+09	5,568803E+09
-1098	8,085644E+06	8,087470E+06	2,776125E+09	2,776289E+09	1,617311E+07	5,552415E+09	5,568588E+09
-1097	8,092930E+06	8,091300E+06	2,776165E+09	2,776048E+09	1,618423E+07	5,552213E+09	5,568398E+09
-1096	8,087923E+06	8,087313E+06	2,776051E+09	2,776046E+09	1,617524E+07	5,552097E+09	5,568272E+09
-1095	8,088802E+06	8,089595E+06	2,775948E+09	2,776090E+09	1,617840E+07	5,552038E+09	5,568216E+09
-1094	8,093082E+06	8,091883E+06	2,776092E+09	2,775889E+09	1,618497E+07	5,551981E+09	5,568166E+09
-1093	8,087358E+06	8,086262E+06	2,775963E+09	2,776078E+09	1,617362E+07	5,552041E+09	5,568215E+09
-1092	8,090733E+06	8,091554E+06	2,776032E+09	2,776099E+09	1,618229E+07	5,552131E+09	5,568313E+09
-1091	8,091168E+06	8,089418E+06	2,776200E+09	2,776045E+09	1,618059E+07	5,552245E+09	5,568425E+09
-1090	8,086602E+06	8,086567E+06	2,776093E+09	2,776296E+09	1,617317E+07	5,552389E+09	5,568562E+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	8,090417E+06	8,092927E+06	2,776291E+09	2,776234E+09	1,618334E+07	5,552526E+09	5,568709E+09
-1088	8,089030E+06	8,086125E+06	2,776392E+09	2,776309E+09	1,617516E+07	5,552702E+09	5,568877E+09
-1087	8,086567E+06	8,087981E+06	2,776324E+09	2,776494E+09	1,617455E+07	5,552817E+09	5,568992E+09
-1086	8,092104E+06	8,090304E+06	2,776478E+09	2,776326E+09	1,618241E+07	5,552804E+09	5,568986E+09
-1085	8,087360E+06	8,084675E+06	2,776371E+09	2,776438E+09	1,617204E+07	5,552809E+09	5,568981E+09
-1084	8,087154E+06	8,090623E+06	2,776314E+09	2,776428E+09	1,617778E+07	5,552742E+09	5,568920E+09
-1083	8,091912E+06	8,089054E+06	2,776427E+09	2,776204E+09	1,618097E+07	5,552631E+09	5,568812E+09
-1082	8,085217E+06	8,086990E+06	2,776185E+09	2,776298E+09	1,617221E+07	5,552483E+09	5,568655E+09
-1081	8,090661E+06	8,091322E+06	2,776142E+09	2,776126E+09	1,618198E+07	5,552268E+09	5,568450E+09
-1080	8,090983E+06	8,087958E+06	2,776111E+09	2,775969E+09	1,617894E+07	5,552080E+09	5,568259E+09
-1079	8,087001E+06	8,087940E+06	2,775849E+09	2,776041E+09	1,617494E+07	5,551890E+09	5,568065E+09
-1078	8,093811E+06	8,092473E+06	2,775898E+09	2,775772E+09	1,618628E+07	5,551670E+09	5,567856E+09
-1077	8,088547E+06	8,088442E+06	2,775821E+09	2,775776E+09	1,617699E+07	5,551597E+09	5,567774E+09
-1076	8,089237E+06	8,090399E+06	2,775716E+09	2,775851E+09	1,617964E+07	5,551567E+09	5,567746E+09
-1075	8,093420E+06	8,092726E+06	2,775883E+09	2,775674E+09	1,618615E+07	5,551557E+09	5,567743E+09
-1074	8,087934E+06	8,086939E+06	2,775746E+09	2,775867E+09	1,617487E+07	5,551614E+09	5,567789E+09
-1073	8,090889E+06	8,091920E+06	2,775782E+09	2,775886E+09	1,618281E+07	5,551668E+09	5,567851E+09
-1072	8,091716E+06	8,090188E+06	2,775979E+09	2,775840E+09	1,618190E+07	5,551819E+09	5,568001E+09
-1071	8,087597E+06	8,086928E+06	2,775907E+09	2,776096E+09	1,617453E+07	5,552003E+09	5,568178E+09
-1070	8,091418E+06	8,093133E+06	2,776087E+09	2,776013E+09	1,618455E+07	5,552100E+09	5,568285E+09
-1069	8,090180E+06	8,086351E+06	2,776186E+09	2,776086E+09	1,617653E+07	5,552272E+09	5,568449E+09
-1068	8,087100E+06	8,088626E+06	2,776087E+09	2,776278E+09	1,617573E+07	5,552365E+09	5,568541E+09
-1067	8,092359E+06	8,091565E+06	2,776269E+09	2,776105E+09	1,618392E+07	5,552374E+09	5,568558E+09
-1066	8,087516E+06	8,086256E+06	2,776164E+09	2,776197E+09	1,617377E+07	5,552361E+09	5,568535E+09
-1065	8,087365E+06	8,091026E+06	2,776065E+09	2,776178E+09	1,617839E+07	5,552243E+09	5,568422E+09
-1064	8,092835E+06	8,089551E+06	2,776167E+09	2,775960E+09	1,618239E+07	5,552126E+09	5,568309E+09
-1063	8,086675E+06	8,086956E+06	2,775911E+09	2,776045E+09	1,617363E+07	5,551955E+09	5,568129E+09
-1062	8,091867E+06	8,091678E+06	2,775833E+09	2,775837E+09	1,618355E+07	5,551670E+09	5,567853E+09
-1061	8,091711E+06	8,089132E+06	2,775823E+09	2,775668E+09	1,618084E+07	5,551492E+09	5,567673E+09
-1060	8,087319E+06	8,089200E+06	2,775577E+09	2,775759E+09	1,617652E+07	5,551336E+09	5,567513E+09
-1059	8,094030E+06	8,093983E+06	2,775684E+09	2,775515E+09	1,618801E+07	5,551199E+09	5,567387E+09
-1058	8,089208E+06	8,089380E+06	2,775608E+09	2,775536E+09	1,617859E+07	5,551143E+09	5,567322E+09
-1057	8,089945E+06	8,090211E+06	2,775457E+09	2,775630E+09	1,618016E+07	5,551087E+09	5,567268E+09
-1056	8,094328E+06	8,093223E+06	2,775628E+09	2,775472E+09	1,618755E+07	5,551100E+09	5,567287E+09
-1055	8,089092E+06	8,087259E+06	2,775519E+09	2,775660E+09	1,617635E+07	5,551179E+09	5,567356E+09
-1054	8,091538E+06	8,092711E+06	2,775562E+09	2,775654E+09	1,618425E+07	5,551216E+09	5,567400E+09
-1053	8,092538E+06	8,090887E+06	2,775795E+09	2,775610E+09	1,618342E+07	5,551405E+09	5,567589E+09
-1052	8,088165E+06	8,087459E+06	2,775716E+09	2,775892E+09	1,617562E+07	5,551609E+09	5,567784E+09
-1051	8,091827E+06	8,093818E+06	2,775909E+09	2,775821E+09	1,618565E+07	5,551730E+09	5,567915E+09
-1050	8,090689E+06	8,087229E+06	2,775982E+09	2,775882E+09	1,617792E+07	5,551864E+09	5,568042E+09
-1049	8,087069E+06	8,089099E+06	2,775833E+09	2,776058E+09	1,617617E+07	5,551891E+09	5,568067E+09
-1048	8,092842E+06	8,092451E+06	2,776018E+09	2,775878E+09	1,618529E+07	5,551895E+09	5,568081E+09
-1047	8,088637E+06	8,086779E+06	2,775924E+09	2,775951E+09	1,617542E+07	5,551875E+09	5,568051E+09
-1046	8,088621E+06	8,091245E+06	2,775788E+09	2,775898E+09	1,617987E+07	5,551685E+09	5,567865E+09
-1045	8,094180E+06	8,090056E+06	2,775889E+09	2,775670E+09	1,618424E+07	5,551559E+09	5,567743E+09
-1044	8,087444E+06	8,087867E+06	2,775627E+09	2,775766E+09	1,617531E+07	5,551394E+09	5,567569E+09
-1043	8,092067E+06	8,093215E+06	2,775596E+09	2,775563E+09	1,618528E+07	5,551159E+09	5,567344E+09
-1042	8,091821E+06	8,090866E+06	2,775606E+09	2,775404E+09	1,618269E+07	5,551010E+09	5,567193E+09
-1041	8,087625E+06	8,089707E+06	2,775332E+09	2,775515E+09	1,617733E+07	5,550846E+09	5,567023E+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							
-1040	8,094820E+06	8,094516E+06	2,775430E+09	2,775300E+09	1,618934E+07	5,550730E+09	5,566920E+09
-1039	8,090856E+06	8,089233E+06	2,775348E+09	2,775321E+09	1,618009E+07	5,550668E+09	5,566849E+09
-1038	8,091201E+06	8,090339E+06	2,775163E+09	2,775382E+09	1,618154E+07	5,550545E+09	5,566727E+09
-1037	8,095180E+06	8,094015E+06	2,775370E+09	2,775212E+09	1,618919E+07	5,550583E+09	5,566772E+09
-1036	8,089522E+06	8,088202E+06	2,775300E+09	2,775418E+09	1,617772E+07	5,550718E+09	5,566896E+09
-1035	8,091626E+06	8,093994E+06	2,775407E+09	2,775434E+09	1,618562E+07	5,550841E+09	5,567026E+09
-1034	8,093038E+06	8,091781E+06	2,775638E+09	2,775415E+09	1,618482E+07	5,551052E+09	5,567237E+09
-1033	8,088561E+06	8,087617E+06	2,775507E+09	2,775710E+09	1,617618E+07	5,551217E+09	5,567393E+09
-1032	8,092351E+06	8,094550E+06	2,775685E+09	2,775648E+09	1,618690E+07	5,551334E+09	5,567520E+09
-1031	8,091709E+06	8,087821E+06	2,775763E+09	2,775682E+09	1,617953E+07	5,551445E+09	5,567625E+09
-1030	8,087614E+06	8,089772E+06	2,775587E+09	2,775810E+09	1,617739E+07	5,551398E+09	5,567575E+09
-1029	8,093827E+06	8,093018E+06	2,775782E+09	2,775611E+09	1,618684E+07	5,551392E+09	5,567579E+09
-1028	8,089367E+06	8,087351E+06	2,775669E+09	2,775687E+09	1,617672E+07	5,551366E+09	5,567533E+09
-1027	8,089296E+06	8,092094E+06	2,775547E+09	2,775631E+09	1,618139E+07	5,551178E+09	5,567359E+09
-1026	8,094714E+06	8,091413E+06	2,775630E+09	2,775398E+09	1,618613E+07	5,551029E+09	5,567215E+09
-1025	8,087588E+06	8,088656E+06	2,775342E+09	2,775497E+09	1,617624E+07	5,550839E+09	5,567016E+09
-1024	8,092622E+06	8,094258E+06	2,775330E+09	2,775317E+09	1,618688E+07	5,550648E+09	5,566835E+09
-1023	8,093230E+06	8,091211E+06	2,775351E+09	2,775160E+09	1,618444E+07	5,550511E+09	5,566696E+09
-1022	8,089201E+06	8,089595E+06	2,775037E+09	2,775251E+09	1,617880E+07	5,550288E+09	5,566467E+09
-1021	8,096375E+06	8,094807E+06	2,775140E+09	2,775031E+09	1,619118E+07	5,550172E+09	5,566363E+09
-1020	8,091739E+06	8,090082E+06	2,775072E+09	2,775063E+09	1,618182E+07	5,550134E+09	5,566316E+09
-1019	8,091387E+06	8,091996E+06	2,774958E+09	2,775129E+09	1,618338E+07	5,550086E+09	5,566270E+09
-1018	8,095080E+06	8,095741E+06	2,775201E+09	2,774982E+09	1,619082E+07	5,550183E+09	5,566374E+09
-1017	8,089555E+06	8,088750E+06	2,775122E+09	2,775219E+09	1,617831E+07	5,550341E+09	5,566519E+09
-1016	8,091967E+06	8,094594E+06	2,775223E+09	2,775274E+09	1,618656E+07	5,550497E+09	5,566684E+09
-1015	8,094345E+06	8,091613E+06	2,775436E+09	2,775251E+09	1,618596E+07	5,550687E+09	5,566873E+09
-1014	8,089442E+06	8,087826E+06	2,775251E+09	2,775501E+09	1,617727E+07	5,550752E+09	5,566929E+09
-1013	8,093168E+06	8,095081E+06	2,775437E+09	2,775409E+09	1,618825E+07	5,550846E+09	5,567034E+09
-1012	8,092329E+06	8,088674E+06	2,775526E+09	2,775435E+09	1,618100E+07	5,550961E+09	5,567142E+09
-1011	8,088096E+06	8,090845E+06	2,775383E+09	2,775550E+09	1,617894E+07	5,550933E+09	5,567112E+09
-1010	8,094585E+06	8,093874E+06	2,775561E+09	2,775359E+09	1,618846E+07	5,550919E+09	5,567108E+09
-1009	8,089903E+06	8,087826E+06	2,775406E+09	2,775438E+09	1,617773E+07	5,550844E+09	5,567022E+09
-1008	8,089845E+06	8,093053E+06	2,775282E+09	2,775399E+09	1,618290E+07	5,550681E+09	5,566864E+09
-1007	8,095760E+06	8,092213E+06	2,775379E+09	2,775156E+09	1,618797E+07	5,550535E+09	5,566723E+09
-1006	8,088503E+06	8,089242E+06	2,775063E+09	2,775223E+09	1,617775E+07	5,550286E+09	5,566464E+09
-1005	8,093991E+06	8,094661E+06	2,775059E+09	2,775039E+09	1,618865E+07	5,550097E+09	5,566286E+09
-1004	8,094318E+06	8,091830E+06	2,775065E+09	2,774895E+09	1,618615E+07	5,549960E+09	5,566146E+09
-1003	8,090037E+06	8,090617E+06	2,774776E+09	2,774977E+09	1,618065E+07	5,549753E+09	5,565933E+09
-1002	8,096548E+06	8,096337E+06	2,774885E+09	2,774763E+09	1,619288E+07	5,549648E+09	5,565841E+09
-1001	8,091560E+06	8,091146E+06	2,774825E+09	2,774808E+09	1,618271E+07	5,549633E+09	5,565816E+09
-1000	8,091443E+06	8,093222E+06	2,774759E+09	2,774918E+09	1,618467E+07	5,549677E+09	5,565861E+09
-999	8,096156E+06	8,095963E+06	2,775021E+09	2,774796E+09	1,619212E+07	5,549816E+09	5,566009E+09
-998	8,090915E+06	8,088446E+06	2,774899E+09	2,775026E+09	1,617936E+07	5,549925E+09	5,566105E+09
-997	8,093340E+06	8,094626E+06	2,774996E+09	2,775074E+09	1,618797E+07	5,550070E+09	5,566258E+09
-996	8,095154E+06	8,092082E+06	2,775200E+09	2,775047E+09	1,618724E+07	5,550247E+09	5,566434E+09
-995	8,089698E+06	8,089230E+06	2,775058E+09	2,775269E+09	1,617893E+07	5,550327E+09	5,566506E+09
-994	8,093249E+06	8,096386E+06	2,775246E+09	2,775173E+09	1,618963E+07	5,550419E+09	5,566609E+09
-993	8,092497E+06	8,089228E+06	2,775306E+09	2,775203E+09	1,618172E+07	5,550509E+09	5,566691E+09
-992	8,088676E+06	8,091506E+06	2,775154E+09	2,775339E+09	1,618018E+07	5,550493E+09	5,566673E+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							
-991	8,096008E+06	8,093943E+06	2,775306E+09	2,775135E+09	1,618995E+07	5,550441E+09	5,566631E+09
-990	8,090864E+06	8,088226E+06	2,775104E+09	2,775171E+09	1,617909E+07	5,550275E+09	5,566454E+09
-989	8,090905E+06	8,093697E+06	2,774997E+09	2,775110E+09	1,618460E+07	5,550107E+09	5,566291E+09
-988	8,096399E+06	8,093266E+06	2,775104E+09	2,774874E+09	1,618967E+07	5,549978E+09	5,566168E+09
-987	8,089252E+06	8,090556E+06	2,774820E+09	2,774933E+09	1,617981E+07	5,549753E+09	5,565933E+09
-986	8,094760E+06	8,095741E+06	2,774800E+09	2,774765E+09	1,619050E+07	5,549565E+09	5,565755E+09
-985	8,094680E+06	8,092776E+06	2,774782E+09	2,774631E+09	1,618746E+07	5,549412E+09	5,565600E+09
-984	8,090391E+06	8,091863E+06	2,774522E+09	2,774739E+09	1,618225E+07	5,549261E+09	5,565443E+09
-983	8,097239E+06	8,097101E+06	2,774665E+09	2,774538E+09	1,619434E+07	5,549203E+09	5,565397E+09
-982	8,092356E+06	8,091416E+06	2,774599E+09	2,774576E+09	1,618377E+07	5,549176E+09	5,565359E+09
-981	8,092674E+06	8,093221E+06	2,774550E+09	2,774701E+09	1,618589E+07	5,549251E+09	5,565437E+09
-980	8,097182E+06	8,096053E+06	2,774798E+09	2,774606E+09	1,619323E+07	5,549405E+09	5,565598E+09
-979	8,091888E+06	8,089257E+06	2,774690E+09	2,774812E+09	1,618115E+07	5,549502E+09	5,565683E+09
-978	8,093435E+06	8,095759E+06	2,774776E+09	2,774856E+09	1,618919E+07	5,549633E+09	5,565822E+09
-977	8,094997E+06	8,092960E+06	2,774974E+09	2,774821E+09	1,618796E+07	5,549796E+09	5,565984E+09
-976	8,089716E+06	8,090346E+06	2,774860E+09	2,775059E+09	1,618006E+07	5,549918E+09	5,566099E+09
-975	8,094347E+06	8,096418E+06	2,775041E+09	2,774969E+09	1,619076E+07	5,550009E+09	5,566200E+09
-974	8,093789E+06	8,089108E+06	2,775047E+09	2,774969E+09	1,618290E+07	5,550016E+09	5,566199E+09
-973	8,090097E+06	8,091825E+06	2,774893E+09	2,775085E+09	1,618192E+07	5,549978E+09	5,566160E+09
-972	8,096668E+06	8,094865E+06	2,775042E+09	2,774881E+09	1,619153E+07	5,549923E+09	5,566114E+09
-971	8,091193E+06	8,090045E+06	2,774880E+09	2,774886E+09	1,618124E+07	5,549767E+09	5,565948E+09
-970	8,091052E+06	8,095070E+06	2,774769E+09	2,774836E+09	1,618612E+07	5,549605E+09	5,565791E+09
-969	8,096524E+06	8,094140E+06	2,774842E+09	2,774610E+09	1,619066E+07	5,549452E+09	5,565643E+09
-968	8,089872E+06	8,091418E+06	2,774553E+09	2,774692E+09	1,618129E+07	5,549245E+09	5,565426E+09
-967	8,096151E+06	8,095926E+06	2,774513E+09	2,774520E+09	1,619208E+07	5,549033E+09	5,565225E+09
-966	8,095588E+06	8,093112E+06	2,774467E+09	2,774355E+09	1,618870E+07	5,548822E+09	5,565011E+09
-965	8,091691E+06	8,092195E+06	2,774255E+09	2,774460E+09	1,618389E+07	5,548715E+09	5,564899E+09
-964	8,097969E+06	8,097612E+06	2,774424E+09	2,774291E+09	1,619558E+07	5,548715E+09	5,564910E+09
-963	8,093474E+06	8,092216E+06	2,774401E+09	2,774336E+09	1,618569E+07	5,548737E+09	5,564922E+09
-962	8,093412E+06	8,094033E+06	2,774344E+09	2,774488E+09	1,618745E+07	5,548833E+09	5,565020E+09
-961	8,097271E+06	8,096863E+06	2,774569E+09	2,774405E+09	1,619413E+07	5,548974E+09	5,565168E+09
-960	8,091968E+06	8,090609E+06	2,774490E+09	2,774626E+09	1,618258E+07	5,549116E+09	5,565299E+09
-959	8,093881E+06	8,096340E+06	2,774585E+09	2,774664E+09	1,619022E+07	5,549249E+09	5,565439E+09
-958	8,095654E+06	8,093063E+06	2,774753E+09	2,774602E+09	1,618872E+07	5,549356E+09	5,565544E+09
-957	8,090937E+06	8,090402E+06	2,774644E+09	2,774829E+09	1,618134E+07	5,549473E+09	5,565654E+09
-956	8,095196E+06	8,096567E+06	2,774803E+09	2,774747E+09	1,619176E+07	5,549550E+09	5,565741E+09
-955	8,094626E+06	8,090345E+06	2,774817E+09	2,774710E+09	1,618497E+07	5,549527E+09	5,565712E+09
-954	8,090176E+06	8,093280E+06	2,774655E+09	2,774821E+09	1,618346E+07	5,549476E+09	5,565659E+09
-953	8,096383E+06	8,096066E+06	2,774791E+09	2,774617E+09	1,619245E+07	5,549409E+09	5,565601E+09
-952	8,091424E+06	8,091358E+06	2,774648E+09	2,774643E+09	1,618278E+07	5,549291E+09	5,565474E+09
-951	8,092466E+06	8,094989E+06	2,774512E+09	2,774601E+09	1,618745E+07	5,549113E+09	5,565300E+09
-950	8,097961E+06	8,094067E+06	2,774525E+09	2,774347E+09	1,619203E+07	5,548872E+09	5,565064E+09
-949	8,091573E+06	8,091579E+06	2,774244E+09	2,774404E+09	1,618315E+07	5,548648E+09	5,564832E+09
-948	8,097011E+06	8,096637E+06	2,774222E+09	2,774243E+09	1,619365E+07	5,548465E+09	5,564659E+09
-947	8,096208E+06	8,094776E+06	2,774235E+09	2,774059E+09	1,619098E+07	5,548295E+09	5,564486E+09
-946	8,092030E+06	8,093363E+06	2,774048E+09	2,774200E+09	1,618539E+07	5,548248E+09	5,564433E+09
-945	8,097903E+06	8,098493E+06	2,774205E+09	2,774071E+09	1,619640E+07	5,548276E+09	5,564472E+09
-944	8,093974E+06	8,093083E+06	2,774194E+09	2,774152E+09	1,618706E+07	5,548345E+09	5,564532E+09
-943	8,094289E+06	8,094297E+06	2,774120E+09	2,774306E+09	1,618859E+07	5,548426E+09	5,564615E+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	8,097725E+06	8,097136E+06	2,774310E+09	2,774188E+09	1,619486E+07	5,548499E+09	5,564693E+09
-941	8,092922E+06	8,090967E+06	2,774268E+09	2,774387E+09	1,618389E+07	5,548655E+09	5,564839E+09
-940	8,094433E+06	8,096681E+06	2,774370E+09	2,774444E+09	1,619111E+07	5,548815E+09	5,565006E+09
-939	8,096779E+06	8,093919E+06	2,774559E+09	2,774362E+09	1,619070E+07	5,548921E+09	5,565112E+09
-938	8,091620E+06	8,091327E+06	2,774439E+09	2,774598E+09	1,618295E+07	5,549037E+09	5,565220E+09
-937	8,095133E+06	8,097519E+06	2,774570E+09	2,774520E+09	1,619265E+07	5,549091E+09	5,565283E+09
-936	8,094697E+06	8,091856E+06	2,774612E+09	2,774494E+09	1,618655E+07	5,549106E+09	5,565292E+09
-935	8,090813E+06	8,093827E+06	2,774437E+09	2,774601E+09	1,618464E+07	5,549038E+09	5,565223E+09
-934	8,097243E+06	8,095993E+06	2,774517E+09	2,774371E+09	1,619324E+07	5,548887E+09	5,565081E+09
-933	8,093174E+06	8,091354E+06	2,774362E+09	2,774376E+09	1,618453E+07	5,548738E+09	5,564922E+09
-932	8,093932E+06	8,094998E+06	2,774193E+09	2,774330E+09	1,618893E+07	5,548523E+09	5,564712E+09
-931	8,099109E+06	8,095446E+06	2,774221E+09	2,774030E+09	1,619455E+07	5,548251E+09	5,564445E+09
-930	8,091945E+06	8,093091E+06	2,773967E+09	2,774089E+09	1,618504E+07	5,548056E+09	5,564241E+09
-929	8,096593E+06	8,098010E+06	2,773966E+09	2,773953E+09	1,619460E+07	5,547920E+09	5,564114E+09
-928	8,096330E+06	8,096166E+06	2,774031E+09	2,773824E+09	1,619250E+07	5,547856E+09	5,564048E+09
-927	8,093255E+06	8,093511E+06	2,773836E+09	2,774001E+09	1,618677E+07	5,547837E+09	5,564024E+09
-926	8,098872E+06	8,098560E+06	2,773945E+09	2,773867E+09	1,619743E+07	5,547812E+09	5,564010E+09
-925	8,095454E+06	8,093331E+06	2,773949E+09	2,773935E+09	1,618879E+07	5,547884E+09	5,564072E+09
-924	8,094857E+06	8,094830E+06	2,773888E+09	2,774095E+09	1,618969E+07	5,547983E+09	5,564172E+09
-923	8,098268E+06	8,098378E+06	2,774117E+09	2,773945E+09	1,619665E+07	5,548062E+09	5,564258E+09
-922	8,093267E+06	8,091840E+06	2,774089E+09	2,774157E+09	1,618511E+07	5,548246E+09	5,564431E+09
-921	8,094308E+06	8,097379E+06	2,774171E+09	2,774236E+09	1,619169E+07	5,548407E+09	5,564599E+09
-920	8,097338E+06	8,094852E+06	2,774367E+09	2,774176E+09	1,619219E+07	5,548543E+09	5,564735E+09
-919	8,092484E+06	8,091783E+06	2,774219E+09	2,774406E+09	1,618427E+07	5,548625E+09	5,564810E+09
-918	8,095641E+06	8,097746E+06	2,774306E+09	2,774292E+09	1,619339E+07	5,548598E+09	5,564792E+09
-917	8,095919E+06	8,092175E+06	2,774356E+09	2,774236E+09	1,618809E+07	5,548593E+09	5,564781E+09
-916	8,091843E+06	8,093891E+06	2,774167E+09	2,774348E+09	1,618573E+07	5,548515E+09	5,564701E+09
-915	8,098744E+06	8,096904E+06	2,774240E+09	2,774077E+09	1,619565E+07	5,548317E+09	5,564513E+09
-914	8,094045E+06	8,092602E+06	2,774078E+09	2,774075E+09	1,618665E+07	5,548153E+09	5,564340E+09
-913	8,093971E+06	8,096426E+06	2,773904E+09	2,774035E+09	1,619040E+07	5,547939E+09	5,564129E+09
-912	8,099075E+06	8,097392E+06	2,773984E+09	2,773759E+09	1,619647E+07	5,547743E+09	5,563939E+09
-911	8,092549E+06	8,093888E+06	2,773747E+09	2,773841E+09	1,618644E+07	5,547588E+09	5,563775E+09
-910	8,097145E+06	8,098106E+06	2,773713E+09	2,773716E+09	1,619525E+07	5,547429E+09	5,563624E+09
-909	8,097874E+06	8,096134E+06	2,773781E+09	2,773597E+09	1,619401E+07	5,547378E+09	5,563572E+09
-908	8,094620E+06	8,093480E+06	2,773567E+09	2,773789E+09	1,618810E+07	5,547356E+09	5,563544E+09
-907	8,099861E+06	8,099769E+06	2,773686E+09	2,773613E+09	1,619963E+07	5,547299E+09	5,563499E+09
-906	8,095892E+06	8,094488E+06	2,773717E+09	2,773679E+09	1,619038E+07	5,547396E+09	5,563586E+09
-905	8,094549E+06	8,095901E+06	2,773672E+09	2,773856E+09	1,619045E+07	5,547528E+09	5,563718E+09
-904	8,098552E+06	8,099327E+06	2,773945E+09	2,773748E+09	1,619788E+07	5,547693E+09	5,563891E+09
-903	8,094441E+06	8,091947E+06	2,773906E+09	2,773979E+09	1,618639E+07	5,547886E+09	5,564072E+09
-902	8,095026E+06	8,097375E+06	2,773933E+09	2,774043E+09	1,619240E+07	5,547976E+09	5,564169E+09
-901	8,098702E+06	8,095208E+06	2,774136E+09	2,773964E+09	1,619391E+07	5,548100E+09	5,564294E+09
-900	8,093173E+06	8,092411E+06	2,773985E+09	2,774183E+09	1,618558E+07	5,548169E+09	5,564354E+09
-899	8,096420E+06	8,098924E+06	2,774077E+09	2,774024E+09	1,619534E+07	5,548101E+09	5,564297E+09
-898	8,096548E+06	8,093252E+06	2,774120E+09	2,773967E+09	1,618980E+07	5,548087E+09	5,564277E+09
-897	8,091957E+06	8,094762E+06	2,773896E+09	2,774082E+09	1,618672E+07	5,547978E+09	5,564164E+09
-896	8,099314E+06	8,098151E+06	2,773979E+09	2,773821E+09	1,619746E+07	5,547800E+09	5,563998E+09
-895	8,094776E+06	8,093558E+06	2,773806E+09	2,773808E+09	1,618833E+07	5,547614E+09	5,563802E+09
-894	8,094362E+06	8,096907E+06	2,773611E+09	2,773750E+09	1,619127E+07	5,547362E+09	5,563553E+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	8,100244E+06	8,097894E+06	2,773720E+09	2,773483E+09	1,619814E+07	5,547203E+09	5,563401E+09
-892	8,093915E+06	8,093877E+06	2,773486E+09	2,773598E+09	1,618779E+07	5,547084E+09	5,563272E+09
-891	8,098718E+06	8,098859E+06	2,773451E+09	2,773456E+09	1,619758E+07	5,546906E+09	5,563104E+09
-890	8,098911E+06	8,097116E+06	2,773521E+09	2,773345E+09	1,619603E+07	5,546867E+09	5,563063E+09
-889	8,094672E+06	8,094743E+06	2,773315E+09	2,773546E+09	1,618942E+07	5,546861E+09	5,563051E+09
-888	8,099755E+06	8,101350E+06	2,773491E+09	2,773393E+09	1,620111E+07	5,546884E+09	5,563085E+09
-887	8,096400E+06	8,095056E+06	2,773535E+09	2,773476E+09	1,619146E+07	5,547012E+09	5,563203E+09
-886	8,094961E+06	8,095902E+06	2,773460E+09	2,773658E+09	1,619086E+07	5,547117E+09	5,563308E+09
-885	8,099965E+06	8,099208E+06	2,773726E+09	2,773555E+09	1,619917E+07	5,547281E+09	5,563481E+09
-884	8,095719E+06	8,091984E+06	2,773673E+09	2,773788E+09	1,618770E+07	5,547461E+09	5,563649E+09
-883	8,095847E+06	8,098627E+06	2,773699E+09	2,773799E+09	1,619447E+07	5,547498E+09	5,563692E+09
-882	8,098991E+06	8,096349E+06	2,773915E+09	2,773707E+09	1,619534E+07	5,547622E+09	5,563817E+09
-881	8,092874E+06	8,093593E+06	2,773760E+09	2,773931E+09	1,618647E+07	5,547691E+09	5,563877E+09
-880	8,096922E+06	8,099810E+06	2,773865E+09	2,773794E+09	1,619673E+07	5,547659E+09	5,563856E+09
-879	8,097726E+06	8,093773E+06	2,773875E+09	2,773737E+09	1,619150E+07	5,547613E+09	5,563804E+09
-878	8,092784E+06	8,095018E+06	2,773599E+09	2,773824E+09	1,618780E+07	5,547424E+09	5,563612E+09
-877	8,100636E+06	8,098748E+06	2,773692E+09	2,773549E+09	1,619938E+07	5,547241E+09	5,563440E+09
-876	8,095687E+06	8,094157E+06	2,773536E+09	2,773536E+09	1,618984E+07	5,547072E+09	5,563262E+09
-875	8,095433E+06	8,097887E+06	2,773353E+09	2,773453E+09	1,619332E+07	5,546805E+09	5,562998E+09
-874	8,101034E+06	8,098755E+06	2,773465E+09	2,773209E+09	1,619979E+07	5,546674E+09	5,562874E+09
-873	8,094426E+06	8,094747E+06	2,773213E+09	2,773344E+09	1,618917E+07	5,546557E+09	5,562746E+09
-872	8,099320E+06	8,100095E+06	2,773202E+09	2,773224E+09	1,619941E+07	5,546426E+09	5,562625E+09
-871	8,099533E+06	8,098180E+06	2,773272E+09	2,773115E+09	1,619771E+07	5,546387E+09	5,562585E+09
-870	8,094847E+06	8,095156E+06	2,773057E+09	2,773300E+09	1,619000E+07	5,546357E+09	5,562547E+09
-869	8,100657E+06	8,101571E+06	2,773263E+09	2,773166E+09	1,620223E+07	5,546429E+09	5,562631E+09
-868	8,097711E+06	8,094905E+06	2,773320E+09	2,773272E+09	1,619262E+07	5,546592E+09	5,562784E+09
-867	8,096262E+06	8,096652E+06	2,773244E+09	2,773431E+09	1,619291E+07	5,546674E+09	5,562867E+09
-866	8,100720E+06	8,100126E+06	2,773518E+09	2,773337E+09	1,620085E+07	5,546855E+09	5,563056E+09
-865	8,095650E+06	8,093333E+06	2,773468E+09	2,773571E+09	1,618898E+07	5,547039E+09	5,563228E+09
-864	8,095714E+06	8,099987E+06	2,773531E+09	2,773595E+09	1,619570E+07	5,547126E+09	5,563322E+09
-863	8,099434E+06	8,096900E+06	2,773726E+09	2,773505E+09	1,619633E+07	5,547231E+09	5,563427E+09
-862	8,093276E+06	8,093593E+06	2,773513E+09	2,773709E+09	1,618687E+07	5,547223E+09	5,563410E+09
-861	8,098443E+06	8,099666E+06	2,773588E+09	2,773564E+09	1,619811E+07	5,547152E+09	5,563350E+09
-860	8,099131E+06	8,094075E+06	2,773579E+09	2,773485E+09	1,619321E+07	5,547064E+09	5,563257E+09
-859	8,093903E+06	8,096227E+06	2,773304E+09	2,773512E+09	1,619013E+07	5,546816E+09	5,563006E+09
-858	8,101167E+06	8,099895E+06	2,773421E+09	2,773235E+09	1,620106E+07	5,546656E+09	5,562857E+09
-857	8,095746E+06	8,095349E+06	2,773277E+09	2,773245E+09	1,619109E+07	5,546522E+09	5,562713E+09
-856	8,096138E+06	8,098844E+06	2,773123E+09	2,773202E+09	1,619498E+07	5,546325E+09	5,562520E+09
-855	8,101913E+06	8,099580E+06	2,773210E+09	2,772977E+09	1,620149E+07	5,546188E+09	5,562389E+09
-854	8,095107E+06	8,095286E+06	2,772926E+09	2,773100E+09	1,619039E+07	5,546027E+09	5,562217E+09
-853	8,100352E+06	8,100735E+06	2,772928E+09	2,772981E+09	1,620109E+07	5,545909E+09	5,562110E+09
-852	8,100419E+06	8,098647E+06	2,773027E+09	2,772877E+09	1,619907E+07	5,545904E+09	5,562103E+09
-851	8,095886E+06	8,095884E+06	2,772832E+09	2,773039E+09	1,619177E+07	5,545871E+09	5,562062E+09
-850	8,101280E+06	8,101987E+06	2,773051E+09	2,772933E+09	1,620327E+07	5,545984E+09	5,562187E+09
-849	8,098175E+06	8,095575E+06	2,773107E+09	2,773062E+09	1,619375E+07	5,546169E+09	5,562362E+09
-848	8,096664E+06	8,097832E+06	2,773059E+09	2,773238E+09	1,619450E+07	5,546297E+09	5,562491E+09
-847	8,100982E+06	8,101052E+06	2,773323E+09	2,773145E+09	1,620203E+07	5,546468E+09	5,562670E+09
-846	8,095776E+06	8,093740E+06	2,773247E+09	2,773357E+09	1,618952E+07	5,546604E+09	5,562794E+09
-845	8,096664E+06	8,099889E+06	2,773301E+09	2,773387E+09	1,619655E+07	5,546688E+09	5,562884E+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							
-844	8,100942E+06	8,096620E+06	2,773476E+09	2,773291E+09	1,619756E+07	5,546767E+09	5,562965E+09
-843	8,094756E+06	8,094315E+06	2,773239E+09	2,773438E+09	1,618907E+07	5,546676E+09	5,562866E+09
-842	8,099319E+06	8,100559E+06	2,773316E+09	2,773281E+09	1,619988E+07	5,546597E+09	5,562796E+09
-841	8,099135E+06	8,095745E+06	2,773321E+09	2,773194E+09	1,619488E+07	5,546515E+09	5,562710E+09
-840	8,094024E+06	8,097759E+06	2,773096E+09	2,773239E+09	1,619178E+07	5,546335E+09	5,562527E+09
-839	8,101457E+06	8,100855E+06	2,773198E+09	2,772989E+09	1,620231E+07	5,546187E+09	5,562389E+09
-838	8,096233E+06	8,095594E+06	2,773003E+09	2,772997E+09	1,619183E+07	5,546000E+09	5,562192E+09
-837	8,097647E+06	8,098845E+06	2,772825E+09	2,772967E+09	1,619649E+07	5,545792E+09	5,561989E+09
-836	8,103252E+06	8,100074E+06	2,772905E+09	2,772729E+09	1,620333E+07	5,545633E+09	5,561837E+09
-835	8,096230E+06	8,096333E+06	2,772631E+09	2,772798E+09	1,619256E+07	5,545429E+09	5,561622E+09
-834	8,100958E+06	8,101497E+06	2,772672E+09	2,772691E+09	1,620245E+07	5,545363E+09	5,561565E+09
-833	8,100700E+06	8,099499E+06	2,772796E+09	2,772619E+09	1,620020E+07	5,545415E+09	5,561615E+09
-832	8,096689E+06	8,096632E+06	2,772652E+09	2,772825E+09	1,619332E+07	5,545477E+09	5,561670E+09
-831	8,101804E+06	8,102768E+06	2,772860E+09	2,772750E+09	1,620457E+07	5,545610E+09	5,561815E+09
-830	8,098569E+06	8,096092E+06	2,772895E+09	2,772872E+09	1,619466E+07	5,545767E+09	5,561961E+09
-829	8,097278E+06	8,098412E+06	2,772854E+09	2,773054E+09	1,619569E+07	5,545908E+09	5,562103E+09
-828	8,101730E+06	8,101252E+06	2,773119E+09	2,772953E+09	1,620298E+07	5,546072E+09	5,562275E+09
-827	8,096768E+06	8,094339E+06	2,773022E+09	2,773116E+09	1,619111E+07	5,546139E+09	5,562330E+09
-826	8,097458E+06	8,100085E+06	2,773057E+09	2,773143E+09	1,619754E+07	5,546201E+09	5,562398E+09
-825	8,101468E+06	8,097521E+06	2,773215E+09	2,773041E+09	1,619899E+07	5,546256E+09	5,562455E+09
-824	8,095177E+06	8,095853E+06	2,773011E+09	2,773176E+09	1,619103E+07	5,546187E+09	5,562378E+09
-823	8,099286E+06	8,101789E+06	2,773080E+09	2,773018E+09	1,620107E+07	5,546097E+09	5,562298E+09
-822	8,099179E+06	8,096462E+06	2,773069E+09	2,772922E+09	1,619564E+07	5,545991E+09	5,562187E+09
-821	8,095156E+06	8,097859E+06	2,772832E+09	2,772992E+09	1,619302E+07	5,545824E+09	5,562017E+09
-820	8,103052E+06	8,100783E+06	2,772912E+09	2,772751E+09	1,620383E+07	5,545663E+09	5,561867E+09
-819	8,097967E+06	8,096387E+06	2,772692E+09	2,772713E+09	1,619435E+07	5,545405E+09	5,561599E+09
-818	8,098852E+06	8,099512E+06	2,772523E+09	2,772676E+09	1,619836E+07	5,545199E+09	5,561398E+09
-817	8,103473E+06	8,101550E+06	2,772629E+09	2,772440E+09	1,620502E+07	5,545069E+09	5,561274E+09
-816	8,096668E+06	8,097590E+06	2,772424E+09	2,772525E+09	1,619426E+07	5,544949E+09	5,561143E+09
-815	8,101089E+06	8,102340E+06	2,772468E+09	2,772458E+09	1,620343E+07	5,544926E+09	5,561129E+09
-814	8,101101E+06	8,099767E+06	2,772569E+09	2,772407E+09	1,620087E+07	5,544976E+09	5,561177E+09
-813	8,097871E+06	8,096878E+06	2,772421E+09	2,772642E+09	1,619475E+07	5,545063E+09	5,561258E+09
-812	8,102696E+06	8,103268E+06	2,772629E+09	2,772565E+09	1,620596E+07	5,545194E+09	5,561400E+09
-811	8,099505E+06	8,096966E+06	2,772664E+09	2,772633E+09	1,619647E+07	5,545296E+09	5,561493E+09
-810	8,097715E+06	8,098815E+06	2,772639E+09	2,772815E+09	1,619653E+07	5,545454E+09	5,561651E+09
-809	8,102021E+06	8,101838E+06	2,772901E+09	2,772724E+09	1,620386E+07	5,545624E+09	5,561828E+09
-808	8,097522E+06	8,095223E+06	2,772830E+09	2,772890E+09	1,619275E+07	5,545720E+09	5,561913E+09
-807	8,097833E+06	8,101085E+06	2,772839E+09	2,772925E+09	1,619892E+07	5,545765E+09	5,561964E+09
-806	8,101786E+06	8,098412E+06	2,772969E+09	2,772800E+09	1,620020E+07	5,545769E+09	5,561969E+09
-805	8,095888E+06	8,096616E+06	2,772773E+09	2,772942E+09	1,619250E+07	5,545715E+09	5,561908E+09
-804	8,100204E+06	8,102009E+06	2,772840E+09	2,772781E+09	1,620221E+07	5,545621E+09	5,561824E+09
-803	8,100407E+06	8,096939E+06	2,772797E+09	2,772646E+09	1,619735E+07	5,545443E+09	5,561641E+09
-802	8,096469E+06	8,097875E+06	2,772541E+09	2,772718E+09	1,619434E+07	5,545259E+09	5,561453E+09
-801	8,103901E+06	8,101755E+06	2,772599E+09	2,772472E+09	1,620566E+07	5,545071E+09	5,561277E+09
-800	8,098741E+06	8,098065E+06	2,772422E+09	2,772419E+09	1,619681E+07	5,544841E+09	5,561037E+09
-799	8,099006E+06	8,100920E+06	2,772261E+09	2,772391E+09	1,619993E+07	5,544653E+09	5,560853E+09
-798	8,103479E+06	8,102405E+06	2,772371E+09	2,772162E+09	1,620588E+07	5,544533E+09	5,560739E+09
-797	8,097686E+06	8,097784E+06	2,772184E+09	2,772295E+09	1,619547E+07	5,544479E+09	5,560674E+09
-796	8,102281E+06	8,102431E+06	2,772233E+09	2,772255E+09	1,620471E+07	5,544488E+09	5,560693E+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							
-795	8,102423E+06	8,100490E+06	2,772326E+09	2,772177E+09	1,620291E+07	5,544503E+09	5,560705E+09
-794	8,098778E+06	8,097567E+06	2,772198E+09	2,772416E+09	1,619635E+07	5,544614E+09	5,560811E+09
-793	8,102684E+06	8,104534E+06	2,772423E+09	2,772348E+09	1,620722E+07	5,544771E+09	5,560978E+09
-792	8,099958E+06	8,098056E+06	2,772504E+09	2,772416E+09	1,619801E+07	5,544920E+09	5,561118E+09
-791	8,097675E+06	8,099424E+06	2,772450E+09	2,772616E+09	1,619710E+07	5,545065E+09	5,561262E+09
-790	8,102441E+06	8,101903E+06	2,772667E+09	2,772518E+09	1,620434E+07	5,545185E+09	5,561389E+09
-789	8,098626E+06	8,095634E+06	2,772582E+09	2,772685E+09	1,619426E+07	5,545267E+09	5,561461E+09
-788	8,098767E+06	8,101550E+06	2,772587E+09	2,772699E+09	1,620032E+07	5,545286E+09	5,561486E+09
-787	8,102904E+06	8,099262E+06	2,772706E+09	2,772522E+09	1,620217E+07	5,545228E+09	5,561430E+09
-786	8,096873E+06	8,096902E+06	2,772518E+09	2,772662E+09	1,619377E+07	5,545180E+09	5,561374E+09
-785	8,100989E+06	8,102564E+06	2,772570E+09	2,772516E+09	1,620355E+07	5,545087E+09	5,561290E+09
-784	8,101526E+06	8,098157E+06	2,772546E+09	2,772375E+09	1,619968E+07	5,544921E+09	5,561121E+09
-783	8,096901E+06	8,099213E+06	2,772268E+09	2,772451E+09	1,619611E+07	5,544719E+09	5,560915E+09
-782	8,104061E+06	8,103062E+06	2,772313E+09	2,772189E+09	1,620712E+07	5,544502E+09	5,560709E+09
-781	8,099324E+06	8,099228E+06	2,772159E+09	2,772152E+09	1,619855E+07	5,544311E+09	5,560509E+09
-780	8,099872E+06	8,101331E+06	2,772013E+09	2,772139E+09	1,620120E+07	5,544152E+09	5,560353E+09
-779	8,104605E+06	8,102845E+06	2,772106E+09	2,771897E+09	1,620745E+07	5,544003E+09	5,560211E+09
-778	8,099070E+06	8,097741E+06	2,771931E+09	2,772052E+09	1,619681E+07	5,543983E+09	5,560180E+09
-777	8,102849E+06	8,103412E+06	2,771982E+09	2,772030E+09	1,620626E+07	5,544012E+09	5,560219E+09
-776	8,103001E+06	8,101871E+06	2,772124E+09	2,771946E+09	1,620487E+07	5,544070E+09	5,560275E+09
-775	8,098728E+06	8,098737E+06	2,772006E+09	2,772199E+09	1,619746E+07	5,544205E+09	5,560402E+09
-774	8,102677E+06	8,104960E+06	2,772211E+09	2,772133E+09	1,620764E+07	5,544344E+09	5,560552E+09
-773	8,101021E+06	8,098064E+06	2,772286E+09	2,772232E+09	1,619908E+07	5,544518E+09	5,560717E+09
-772	8,098956E+06	8,099445E+06	2,772219E+09	2,772430E+09	1,619840E+07	5,544649E+09	5,560847E+09
-771	8,103790E+06	8,102407E+06	2,772410E+09	2,772284E+09	1,620620E+07	5,544693E+09	5,560900E+09
-770	8,099644E+06	8,096277E+06	2,772348E+09	2,772432E+09	1,619592E+07	5,544780E+09	5,560976E+09
-769	8,098961E+06	8,102719E+06	2,772362E+09	2,772445E+09	1,620168E+07	5,544807E+09	5,561009E+09
-768	8,103450E+06	8,100539E+06	2,772512E+09	2,772261E+09	1,620399E+07	5,544774E+09	5,560978E+09
-767	8,096962E+06	8,097926E+06	2,772289E+09	2,772418E+09	1,619489E+07	5,544707E+09	5,560902E+09
-766	8,101435E+06	8,103143E+06	2,772289E+09	2,772264E+09	1,620458E+07	5,544553E+09	5,560758E+09
-765	8,102452E+06	8,099256E+06	2,772248E+09	2,772127E+09	1,620171E+07	5,544375E+09	5,560577E+09
-764	8,097866E+06	8,099977E+06	2,771972E+09	2,772180E+09	1,619784E+07	5,544152E+09	5,560350E+09
-763	8,105062E+06	8,103819E+06	2,772011E+09	2,771877E+09	1,620888E+07	5,543888E+09	5,560096E+09
-762	8,100503E+06	8,099390E+06	2,771885E+09	2,771849E+09	1,619989E+07	5,543734E+09	5,559934E+09
-761	8,100787E+06	8,101754E+06	2,771748E+09	2,771874E+09	1,620254E+07	5,543622E+09	5,559824E+09
-760	8,105734E+06	8,103977E+06	2,771880E+09	2,771650E+09	1,620971E+07	5,543531E+09	5,559740E+09
-759	8,099557E+06	8,098960E+06	2,771705E+09	2,771828E+09	1,619852E+07	5,543533E+09	5,559731E+09
-758	8,102893E+06	8,104474E+06	2,771756E+09	2,771811E+09	1,620737E+07	5,543566E+09	5,559774E+09
-757	8,103573E+06	8,102662E+06	2,771917E+09	2,771754E+09	1,620624E+07	5,543671E+09	5,559877E+09
-756	8,099545E+06	8,098804E+06	2,771799E+09	2,772009E+09	1,619835E+07	5,543808E+09	5,560006E+09
-755	8,103742E+06	8,104837E+06	2,771965E+09	2,771916E+09	1,620858E+07	5,543881E+09	5,560090E+09
-754	8,102454E+06	8,097923E+06	2,772040E+09	2,772004E+09	1,620038E+07	5,544044E+09	5,560245E+09
-753	8,099496E+06	8,100542E+06	2,771975E+09	2,772196E+09	1,620004E+07	5,544171E+09	5,560371E+09
-752	8,104291E+06	8,104045E+06	2,772210E+09	2,772029E+09	1,620834E+07	5,544239E+09	5,560447E+09
-751	8,099427E+06	8,097768E+06	2,772155E+09	2,772184E+09	1,619719E+07	5,544339E+09	5,560536E+09
-750	8,098880E+06	8,103362E+06	2,772142E+09	2,772204E+09	1,620224E+07	5,544345E+09	5,560548E+09
-749	8,104278E+06	8,101007E+06	2,772270E+09	2,772049E+09	1,620528E+07	5,544319E+09	5,560524E+09
-748	8,098179E+06	8,098316E+06	2,772020E+09	2,772192E+09	1,619650E+07	5,544212E+09	5,560408E+09
-747	8,102850E+06	8,103666E+06	2,771976E+09	2,771989E+09	1,620652E+07	5,543965E+09	5,560171E+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							
-746	8,103674E+06	8,100023E+06	2,771956E+09	2,771828E+09	1,620370E+07	5,543784E+09	5,559987E+09
-745	8,098522E+06	8,100965E+06	2,771698E+09	2,771882E+09	1,619949E+07	5,543580E+09	5,559780E+09
-744	8,105838E+06	8,104871E+06	2,771771E+09	2,771582E+09	1,621071E+07	5,543353E+09	5,559564E+09
-743	8,100887E+06	8,100210E+06	2,771642E+09	2,771588E+09	1,620110E+07	5,543230E+09	5,559431E+09
-742	8,101283E+06	8,102365E+06	2,771481E+09	2,771628E+09	1,620365E+07	5,543109E+09	5,559313E+09
-741	8,106347E+06	8,105090E+06	2,771621E+09	2,771439E+09	1,621144E+07	5,543060E+09	5,559271E+09
-740	8,100489E+06	8,099716E+06	2,771465E+09	2,771613E+09	1,620021E+07	5,543078E+09	5,559278E+09
-739	8,103707E+06	8,104783E+06	2,771502E+09	2,771568E+09	1,620849E+07	5,543070E+09	5,559278E+09
-738	8,104795E+06	8,102483E+06	2,771681E+09	2,771516E+09	1,620728E+07	5,543197E+09	5,559405E+09
-737	8,100358E+06	8,099197E+06	2,771566E+09	2,771785E+09	1,619955E+07	5,543351E+09	5,559551E+09
-736	8,104514E+06	8,105951E+06	2,771763E+09	2,771686E+09	1,621047E+07	5,543449E+09	5,559659E+09
-735	8,102516E+06	8,099439E+06	2,771850E+09	2,771781E+09	1,620196E+07	5,543630E+09	5,559832E+09
-734	8,099187E+06	8,101951E+06	2,771785E+09	2,771970E+09	1,620114E+07	5,543755E+09	5,559956E+09
-733	8,104443E+06	8,104999E+06	2,772025E+09	2,771835E+09	1,620944E+07	5,543860E+09	5,560069E+09
-732	8,100257E+06	8,097988E+06	2,771948E+09	2,771986E+09	1,619824E+07	5,543935E+09	5,560133E+09
-731	8,100086E+06	8,102958E+06	2,771866E+09	2,771973E+09	1,620304E+07	5,543839E+09	5,560042E+09
-730	8,105903E+06	8,100908E+06	2,771970E+09	2,771790E+09	1,620681E+07	5,543760E+09	5,559967E+09
-729	8,099047E+06	8,099293E+06	2,771710E+09	2,771909E+09	1,619834E+07	5,543619E+09	5,559817E+09
-728	8,103807E+06	8,105086E+06	2,771701E+09	2,771673E+09	1,620889E+07	5,543374E+09	5,559583E+09
-727	8,103818E+06	8,101461E+06	2,771692E+09	2,771515E+09	1,620528E+07	5,543207E+09	5,559413E+09
-726	8,098926E+06	8,101561E+06	2,771429E+09	2,771589E+09	1,620049E+07	5,543018E+09	5,559218E+09
-725	8,106616E+06	8,105613E+06	2,771507E+09	2,771345E+09	1,621223E+07	5,542852E+09	5,559064E+09
-724	8,102071E+06	8,100803E+06	2,771382E+09	2,771361E+09	1,620287E+07	5,542743E+09	5,558945E+09
-723	8,102391E+06	8,102884E+06	2,771202E+09	2,771381E+09	1,620528E+07	5,542583E+09	5,558789E+09
-722	8,107312E+06	8,105771E+06	2,771371E+09	2,771187E+09	1,621308E+07	5,542558E+09	5,558771E+09
-721	8,101082E+06	8,100578E+06	2,771237E+09	2,771371E+09	1,620166E+07	5,542608E+09	5,558810E+09
-720	8,104315E+06	8,105646E+06	2,771298E+09	2,771326E+09	1,620996E+07	5,542624E+09	5,558834E+09
-719	8,105008E+06	8,103253E+06	2,771474E+09	2,771294E+09	1,620826E+07	5,542768E+09	5,558976E+09
-718	8,100528E+06	8,099988E+06	2,771346E+09	2,771568E+09	1,620052E+07	5,542914E+09	5,559114E+09
-717	8,104622E+06	8,107062E+06	2,771556E+09	2,771498E+09	1,621168E+07	5,543055E+09	5,559266E+09
-716	8,103209E+06	8,100143E+06	2,771660E+09	2,771583E+09	1,620335E+07	5,543242E+09	5,559446E+09
-715	8,099978E+06	8,101966E+06	2,771560E+09	2,771746E+09	1,620194E+07	5,543306E+09	5,559508E+09
-714	8,105807E+06	8,104523E+06	2,771787E+09	2,771609E+09	1,621033E+07	5,543396E+09	5,559606E+09
-713	8,101459E+06	8,098362E+06	2,771686E+09	2,771755E+09	1,619982E+07	5,543441E+09	5,559641E+09
-712	8,101248E+06	8,103850E+06	2,771598E+09	2,771706E+09	1,620510E+07	5,543304E+09	5,559510E+09
-711	8,106214E+06	8,102495E+06	2,771706E+09	2,771508E+09	1,620871E+07	5,543213E+09	5,559422E+09
-710	8,099057E+06	8,100802E+06	2,771450E+09	2,771606E+09	1,619986E+07	5,543056E+09	5,559256E+09
-709	8,103983E+06	8,106183E+06	2,771454E+09	2,771408E+09	1,621017E+07	5,542861E+09	5,559071E+09
-708	8,104615E+06	8,102030E+06	2,771443E+09	2,771261E+09	1,620664E+07	5,542704E+09	5,558910E+09
-707	8,100180E+06	8,101368E+06	2,771131E+09	2,771326E+09	1,620155E+07	5,542456E+09	5,558658E+09
-706	8,107956E+06	8,105899E+06	2,771208E+09	2,771083E+09	1,621385E+07	5,542292E+09	5,558505E+09
-705	8,102944E+06	8,101957E+06	2,771097E+09	2,771097E+09	1,620490E+07	5,542194E+09	5,558399E+09
-704	8,103160E+06	8,104209E+06	2,770960E+09	2,771100E+09	1,620737E+07	5,542059E+09	5,558266E+09
-703	8,107312E+06	8,106994E+06	2,771148E+09	2,770924E+09	1,621431E+07	5,542072E+09	5,558286E+09
-702	8,101416E+06	8,101081E+06	2,771012E+09	2,771126E+09	1,620250E+07	5,542138E+09	5,558340E+09
-701	8,104780E+06	8,106255E+06	2,771079E+09	2,771137E+09	1,621103E+07	5,542216E+09	5,558427E+09
-700	8,106069E+06	8,103788E+06	2,771263E+09	2,771110E+09	1,620986E+07	5,542373E+09	5,558583E+09
-699	8,101465E+06	8,100301E+06	2,771122E+09	2,771360E+09	1,620177E+07	5,542482E+09	5,558684E+09
-698	8,105493E+06	8,107368E+06	2,771352E+09	2,771285E+09	1,621286E+07	5,542637E+09	5,558850E+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	8,104007E+06	8,100603E+06	2,771456E+09	2,771368E+09	1,620461E+07	5,542824E+09	5,559029E+09
-696	8,100824E+06	8,102502E+06	2,771349E+09	2,771512E+09	1,620333E+07	5,542860E+09	5,559064E+09
-695	8,106226E+06	8,105224E+06	2,771542E+09	2,771368E+09	1,621145E+07	5,542910E+09	5,559122E+09
-694	8,101740E+06	8,099559E+06	2,771413E+09	2,771490E+09	1,620130E+07	5,542904E+09	5,559105E+09
-693	8,101429E+06	8,105274E+06	2,771333E+09	2,771456E+09	1,620670E+07	5,542789E+09	5,558996E+09
-692	8,106858E+06	8,103617E+06	2,771453E+09	2,771238E+09	1,621047E+07	5,542691E+09	5,558901E+09
-691	8,099939E+06	8,100914E+06	2,771172E+09	2,771315E+09	1,620085E+07	5,542486E+09	5,558687E+09
-690	8,105336E+06	8,105935E+06	2,771172E+09	2,771128E+09	1,621127E+07	5,542299E+09	5,558511E+09
-689	8,105821E+06	8,102637E+06	2,771158E+09	2,770994E+09	1,620846E+07	5,542152E+09	5,558360E+09
-688	8,101443E+06	8,102526E+06	2,770860E+09	2,771045E+09	1,620397E+07	5,541904E+09	5,558108E+09
-687	8,108151E+06	8,107644E+06	2,770955E+09	2,770810E+09	1,621580E+07	5,541765E+09	5,557981E+09
-686	8,103103E+06	8,103388E+06	2,770857E+09	2,770828E+09	1,620649E+07	5,541685E+09	5,557891E+09
-685	8,103413E+06	8,105050E+06	2,770737E+09	2,770880E+09	1,620846E+07	5,541617E+09	5,557825E+09
-684	8,108110E+06	8,107239E+06	2,770924E+09	2,770717E+09	1,621535E+07	5,541641E+09	5,557856E+09
-683	8,102632E+06	8,100608E+06	2,770752E+09	2,770906E+09	1,620324E+07	5,541657E+09	5,557861E+09
-682	8,105886E+06	8,106366E+06	2,770827E+09	2,770919E+09	1,621225E+07	5,541746E+09	5,557959E+09
-681	8,106977E+06	8,104720E+06	2,771037E+09	2,770891E+09	1,621170E+07	5,541928E+09	5,558140E+09
-680	8,102244E+06	8,101477E+06	2,770925E+09	2,771115E+09	1,620372E+07	5,542040E+09	5,558244E+09
-679	8,105542E+06	8,108317E+06	2,771159E+09	2,771054E+09	1,621386E+07	5,542213E+09	5,558427E+09
-678	8,104408E+06	8,101285E+06	2,771241E+09	2,771140E+09	1,620569E+07	5,542381E+09	5,558586E+09
-677	8,101062E+06	8,103265E+06	2,771121E+09	2,771313E+09	1,620433E+07	5,542434E+09	5,558638E+09
-676	8,107047E+06	8,106033E+06	2,771304E+09	2,771150E+09	1,621308E+07	5,542454E+09	5,558667E+09
-675	8,102505E+06	8,100178E+06	2,771146E+09	2,771228E+09	1,620268E+07	5,542374E+09	5,558577E+09
-674	8,102406E+06	8,105699E+06	2,771075E+09	2,771182E+09	1,620811E+07	5,542256E+09	5,558464E+09
-673	8,107898E+06	8,104279E+06	2,771193E+09	2,770965E+09	1,621218E+07	5,542158E+09	5,558370E+09
-672	8,101151E+06	8,101530E+06	2,770907E+09	2,771024E+09	1,620268E+07	5,541932E+09	5,558134E+09
-671	8,105895E+06	8,106761E+06	2,770893E+09	2,770848E+09	1,621266E+07	5,541741E+09	5,557954E+09
-670	8,106216E+06	8,104013E+06	2,770867E+09	2,770711E+09	1,621023E+07	5,541578E+09	5,557788E+09
-669	8,101765E+06	8,103920E+06	2,770594E+09	2,770793E+09	1,620569E+07	5,541387E+09	5,557593E+09
-668	8,108844E+06	8,108688E+06	2,770704E+09	2,770557E+09	1,621753E+07	5,541262E+09	5,557479E+09
-667	8,104192E+06	8,103278E+06	2,770582E+09	2,770569E+09	1,620747E+07	5,541151E+09	5,557358E+09
-666	8,104906E+06	8,104771E+06	2,770465E+09	2,770638E+09	1,620968E+07	5,541103E+09	5,557313E+09
-665	8,109338E+06	8,107663E+06	2,770660E+09	2,770488E+09	1,621700E+07	5,541149E+09	5,557366E+09
-664	8,103804E+06	8,101676E+06	2,770526E+09	2,770658E+09	1,620548E+07	5,541183E+09	5,557389E+09
-663	8,105787E+06	8,108027E+06	2,770636E+09	2,770681E+09	1,621381E+07	5,541317E+09	5,557531E+09
-662	8,106903E+06	8,106057E+06	2,770860E+09	2,770665E+09	1,621296E+07	5,541525E+09	5,557738E+09
-661	8,102244E+06	8,102410E+06	2,770759E+09	2,770937E+09	1,620465E+07	5,541696E+09	5,557900E+09
-660	8,106156E+06	8,108561E+06	2,770961E+09	2,770877E+09	1,621472E+07	5,541839E+09	5,558053E+09
-659	8,105488E+06	8,101007E+06	2,770979E+09	2,770931E+09	1,620649E+07	5,541910E+09	5,558116E+09
-658	8,102116E+06	8,103499E+06	2,770843E+09	2,771078E+09	1,620562E+07	5,541921E+09	5,558126E+09
-657	8,108065E+06	8,106846E+06	2,771036E+09	2,770891E+09	1,621491E+07	5,541926E+09	5,558141E+09
-656	8,103485E+06	8,101329E+06	2,770898E+09	2,770925E+09	1,620481E+07	5,541823E+09	5,558028E+09
-655	8,102834E+06	8,106539E+06	2,770829E+09	2,770888E+09	1,620937E+07	5,541717E+09	5,557926E+09
-654	8,108515E+06	8,105205E+06	2,770926E+09	2,770686E+09	1,621372E+07	5,541613E+09	5,557827E+09
-653	8,101728E+06	8,102585E+06	2,770646E+09	2,770784E+09	1,620431E+07	5,541429E+09	5,557633E+09
-652	8,106742E+06	8,107878E+06	2,770629E+09	2,770606E+09	1,621462E+07	5,541234E+09	5,557449E+09
-651	8,107014E+06	8,104783E+06	2,770581E+09	2,770442E+09	1,621180E+07	5,541024E+09	5,557235E+09
-650	8,102853E+06	8,104282E+06	2,770318E+09	2,770525E+09	1,620713E+07	5,540844E+09	5,557051E+09
-649	8,109950E+06	8,109120E+06	2,770434E+09	2,770300E+09	1,621907E+07	5,540733E+09	5,556952E+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							
-648	8,105510E+06	8,103809E+06	2,770313E+09	2,770288E+09	1,620932E+07	5,540601E+09	5,556811E+09
-647	8,105401E+06	8,105687E+06	2,770208E+09	2,770375E+09	1,621109E+07	5,540583E+09	5,556794E+09
-646	8,109496E+06	8,109180E+06	2,770421E+09	2,770241E+09	1,621868E+07	5,540662E+09	5,556881E+09
-645	8,103863E+06	8,103070E+06	2,770340E+09	2,770451E+09	1,620693E+07	5,540790E+09	5,556997E+09
-644	8,106074E+06	8,108921E+06	2,770466E+09	2,770489E+09	1,621500E+07	5,540955E+09	5,557170E+09
-643	8,107782E+06	8,105601E+06	2,770646E+09	2,770469E+09	1,621338E+07	5,541115E+09	5,557329E+09
-642	8,103568E+06	8,102043E+06	2,770521E+09	2,770744E+09	1,620561E+07	5,541265E+09	5,557471E+09
-641	8,107489E+06	8,108717E+06	2,770704E+09	2,770674E+09	1,621621E+07	5,541378E+09	5,557594E+09
-640	8,106736E+06	8,102076E+06	2,770727E+09	2,770671E+09	1,620881E+07	5,541398E+09	5,557607E+09
-639	8,102313E+06	8,104975E+06	2,770612E+09	2,770803E+09	1,620729E+07	5,541416E+09	5,557623E+09
-638	8,108275E+06	8,108163E+06	2,770806E+09	2,770616E+09	1,621644E+07	5,541422E+09	5,557639E+09
-637	8,103684E+06	8,102342E+06	2,770684E+09	2,770683E+09	1,620603E+07	5,541368E+09	5,557574E+09
-636	8,103566E+06	8,107025E+06	2,770587E+09	2,770652E+09	1,621059E+07	5,541238E+09	5,557449E+09
-635	8,109409E+06	8,105367E+06	2,770625E+09	2,770433E+09	1,621478E+07	5,541058E+09	5,557272E+09
-634	8,102855E+06	8,103268E+06	2,770336E+09	2,770519E+09	1,620612E+07	5,540855E+09	5,557061E+09
-633	8,107924E+06	8,108727E+06	2,770328E+09	2,770326E+09	1,621665E+07	5,540654E+09	5,556871E+09
-632	8,108238E+06	8,105904E+06	2,770296E+09	2,770128E+09	1,621414E+07	5,540424E+09	5,556638E+09
-631	8,103637E+06	8,104996E+06	2,770047E+09	2,770223E+09	1,620863E+07	5,540270E+09	5,556479E+09
-630	8,110485E+06	8,109992E+06	2,770161E+09	2,770024E+09	1,622048E+07	5,540184E+09	5,556405E+09
-629	8,105962E+06	8,104925E+06	2,770086E+09	2,770059E+09	1,621089E+07	5,540145E+09	5,556356E+09
-628	8,105864E+06	8,106899E+06	2,770007E+09	2,770163E+09	1,621276E+07	5,540170E+09	5,556383E+09
-627	8,109918E+06	8,109693E+06	2,770211E+09	2,770034E+09	1,621961E+07	5,540245E+09	5,556464E+09
-626	8,104907E+06	8,103257E+06	2,770138E+09	2,770260E+09	1,620816E+07	5,540397E+09	5,556606E+09
-625	8,107126E+06	8,108860E+06	2,770252E+09	2,770305E+09	1,621599E+07	5,540557E+09	5,556773E+09
-624	8,109127E+06	8,105716E+06	2,770406E+09	2,770245E+09	1,621484E+07	5,540652E+09	5,556867E+09
-623	8,104078E+06	8,102844E+06	2,770273E+09	2,770502E+09	1,620692E+07	5,540775E+09	5,556982E+09
-622	8,107591E+06	8,110054E+06	2,770452E+09	2,770421E+09	1,621765E+07	5,540873E+09	5,557090E+09
-621	8,106769E+06	8,103643E+06	2,770523E+09	2,770428E+09	1,621041E+07	5,540950E+09	5,557161E+09
-620	8,102615E+06	8,106052E+06	2,770415E+09	2,770561E+09	1,620867E+07	5,540976E+09	5,557185E+09
-619	8,109024E+06	8,108070E+06	2,770557E+09	2,770373E+09	1,621709E+07	5,540930E+09	5,557147E+09
-618	8,104932E+06	8,102403E+06	2,770408E+09	2,770446E+09	1,620733E+07	5,540854E+09	5,557061E+09
-617	8,104998E+06	8,107340E+06	2,770297E+09	2,770407E+09	1,621234E+07	5,540704E+09	5,556916E+09
-616	8,110606E+06	8,106639E+06	2,770329E+09	2,770135E+09	1,621724E+07	5,540463E+09	5,556681E+09
-615	8,103371E+06	8,104688E+06	2,770062E+09	2,770209E+09	1,620806E+07	5,540271E+09	5,556479E+09
-614	8,108427E+06	8,109913E+06	2,770053E+09	2,770030E+09	1,621834E+07	5,540083E+09	5,556302E+09
-613	8,108668E+06	8,106901E+06	2,770048E+09	2,769865E+09	1,621557E+07	5,539913E+09	5,556129E+09
-612	8,104492E+06	8,105477E+06	2,769795E+09	2,769974E+09	1,620997E+07	5,539769E+09	5,555979E+09
-611	8,111155E+06	8,110138E+06	2,769875E+09	2,769779E+09	1,622129E+07	5,539654E+09	5,555875E+09
-610	8,106969E+06	8,105510E+06	2,769827E+09	2,769828E+09	1,621248E+07	5,539655E+09	5,555867E+09
-609	8,106911E+06	8,107499E+06	2,769779E+09	2,769942E+09	1,621441E+07	5,539722E+09	5,555936E+09
-608	8,110970E+06	8,110343E+06	2,769988E+09	2,769792E+09	1,622131E+07	5,539781E+09	5,556002E+09
-607	8,105761E+06	8,103713E+06	2,769920E+09	2,770028E+09	1,620947E+07	5,539948E+09	5,556158E+09
-606	8,107540E+06	8,109524E+06	2,770013E+09	2,770086E+09	1,621706E+07	5,540100E+09	5,556317E+09
-605	8,109391E+06	8,106853E+06	2,770202E+09	2,770039E+09	1,621624E+07	5,540241E+09	5,556457E+09
-604	8,104184E+06	8,104295E+06	2,770084E+09	2,770283E+09	1,620848E+07	5,540367E+09	5,556575E+09
-603	8,107671E+06	8,110527E+06	2,770238E+09	2,770194E+09	1,621820E+07	5,540431E+09	5,556650E+09
-602	8,107652E+06	8,104039E+06	2,770307E+09	2,770208E+09	1,621169E+07	5,540515E+09	5,556727E+09
-601	8,103867E+06	8,105997E+06	2,770174E+09	2,770339E+09	1,620986E+07	5,540513E+09	5,556723E+09
-600	8,110416E+06	8,108282E+06	2,770274E+09	2,770111E+09	1,621870E+07	5,540385E+09	5,556603E+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	8,105798E+06	8,103384E+06	2,770117E+09	2,770161E+09	1,620918E+07	5,540278E+09	5,556487E+09
-598	8,105413E+06	8,108581E+06	2,769998E+09	2,770114E+09	1,621399E+07	5,540112E+09	5,556326E+09
-597	8,110859E+06	8,108236E+06	2,770077E+09	2,769849E+09	1,621909E+07	5,539927E+09	5,556146E+09
-596	8,103976E+06	8,105685E+06	2,769814E+09	2,769925E+09	1,620966E+07	5,539739E+09	5,555949E+09
-595	8,109339E+06	8,109763E+06	2,769759E+09	2,769758E+09	1,621910E+07	5,539517E+09	5,555736E+09
-594	8,109946E+06	8,107236E+06	2,769752E+09	2,769613E+09	1,621718E+07	5,539364E+09	5,555582E+09
-593	8,105938E+06	8,105890E+06	2,769521E+09	2,769730E+09	1,621183E+07	5,539251E+09	5,555463E+09
-592	8,112004E+06	8,111331E+06	2,769620E+09	2,769512E+09	1,622334E+07	5,539133E+09	5,555356E+09
-591	8,107539E+06	8,106666E+06	2,769615E+09	2,769570E+09	1,621420E+07	5,539185E+09	5,555399E+09
-590	8,107136E+06	8,108448E+06	2,769570E+09	2,769714E+09	1,621558E+07	5,539284E+09	5,555499E+09
-589	8,111142E+06	8,111173E+06	2,769801E+09	2,769594E+09	1,622231E+07	5,539395E+09	5,555617E+09
-588	8,106220E+06	8,104395E+06	2,769716E+09	2,769831E+09	1,621062E+07	5,539547E+09	5,555758E+09
-587	8,107745E+06	8,109751E+06	2,769762E+09	2,769879E+09	1,621750E+07	5,539641E+09	5,555859E+09
-586	8,110103E+06	8,107478E+06	2,769961E+09	2,769825E+09	1,621758E+07	5,539786E+09	5,556003E+09
-585	8,105251E+06	8,104708E+06	2,769869E+09	2,770057E+09	1,620996E+07	5,539926E+09	5,556136E+09
-584	8,108783E+06	8,110777E+06	2,770003E+09	2,769935E+09	1,621956E+07	5,539938E+09	5,556158E+09
-583	8,108799E+06	8,104344E+06	2,770066E+09	2,769948E+09	1,621314E+07	5,540014E+09	5,556227E+09
-582	8,104612E+06	8,106690E+06	2,769906E+09	2,770089E+09	1,621130E+07	5,539994E+09	5,556206E+09
-581	8,110848E+06	8,109597E+06	2,770029E+09	2,769862E+09	1,622045E+07	5,539891E+09	5,556111E+09
-580	8,106115E+06	8,105098E+06	2,769877E+09	2,769895E+09	1,621121E+07	5,539773E+09	5,555984E+09
-579	8,105820E+06	8,109078E+06	2,769721E+09	2,769841E+09	1,621490E+07	5,539562E+09	5,555776E+09
-578	8,111794E+06	8,108856E+06	2,769795E+09	2,769584E+09	1,622065E+07	5,539379E+09	5,555600E+09
-577	8,105461E+06	8,105702E+06	2,769526E+09	2,769656E+09	1,621116E+07	5,539183E+09	5,555394E+09
-576	8,110607E+06	8,110152E+06	2,769445E+09	2,769460E+09	1,622076E+07	5,538905E+09	5,555126E+09
-575	8,110715E+06	8,108385E+06	2,769465E+09	2,769315E+09	1,621910E+07	5,538779E+09	5,554998E+09
-574	8,106298E+06	8,107294E+06	2,769261E+09	2,769455E+09	1,621359E+07	5,538716E+09	5,554930E+09
-573	8,111965E+06	8,112950E+06	2,769427E+09	2,769270E+09	1,622492E+07	5,538697E+09	5,554922E+09
-572	8,108002E+06	8,107615E+06	2,769429E+09	2,769351E+09	1,621562E+07	5,538780E+09	5,554996E+09
-571	8,107665E+06	8,108128E+06	2,769333E+09	2,769514E+09	1,621579E+07	5,538847E+09	5,555062E+09
-570	8,112131E+06	8,111344E+06	2,769554E+09	2,769409E+09	1,622347E+07	5,538963E+09	5,555186E+09
-569	8,107530E+06	8,104652E+06	2,769483E+09	2,769626E+09	1,621218E+07	5,539109E+09	5,555321E+09
-568	8,108516E+06	8,110506E+06	2,769528E+09	2,769637E+09	1,621902E+07	5,539164E+09	5,555383E+09
-567	8,110984E+06	8,108325E+06	2,769758E+09	2,769577E+09	1,621931E+07	5,539335E+09	5,555554E+09
-566	8,105753E+06	8,105449E+06	2,769658E+09	2,769825E+09	1,621120E+07	5,539483E+09	5,555694E+09
-565	8,109114E+06	8,111495E+06	2,769806E+09	2,769716E+09	1,622061E+07	5,539522E+09	5,555742E+09
-564	8,109314E+06	8,105331E+06	2,769839E+09	2,769717E+09	1,621465E+07	5,539556E+09	5,555771E+09
-563	8,104790E+06	8,107186E+06	2,769623E+09	2,769841E+09	1,621198E+07	5,539464E+09	5,555676E+09
-562	8,111491E+06	8,110634E+06	2,769745E+09	2,769607E+09	1,622212E+07	5,539353E+09	5,555575E+09
-561	8,107310E+06	8,105832E+06	2,769607E+09	2,769619E+09	1,621314E+07	5,539225E+09	5,555439E+09
-560	8,107143E+06	8,109391E+06	2,769418E+09	2,769534E+09	1,621653E+07	5,538952E+09	5,555168E+09
-559	8,113094E+06	8,109438E+06	2,769497E+09	2,769273E+09	1,622253E+07	5,538770E+09	5,554993E+09
-558	8,106284E+06	8,106598E+06	2,769231E+09	2,769363E+09	1,621288E+07	5,538594E+09	5,554807E+09
-557	8,110795E+06	8,111753E+06	2,769207E+09	2,769188E+09	1,622255E+07	5,538395E+09	5,554617E+09
-556	8,110788E+06	8,110151E+06	2,769257E+09	2,769061E+09	1,622094E+07	5,538318E+09	5,554539E+09
-555	8,106618E+06	8,107773E+06	2,769034E+09	2,769227E+09	1,621439E+07	5,538261E+09	5,554475E+09
-554	8,112731E+06	8,113368E+06	2,769188E+09	2,769074E+09	1,622610E+07	5,538262E+09	5,554488E+09
-553	8,109706E+06	8,107243E+06	2,769182E+09	2,769153E+09	1,621695E+07	5,538336E+09	5,554553E+09
-552	8,108976E+06	8,108127E+06	2,769047E+09	2,769277E+09	1,621710E+07	5,538324E+09	5,554541E+09
-551	8,113039E+06	8,111995E+06	2,769293E+09	2,769153E+09	1,622503E+07	5,538446E+09	5,554671E+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							
-550	8,107955E+06	8,105766E+06	2,769256E+09	2,769375E+09	1,621372E+07	5,538631E+09	5,554845E+09
-549	8,108524E+06	8,111883E+06	2,769359E+09	2,769400E+09	1,622041E+07	5,538759E+09	5,554979E+09
-548	8,111440E+06	8,109371E+06	2,769586E+09	2,769358E+09	1,622081E+07	5,538944E+09	5,555165E+09
-547	8,106195E+06	8,105624E+06	2,769428E+09	2,769616E+09	1,621182E+07	5,539044E+09	5,555255E+09
-546	8,109828E+06	8,112139E+06	2,769554E+09	2,769516E+09	1,622197E+07	5,539070E+09	5,555292E+09
-545	8,110477E+06	8,106059E+06	2,769589E+09	2,769487E+09	1,621654E+07	5,539077E+09	5,555293E+09
-544	8,105544E+06	8,107971E+06	2,769346E+09	2,769561E+09	1,621352E+07	5,538907E+09	5,555121E+09
-543	8,112513E+06	8,111425E+06	2,769480E+09	2,769309E+09	1,622394E+07	5,538789E+09	5,555013E+09
-542	8,108064E+06	8,106691E+06	2,769329E+09	2,769326E+09	1,621475E+07	5,538656E+09	5,554870E+09
-541	8,107779E+06	8,110294E+06	2,769161E+09	2,769249E+09	1,621807E+07	5,538410E+09	5,554628E+09
-540	8,113600E+06	8,110833E+06	2,769229E+09	2,768995E+09	1,622443E+07	5,538224E+09	5,554448E+09
-539	8,106564E+06	8,107265E+06	2,768940E+09	2,769092E+09	1,621383E+07	5,538032E+09	5,554246E+09
-538	8,111351E+06	8,112789E+06	2,768943E+09	2,768946E+09	1,622414E+07	5,537889E+09	5,554113E+09
-537	8,112172E+06	8,110501E+06	2,769012E+09	2,768822E+09	1,622267E+07	5,537835E+09	5,554057E+09
-536	8,108125E+06	8,107623E+06	2,768755E+09	2,768975E+09	1,621575E+07	5,537730E+09	5,553945E+09
-535	8,114175E+06	8,113606E+06	2,768915E+09	2,768824E+09	1,622778E+07	5,537739E+09	5,553967E+09
-534	8,110611E+06	8,107990E+06	2,768917E+09	2,768911E+09	1,621860E+07	5,537828E+09	5,554046E+09
-533	8,109087E+06	8,109754E+06	2,768847E+09	2,769037E+09	1,621884E+07	5,537884E+09	5,554103E+09
-532	8,112934E+06	8,113728E+06	2,769124E+09	2,768924E+09	1,622666E+07	5,538049E+09	5,554275E+09
-531	8,107957E+06	8,106394E+06	2,769074E+09	2,769165E+09	1,621435E+07	5,538239E+09	5,554454E+09
-530	8,108848E+06	8,112510E+06	2,769166E+09	2,769224E+09	1,622136E+07	5,538390E+09	5,554611E+09
-529	8,112800E+06	8,109249E+06	2,769369E+09	2,769171E+09	1,622205E+07	5,538540E+09	5,554762E+09
-528	8,107213E+06	8,105852E+06	2,769149E+09	2,769382E+09	1,621306E+07	5,538531E+09	5,554744E+09
-527	8,110837E+06	8,112801E+06	2,769276E+09	2,769249E+09	1,622364E+07	5,538525E+09	5,554749E+09
-526	8,111094E+06	8,107259E+06	2,769321E+09	2,769207E+09	1,621835E+07	5,538528E+09	5,554746E+09
-525	8,105990E+06	8,109202E+06	2,769114E+09	2,769272E+09	1,621519E+07	5,538385E+09	5,554601E+09
-524	8,113229E+06	8,112375E+06	2,769230E+09	2,769029E+09	1,622560E+07	5,538260E+09	5,554485E+09
-523	8,108725E+06	8,107051E+06	2,769037E+09	2,769053E+09	1,621578E+07	5,538090E+09	5,554305E+09
-522	8,108611E+06	8,111114E+06	2,768866E+09	2,768996E+09	1,621972E+07	5,537862E+09	5,554082E+09
-521	8,114834E+06	8,111628E+06	2,768956E+09	2,768738E+09	1,622646E+07	5,537694E+09	5,553921E+09
-520	8,107687E+06	8,107916E+06	2,768657E+09	2,768812E+09	1,621560E+07	5,537469E+09	5,553685E+09
-519	8,112586E+06	8,113346E+06	2,768679E+09	2,768670E+09	1,622593E+07	5,537349E+09	5,553575E+09
-518	8,113122E+06	8,111151E+06	2,768745E+09	2,768569E+09	1,622427E+07	5,537314E+09	5,553538E+09
-517	8,108826E+06	8,108544E+06	2,768513E+09	2,768721E+09	1,621737E+07	5,537234E+09	5,553452E+09
-516	8,114303E+06	8,115023E+06	2,768675E+09	2,768576E+09	1,622933E+07	5,537252E+09	5,553481E+09
-515	8,110526E+06	8,108949E+06	2,768677E+09	2,768670E+09	1,621948E+07	5,537347E+09	5,553567E+09
-514	8,109121E+06	8,111044E+06	2,768649E+09	2,768830E+09	1,622017E+07	5,537478E+09	5,553699E+09
-513	8,113984E+06	8,113985E+06	2,768944E+09	2,768732E+09	1,622797E+07	5,537676E+09	5,553904E+09
-512	8,109291E+06	8,106146E+06	2,768848E+09	2,768957E+09	1,621544E+07	5,537805E+09	5,554020E+09
-511	8,110193E+06	8,112544E+06	2,768929E+09	2,769007E+09	1,622274E+07	5,537935E+09	5,554158E+09
-510	8,113654E+06	8,109887E+06	2,769119E+09	2,768947E+09	1,622354E+07	5,538067E+09	5,554290E+09
-509	8,107439E+06	8,107401E+06	2,768936E+09	2,769131E+09	1,621484E+07	5,538067E+09	5,554282E+09
-508	8,111011E+06	8,114265E+06	2,769062E+09	2,768992E+09	1,622528E+07	5,538054E+09	5,554280E+09
-507	8,111347E+06	8,107959E+06	2,769068E+09	2,768947E+09	1,621931E+07	5,538015E+09	5,554234E+09
-506	8,106699E+06	8,109801E+06	2,768849E+09	2,769031E+09	1,621650E+07	5,537880E+09	5,554096E+09
-505	8,114808E+06	8,112463E+06	2,768943E+09	2,768774E+09	1,622727E+07	5,537717E+09	5,553944E+09
-504	8,109831E+06	8,107415E+06	2,768707E+09	2,768758E+09	1,621725E+07	5,537465E+09	5,553682E+09
-503	8,109762E+06	8,111896E+06	2,768565E+09	2,768690E+09	1,622166E+07	5,537254E+09	5,553476E+09
-502	8,115392E+06	8,112914E+06	2,768677E+09	2,768370E+09	1,622831E+07	5,537047E+09	5,553275E+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	8,108358E+06	8,109253E+06	2,768420E+09	2,768526E+09	1,621761E+07	5,536947E+09	5,553164E+09
-500	8,113224E+06	8,114421E+06	2,768432E+09	2,768408E+09	1,622765E+07	5,536840E+09	5,553068E+09
-499	8,113532E+06	8,111834E+06	2,768471E+09	2,768321E+09	1,622537E+07	5,536792E+09	5,553017E+09
-498	8,109229E+06	8,109648E+06	2,768265E+09	2,768501E+09	1,621888E+07	5,536766E+09	5,552985E+09
-497	8,115053E+06	8,115707E+06	2,768459E+09	2,768361E+09	1,623076E+07	5,536820E+09	5,553050E+09
-496	8,111381E+06	8,109233E+06	2,768458E+09	2,768441E+09	1,622061E+07	5,536898E+09	5,553119E+09
-495	8,110283E+06	8,111275E+06	2,768448E+09	2,768610E+09	1,622156E+07	5,537058E+09	5,553279E+09
-494	8,114871E+06	8,114172E+06	2,768727E+09	2,768535E+09	1,622904E+07	5,537262E+09	5,553491E+09
-493	8,110153E+06	8,106965E+06	2,768640E+09	2,768739E+09	1,621712E+07	5,537379E+09	5,553596E+09
-492	8,110344E+06	8,113637E+06	2,768697E+09	2,768779E+09	1,622398E+07	5,537475E+09	5,553699E+09
-491	8,113643E+06	8,110771E+06	2,768867E+09	2,768703E+09	1,622441E+07	5,537570E+09	5,553794E+09
-490	8,107582E+06	8,108654E+06	2,768700E+09	2,768892E+09	1,621624E+07	5,537592E+09	5,553808E+09
-489	8,112280E+06	8,114364E+06	2,768816E+09	2,768750E+09	1,622664E+07	5,537566E+09	5,553793E+09
-488	8,112746E+06	8,107980E+06	2,768771E+09	2,768674E+09	1,622073E+07	5,537445E+09	5,553666E+09
-487	8,108254E+06	8,110104E+06	2,768552E+09	2,768741E+09	1,621836E+07	5,537293E+09	5,553511E+09
-486	8,115542E+06	8,113520E+06	2,768651E+09	2,768490E+09	1,622906E+07	5,537142E+09	5,553371E+09
-485	8,110195E+06	8,109269E+06	2,768466E+09	2,768456E+09	1,621946E+07	5,536922E+09	5,553142E+09
-484	8,109959E+06	8,113435E+06	2,768333E+09	2,768407E+09	1,622339E+07	5,536739E+09	5,552963E+09
-483	8,115485E+06	8,113884E+06	2,768416E+09	2,768184E+09	1,622937E+07	5,536600E+09	5,552829E+09
-482	8,109011E+06	8,110047E+06	2,768158E+09	2,768297E+09	1,621906E+07	5,536454E+09	5,552673E+09
-481	8,114607E+06	8,114495E+06	2,768153E+09	2,768179E+09	1,622910E+07	5,536332E+09	5,552561E+09
-480	8,114543E+06	8,112081E+06	2,768165E+09	2,768059E+09	1,622662E+07	5,536224E+09	5,552451E+09
-479	8,110390E+06	8,110119E+06	2,768010E+09	2,768232E+09	1,622051E+07	5,536242E+09	5,552463E+09
-478	8,115553E+06	8,116433E+06	2,768238E+09	2,768122E+09	1,623199E+07	5,536359E+09	5,552591E+09
-477	8,112238E+06	8,110081E+06	2,768280E+09	2,768209E+09	1,622232E+07	5,536488E+09	5,552711E+09
-476	8,110858E+06	8,112103E+06	2,768256E+09	2,768403E+09	1,622296E+07	5,536660E+09	5,552883E+09
-475	8,115063E+06	8,114746E+06	2,768494E+09	2,768333E+09	1,622981E+07	5,536827E+09	5,553056E+09
-474	8,110378E+06	8,108243E+06	2,768421E+09	2,768546E+09	1,621862E+07	5,536967E+09	5,553186E+09
-473	8,110994E+06	8,114221E+06	2,768480E+09	2,768568E+09	1,622522E+07	5,537048E+09	5,553274E+09
-472	8,114402E+06	8,111008E+06	2,768616E+09	2,768454E+09	1,622541E+07	5,537070E+09	5,553296E+09
-471	8,108814E+06	8,108923E+06	2,768454E+09	2,768626E+09	1,621774E+07	5,537081E+09	5,553299E+09
-470	8,113203E+06	8,114603E+06	2,768545E+09	2,768491E+09	1,622781E+07	5,537036E+09	5,553264E+09
-469	8,113600E+06	8,109227E+06	2,768510E+09	2,768383E+09	1,622283E+07	5,536892E+09	5,553115E+09
-468	8,108529E+06	8,111587E+06	2,768284E+09	2,768448E+09	1,622012E+07	5,536732E+09	5,552952E+09
-467	8,115358E+06	8,114845E+06	2,768375E+09	2,768203E+09	1,623020E+07	5,536577E+09	5,552807E+09
-466	8,110471E+06	8,110676E+06	2,768216E+09	2,768198E+09	1,622115E+07	5,536414E+09	5,552635E+09
-465	8,111447E+06	8,113398E+06	2,768066E+09	2,768161E+09	1,622485E+07	5,536228E+09	5,552453E+09
-464	8,116919E+06	8,113779E+06	2,768096E+09	2,767918E+09	1,623070E+07	5,536014E+09	5,552245E+09
-463	8,110790E+06	8,110203E+06	2,767852E+09	2,768015E+09	1,622099E+07	5,535867E+09	5,552087E+09
-462	8,115397E+06	8,115295E+06	2,767869E+09	2,767913E+09	1,623069E+07	5,535782E+09	5,552012E+09
-461	8,115095E+06	8,113725E+06	2,767948E+09	2,767781E+09	1,622882E+07	5,535730E+09	5,551959E+09
-460	8,110636E+06	8,111369E+06	2,767821E+09	2,767986E+09	1,622201E+07	5,535807E+09	5,552029E+09
-459	8,115431E+06	8,117202E+06	2,768035E+09	2,767912E+09	1,623263E+07	5,535947E+09	5,552179E+09
-458	8,112770E+06	8,110839E+06	2,768081E+09	2,768031E+09	1,622361E+07	5,536112E+09	5,552336E+09
-457	8,111777E+06	8,112230E+06	2,768032E+09	2,768221E+09	1,622401E+07	5,536253E+09	5,552477E+09
-456	8,115682E+06	8,114954E+06	2,768227E+09	2,768111E+09	1,623064E+07	5,536337E+09	5,552568E+09
-455	8,111356E+06	8,108802E+06	2,768181E+09	2,768291E+09	1,622016E+07	5,536472E+09	5,552692E+09
-454	8,111555E+06	8,114702E+06	2,768243E+09	2,768323E+09	1,622626E+07	5,536566E+09	5,552793E+09
-453	8,115488E+06	8,111926E+06	2,768395E+09	2,768184E+09	1,622741E+07	5,536579E+09	5,552807E+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	8,109531E+06	8,109879E+06	2,768218E+09	2,768361E+09	1,621941E+07	5,536580E+09	5,552799E+09
-451	8,113306E+06	8,115495E+06	2,768278E+09	2,768230E+09	1,622880E+07	5,536508E+09	5,552737E+09
-450	8,113763E+06	8,110843E+06	2,768268E+09	2,768137E+09	1,622461E+07	5,536405E+09	5,552629E+09
-449	8,109351E+06	8,112256E+06	2,768041E+09	2,768202E+09	1,622161E+07	5,536243E+09	5,552465E+09
-448	8,116267E+06	8,115094E+06	2,768085E+09	2,767936E+09	1,623136E+07	5,536021E+09	5,552253E+09
-447	8,112128E+06	8,110884E+06	2,767925E+09	2,767919E+09	1,622301E+07	5,535845E+09	5,552068E+09
-446	8,112826E+06	8,113502E+06	2,767751E+09	2,767892E+09	1,622633E+07	5,535643E+09	5,551869E+09
-445	8,117934E+06	8,115046E+06	2,767798E+09	2,767612E+09	1,623298E+07	5,535410E+09	5,551643E+09
-444	8,111183E+06	8,111631E+06	2,767582E+09	2,767712E+09	1,622281E+07	5,535294E+09	5,551517E+09
-443	8,114997E+06	8,116664E+06	2,767619E+09	2,767633E+09	1,623166E+07	5,535252E+09	5,551483E+09
-442	8,115227E+06	8,115064E+06	2,767753E+09	2,767558E+09	1,623029E+07	5,535311E+09	5,551541E+09
-441	8,111865E+06	8,111506E+06	2,767625E+09	2,767795E+09	1,622337E+07	5,535420E+09	5,551643E+09
-440	8,116372E+06	8,117097E+06	2,767785E+09	2,767715E+09	1,623347E+07	5,535500E+09	5,551734E+09
-439	8,114274E+06	8,110997E+06	2,767842E+09	2,767818E+09	1,622527E+07	5,535660E+09	5,551885E+09
-438	8,112330E+06	8,112753E+06	2,767795E+09	2,768007E+09	1,622508E+07	5,535802E+09	5,552027E+09
-437	8,116261E+06	8,116178E+06	2,768023E+09	2,767857E+09	1,623244E+07	5,535880E+09	5,552112E+09
-436	8,111716E+06	8,109916E+06	2,767984E+09	2,768041E+09	1,622163E+07	5,536024E+09	5,552246E+09
-435	8,111545E+06	8,115407E+06	2,768015E+09	2,768086E+09	1,622695E+07	5,536100E+09	5,552327E+09
-434	8,116132E+06	8,112895E+06	2,768166E+09	2,767967E+09	1,622903E+07	5,536133E+09	5,552362E+09
-433	8,110592E+06	8,110327E+06	2,767962E+09	2,768131E+09	1,622092E+07	5,536093E+09	5,552314E+09
-432	8,113923E+06	8,115827E+06	2,767979E+09	2,767965E+09	1,622975E+07	5,535944E+09	5,552173E+09
-431	8,114940E+06	8,111536E+06	2,767991E+09	2,767847E+09	1,622648E+07	5,535838E+09	5,552064E+09
-430	8,110344E+06	8,112587E+06	2,767756E+09	2,767927E+09	1,622293E+07	5,535683E+09	5,551906E+09
-429	8,117668E+06	8,116117E+06	2,767801E+09	2,767633E+09	1,623379E+07	5,535434E+09	5,551668E+09
-428	8,113100E+06	8,112050E+06	2,767630E+09	2,767615E+09	1,622515E+07	5,535245E+09	5,551470E+09
-427	8,113064E+06	8,114718E+06	2,767449E+09	2,767598E+09	1,622778E+07	5,535047E+09	5,551275E+09
-426	8,118010E+06	8,116916E+06	2,767553E+09	2,767346E+09	1,623493E+07	5,534898E+09	5,551133E+09
-425	8,111885E+06	8,112363E+06	2,767367E+09	2,767469E+09	1,622425E+07	5,534836E+09	5,551061E+09
-424	8,115494E+06	8,116867E+06	2,767383E+09	2,767405E+09	1,623236E+07	5,534788E+09	5,551021E+09
-423	8,116703E+06	8,115017E+06	2,767525E+09	2,767344E+09	1,623172E+07	5,534868E+09	5,551100E+09
-422	8,113142E+06	8,111438E+06	2,767377E+09	2,767599E+09	1,622458E+07	5,534976E+09	5,551201E+09
-421	8,117315E+06	8,118160E+06	2,767540E+09	2,767477E+09	1,623548E+07	5,535016E+09	5,551252E+09
-420	8,114692E+06	8,112188E+06	2,767614E+09	2,767567E+09	1,622688E+07	5,535182E+09	5,551409E+09
-419	8,111935E+06	8,113895E+06	2,767572E+09	2,767762E+09	1,622583E+07	5,535335E+09	5,551561E+09
-418	8,116519E+06	8,117193E+06	2,767833E+09	2,767644E+09	1,623371E+07	5,535477E+09	5,551711E+09
-417	8,112870E+06	8,110110E+06	2,767778E+09	2,767835E+09	1,622298E+07	5,535613E+09	5,551836E+09
-416	8,112398E+06	8,115429E+06	2,767749E+09	2,767860E+09	1,622783E+07	5,535609E+09	5,551837E+09
-415	8,117525E+06	8,113450E+06	2,767906E+09	2,767720E+09	1,623097E+07	5,535627E+09	5,551858E+09
-414	8,111311E+06	8,111129E+06	2,767703E+09	2,767880E+09	1,622244E+07	5,535583E+09	5,551805E+09
-413	8,114731E+06	8,117121E+06	2,767728E+09	2,767673E+09	1,623185E+07	5,535401E+09	5,551633E+09
-412	8,115597E+06	8,112794E+06	2,767735E+09	2,767557E+09	1,622839E+07	5,535292E+09	5,551520E+09
-411	8,110642E+06	8,113412E+06	2,767462E+09	2,767642E+09	1,622405E+07	5,535104E+09	5,551328E+09
-410	8,118334E+06	8,117280E+06	2,767516E+09	2,767364E+09	1,623561E+07	5,534880E+09	5,551116E+09
-409	8,114074E+06	8,112902E+06	2,767340E+09	2,767340E+09	1,622698E+07	5,534680E+09	5,550907E+09
-408	8,113571E+06	8,115211E+06	2,767144E+09	2,767308E+09	1,622878E+07	5,534452E+09	5,550681E+09
-407	8,119128E+06	8,117530E+06	2,767292E+09	2,767069E+09	1,623666E+07	5,534362E+09	5,550598E+09
-406	8,113201E+06	8,112376E+06	2,767120E+09	2,767232E+09	1,622558E+07	5,534352E+09	5,550578E+09
-405	8,116904E+06	8,117581E+06	2,767142E+09	2,767158E+09	1,623448E+07	5,534300E+09	5,550534E+09
-404	8,117703E+06	8,115843E+06	2,767284E+09	2,767108E+09	1,623355E+07	5,534392E+09	5,550625E+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							
-403	8,113209E+06	8,112590E+06	2,767134E+09	2,767369E+09	1,622580E+07	5,534503E+09	5,550729E+09
-402	8,117203E+06	8,119707E+06	2,767344E+09	2,767267E+09	1,623691E+07	5,534611E+09	5,550848E+09
-401	8,115269E+06	8,112881E+06	2,767429E+09	2,767361E+09	1,622815E+07	5,534790E+09	5,551018E+09
-400	8,112270E+06	8,114071E+06	2,767350E+09	2,767550E+09	1,622634E+07	5,534900E+09	5,551126E+09
-399	8,117895E+06	8,117228E+06	2,767605E+09	2,767430E+09	1,623512E+07	5,535035E+09	5,551270E+09
-398	8,114070E+06	8,110221E+06	2,767527E+09	2,767619E+09	1,622429E+07	5,535146E+09	5,551370E+09
-397	8,113312E+06	8,116619E+06	2,767492E+09	2,767591E+09	1,622993E+07	5,535083E+09	5,551313E+09
-396	8,117914E+06	8,114770E+06	2,767655E+09	2,767435E+09	1,623268E+07	5,535089E+09	5,551322E+09
-395	8,111156E+06	8,112391E+06	2,767445E+09	2,767599E+09	1,622355E+07	5,535044E+09	5,551268E+09
-394	8,115370E+06	8,118159E+06	2,767487E+09	2,767417E+09	1,623353E+07	5,534905E+09	5,551138E+09
-393	8,116881E+06	8,113350E+06	2,767463E+09	2,767303E+09	1,623023E+07	5,534766E+09	5,550996E+09
-392	8,111652E+06	8,113596E+06	2,767140E+09	2,767367E+09	1,622525E+07	5,534507E+09	5,550732E+09
-391	8,119716E+06	8,117915E+06	2,767209E+09	2,767077E+09	1,623763E+07	5,534286E+09	5,550524E+09
-390	8,115011E+06	8,113562E+06	2,767062E+09	2,767060E+09	1,622857E+07	5,534121E+09	5,550350E+09
-389	8,114582E+06	8,116347E+06	2,766893E+09	2,767011E+09	1,623093E+07	5,533904E+09	5,550135E+09
-388	8,119792E+06	8,118522E+06	2,767056E+09	2,766804E+09	1,623831E+07	5,533859E+09	5,550098E+09
-387	8,113661E+06	8,113160E+06	2,766870E+09	2,766995E+09	1,622682E+07	5,533865E+09	5,550092E+09
-386	8,117374E+06	8,118727E+06	2,766912E+09	2,766947E+09	1,623610E+07	5,533859E+09	5,550095E+09
-385	8,118315E+06	8,116705E+06	2,767050E+09	2,766895E+09	1,623502E+07	5,533944E+09	5,550179E+09
-384	8,113303E+06	8,113121E+06	2,766885E+09	2,767135E+09	1,622642E+07	5,534020E+09	5,550247E+09
-383	8,117951E+06	8,120061E+06	2,767123E+09	2,767041E+09	1,623801E+07	5,534164E+09	5,550402E+09
-382	8,116467E+06	8,112825E+06	2,767213E+09	2,767152E+09	1,622929E+07	5,534365E+09	5,550594E+09
-381	8,113559E+06	8,114761E+06	2,767122E+09	2,767309E+09	1,622832E+07	5,534430E+09	5,550659E+09
-380	8,118808E+06	8,118032E+06	2,767373E+09	2,767189E+09	1,623684E+07	5,534562E+09	5,550799E+09
-379	8,114181E+06	8,111544E+06	2,767288E+09	2,767372E+09	1,622573E+07	5,534661E+09	5,550886E+09
-378	8,113338E+06	8,118005E+06	2,767289E+09	2,767356E+09	1,623134E+07	5,534645E+09	5,550877E+09
-377	8,118505E+06	8,115546E+06	2,767436E+09	2,767202E+09	1,623405E+07	5,534638E+09	5,550872E+09
-376	8,111707E+06	8,112531E+06	2,767167E+09	2,767348E+09	1,622424E+07	5,534515E+09	5,550739E+09
-375	8,117057E+06	8,118107E+06	2,767183E+09	2,767159E+09	1,623516E+07	5,534342E+09	5,550577E+09
-374	8,118398E+06	8,113683E+06	2,767137E+09	2,767027E+09	1,623208E+07	5,534164E+09	5,550396E+09
-373	8,112898E+06	8,114786E+06	2,766821E+09	2,767033E+09	1,622768E+07	5,533854E+09	5,550082E+09
-372	8,120215E+06	8,119253E+06	2,766924E+09	2,766748E+09	1,623947E+07	5,533672E+09	5,549912E+09
-371	8,115042E+06	8,114841E+06	2,766801E+09	2,766761E+09	1,622988E+07	5,533561E+09	5,549791E+09
-370	8,115158E+06	8,117410E+06	2,766674E+09	2,766765E+09	1,623257E+07	5,533438E+09	5,549671E+09
-369	8,120653E+06	8,119315E+06	2,766818E+09	2,766586E+09	1,623997E+07	5,533404E+09	5,549644E+09
-368	8,114330E+06	8,113598E+06	2,766600E+09	2,766772E+09	1,622793E+07	5,533371E+09	5,549599E+09
-367	8,118284E+06	8,119356E+06	2,766660E+09	2,766725E+09	1,623764E+07	5,533385E+09	5,549623E+09
-366	8,119130E+06	8,117067E+06	2,766820E+09	2,766676E+09	1,623620E+07	5,533495E+09	5,549732E+09
-365	8,114246E+06	8,113903E+06	2,766671E+09	2,766885E+09	1,622815E+07	5,533556E+09	5,549784E+09
-364	8,118585E+06	8,120482E+06	2,766911E+09	2,766807E+09	1,623907E+07	5,533718E+09	5,549957E+09
-363	8,116985E+06	8,113418E+06	2,766989E+09	2,766932E+09	1,623040E+07	5,533920E+09	5,550151E+09
-362	8,114046E+06	8,115945E+06	2,766920E+09	2,767099E+09	1,622999E+07	5,534019E+09	5,550249E+09
-361	8,119172E+06	8,118956E+06	2,767154E+09	2,766973E+09	1,623813E+07	5,534127E+09	5,550366E+09
-360	8,114321E+06	8,112146E+06	2,767042E+09	2,767132E+09	1,622647E+07	5,534174E+09	5,550400E+09
-359	8,114343E+06	8,118100E+06	2,767035E+09	2,767117E+09	1,623244E+07	5,534152E+09	5,550385E+09
-358	8,119995E+06	8,115462E+06	2,767160E+09	2,766959E+09	1,623546E+07	5,534119E+09	5,550354E+09
-357	8,113268E+06	8,113316E+06	2,766863E+09	2,767049E+09	1,622658E+07	5,533912E+09	5,550139E+09
-356	8,118116E+06	8,119044E+06	2,766877E+09	2,766849E+09	1,623716E+07	5,533727E+09	5,549964E+09
-355	8,118464E+06	8,115411E+06	2,766849E+09	2,766713E+09	1,623388E+07	5,533561E+09	5,549795E+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	8,113088E+06	8,116409E+06	2,766595E+09	2,766742E+09	1,622950E+07	5,533337E+09	5,549566E+09
-353	8,120438E+06	8,120378E+06	2,766698E+09	2,766492E+09	1,624082E+07	5,533190E+09	5,549431E+09
-352	8,115502E+06	8,115161E+06	2,766538E+09	2,766517E+09	1,623066E+07	5,533055E+09	5,549285E+09
-351	8,116565E+06	8,117435E+06	2,766396E+09	2,766543E+09	1,623400E+07	5,532939E+09	5,549173E+09
-350	8,121945E+06	8,119623E+06	2,766530E+09	2,766361E+09	1,624157E+07	5,532891E+09	5,549133E+09
-349	8,115500E+06	8,114514E+06	2,766316E+09	2,766490E+09	1,623001E+07	5,532806E+09	5,549036E+09
-348	8,118843E+06	8,120068E+06	2,766411E+09	2,766450E+09	1,623891E+07	5,532861E+09	5,549100E+09
-347	8,119450E+06	8,117872E+06	2,766592E+09	2,766423E+09	1,623732E+07	5,533016E+09	5,549253E+09
-346	8,114957E+06	8,114655E+06	2,766490E+09	2,766668E+09	1,622961E+07	5,533158E+09	5,549387E+09
-345	8,119182E+06	8,121130E+06	2,766713E+09	2,766616E+09	1,624031E+07	5,533329E+09	5,549569E+09
-344	8,117484E+06	8,113893E+06	2,766760E+09	2,766726E+09	1,623138E+07	5,533485E+09	5,549717E+09
-343	8,114758E+06	8,116617E+06	2,766696E+09	2,766894E+09	1,623137E+07	5,533590E+09	5,549821E+09
-342	8,119996E+06	8,119285E+06	2,766928E+09	2,766757E+09	1,623928E+07	5,533685E+09	5,549924E+09
-341	8,115344E+06	8,113015E+06	2,766795E+09	2,766863E+09	1,622836E+07	5,533658E+09	5,549887E+09
-340	8,115229E+06	8,118424E+06	2,766766E+09	2,766846E+09	1,623365E+07	5,533612E+09	5,549846E+09
-339	8,120593E+06	8,116435E+06	2,766867E+09	2,766677E+09	1,623703E+07	5,533544E+09	5,549782E+09
-338	8,113779E+06	8,114835E+06	2,766602E+09	2,766757E+09	1,622861E+07	5,533359E+09	5,549588E+09
-337	8,118245E+06	8,120398E+06	2,766613E+09	2,766559E+09	1,623864E+07	5,533172E+09	5,549411E+09
-336	8,118437E+06	8,116336E+06	2,766577E+09	2,766421E+09	1,623477E+07	5,532998E+09	5,549233E+09
-335	8,114206E+06	8,116674E+06	2,766330E+09	2,766486E+09	1,623088E+07	5,532816E+09	5,549047E+09
-334	8,121932E+06	8,120316E+06	2,766417E+09	2,766257E+09	1,624225E+07	5,532674E+09	5,548916E+09
-333	8,117315E+06	8,115764E+06	2,766237E+09	2,766244E+09	1,623308E+07	5,532481E+09	5,548714E+09
-332	8,117820E+06	8,118001E+06	2,766102E+09	2,766268E+09	1,623582E+07	5,532370E+09	5,548606E+09
-331	8,122141E+06	8,120965E+06	2,766262E+09	2,766088E+09	1,624311E+07	5,532351E+09	5,548594E+09
-330	8,115882E+06	8,115817E+06	2,766122E+09	2,766235E+09	1,623170E+07	5,532357E+09	5,548589E+09
-329	8,118889E+06	8,120963E+06	2,766218E+09	2,766231E+09	1,623985E+07	5,532449E+09	5,548689E+09
-328	8,119838E+06	8,118108E+06	2,766376E+09	2,766218E+09	1,623795E+07	5,532594E+09	5,548832E+09
-327	8,116131E+06	8,114884E+06	2,766264E+09	2,766483E+09	1,623101E+07	5,532748E+09	5,548979E+09
-326	8,120106E+06	8,121484E+06	2,766478E+09	2,766422E+09	1,624159E+07	5,532900E+09	5,549142E+09
-325	8,118422E+06	8,114885E+06	2,766518E+09	2,766471E+09	1,623331E+07	5,532989E+09	5,549223E+09
-324	8,115167E+06	8,117202E+06	2,766464E+09	2,766633E+09	1,623237E+07	5,533097E+09	5,549330E+09
-323	8,120296E+06	8,120024E+06	2,766686E+09	2,766502E+09	1,624032E+07	5,533189E+09	5,549429E+09
-322	8,116131E+06	8,114094E+06	2,766575E+09	2,766608E+09	1,623022E+07	5,533183E+09	5,549413E+09
-321	8,115770E+06	8,119385E+06	2,766513E+09	2,766597E+09	1,623515E+07	5,533110E+09	5,549345E+09
-320	8,121005E+06	8,117398E+06	2,766585E+09	2,766405E+09	1,623840E+07	5,532991E+09	5,549229E+09
-319	8,114575E+06	8,115641E+06	2,766334E+09	2,766492E+09	1,623022E+07	5,532826E+09	5,549056E+09
-318	8,119231E+06	8,120672E+06	2,766350E+09	2,766300E+09	1,623990E+07	5,532650E+09	5,548890E+09
-317	8,119735E+06	8,116935E+06	2,766291E+09	2,766127E+09	1,623667E+07	5,532418E+09	5,548655E+09
-316	8,115658E+06	8,116699E+06	2,766033E+09	2,766206E+09	1,623236E+07	5,532239E+09	5,548471E+09
-315	8,122828E+06	8,121308E+06	2,766105E+09	2,765981E+09	1,624414E+07	5,532086E+09	5,548330E+09
-314	8,118125E+06	8,117297E+06	2,765969E+09	2,765961E+09	1,623542E+07	5,531930E+09	5,548165E+09
-313	8,117938E+06	8,119392E+06	2,765848E+09	2,765997E+09	1,623733E+07	5,531845E+09	5,548082E+09
-312	8,122039E+06	8,121807E+06	2,766014E+09	2,765824E+09	1,624385E+07	5,531838E+09	5,548082E+09
-311	8,116812E+06	8,116063E+06	2,765899E+09	2,766014E+09	1,623287E+07	5,531912E+09	5,548145E+09
-310	8,120023E+06	8,121024E+06	2,765995E+09	2,766036E+09	1,624105E+07	5,532031E+09	5,548272E+09
-309	8,121244E+06	8,118773E+06	2,766138E+09	2,765991E+09	1,624002E+07	5,532129E+09	5,548369E+09
-308	8,117041E+06	8,115594E+06	2,766042E+09	2,766255E+09	1,623263E+07	5,532297E+09	5,548530E+09
-307	8,120109E+06	8,122754E+06	2,766266E+09	2,766195E+09	1,624286E+07	5,532461E+09	5,548703E+09
-306	8,118791E+06	8,116147E+06	2,766349E+09	2,766241E+09	1,623494E+07	5,532590E+09	5,548825E+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	8,115128E+06	8,117990E+06	2,766263E+09	2,766416E+09	1,623312E+07	5,532679E+09	5,548912E+09
-304	8,120719E+06	8,120193E+06	2,766433E+09	2,766275E+09	1,624091E+07	5,532708E+09	5,548949E+09
-303	8,117300E+06	8,114593E+06	2,766300E+09	2,766378E+09	1,623189E+07	5,532678E+09	5,548910E+09
-302	8,116908E+06	8,119744E+06	2,766222E+09	2,766341E+09	1,623665E+07	5,532563E+09	5,548800E+09
-301	8,122228E+06	8,118365E+06	2,766287E+09	2,766094E+09	1,624059E+07	5,532380E+09	5,548621E+09
-300	8,115640E+06	8,116078E+06	2,766052E+09	2,766180E+09	1,623172E+07	5,532232E+09	5,548464E+09
-299	8,119952E+06	8,121355E+06	2,766064E+09	2,766011E+09	1,624131E+07	5,532074E+09	5,548316E+09
-298	8,120807E+06	8,118191E+06	2,766034E+09	2,765847E+09	1,623900E+07	5,531881E+09	5,548120E+09
-297	8,116237E+06	8,117937E+06	2,765756E+09	2,765940E+09	1,623417E+07	5,531696E+09	5,547930E+09
-296	8,122998E+06	8,122581E+06	2,765818E+09	2,765706E+09	1,624558E+07	5,531524E+09	5,547770E+09
-295	8,118780E+06	8,118390E+06	2,765712E+09	2,765705E+09	1,623717E+07	5,531417E+09	5,547654E+09
-294	8,118779E+06	8,119799E+06	2,765610E+09	2,765757E+09	1,623858E+07	5,531367E+09	5,547606E+09
-293	8,123117E+06	8,122272E+06	2,765765E+09	2,765571E+09	1,624539E+07	5,531336E+09	5,547582E+09
-292	8,118159E+06	8,115997E+06	2,765662E+09	2,765779E+09	1,623416E+07	5,531441E+09	5,547675E+09
-291	8,120518E+06	8,121948E+06	2,765755E+09	2,765816E+09	1,624247E+07	5,531572E+09	5,547814E+09
-290	8,121829E+06	8,120142E+06	2,765944E+09	2,765762E+09	1,624197E+07	5,531705E+09	5,547947E+09
-289	8,116890E+06	8,116887E+06	2,765849E+09	2,766035E+09	1,623378E+07	5,531884E+09	5,548117E+09
-288	8,120046E+06	8,123279E+06	2,766049E+09	2,765973E+09	1,624332E+07	5,532022E+09	5,548265E+09
-287	8,119845E+06	8,116262E+06	2,766117E+09	2,766041E+09	1,623611E+07	5,532158E+09	5,548394E+09
-286	8,116545E+06	8,117872E+06	2,766004E+09	2,766209E+09	1,623442E+07	5,532212E+09	5,548447E+09
-285	8,122352E+06	8,120655E+06	2,766135E+09	2,766007E+09	1,624301E+07	5,532142E+09	5,548385E+09
-284	8,118460E+06	8,115295E+06	2,766022E+09	2,766085E+09	1,623376E+07	5,532107E+09	5,548341E+09
-283	8,117241E+06	8,121050E+06	2,765961E+09	2,766048E+09	1,623829E+07	5,532008E+09	5,548246E+09
-282	8,122743E+06	8,119896E+06	2,766066E+09	2,765801E+09	1,624264E+07	5,531867E+09	5,548109E+09
-281	8,115807E+06	8,117227E+06	2,765808E+09	2,765914E+09	1,623303E+07	5,531723E+09	5,547956E+09
-280	8,120445E+06	8,121991E+06	2,765772E+09	2,765748E+09	1,624244E+07	5,531520E+09	5,547762E+09
-279	8,121825E+06	8,119234E+06	2,765730E+09	2,765596E+09	1,624106E+07	5,531326E+09	5,547567E+09
-278	8,117329E+06	8,118603E+06	2,765454E+09	2,765674E+09	1,623593E+07	5,531128E+09	5,547363E+09
-277	8,123967E+06	8,123415E+06	2,765516E+09	2,765399E+09	1,624738E+07	5,530915E+09	5,547163E+09
-276	8,119898E+06	8,118610E+06	2,765447E+09	2,765411E+09	1,623851E+07	5,530859E+09	5,547097E+09
-275	8,119552E+06	8,120349E+06	2,765360E+09	2,765502E+09	1,623990E+07	5,530862E+09	5,547102E+09
-274	8,124111E+06	8,123349E+06	2,765559E+09	2,765337E+09	1,624746E+07	5,530896E+09	5,547144E+09
-273	8,118619E+06	8,117191E+06	2,765456E+09	2,765571E+09	1,623581E+07	5,531027E+09	5,547262E+09
-272	8,120407E+06	8,123009E+06	2,765543E+09	2,765610E+09	1,624342E+07	5,531153E+09	5,547397E+09
-271	8,122333E+06	8,120884E+06	2,765746E+09	2,765578E+09	1,624322E+07	5,531324E+09	5,547567E+09
-270	8,117697E+06	8,116964E+06	2,765638E+09	2,765844E+09	1,623466E+07	5,531482E+09	5,547717E+09
-269	8,121241E+06	8,123152E+06	2,765790E+09	2,765744E+09	1,624439E+07	5,531534E+09	5,547779E+09
-268	8,121404E+06	8,116220E+06	2,765849E+09	2,765791E+09	1,623762E+07	5,531640E+09	5,547877E+09
-267	8,117172E+06	8,118936E+06	2,765726E+09	2,765944E+09	1,623611E+07	5,531669E+09	5,547906E+09
-266	8,122932E+06	8,122370E+06	2,765900E+09	2,765717E+09	1,624530E+07	5,531618E+09	5,547863E+09
-265	8,118236E+06	8,116936E+06	2,765794E+09	2,765801E+09	1,623517E+07	5,531595E+09	5,547830E+09
-264	8,117204E+06	8,121831E+06	2,765713E+09	2,765773E+09	1,623903E+07	5,531486E+09	5,547725E+09
-263	8,123594E+06	8,120539E+06	2,765801E+09	2,765564E+09	1,624413E+07	5,531364E+09	5,547608E+09
-262	8,117228E+06	8,117533E+06	2,765517E+09	2,765673E+09	1,623476E+07	5,531190E+09	5,547424E+09
-261	8,122055E+06	8,122531E+06	2,765441E+09	2,765460E+09	1,624459E+07	5,530902E+09	5,547146E+09
-260	8,123148E+06	8,120010E+06	2,765424E+09	2,765289E+09	1,624316E+07	5,530714E+09	5,546957E+09
-259	8,117965E+06	8,119643E+06	2,765175E+09	2,765374E+09	1,623761E+07	5,530549E+09	5,546786E+09
-258	8,124624E+06	8,124618E+06	2,765286E+09	2,765110E+09	1,624924E+07	5,530396E+09	5,546645E+09
-257	8,120188E+06	8,119483E+06	2,765221E+09	2,765163E+09	1,623967E+07	5,530384E+09	5,546624E+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	8,119937E+06	8,120985E+06	2,765117E+09	2,765274E+09	1,624092E+07	5,530391E+09	5,546632E+09
-255	8,124743E+06	8,124260E+06	2,765317E+09	2,765144E+09	1,624900E+07	5,530461E+09	5,546710E+09
-254	8,119633E+06	8,117753E+06	2,765225E+09	2,765370E+09	1,623739E+07	5,530595E+09	5,546833E+09
-253	8,121216E+06	8,123354E+06	2,765294E+09	2,765369E+09	1,624457E+07	5,530663E+09	5,546908E+09
-252	8,123501E+06	8,120698E+06	2,765509E+09	2,765335E+09	1,624420E+07	5,530844E+09	5,547089E+09
-251	8,118442E+06	8,117486E+06	2,765396E+09	2,765610E+09	1,623593E+07	5,531006E+09	5,547242E+09
-250	8,122096E+06	8,124206E+06	2,765567E+09	2,765497E+09	1,624630E+07	5,531064E+09	5,547311E+09
-249	8,121574E+06	8,117779E+06	2,765629E+09	2,765543E+09	1,623935E+07	5,531172E+09	5,547411E+09
-248	8,116997E+06	8,120352E+06	2,765502E+09	2,765686E+09	1,623735E+07	5,531188E+09	5,547425E+09
-247	8,123182E+06	8,123443E+06	2,765684E+09	2,765490E+09	1,624663E+07	5,531174E+09	5,547420E+09
-246	8,119120E+06	8,117272E+06	2,765560E+09	2,765574E+09	1,623639E+07	5,531133E+09	5,547370E+09
-245	8,118562E+06	8,121584E+06	2,765415E+09	2,765515E+09	1,624015E+07	5,530930E+09	5,547170E+09
-244	8,125250E+06	8,120589E+06	2,765483E+09	2,765285E+09	1,624584E+07	5,530768E+09	5,547014E+09
-243	8,118212E+06	8,118611E+06	2,765189E+09	2,765375E+09	1,623682E+07	5,530564E+09	5,546801E+09
-242	8,122952E+06	8,124085E+06	2,765156E+09	2,765135E+09	1,624704E+07	5,530291E+09	5,546538E+09
-241	8,123172E+06	8,121620E+06	2,765161E+09	2,764976E+09	1,624479E+07	5,530137E+09	5,546382E+09
-240	8,118217E+06	8,120296E+06	2,764914E+09	2,765086E+09	1,623851E+07	5,530000E+09	5,546239E+09
-239	8,125320E+06	8,125272E+06	2,765035E+09	2,764887E+09	1,625059E+07	5,529922E+09	5,546172E+09
-238	8,121522E+06	8,119805E+06	2,764972E+09	2,764952E+09	1,624133E+07	5,529924E+09	5,546165E+09
-237	8,121124E+06	8,121419E+06	2,764850E+09	2,765041E+09	1,624254E+07	5,529891E+09	5,546133E+09
-236	8,125732E+06	8,124859E+06	2,765081E+09	2,764905E+09	1,625059E+07	5,529986E+09	5,546236E+09
-235	8,120129E+06	8,118661E+06	2,765007E+09	2,765137E+09	1,623879E+07	5,530144E+09	5,546383E+09
-234	8,121680E+06	8,124248E+06	2,765099E+09	2,765133E+09	1,624593E+07	5,530232E+09	5,546478E+09
-233	8,123697E+06	8,121445E+06	2,765299E+09	2,765112E+09	1,624514E+07	5,530411E+09	5,546656E+09
-232	8,118632E+06	8,118285E+06	2,765162E+09	2,765379E+09	1,623692E+07	5,530541E+09	5,546778E+09
-231	8,122391E+06	8,125237E+06	2,765333E+09	2,765287E+09	1,624763E+07	5,530620E+09	5,546868E+09
-230	8,122382E+06	8,118524E+06	2,765403E+09	2,765313E+09	1,624091E+07	5,530717E+09	5,546957E+09
-229	8,117892E+06	8,120539E+06	2,765245E+09	2,765424E+09	1,623843E+07	5,530668E+09	5,546907E+09
-228	8,124577E+06	8,123185E+06	2,765417E+09	2,765226E+09	1,624776E+07	5,530644E+09	5,546892E+09
-227	8,120310E+06	8,117815E+06	2,765271E+09	2,765311E+09	1,623812E+07	5,530582E+09	5,546820E+09
-226	8,119867E+06	8,122584E+06	2,765127E+09	2,765225E+09	1,624245E+07	5,530353E+09	5,546595E+09
-225	8,125556E+06	8,122338E+06	2,765197E+09	2,764987E+09	1,624789E+07	5,530184E+09	5,546432E+09
-224	8,118269E+06	8,120161E+06	2,764913E+09	2,765062E+09	1,623843E+07	5,529975E+09	5,546213E+09
-223	8,123214E+06	8,125213E+06	2,764894E+09	2,764864E+09	1,624843E+07	5,529759E+09	5,546007E+09
-222	8,124069E+06	8,122102E+06	2,764906E+09	2,764722E+09	1,624617E+07	5,529627E+09	5,545874E+09
-221	8,119600E+06	8,120112E+06	2,764623E+09	2,764824E+09	1,623971E+07	5,529447E+09	5,545687E+09
-220	8,126637E+06	8,125459E+06	2,764750E+09	2,764634E+09	1,625210E+07	5,529384E+09	5,545636E+09
-219	8,122417E+06	8,120862E+06	2,764705E+09	2,764704E+09	1,624328E+07	5,529409E+09	5,545653E+09
-218	8,121744E+06	8,122752E+06	2,764626E+09	2,764777E+09	1,624450E+07	5,529403E+09	5,545648E+09
-217	8,125581E+06	8,126069E+06	2,764875E+09	2,764659E+09	1,625165E+07	5,529534E+09	5,545785E+09
-216	8,120338E+06	8,119215E+06	2,764793E+09	2,764903E+09	1,623955E+07	5,529696E+09	5,545935E+09
-215	8,122144E+06	8,124754E+06	2,764879E+09	2,764948E+09	1,624690E+07	5,529827E+09	5,546073E+09
-214	8,124905E+06	8,121829E+06	2,765075E+09	2,764920E+09	1,624673E+07	5,529995E+09	5,546242E+09
-213	8,119671E+06	8,118667E+06	2,764916E+09	2,765148E+09	1,623834E+07	5,530065E+09	5,546303E+09
-212	8,123292E+06	8,125576E+06	2,765105E+09	2,765043E+09	1,624887E+07	5,530149E+09	5,546397E+09
-211	8,123124E+06	8,119301E+06	2,765177E+09	2,765067E+09	1,624242E+07	5,530245E+09	5,546487E+09
-210	8,118675E+06	8,121322E+06	2,765017E+09	2,765161E+09	1,624000E+07	5,530178E+09	5,546418E+09
-209	8,124967E+06	8,124105E+06	2,765157E+09	2,764965E+09	1,624907E+07	5,530123E+09	5,546372E+09
-208	8,120671E+06	8,119046E+06	2,764975E+09	2,765028E+09	1,623972E+07	5,530003E+09	5,546243E+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	8,120313E+06	8,123881E+06	2,764832E+09	2,764959E+09	1,624419E+07	5,529791E+09	5,546035E+09
-206	8,126346E+06	8,123436E+06	2,764912E+09	2,764696E+09	1,624978E+07	5,529608E+09	5,545858E+09
-205	8,119255E+06	8,120303E+06	2,764611E+09	2,764749E+09	1,623956E+07	5,529361E+09	5,545600E+09
-204	8,124589E+06	8,125068E+06	2,764604E+09	2,764571E+09	1,624966E+07	5,529176E+09	5,545425E+09
-203	8,125264E+06	8,122695E+06	2,764619E+09	2,764453E+09	1,624796E+07	5,529073E+09	5,545321E+09
-202	8,120929E+06	8,121207E+06	2,764364E+09	2,764552E+09	1,624214E+07	5,528916E+09	5,545159E+09
-201	8,126780E+06	8,127158E+06	2,764510E+09	2,764378E+09	1,625394E+07	5,528888E+09	5,545142E+09
-200	8,122552E+06	8,122181E+06	2,764482E+09	2,764453E+09	1,624473E+07	5,528936E+09	5,545180E+09
-199	8,121904E+06	8,123562E+06	2,764419E+09	2,764576E+09	1,624547E+07	5,528995E+09	5,545240E+09
-198	8,126383E+06	8,126182E+06	2,764660E+09	2,764465E+09	1,625257E+07	5,529124E+09	5,545377E+09
-197	8,121567E+06	8,118793E+06	2,764536E+09	2,764684E+09	1,624036E+07	5,529220E+09	5,545461E+09
-196	8,123326E+06	8,124855E+06	2,764620E+09	2,764720E+09	1,624818E+07	5,529340E+09	5,545588E+09
-195	8,125825E+06	8,122861E+06	2,764833E+09	2,764682E+09	1,624869E+07	5,529515E+09	5,545763E+09
-194	8,120362E+06	8,120076E+06	2,764707E+09	2,764879E+09	1,624044E+07	5,529586E+09	5,545827E+09
-193	8,123193E+06	8,126679E+06	2,764897E+09	2,764789E+09	1,624987E+07	5,529686E+09	5,545936E+09
-192	8,123443E+06	8,120132E+06	2,764944E+09	2,764816E+09	1,624358E+07	5,529760E+09	5,546004E+09
-191	8,119124E+06	8,122017E+06	2,764759E+09	2,764940E+09	1,624114E+07	5,529699E+09	5,545941E+09
-190	8,126101E+06	8,124825E+06	2,764882E+09	2,764724E+09	1,625093E+07	5,529606E+09	5,545857E+09
-189	8,121729E+06	8,119768E+06	2,764672E+09	2,764737E+09	1,624150E+07	5,529409E+09	5,545650E+09
-188	8,121455E+06	8,124321E+06	2,764542E+09	2,764656E+09	1,624578E+07	5,529198E+09	5,545444E+09
-187	8,127342E+06	8,124270E+06	2,764632E+09	2,764402E+09	1,625161E+07	5,529034E+09	5,545285E+09
-186	8,120461E+06	8,120975E+06	2,764342E+09	2,764446E+09	1,624144E+07	5,528788E+09	5,545030E+09
-185	8,125054E+06	8,125974E+06	2,764331E+09	2,764293E+09	1,625103E+07	5,528624E+09	5,544875E+09
-184	8,125660E+06	8,124011E+06	2,764340E+09	2,764181E+09	1,624967E+07	5,528520E+09	5,544770E+09
-183	8,121303E+06	8,122533E+06	2,764111E+09	2,764318E+09	1,624384E+07	5,528429E+09	5,544673E+09
-182	8,127387E+06	8,128162E+06	2,764276E+09	2,764144E+09	1,625555E+07	5,528420E+09	5,544676E+09
-181	8,123586E+06	8,122066E+06	2,764225E+09	2,764208E+09	1,624565E+07	5,528434E+09	5,544679E+09
-180	8,123213E+06	8,123248E+06	2,764162E+09	2,764346E+09	1,624646E+07	5,528508E+09	5,544755E+09
-179	8,127572E+06	8,126569E+06	2,764406E+09	2,764244E+09	1,625414E+07	5,528650E+09	5,544904E+09
-178	8,122668E+06	8,119911E+06	2,764314E+09	2,764436E+09	1,624258E+07	5,528750E+09	5,544993E+09
-177	8,123167E+06	8,126560E+06	2,764425E+09	2,764478E+09	1,624973E+07	5,528903E+09	5,545153E+09
-176	8,125775E+06	8,124245E+06	2,764644E+09	2,764442E+09	1,625002E+07	5,529086E+09	5,545336E+09
-175	8,120441E+06	8,121018E+06	2,764521E+09	2,764683E+09	1,624146E+07	5,529204E+09	5,545445E+09
-174	8,124014E+06	8,126882E+06	2,764674E+09	2,764588E+09	1,625090E+07	5,529262E+09	5,545513E+09
-173	8,124685E+06	8,119933E+06	2,764653E+09	2,764577E+09	1,624462E+07	5,529230E+09	5,545474E+09
-172	8,120428E+06	8,122219E+06	2,764448E+09	2,764676E+09	1,624265E+07	5,529123E+09	5,545366E+09
-171	8,127261E+06	8,125733E+06	2,764574E+09	2,764432E+09	1,625299E+07	5,529006E+09	5,545259E+09
-170	8,122752E+06	8,121079E+06	2,764393E+09	2,764401E+09	1,624383E+07	5,528794E+09	5,545037E+09
-169	8,121912E+06	8,125282E+06	2,764271E+09	2,764337E+09	1,624719E+07	5,528607E+09	5,544854E+09
-168	8,127940E+06	8,125279E+06	2,764349E+09	2,764105E+09	1,625322E+07	5,528454E+09	5,544707E+09
-167	8,121186E+06	8,121934E+06	2,764071E+09	2,764200E+09	1,624312E+07	5,528272E+09	5,544515E+09
-166	8,125992E+06	8,127033E+06	2,764065E+09	2,764052E+09	1,625303E+07	5,528117E+09	5,544370E+09
-165	8,126488E+06	8,124733E+06	2,764062E+09	2,763920E+09	1,625122E+07	5,527982E+09	5,544233E+09
-164	8,122376E+06	8,122946E+06	2,763852E+09	2,764063E+09	1,624532E+07	5,527915E+09	5,544160E+09
-163	8,128263E+06	8,128706E+06	2,764025E+09	2,763904E+09	1,625697E+07	5,527929E+09	5,544186E+09
-162	8,124785E+06	8,122631E+06	2,763983E+09	2,763949E+09	1,624742E+07	5,527931E+09	5,544179E+09
-161	8,123556E+06	8,124157E+06	2,763923E+09	2,764102E+09	1,624771E+07	5,528025E+09	5,544273E+09
-160	8,127786E+06	8,127916E+06	2,764173E+09	2,764007E+09	1,625570E+07	5,528179E+09	5,544435E+09
-159	8,122815E+06	8,121230E+06	2,764120E+09	2,764227E+09	1,624405E+07	5,528347E+09	5,544591E+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	8,123511E+06	8,127398E+06	2,764242E+09	2,764272E+09	1,625091E+07	5,528514E+09	5,544765E+09
-157	8,126696E+06	8,123948E+06	2,764416E+09	2,764224E+09	1,625064E+07	5,528641E+09	5,544891E+09
-156	8,121773E+06	8,120706E+06	2,764264E+09	2,764467E+09	1,624248E+07	5,528731E+09	5,544973E+09
-155	8,125484E+06	8,127091E+06	2,764393E+09	2,764360E+09	1,625258E+07	5,528753E+09	5,545005E+09
-154	8,126057E+06	8,121150E+06	2,764372E+09	2,764290E+09	1,624721E+07	5,528662E+09	5,544909E+09
-153	8,120710E+06	8,123765E+06	2,764185E+09	2,764373E+09	1,624447E+07	5,528557E+09	5,544802E+09
-152	8,127516E+06	8,127199E+06	2,764314E+09	2,764127E+09	1,625471E+07	5,528441E+09	5,544695E+09
-151	8,122961E+06	8,122194E+06	2,764152E+09	2,764133E+09	1,624516E+07	5,528285E+09	5,544530E+09
-150	8,122717E+06	8,125796E+06	2,764012E+09	2,764081E+09	1,624851E+07	5,528092E+09	5,544341E+09
-149	8,128905E+06	8,125536E+06	2,764039E+09	2,763837E+09	1,625444E+07	5,527877E+09	5,544131E+09
-148	8,122427E+06	8,122558E+06	2,763761E+09	2,763932E+09	1,624498E+07	5,527694E+09	5,543939E+09
-147	8,127075E+06	8,128041E+06	2,763773E+09	2,763780E+09	1,625512E+07	5,527553E+09	5,543808E+09
-146	8,127523E+06	8,125897E+06	2,763795E+09	2,763620E+09	1,625342E+07	5,527415E+09	5,543669E+09
-145	8,122938E+06	8,123686E+06	2,763601E+09	2,763784E+09	1,624662E+07	5,527385E+09	5,543632E+09
-144	8,128710E+06	8,129430E+06	2,763765E+09	2,763648E+09	1,625814E+07	5,527413E+09	5,543671E+09
-143	8,125385E+06	8,123483E+06	2,763760E+09	2,763736E+09	1,624887E+07	5,527496E+09	5,543745E+09
-142	8,124177E+06	8,125281E+06	2,763720E+09	2,763895E+09	1,624946E+07	5,527616E+09	5,543865E+09
-141	8,128317E+06	8,128352E+06	2,763958E+09	2,763793E+09	1,625667E+07	5,527751E+09	5,544008E+09
-140	8,123884E+06	8,121464E+06	2,763914E+09	2,764025E+09	1,624535E+07	5,527939E+09	5,544184E+09
-139	8,124526E+06	8,127438E+06	2,764019E+09	2,764074E+09	1,625196E+07	5,528093E+09	5,544345E+09
-138	8,128034E+06	8,124177E+06	2,764167E+09	2,763983E+09	1,625221E+07	5,528150E+09	5,544402E+09
-137	8,122333E+06	8,121597E+06	2,763995E+09	2,764205E+09	1,624393E+07	5,528200E+09	5,544444E+09
-136	8,125816E+06	8,128456E+06	2,764109E+09	2,764080E+09	1,625427E+07	5,528189E+09	5,544443E+09
-135	8,126188E+06	8,122868E+06	2,764128E+09	2,764016E+09	1,624906E+07	5,528144E+09	5,544393E+09
-134	8,121113E+06	8,124899E+06	2,763949E+09	2,764094E+09	1,624601E+07	5,528043E+09	5,544289E+09
-133	8,128283E+06	8,127259E+06	2,764034E+09	2,763848E+09	1,625554E+07	5,527882E+09	5,544138E+09
-132	8,124257E+06	8,122336E+06	2,763857E+09	2,763868E+09	1,624659E+07	5,527725E+09	5,543972E+09
-131	8,124181E+06	8,126227E+06	2,763711E+09	2,763822E+09	1,625041E+07	5,527532E+09	5,543783E+09
-130	8,130080E+06	8,126938E+06	2,763746E+09	2,763539E+09	1,625702E+07	5,527285E+09	5,543542E+09
-129	8,122955E+06	8,123959E+06	2,763492E+09	2,763634E+09	1,624691E+07	5,527126E+09	5,543373E+09
-128	8,127537E+06	8,129199E+06	2,763509E+09	2,763499E+09	1,625674E+07	5,527008E+09	5,543264E+09
-127	8,127980E+06	8,126764E+06	2,763557E+09	2,763375E+09	1,625474E+07	5,526932E+09	5,543187E+09
-126	8,123772E+06	8,124044E+06	2,763360E+09	2,763553E+09	1,624782E+07	5,526913E+09	5,543161E+09
-125	8,129419E+06	8,129494E+06	2,763493E+09	2,763417E+09	1,625891E+07	5,526910E+09	5,543169E+09
-124	8,126454E+06	8,123952E+06	2,763510E+09	2,763513E+09	1,625041E+07	5,527023E+09	5,543273E+09
-123	8,125128E+06	8,126004E+06	2,763501E+09	2,763676E+09	1,625113E+07	5,527177E+09	5,543429E+09
-122	8,129274E+06	8,129043E+06	2,763743E+09	2,763549E+09	1,625832E+07	5,527292E+09	5,543550E+09
-121	8,124599E+06	8,122005E+06	2,763698E+09	2,763788E+09	1,624660E+07	5,527486E+09	5,543733E+09
-120	8,124962E+06	8,128077E+06	2,763771E+09	2,763845E+09	1,625304E+07	5,527616E+09	5,543869E+09
-119	8,128426E+06	8,125274E+06	2,763938E+09	2,763761E+09	1,625370E+07	5,527699E+09	5,543953E+09
-118	8,122569E+06	8,123089E+06	2,763772E+09	2,763961E+09	1,624566E+07	5,527734E+09	5,543980E+09
-117	8,126120E+06	8,129042E+06	2,763858E+09	2,763817E+09	1,625516E+07	5,527675E+09	5,543930E+09
-116	8,127067E+06	8,123455E+06	2,763878E+09	2,763758E+09	1,625052E+07	5,527636E+09	5,543886E+09
-115	8,122384E+06	8,125034E+06	2,763684E+09	2,763838E+09	1,624742E+07	5,527522E+09	5,543769E+09
-114	8,129629E+06	8,127629E+06	2,763735E+09	2,763562E+09	1,625726E+07	5,527297E+09	5,543554E+09
-113	8,125170E+06	8,123287E+06	2,763552E+09	2,763573E+09	1,624846E+07	5,527124E+09	5,543373E+09
-112	8,124807E+06	8,127447E+06	2,763397E+09	2,763521E+09	1,625225E+07	5,526918E+09	5,543170E+09
-111	8,130394E+06	8,128508E+06	2,763482E+09	2,763253E+09	1,625890E+07	5,526735E+09	5,542994E+09
-110	8,123653E+06	8,124959E+06	2,763241E+09	2,763353E+09	1,624861E+07	5,526594E+09	5,542843E+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	8,128402E+06	8,129026E+06	2,763216E+09	2,763232E+09	1,625743E+07	5,526449E+09	5,542706E+09
-108	8,129307E+06	8,126952E+06	2,763268E+09	2,763134E+09	1,625626E+07	5,526403E+09	5,542659E+09
-107	8,125239E+06	8,124424E+06	2,763095E+09	2,763320E+09	1,624966E+07	5,526415E+09	5,542665E+09
-106	8,130243E+06	8,130666E+06	2,763253E+09	2,763160E+09	1,626091E+07	5,526413E+09	5,542674E+09
-105	8,126965E+06	8,125132E+06	2,763312E+09	2,763264E+09	1,625210E+07	5,526576E+09	5,542828E+09
-104	8,125258E+06	8,127062E+06	2,763304E+09	2,763451E+09	1,625232E+07	5,526755E+09	5,543007E+09
-103	8,129389E+06	8,129822E+06	2,763561E+09	2,763352E+09	1,625921E+07	5,526913E+09	5,543173E+09
-102	8,125079E+06	8,122733E+06	2,763489E+09	2,763585E+09	1,624781E+07	5,527074E+09	5,543322E+09
-101	8,125280E+06	8,128241E+06	2,763503E+09	2,763622E+09	1,625352E+07	5,527126E+09	5,543379E+09
-100	8,129266E+06	8,125990E+06	2,763673E+09	2,763524E+09	1,625526E+07	5,527197E+09	5,543452E+09
-99	8,123576E+06	8,123736E+06	2,763528E+09	2,763705E+09	1,624731E+07	5,527233E+09	5,543480E+09
-98	8,127203E+06	8,129463E+06	2,763599E+09	2,763527E+09	1,625667E+07	5,527126E+09	5,543382E+09
-97	8,128126E+06	8,123871E+06	2,763609E+09	2,763468E+09	1,625200E+07	5,527078E+09	5,543330E+09
-96	8,123325E+06	8,125679E+06	2,763390E+09	2,763562E+09	1,624900E+07	5,526951E+09	5,543200E+09
-95	8,130235E+06	8,128968E+06	2,763465E+09	2,763294E+09	1,625920E+07	5,526758E+09	5,543018E+09
-94	8,125635E+06	8,124978E+06	2,763291E+09	2,763294E+09	1,625061E+07	5,526585E+09	5,542836E+09
-93	8,125345E+06	8,127998E+06	2,763111E+09	2,763240E+09	1,625334E+07	5,526351E+09	5,542604E+09
-92	8,131291E+06	8,129159E+06	2,763197E+09	2,762988E+09	1,626045E+07	5,526184E+09	5,542445E+09
-91	8,125114E+06	8,124987E+06	2,762959E+09	2,763091E+09	1,625010E+07	5,526050E+09	5,542300E+09
-90	8,129654E+06	8,129412E+06	2,762915E+09	2,762946E+09	1,625907E+07	5,525861E+09	5,542120E+09
-89	8,130116E+06	8,127993E+06	2,762994E+09	2,762853E+09	1,625811E+07	5,525847E+09	5,542105E+09
-88	8,125612E+06	8,125832E+06	2,762851E+09	2,763057E+09	1,625144E+07	5,525908E+09	5,542159E+09
-87	8,130098E+06	8,132224E+06	2,763072E+09	2,762929E+09	1,626232E+07	5,526002E+09	5,542264E+09
-86	8,127321E+06	8,126059E+06	2,763139E+09	2,763053E+09	1,625338E+07	5,526192E+09	5,542445E+09
-85	8,125694E+06	8,126781E+06	2,763074E+09	2,763252E+09	1,625247E+07	5,526326E+09	5,542579E+09
-84	8,130390E+06	8,129894E+06	2,763311E+09	2,763164E+09	1,626028E+07	5,526475E+09	5,542736E+09
-83	8,126438E+06	8,123119E+06	2,763244E+09	2,763372E+09	1,624956E+07	5,526615E+09	5,542865E+09
-82	8,126165E+06	8,128994E+06	2,763247E+09	2,763362E+09	1,625516E+07	5,526609E+09	5,542864E+09
-81	8,130223E+06	8,126879E+06	2,763440E+09	2,763250E+09	1,625710E+07	5,526690E+09	5,542947E+09
-80	8,124197E+06	8,124556E+06	2,763283E+09	2,763435E+09	1,624875E+07	5,526718E+09	5,542967E+09
-79	8,127627E+06	8,130140E+06	2,763367E+09	2,763273E+09	1,625777E+07	5,526640E+09	5,542897E+09
-78	8,128745E+06	8,124970E+06	2,763353E+09	2,763207E+09	1,625372E+07	5,526560E+09	5,542814E+09
-77	8,123744E+06	8,126193E+06	2,763079E+09	2,763288E+09	1,624994E+07	5,526367E+09	5,542617E+09
-76	8,130998E+06	8,130149E+06	2,763159E+09	2,763020E+09	1,626115E+07	5,526179E+09	5,542440E+09
-75	8,126887E+06	8,125840E+06	2,763005E+09	2,763004E+09	1,625273E+07	5,526008E+09	5,542261E+09
-74	8,126683E+06	8,128384E+06	2,762803E+09	2,762926E+09	1,625507E+07	5,525729E+09	5,541984E+09
-73	8,132480E+06	8,129737E+06	2,762897E+09	2,762680E+09	1,626222E+07	5,525578E+09	5,541840E+09
-72	8,125995E+06	8,125799E+06	2,762669E+09	2,762803E+09	1,625179E+07	5,525472E+09	5,541724E+09
-71	8,129836E+06	8,130953E+06	2,762687E+09	2,762687E+09	1,626079E+07	5,525374E+09	5,541634E+09
-70	8,130243E+06	8,129737E+06	2,762802E+09	2,762613E+09	1,625998E+07	5,525415E+09	5,541675E+09
-69	8,125858E+06	8,126367E+06	2,762644E+09	2,762841E+09	1,625223E+07	5,525486E+09	5,541738E+09
-68	8,130714E+06	8,132692E+06	2,762858E+09	2,762749E+09	1,626341E+07	5,525607E+09	5,541870E+09
-67	8,128849E+06	8,125720E+06	2,762912E+09	2,762869E+09	1,625457E+07	5,525781E+09	5,542035E+09
-66	8,126898E+06	8,126728E+06	2,762800E+09	2,763025E+09	1,625363E+07	5,525825E+09	5,542079E+09
-65	8,131372E+06	8,130412E+06	2,763041E+09	2,762908E+09	1,626178E+07	5,525949E+09	5,542211E+09
-64	8,126961E+06	8,124303E+06	2,762995E+09	2,763103E+09	1,625126E+07	5,526098E+09	5,542349E+09
-63	8,126268E+06	8,130397E+06	2,763049E+09	2,763097E+09	1,625666E+07	5,526146E+09	5,542403E+09
-62	8,130685E+06	8,128044E+06	2,763235E+09	2,762997E+09	1,625873E+07	5,526232E+09	5,542491E+09
-61	8,124708E+06	8,124765E+06	2,763023E+09	2,763192E+09	1,624947E+07	5,526215E+09	5,542464E+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	8,128485E+06	8,130749E+06	2,763083E+09	2,763044E+09	1,625923E+07	5,526127E+09	5,542386E+09
-59	8,130009E+06	8,125822E+06	2,763075E+09	2,762952E+09	1,625583E+07	5,526027E+09	5,542283E+09
-58	8,124707E+06	8,127063E+06	2,762780E+09	2,762986E+09	1,625177E+07	5,525766E+09	5,542018E+09
-57	8,132054E+06	8,131098E+06	2,762875E+09	2,762706E+09	1,626315E+07	5,525581E+09	5,541844E+09
-56	8,127696E+06	8,126800E+06	2,762715E+09	2,762699E+09	1,625450E+07	5,525414E+09	5,541669E+09
-55	8,127347E+06	8,129243E+06	2,762537E+09	2,762638E+09	1,625659E+07	5,525175E+09	5,541432E+09
-54	8,132978E+06	8,131058E+06	2,762629E+09	2,762404E+09	1,626404E+07	5,525034E+09	5,541298E+09
-53	8,126397E+06	8,126430E+06	2,762386E+09	2,762539E+09	1,625283E+07	5,524926E+09	5,541178E+09
-52	8,130257E+06	8,132070E+06	2,762438E+09	2,762457E+09	1,626233E+07	5,524895E+09	5,541157E+09
-51	8,131493E+06	8,130113E+06	2,762581E+09	2,762391E+09	1,626161E+07	5,524972E+09	5,541234E+09
-50	8,127242E+06	8,126204E+06	2,762388E+09	2,762607E+09	1,625345E+07	5,524995E+09	5,541248E+09
-49	8,132100E+06	8,132760E+06	2,762598E+09	2,762516E+09	1,626486E+07	5,525114E+09	5,541378E+09
-48	8,129890E+06	8,126363E+06	2,762647E+09	2,762631E+09	1,625625E+07	5,525278E+09	5,541534E+09
-47	8,127054E+06	8,128227E+06	2,762587E+09	2,762782E+09	1,625528E+07	5,525369E+09	5,541624E+09
-46	8,131394E+06	8,132162E+06	2,762855E+09	2,762665E+09	1,626356E+07	5,525520E+09	5,541784E+09
-45	8,126986E+06	8,125049E+06	2,762790E+09	2,762866E+09	1,625204E+07	5,525657E+09	5,541909E+09
-44	8,126644E+06	8,131074E+06	2,762832E+09	2,762892E+09	1,625772E+07	5,525724E+09	5,541981E+09
-43	8,132107E+06	8,128069E+06	2,762994E+09	2,762780E+09	1,626018E+07	5,525774E+09	5,542034E+09
-42	8,125893E+06	8,125031E+06	2,762721E+09	2,762930E+09	1,625092E+07	5,525651E+09	5,541902E+09
-41	8,129666E+06	8,131490E+06	2,762780E+09	2,762752E+09	1,626116E+07	5,525532E+09	5,541793E+09
-40	8,130710E+06	8,127235E+06	2,762780E+09	2,762646E+09	1,625795E+07	5,525426E+09	5,541684E+09
-39	8,125174E+06	8,128350E+06	2,762525E+09	2,762677E+09	1,625352E+07	5,525202E+09	5,541456E+09
-38	8,132729E+06	8,132199E+06	2,762610E+09	2,762409E+09	1,626493E+07	5,525019E+09	5,541284E+09
-37	8,128345E+06	8,127167E+06	2,762413E+09	2,762415E+09	1,625551E+07	5,524827E+09	5,541083E+09
-36	8,128206E+06	8,130099E+06	2,762243E+09	2,762387E+09	1,625830E+07	5,524629E+09	5,540887E+09
-35	8,134179E+06	8,131866E+06	2,762365E+09	2,762157E+09	1,626605E+07	5,524522E+09	5,540788E+09
-34	8,127573E+06	8,127010E+06	2,762122E+09	2,762276E+09	1,625458E+07	5,524398E+09	5,540653E+09
-33	8,131381E+06	8,132618E+06	2,762194E+09	2,762200E+09	1,626400E+07	5,524394E+09	5,540658E+09
-32	8,132383E+06	8,130617E+06	2,762334E+09	2,762155E+09	1,626300E+07	5,524490E+09	5,540753E+09
-31	8,127867E+06	8,127021E+06	2,762163E+09	2,762372E+09	1,625489E+07	5,524535E+09	5,540790E+09
-30	8,132227E+06	8,134035E+06	2,762364E+09	2,762281E+09	1,626626E+07	5,524644E+09	5,540911E+09
-29	8,129907E+06	8,127279E+06	2,762403E+09	2,762392E+09	1,625719E+07	5,524795E+09	5,541052E+09
-28	8,127105E+06	8,129566E+06	2,762373E+09	2,762565E+09	1,625667E+07	5,524938E+09	5,541195E+09
-27	8,132465E+06	8,132499E+06	2,762657E+09	2,762450E+09	1,626496E+07	5,525107E+09	5,541372E+09
-26	8,128295E+06	8,124906E+06	2,762544E+09	2,762630E+09	1,625320E+07	5,525174E+09	5,541427E+09
-25	8,128072E+06	8,131095E+06	2,762570E+09	2,762645E+09	1,625917E+07	5,525215E+09	5,541474E+09
-24	8,133082E+06	8,128840E+06	2,762715E+09	2,762526E+09	1,626192E+07	5,525241E+09	5,541503E+09
-23	8,126283E+06	8,126639E+06	2,762475E+09	2,762651E+09	1,625292E+07	5,525127E+09	5,541380E+09
-22	8,129997E+06	8,133108E+06	2,762535E+09	2,762468E+09	1,626311E+07	5,525003E+09	5,541266E+09
-21	8,131041E+06	8,128183E+06	2,762503E+09	2,762361E+09	1,625922E+07	5,524864E+09	5,541123E+09
-20	8,125880E+06	8,129042E+06	2,762239E+09	2,762419E+09	1,625492E+07	5,524658E+09	5,540913E+09
-19	8,134275E+06	8,132332E+06	2,762311E+09	2,762143E+09	1,626661E+07	5,524454E+09	5,540721E+09
-18	8,129578E+06	8,127434E+06	2,762076E+09	2,762114E+09	1,625701E+07	5,524190E+09	5,540447E+09
-17	8,129458E+06	8,130856E+06	2,761941E+09	2,762081E+09	1,626031E+07	5,524022E+09	5,540283E+09
-16	8,134763E+06	8,133227E+06	2,762094E+09	2,761869E+09	1,626799E+07	5,523963E+09	5,540231E+09
-15	8,128178E+06	8,128259E+06	2,761901E+09	2,762004E+09	1,625644E+07	5,523905E+09	5,540162E+09
-14	8,131844E+06	8,133679E+06	2,761969E+09	2,761958E+09	1,626552E+07	5,523927E+09	5,540192E+09
-13	8,132776E+06	8,131056E+06	2,762076E+09	2,761927E+09	1,626383E+07	5,524003E+09	5,540267E+09
-12	8,128259E+06	8,128036E+06	2,761923E+09	2,762169E+09	1,625630E+07	5,524092E+09	5,540348E+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	8,133044E+06	8,134643E+06	2,762148E+09	2,762072E+09	1,626769E+07	5,524220E+09	5,540488E+09
-10	8,130845E+06	8,127603E+06	2,762180E+09	2,762157E+09	1,625845E+07	5,524337E+09	5,540596E+09
-9	8,128243E+06	8,129924E+06	2,762164E+09	2,762331E+09	1,625817E+07	5,524495E+09	5,540753E+09
-8	8,133348E+06	8,132782E+06	2,762428E+09	2,762231E+09	1,626613E+07	5,524658E+09	5,540925E+09
-7	8,129093E+06	8,125744E+06	2,762319E+09	2,762391E+09	1,625484E+07	5,524710E+09	5,540965E+09
-6	8,128343E+06	8,132292E+06	2,762318E+09	2,762394E+09	1,626063E+07	5,524712E+09	5,540972E+09
-5	8,133103E+06	8,129924E+06	2,762438E+09	2,762256E+09	1,626303E+07	5,524694E+09	5,540957E+09
-4	8,126457E+06	8,128102E+06	2,762213E+09	2,762390E+09	1,625456E+07	5,524604E+09	5,540858E+09
-3	8,131341E+06	8,133312E+06	2,762264E+09	2,762202E+09	1,626465E+07	5,524466E+09	5,540730E+09
-2	8,132513E+06	8,128212E+06	2,762181E+09	2,762065E+09	1,626072E+07	5,524246E+09	5,540507E+09
-1	8,127622E+06	8,129218E+06	2,761916E+09	2,762108E+09	1,625684E+07	5,524024E+09	5,540281E+09
1	8,135138E+06	8,133363E+06	2,761999E+09	2,761844E+09	1,626850E+07	5,523843E+09	5,540111E+09
2	8,130040E+06	8,129239E+06	2,761830E+09	2,761809E+09	1,625928E+07	5,523639E+09	5,539898E+09
3	8,129639E+06	8,132482E+06	2,761716E+09	2,761803E+09	1,626212E+07	5,523519E+09	5,539781E+09
4	8,134795E+06	8,134194E+06	2,761850E+09	2,761621E+09	1,626899E+07	5,523471E+09	5,539740E+09
5	8,128812E+06	8,128965E+06	2,761655E+09	2,761796E+09	1,625778E+07	5,523451E+09	5,539709E+09
6	8,133170E+06	8,133602E+06	2,761707E+09	2,761750E+09	1,626677E+07	5,523456E+09	5,539723E+09
7	8,133895E+06	8,131108E+06	2,761780E+09	2,761683E+09	1,626500E+07	5,523463E+09	5,539728E+09
8	8,129410E+06	8,128533E+06	2,761671E+09	2,761905E+09	1,625794E+07	5,523576E+09	5,539834E+09
9	8,133513E+06	8,135424E+06	2,761925E+09	2,761827E+09	1,626894E+07	5,523752E+09	5,540021E+09
10	8,131627E+06	8,128539E+06	2,761997E+09	2,761911E+09	1,626017E+07	5,523908E+09	5,540168E+09
11	8,128713E+06	8,130882E+06	2,761963E+09	2,762106E+09	1,625959E+07	5,524069E+09	5,540329E+09
12	8,133587E+06	8,133395E+06	2,762181E+09	2,762010E+09	1,626698E+07	5,524191E+09	5,540458E+09
13	8,129353E+06	8,127130E+06	2,762078E+09	2,762181E+09	1,625648E+07	5,524259E+09	5,540515E+09
14	8,129166E+06	8,132903E+06	2,762077E+09	2,762163E+09	1,626207E+07	5,524240E+09	5,540502E+09
15	8,134021E+06	8,130279E+06	2,762156E+09	2,761980E+09	1,626430E+07	5,524136E+09	5,540401E+09
16	8,127821E+06	8,128429E+06	2,761935E+09	2,762094E+09	1,625625E+07	5,524030E+09	5,540286E+09
17	8,132450E+06	8,133656E+06	2,761961E+09	2,761912E+09	1,626611E+07	5,523873E+09	5,540140E+09
18	8,133385E+06	8,129432E+06	2,761893E+09	2,761750E+09	1,626282E+07	5,523643E+09	5,539906E+09
19	8,128035E+06	8,130720E+06	2,761633E+09	2,761800E+09	1,625875E+07	5,523433E+09	5,539691E+09
20	8,134971E+06	8,134766E+06	2,761715E+09	2,761549E+09	1,626974E+07	5,523264E+09	5,539533E+09
21	8,130298E+06	8,130677E+06	2,761583E+09	2,761556E+09	1,626098E+07	5,523138E+09	5,539399E+09
22	8,131054E+06	8,132486E+06	2,761464E+09	2,761568E+09	1,626354E+07	5,523033E+09	5,539296E+09
23	8,136162E+06	8,133990E+06	2,761547E+09	2,761373E+09	1,627015E+07	5,522919E+09	5,539189E+09
24	8,130572E+06	8,129015E+06	2,761365E+09	2,761534E+09	1,625959E+07	5,522900E+09	5,539159E+09
25	8,133939E+06	8,134366E+06	2,761433E+09	2,761499E+09	1,626830E+07	5,522932E+09	5,539201E+09
26	8,134415E+06	8,132658E+06	2,761574E+09	2,761417E+09	1,626707E+07	5,522991E+09	5,539258E+09
27	8,129556E+06	8,129989E+06	2,761494E+09	2,761663E+09	1,625955E+07	5,523157E+09	5,539416E+09
28	8,133235E+06	8,136235E+06	2,761730E+09	2,761615E+09	1,626947E+07	5,523345E+09	5,539614E+09
29	8,132047E+06	8,129343E+06	2,761800E+09	2,761732E+09	1,626139E+07	5,523532E+09	5,539794E+09
30	8,129688E+06	8,130938E+06	2,761731E+09	2,761915E+09	1,626063E+07	5,523645E+09	5,539906E+09
31	8,134437E+06	8,133507E+06	2,761893E+09	2,761772E+09	1,626794E+07	5,523665E+09	5,539933E+09
32	8,130506E+06	8,127828E+06	2,761806E+09	2,761900E+09	1,625833E+07	5,523706E+09	5,539964E+09
33	8,129882E+06	8,133446E+06	2,761803E+09	2,761884E+09	1,626333E+07	5,523688E+09	5,539951E+09
34	8,135116E+06	8,131306E+06	2,761901E+09	2,761677E+09	1,626642E+07	5,523578E+09	5,539845E+09
35	8,128579E+06	8,129412E+06	2,761665E+09	2,761795E+09	1,625799E+07	5,523460E+09	5,539718E+09
36	8,132718E+06	8,134508E+06	2,761663E+09	2,761622E+09	1,626723E+07	5,523285E+09	5,539552E+09
37	8,133667E+06	8,131072E+06	2,761623E+09	2,761485E+09	1,626474E+07	5,523109E+09	5,539374E+09
38	8,129085E+06	8,131409E+06	2,761377E+09	2,761541E+09	1,626049E+07	5,522918E+09	5,539179E+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							
39	8,135925E+06	8,135141E+06	2,761423E+09	2,761280E+09	1,627107E+07	5,522703E+09	5,538974E+09
40	8,131962E+06	8,130889E+06	2,761299E+09	2,761282E+09	1,626285E+07	5,522581E+09	5,538844E+09
41	8,132347E+06	8,132573E+06	2,761162E+09	2,761311E+09	1,626492E+07	5,522473E+09	5,538737E+09
42	8,137100E+06	8,135145E+06	2,761264E+09	2,761084E+09	1,627224E+07	5,522348E+09	5,538620E+09
43	8,130887E+06	8,130481E+06	2,761111E+09	2,761248E+09	1,626137E+07	5,522359E+09	5,538621E+09
44	8,133437E+06	8,135841E+06	2,761200E+09	2,761234E+09	1,626928E+07	5,522434E+09	5,538704E+09
45	8,134463E+06	8,134023E+06	2,761390E+09	2,761206E+09	1,626849E+07	5,522597E+09	5,538865E+09
46	8,130736E+06	8,130086E+06	2,761308E+09	2,761478E+09	1,626082E+07	5,522786E+09	5,539046E+09
47	8,134253E+06	8,135925E+06	2,761478E+09	2,761415E+09	1,627018E+07	5,522893E+09	5,539163E+09
48	8,133661E+06	8,129400E+06	2,761550E+09	2,761508E+09	1,626306E+07	5,523058E+09	5,539321E+09
49	8,130382E+06	8,131503E+06	2,761475E+09	2,761683E+09	1,626189E+07	5,523158E+09	5,539420E+09
50	8,135106E+06	8,134776E+06	2,761666E+09	2,761497E+09	1,626988E+07	5,523162E+09	5,539432E+09
51	8,130902E+06	8,129223E+06	2,761584E+09	2,761623E+09	1,626013E+07	5,523207E+09	5,539467E+09
52	8,129982E+06	8,134200E+06	2,761544E+09	2,761617E+09	1,626418E+07	5,523161E+09	5,539425E+09
53	8,135779E+06	8,132339E+06	2,761640E+09	2,761432E+09	1,626812E+07	5,523072E+09	5,539340E+09
54	8,129790E+06	8,129803E+06	2,761382E+09	2,761537E+09	1,625959E+07	5,522918E+09	5,539178E+09
55	8,133474E+06	8,134864E+06	2,761340E+09	2,761332E+09	1,626834E+07	5,522672E+09	5,538941E+09
56	8,134839E+06	8,131918E+06	2,761333E+09	2,761178E+09	1,626676E+07	5,522511E+09	5,538777E+09
57	8,130126E+06	8,131904E+06	2,761088E+09	2,761255E+09	1,626203E+07	5,522343E+09	5,538605E+09
58	8,137155E+06	8,136246E+06	2,761145E+09	2,760978E+09	1,627340E+07	5,522123E+09	5,538396E+09
59	8,132898E+06	8,132059E+06	2,761016E+09	2,760991E+09	1,626496E+07	5,522006E+09	5,538271E+09
60	8,132517E+06	8,133704E+06	2,760871E+09	2,761036E+09	1,626622E+07	5,521907E+09	5,538173E+09
61	8,137114E+06	8,136885E+06	2,761031E+09	2,760842E+09	1,627400E+07	5,521873E+09	5,538147E+09
62	8,131654E+06	8,131095E+06	2,760909E+09	2,761021E+09	1,626275E+07	5,521930E+09	5,538193E+09
63	8,133982E+06	8,135985E+06	2,760975E+09	2,761016E+09	1,626997E+07	5,521991E+09	5,538261E+09
64	8,136015E+06	8,133962E+06	2,761171E+09	2,760993E+09	1,626998E+07	5,522165E+09	5,538435E+09
65	8,131988E+06	8,129984E+06	2,761062E+09	2,761279E+09	1,626197E+07	5,522341E+09	5,538603E+09
66	8,135246E+06	8,136861E+06	2,761230E+09	2,761173E+09	1,627211E+07	5,522403E+09	5,538675E+09
67	8,134124E+06	8,130688E+06	2,761309E+09	2,761246E+09	1,626481E+07	5,522555E+09	5,538819E+09
68	8,130026E+06	8,132708E+06	2,761231E+09	2,761419E+09	1,626273E+07	5,522650E+09	5,538912E+09
69	8,135426E+06	8,135892E+06	2,761446E+09	2,761257E+09	1,627132E+07	5,522703E+09	5,538975E+09
70	8,132130E+06	8,129515E+06	2,761345E+09	2,761383E+09	1,626165E+07	5,522728E+09	5,538989E+09
71	8,131035E+06	8,134175E+06	2,761241E+09	2,761355E+09	1,626521E+07	5,522597E+09	5,538862E+09
72	8,137315E+06	8,132990E+06	2,761344E+09	2,761148E+09	1,627031E+07	5,522492E+09	5,538763E+09
73	8,130633E+06	8,130688E+06	2,761094E+09	2,761255E+09	1,626132E+07	5,522349E+09	5,538610E+09
74	8,134300E+06	8,136364E+06	2,761077E+09	2,761020E+09	1,627066E+07	5,522097E+09	5,538367E+09
75	8,135363E+06	8,133426E+06	2,761076E+09	2,760878E+09	1,626879E+07	5,521954E+09	5,538222E+09
76	8,130408E+06	8,132797E+06	2,760801E+09	2,760975E+09	1,626320E+07	5,521776E+09	5,538039E+09
77	8,137727E+06	8,137345E+06	2,760865E+09	2,760726E+09	1,627507E+07	5,521591E+09	5,537866E+09
78	8,134049E+06	8,132647E+06	2,760732E+09	2,760733E+09	1,626670E+07	5,521465E+09	5,537732E+09
79	8,133167E+06	8,134094E+06	2,760569E+09	2,760760E+09	1,626726E+07	5,521330E+09	5,537597E+09
80	8,138239E+06	8,137449E+06	2,760779E+09	2,760576E+09	1,627569E+07	5,521355E+09	5,537630E+09
81	8,132911E+06	8,131171E+06	2,760680E+09	2,760792E+09	1,626408E+07	5,521471E+09	5,537735E+09
82	8,135184E+06	8,136673E+06	2,760752E+09	2,760778E+09	1,627186E+07	5,521530E+09	5,537802E+09
83	8,136937E+06	8,134725E+06	2,760945E+09	2,760766E+09	1,627166E+07	5,521711E+09	5,537983E+09
84	8,132062E+06	8,131083E+06	2,760821E+09	2,761053E+09	1,626315E+07	5,521874E+09	5,538137E+09
85	8,135203E+06	8,138365E+06	2,761026E+09	2,760962E+09	1,627357E+07	5,521989E+09	5,538262E+09
86	8,134818E+06	8,131472E+06	2,761108E+09	2,761027E+09	1,626629E+07	5,522135E+09	5,538402E+09
87	8,130457E+06	8,132927E+06	2,760983E+09	2,761183E+09	1,626338E+07	5,522166E+09	5,538429E+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							
88	8,136876E+06	8,135989E+06	2,761189E+09	2,761011E+09	1,627287E+07	5,522200E+09	5,538473E+09
89	8,133362E+06	8,129735E+06	2,761063E+09	2,761129E+09	1,626310E+07	5,522192E+09	5,538455E+09
90	8,132012E+06	8,135387E+06	2,760955E+09	2,761052E+09	1,626740E+07	5,522007E+09	5,538274E+09
91	8,137701E+06	8,134631E+06	2,761070E+09	2,760836E+09	1,627233E+07	5,521906E+09	5,538178E+09
92	8,130505E+06	8,132102E+06	2,760819E+09	2,760955E+09	1,626261E+07	5,521774E+09	5,538037E+09
93	8,134919E+06	8,137501E+06	2,760824E+09	2,760757E+09	1,627242E+07	5,521581E+09	5,537853E+09
94	8,136755E+06	8,133868E+06	2,760792E+09	2,760619E+09	1,627062E+07	5,521411E+09	5,537681E+09
95	8,131643E+06	8,132735E+06	2,760465E+09	2,760700E+09	1,626438E+07	5,521165E+09	5,537430E+09
96	8,139250E+06	8,137907E+06	2,760551E+09	2,760439E+09	1,627716E+07	5,520990E+09	5,537267E+09
97	8,135074E+06	8,133256E+06	2,760453E+09	2,760457E+09	1,626833E+07	5,520910E+09	5,537178E+09
98	8,134115E+06	8,135335E+06	2,760332E+09	2,760473E+09	1,626945E+07	5,520805E+09	5,537074E+09
99	8,138809E+06	8,138521E+06	2,760562E+09	2,760322E+09	1,627733E+07	5,520884E+09	5,537161E+09
100	8,133304E+06	8,131915E+06	2,760451E+09	2,760569E+09	1,626522E+07	5,521020E+09	5,537285E+09
101	8,135530E+06	8,137740E+06	2,760538E+09	2,760582E+09	1,627327E+07	5,521119E+09	5,537393E+09
102	8,137617E+06	8,135403E+06	2,760718E+09	2,760559E+09	1,627302E+07	5,521278E+09	5,537551E+09
103	8,132178E+06	8,131650E+06	2,760566E+09	2,760818E+09	1,626383E+07	5,521384E+09	5,537648E+09
104	8,136025E+06	8,138809E+06	2,760791E+09	2,760721E+09	1,627483E+07	5,521512E+09	5,537787E+09
105	8,135981E+06	8,131600E+06	2,760871E+09	2,760794E+09	1,626758E+07	5,521665E+09	5,537932E+09
106	8,131733E+06	8,133717E+06	2,760733E+09	2,760913E+09	1,626545E+07	5,521646E+09	5,537911E+09
107	8,137780E+06	8,136917E+06	2,760931E+09	2,760741E+09	1,627470E+07	5,521672E+09	5,537946E+09
108	8,133487E+06	8,131123E+06	2,760798E+09	2,760856E+09	1,626461E+07	5,521654E+09	5,537919E+09
109	8,132155E+06	8,136813E+06	2,760725E+09	2,760796E+09	1,626897E+07	5,521520E+09	5,537789E+09
110	8,138433E+06	8,135517E+06	2,760830E+09	2,760583E+09	1,627395E+07	5,521413E+09	5,537687E+09
111	8,131272E+06	8,132298E+06	2,760519E+09	2,760687E+09	1,626357E+07	5,521206E+09	5,537470E+09
112	8,136711E+06	8,137475E+06	2,760503E+09	2,760486E+09	1,627419E+07	5,520989E+09	5,537263E+09
113	8,138337E+06	8,134192E+06	2,760457E+09	2,760338E+09	1,627253E+07	5,520795E+09	5,537067E+09
114	8,132911E+06	8,133858E+06	2,760142E+09	2,760368E+09	1,626677E+07	5,520509E+09	5,536776E+09
115	8,139660E+06	8,139339E+06	2,760271E+09	2,760116E+09	1,627900E+07	5,520387E+09	5,536666E+09
116	8,135069E+06	8,134553E+06	2,760205E+09	2,760168E+09	1,626962E+07	5,520374E+09	5,536643E+09
117	8,134543E+06	8,136456E+06	2,760133E+09	2,760242E+09	1,627100E+07	5,520375E+09	5,536646E+09
118	8,139646E+06	8,139134E+06	2,760346E+09	2,760122E+09	1,627878E+07	5,520468E+09	5,536747E+09
119	8,134044E+06	8,132151E+06	2,760193E+09	2,760361E+09	1,626619E+07	5,520554E+09	5,536820E+09
120	8,136432E+06	8,138261E+06	2,760292E+09	2,760369E+09	1,627469E+07	5,520661E+09	5,536936E+09
121	8,138459E+06	8,135773E+06	2,760489E+09	2,760340E+09	1,627423E+07	5,520829E+09	5,537103E+09
122	8,132985E+06	8,132630E+06	2,760348E+09	2,760559E+09	1,626561E+07	5,520907E+09	5,537172E+09
123	8,136623E+06	8,139408E+06	2,760570E+09	2,760473E+09	1,627603E+07	5,521043E+09	5,537319E+09
124	8,136471E+06	8,132254E+06	2,760627E+09	2,760553E+09	1,626872E+07	5,521181E+09	5,537450E+09
125	8,132335E+06	8,134795E+06	2,760503E+09	2,760681E+09	1,626713E+07	5,521184E+09	5,537451E+09
126	8,138402E+06	8,137774E+06	2,760676E+09	2,760494E+09	1,627618E+07	5,521170E+09	5,537446E+09
127	8,133800E+06	8,131747E+06	2,760513E+09	2,760583E+09	1,626555E+07	5,521096E+09	5,537362E+09
128	8,133364E+06	8,137093E+06	2,760442E+09	2,760524E+09	1,627046E+07	5,520966E+09	5,537236E+09
129	8,139912E+06	8,135640E+06	2,760528E+09	2,760313E+09	1,627555E+07	5,520841E+09	5,537116E+09
130	8,132897E+06	8,133137E+06	2,760197E+09	2,760370E+09	1,626603E+07	5,520567E+09	5,536833E+09
131	8,137870E+06	8,138455E+06	2,760180E+09	2,760165E+09	1,627633E+07	5,520345E+09	5,536622E+09
132	8,138474E+06	8,135907E+06	2,760156E+09	2,760020E+09	1,627438E+07	5,520176E+09	5,536451E+09
133	8,133125E+06	8,135501E+06	2,759915E+09	2,760080E+09	1,626863E+07	5,519995E+09	5,536264E+09
134	8,139871E+06	8,140479E+06	2,760058E+09	2,759867E+09	1,628035E+07	5,519925E+09	5,536205E+09
135	8,135537E+06	8,134800E+06	2,759962E+09	2,759939E+09	1,627034E+07	5,519901E+09	5,536171E+09
136	8,135888E+06	8,136488E+06	2,759880E+09	2,760036E+09	1,627238E+07	5,519916E+09	5,536188E+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							
137	8,140865E+06	8,139290E+06	2,760078E+09	2,759916E+09	1,628016E+07	5,519994E+09	5,536274E+09
138	8,135151E+06	8,133127E+06	2,759927E+09	2,760099E+09	1,626828E+07	5,520026E+09	5,536294E+09
139	8,136783E+06	8,139090E+06	2,760053E+09	2,760107E+09	1,627587E+07	5,520160E+09	5,536436E+09
140	8,138668E+06	8,136610E+06	2,760265E+09	2,760091E+09	1,627528E+07	5,520357E+09	5,536632E+09
141	8,133598E+06	8,133411E+06	2,760157E+09	2,760334E+09	1,626701E+07	5,520491E+09	5,536758E+09
142	8,137377E+06	8,139857E+06	2,760352E+09	2,760263E+09	1,627723E+07	5,520615E+09	5,536892E+09
143	8,137158E+06	8,132700E+06	2,760366E+09	2,760319E+09	1,626986E+07	5,520686E+09	5,536955E+09
144	8,133226E+06	8,135492E+06	2,760246E+09	2,760442E+09	1,626872E+07	5,520688E+09	5,536957E+09
145	8,139327E+06	8,138283E+06	2,760421E+09	2,760249E+09	1,627761E+07	5,520670E+09	5,536947E+09
146	8,134859E+06	8,132847E+06	2,760243E+09	2,760287E+09	1,626771E+07	5,520530E+09	5,536798E+09
147	8,134329E+06	8,137568E+06	2,760155E+09	2,760230E+09	1,627190E+07	5,520385E+09	5,536657E+09
148	8,140527E+06	8,136679E+06	2,760215E+09	2,760013E+09	1,627721E+07	5,520228E+09	5,536505E+09
149	8,133523E+06	8,134566E+06	2,759915E+09	2,760066E+09	1,626809E+07	5,519981E+09	5,536249E+09
150	8,138173E+06	8,139784E+06	2,759899E+09	2,759865E+09	1,627796E+07	5,519764E+09	5,536041E+09
151	8,138516E+06	8,136858E+06	2,759874E+09	2,759721E+09	1,627537E+07	5,519595E+09	5,535870E+09
152	8,134247E+06	8,135840E+06	2,759656E+09	2,759822E+09	1,627009E+07	5,519478E+09	5,535748E+09
153	8,141242E+06	8,140488E+06	2,759793E+09	2,759640E+09	1,628173E+07	5,519434E+09	5,535716E+09
154	8,137249E+06	8,135322E+06	2,759684E+09	2,759683E+09	1,627257E+07	5,519367E+09	5,535640E+09
155	8,137003E+06	8,137041E+06	2,759610E+09	2,759783E+09	1,627404E+07	5,519394E+09	5,535668E+09
156	8,141010E+06	8,140473E+06	2,759825E+09	2,759666E+09	1,628148E+07	5,519490E+09	5,535772E+09
157	8,135522E+06	8,134389E+06	2,759741E+09	2,759858E+09	1,626991E+07	5,519599E+09	5,535869E+09
158	8,136929E+06	8,139941E+06	2,759857E+09	2,759889E+09	1,627687E+07	5,519746E+09	5,536023E+09
159	8,139157E+06	8,136777E+06	2,760035E+09	2,759876E+09	1,627593E+07	5,519911E+09	5,536187E+09
160	8,134836E+06	8,133677E+06	2,759918E+09	2,760128E+09	1,626851E+07	5,520046E+09	5,536314E+09
161	8,138381E+06	8,140112E+06	2,760093E+09	2,760044E+09	1,627849E+07	5,520137E+09	5,536415E+09
162	8,138129E+06	8,133865E+06	2,760101E+09	2,760037E+09	1,627199E+07	5,520139E+09	5,536411E+09
163	8,133694E+06	8,136305E+06	2,759991E+09	2,760153E+09	1,627000E+07	5,520143E+09	5,536413E+09
164	8,139669E+06	8,139237E+06	2,760157E+09	2,759967E+09	1,627891E+07	5,520124E+09	5,536403E+09
165	8,135688E+06	8,134037E+06	2,759997E+09	2,760010E+09	1,626972E+07	5,520007E+09	5,536277E+09
166	8,135124E+06	8,138406E+06	2,759872E+09	2,759959E+09	1,627353E+07	5,519831E+09	5,536104E+09
167	8,141057E+06	8,137582E+06	2,759902E+09	2,759721E+09	1,627864E+07	5,519623E+09	5,535902E+09
168	8,134465E+06	8,135408E+06	2,759627E+09	2,759780E+09	1,626987E+07	5,519407E+09	5,535677E+09
169	8,139115E+06	8,140212E+06	2,759630E+09	2,759594E+09	1,627933E+07	5,519224E+09	5,535503E+09
170	8,139725E+06	8,137682E+06	2,759601E+09	2,759431E+09	1,627741E+07	5,519031E+09	5,535309E+09
171	8,135580E+06	8,135991E+06	2,759383E+09	2,759558E+09	1,627157E+07	5,518941E+09	5,535212E+09
172	8,141981E+06	8,141387E+06	2,759507E+09	2,759390E+09	1,628337E+07	5,518897E+09	5,535181E+09
173	8,138073E+06	8,136572E+06	2,759435E+09	2,759427E+09	1,627465E+07	5,518862E+09	5,535136E+09
174	8,137133E+06	8,138225E+06	2,759368E+09	2,759534E+09	1,627536E+07	5,518902E+09	5,535178E+09
175	8,140928E+06	8,141234E+06	2,759583E+09	2,759413E+09	1,628216E+07	5,518996E+09	5,535278E+09
176	8,136385E+06	8,134702E+06	2,759521E+09	2,759637E+09	1,627109E+07	5,519158E+09	5,535429E+09
177	8,138034E+06	8,139980E+06	2,759631E+09	2,759688E+09	1,627801E+07	5,519320E+09	5,535598E+09
178	8,140655E+06	8,137429E+06	2,759786E+09	2,759636E+09	1,627808E+07	5,519422E+09	5,535700E+09
179	8,135796E+06	8,134435E+06	2,759679E+09	2,759880E+09	1,627023E+07	5,519559E+09	5,535829E+09
180	8,138449E+06	8,141391E+06	2,759860E+09	2,759793E+09	1,627984E+07	5,519653E+09	5,535933E+09
181	8,138506E+06	8,135286E+06	2,759911E+09	2,759781E+09	1,627379E+07	5,519692E+09	5,535965E+09
182	8,133803E+06	8,137178E+06	2,759764E+09	2,759910E+09	1,627098E+07	5,519675E+09	5,535946E+09
183	8,140247E+06	8,139506E+06	2,759872E+09	2,759711E+09	1,627975E+07	5,519583E+09	5,535863E+09
184	8,136995E+06	8,134601E+06	2,759691E+09	2,759750E+09	1,627160E+07	5,519440E+09	5,535712E+09
185	8,136464E+06	8,138792E+06	2,759550E+09	2,759678E+09	1,627526E+07	5,519227E+09	5,535503E+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							
186	8,142234E+06	8,138751E+06	2,759581E+09	2,759387E+09	1,628099E+07	5,518968E+09	5,535249E+09
187	8,135472E+06	8,136020E+06	2,759340E+09	2,759455E+09	1,627149E+07	5,518794E+09	5,535066E+09
188	8,139667E+06	8,141010E+06	2,759346E+09	2,759302E+09	1,628068E+07	5,518647E+09	5,534928E+09
189	8,140751E+06	8,138809E+06	2,759353E+09	2,759160E+09	1,627956E+07	5,518513E+09	5,534792E+09
190	8,136296E+06	8,137040E+06	2,759115E+09	2,759307E+09	1,627334E+07	5,518422E+09	5,534695E+09
191	8,142146E+06	8,142478E+06	2,759227E+09	2,759134E+09	1,628462E+07	5,518360E+09	5,534645E+09
192	8,138767E+06	8,137566E+06	2,759191E+09	2,759189E+09	1,627633E+07	5,518380E+09	5,534656E+09
193	8,137860E+06	8,138597E+06	2,759141E+09	2,759310E+09	1,627646E+07	5,518451E+09	5,534727E+09
194	8,141966E+06	8,141719E+06	2,759348E+09	2,759169E+09	1,628368E+07	5,518517E+09	5,534800E+09
195	8,137644E+06	8,134700E+06	2,759293E+09	2,759405E+09	1,627234E+07	5,518698E+09	5,534970E+09
196	8,138520E+06	8,140841E+06	2,759392E+09	2,759464E+09	1,627936E+07	5,518856E+09	5,535135E+09
197	8,141296E+06	8,138774E+06	2,759583E+09	2,759397E+09	1,628007E+07	5,518980E+09	5,535260E+09
198	8,135714E+06	8,135797E+06	2,759467E+09	2,759643E+09	1,627151E+07	5,519111E+09	5,535382E+09
199	8,138432E+06	8,142017E+06	2,759622E+09	2,759548E+09	1,628045E+07	5,519170E+09	5,535451E+09
200	8,139570E+06	8,135690E+06	2,759658E+09	2,759553E+09	1,627526E+07	5,519211E+09	5,535487E+09
201	8,135228E+06	8,137106E+06	2,759479E+09	2,759675E+09	1,627233E+07	5,519154E+09	5,535426E+09
202	8,141965E+06	8,140078E+06	2,759548E+09	2,759417E+09	1,628204E+07	5,518965E+09	5,535247E+09
203	8,138191E+06	8,135396E+06	2,759384E+09	2,759433E+09	1,627359E+07	5,518817E+09	5,535090E+09
204	8,136867E+06	8,140092E+06	2,759264E+09	2,759363E+09	1,627696E+07	5,518628E+09	5,534905E+09
205	8,142784E+06	8,140367E+06	2,759344E+09	2,759078E+09	1,628315E+07	5,518422E+09	5,534705E+09
206	8,135756E+06	8,137084E+06	2,759089E+09	2,759183E+09	1,627284E+07	5,518272E+09	5,534545E+09
207	8,140180E+06	8,141624E+06	2,759059E+09	2,759041E+09	1,628180E+07	5,518100E+09	5,534382E+09
208	8,141767E+06	8,139655E+06	2,759058E+09	2,758919E+09	1,628142E+07	5,517977E+09	5,534259E+09
209	8,137440E+06	8,137564E+06	2,758823E+09	2,759058E+09	1,627500E+07	5,517881E+09	5,534156E+09
210	8,143059E+06	8,143324E+06	2,758936E+09	2,758844E+09	1,628638E+07	5,517780E+09	5,534066E+09
211	8,139835E+06	8,137822E+06	2,758941E+09	2,758910E+09	1,627766E+07	5,517851E+09	5,534129E+09
212	8,138497E+06	8,139214E+06	2,758903E+09	2,759064E+09	1,627771E+07	5,517968E+09	5,534246E+09
213	8,142918E+06	8,142622E+06	2,759148E+09	2,758939E+09	1,628554E+07	5,518088E+09	5,534373E+09
214	8,138173E+06	8,135749E+06	2,759085E+09	2,759193E+09	1,627392E+07	5,518279E+09	5,534553E+09
215	8,138464E+06	8,141852E+06	2,759169E+09	2,759245E+09	1,628032E+07	5,518414E+09	5,534695E+09
216	8,141784E+06	8,139615E+06	2,759373E+09	2,759195E+09	1,628140E+07	5,518568E+09	5,534849E+09
217	8,136521E+06	8,136109E+06	2,759243E+09	2,759434E+09	1,627263E+07	5,518677E+09	5,534950E+09
218	8,139664E+06	8,142118E+06	2,759347E+09	2,759298E+09	1,628178E+07	5,518645E+09	5,534927E+09
219	8,141108E+06	8,135827E+06	2,759369E+09	2,759281E+09	1,627693E+07	5,518650E+09	5,534927E+09
220	8,135996E+06	8,138080E+06	2,759168E+09	2,759383E+09	1,627408E+07	5,518551E+09	5,534825E+09
221	8,142683E+06	8,141704E+06	2,759276E+09	2,759097E+09	1,628439E+07	5,518374E+09	5,534658E+09
222	8,138089E+06	8,137104E+06	2,759124E+09	2,759116E+09	1,627519E+07	5,518240E+09	5,534515E+09
223	8,136879E+06	8,140977E+06	2,758994E+09	2,759063E+09	1,627786E+07	5,518057E+09	5,534334E+09
224	8,143597E+06	8,141141E+06	2,759071E+09	2,758829E+09	1,628474E+07	5,517900E+09	5,534185E+09
225	8,137303E+06	8,137273E+06	2,758795E+09	2,758942E+09	1,627458E+07	5,517737E+09	5,534011E+09
226	8,141834E+06	8,142133E+06	2,758733E+09	2,758762E+09	1,628397E+07	5,517496E+09	5,533780E+09
227	8,143106E+06	8,140345E+06	2,758761E+09	2,758627E+09	1,628345E+07	5,517388E+09	5,533672E+09
228	8,138003E+06	8,138616E+06	2,758557E+09	2,758775E+09	1,627662E+07	5,517333E+09	5,533609E+09
229	8,143568E+06	8,144539E+06	2,758724E+09	2,758573E+09	1,628811E+07	5,517297E+09	5,533585E+09
230	8,140107E+06	8,138687E+06	2,758732E+09	2,758676E+09	1,627879E+07	5,517408E+09	5,533687E+09
231	8,138779E+06	8,139857E+06	2,758675E+09	2,758847E+09	1,627864E+07	5,517522E+09	5,533800E+09
232	8,143574E+06	8,143480E+06	2,758917E+09	2,758751E+09	1,628705E+07	5,517669E+09	5,533956E+09
233	8,139123E+06	8,136316E+06	2,758857E+09	2,758992E+09	1,627544E+07	5,517850E+09	5,534125E+09
234	8,139175E+06	8,142355E+06	2,758920E+09	2,759000E+09	1,628153E+07	5,517920E+09	5,534202E+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	8,142856E+06	8,139561E+06	2,759129E+09	2,758940E+09	1,628242E+07	5,518069E+09	5,534352E+09
236	8,137238E+06	8,136665E+06	2,758982E+09	2,759183E+09	1,627390E+07	5,518165E+09	5,534439E+09
237	8,140729E+06	8,143045E+06	2,759093E+09	2,759025E+09	1,628377E+07	5,518118E+09	5,534402E+09
238	8,141480E+06	8,137330E+06	2,759106E+09	2,759001E+09	1,627881E+07	5,518107E+09	5,534386E+09
239	8,136002E+06	8,139449E+06	2,758902E+09	2,759089E+09	1,627545E+07	5,517992E+09	5,534267E+09
240	8,143037E+06	8,142893E+06	2,759026E+09	2,758835E+09	1,628593E+07	5,517861E+09	5,534147E+09
241	8,139009E+06	8,137527E+06	2,758868E+09	2,758863E+09	1,627654E+07	5,517731E+09	5,534007E+09
242	8,138352E+06	8,140881E+06	2,758685E+09	2,758788E+09	1,627923E+07	5,517473E+09	5,533753E+09
243	8,145273E+06	8,141255E+06	2,758751E+09	2,758545E+09	1,628653E+07	5,517295E+09	5,533582E+09
244	8,138410E+06	8,138276E+06	2,758465E+09	2,758649E+09	1,627669E+07	5,517114E+09	5,533390E+09
245	8,142733E+06	8,143638E+06	2,758448E+09	2,758446E+09	1,628637E+07	5,516894E+09	5,533181E+09
246	8,143090E+06	8,141943E+06	2,758504E+09	2,758325E+09	1,628503E+07	5,516829E+09	5,533114E+09
247	8,138127E+06	8,139389E+06	2,758310E+09	2,758497E+09	1,627752E+07	5,516806E+09	5,533084E+09
248	8,144092E+06	8,145226E+06	2,758491E+09	2,758361E+09	1,628932E+07	5,516851E+09	5,533141E+09
249	8,141429E+06	8,138938E+06	2,758502E+09	2,758479E+09	1,628037E+07	5,516981E+09	5,533261E+09
250	8,139912E+06	8,140333E+06	2,758422E+09	2,758624E+09	1,628024E+07	5,517046E+09	5,533326E+09
251	8,144550E+06	8,143976E+06	2,758690E+09	2,758520E+09	1,628853E+07	5,517210E+09	5,533499E+09
252	8,139626E+06	8,137250E+06	2,758637E+09	2,758758E+09	1,627688E+07	5,517395E+09	5,533672E+09
253	8,139682E+06	8,143193E+06	2,758718E+09	2,758755E+09	1,628287E+07	5,517473E+09	5,533756E+09
254	8,143156E+06	8,140377E+06	2,758903E+09	2,758701E+09	1,628353E+07	5,517604E+09	5,533888E+09
255	8,137482E+06	8,137467E+06	2,758720E+09	2,758928E+09	1,627495E+07	5,517648E+09	5,533923E+09
256	8,141254E+06	8,144043E+06	2,758823E+09	2,758788E+09	1,628530E+07	5,517611E+09	5,533896E+09
257	8,142395E+06	8,138151E+06	2,758840E+09	2,758739E+09	1,628055E+07	5,517579E+09	5,533860E+09
258	8,136987E+06	8,139816E+06	2,758616E+09	2,758792E+09	1,627680E+07	5,517408E+09	5,533685E+09
259	8,144370E+06	8,142874E+06	2,758740E+09	2,758543E+09	1,628724E+07	5,517283E+09	5,533570E+09
260	8,140173E+06	8,138145E+06	2,758565E+09	2,758582E+09	1,627832E+07	5,517147E+09	5,533425E+09
261	8,139753E+06	8,141853E+06	2,758390E+09	2,758491E+09	1,628161E+07	5,516881E+09	5,533162E+09
262	8,145623E+06	8,143032E+06	2,758456E+09	2,758245E+09	1,628865E+07	5,516701E+09	5,532990E+09
263	8,138479E+06	8,139818E+06	2,758184E+09	2,758341E+09	1,627830E+07	5,516526E+09	5,532804E+09
264	8,142951E+06	8,144902E+06	2,758195E+09	2,758186E+09	1,628785E+07	5,516381E+09	5,532669E+09
265	8,143900E+06	8,142439E+06	2,758264E+09	2,758087E+09	1,628634E+07	5,516351E+09	5,532637E+09
266	8,139412E+06	8,139255E+06	2,758044E+09	2,758253E+09	1,627867E+07	5,516298E+09	5,532576E+09
267	8,145341E+06	8,145236E+06	2,758228E+09	2,758125E+09	1,629058E+07	5,516353E+09	5,532644E+09
268	8,142398E+06	8,139772E+06	2,758248E+09	2,758246E+09	1,628217E+07	5,516494E+09	5,532776E+09
269	8,140539E+06	8,141637E+06	2,758205E+09	2,758366E+09	1,628218E+07	5,516570E+09	5,532853E+09
270	8,144370E+06	8,145165E+06	2,758483E+09	2,758273E+09	1,628954E+07	5,516756E+09	5,533045E+09
271	8,139769E+06	8,137952E+06	2,758417E+09	2,758517E+09	1,627772E+07	5,516934E+09	5,533212E+09
272	8,140201E+06	8,143629E+06	2,758479E+09	2,758556E+09	1,628383E+07	5,517035E+09	5,533319E+09
273	8,144536E+06	8,140661E+06	2,758650E+09	2,758487E+09	1,628520E+07	5,517137E+09	5,533422E+09
274	8,138686E+06	8,137913E+06	2,758438E+09	2,758663E+09	1,627660E+07	5,517102E+09	5,533378E+09
275	8,142289E+06	8,144442E+06	2,758560E+09	2,758506E+09	1,628673E+07	5,517066E+09	5,533353E+09
276	8,143124E+06	8,139166E+06	2,758583E+09	2,758458E+09	1,628229E+07	5,517040E+09	5,533323E+09
277	8,137866E+06	8,140770E+06	2,758366E+09	2,758499E+09	1,627864E+07	5,516865E+09	5,533143E+09
278	8,144748E+06	8,143998E+06	2,758464E+09	2,758262E+09	1,628875E+07	5,516725E+09	5,533014E+09
279	8,140601E+06	8,139453E+06	2,758257E+09	2,758287E+09	1,628005E+07	5,516544E+09	5,532824E+09
280	8,140275E+06	8,143159E+06	2,758084E+09	2,758220E+09	1,628343E+07	5,516304E+09	5,532587E+09
281	8,146362E+06	8,144183E+06	2,758168E+09	2,757958E+09	1,629054E+07	5,516126E+09	5,532416E+09
282	8,139425E+06	8,140039E+06	2,757889E+09	2,758034E+09	1,627946E+07	5,515923E+09	5,532202E+09
283	8,144253E+06	8,144763E+06	2,757918E+09	2,757905E+09	1,628902E+07	5,515822E+09	5,532111E+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	8,145154E+06	8,142893E+06	2,757990E+09	2,757833E+09	1,628805E+07	5,515823E+09	5,532111E+09
285	8,140817E+06	8,140157E+06	2,757801E+09	2,757996E+09	1,628097E+07	5,515797E+09	5,532078E+09
286	8,145486E+06	8,146840E+06	2,758003E+09	2,757886E+09	1,629233E+07	5,515889E+09	5,532181E+09
287	8,142465E+06	8,141029E+06	2,758037E+09	2,758007E+09	1,628349E+07	5,516044E+09	5,532328E+09
288	8,140575E+06	8,142492E+06	2,758008E+09	2,758174E+09	1,628307E+07	5,516182E+09	5,532465E+09
289	8,145180E+06	8,145238E+06	2,758269E+09	2,758082E+09	1,629042E+07	5,516351E+09	5,532642E+09
290	8,141019E+06	8,137667E+06	2,758155E+09	2,758290E+09	1,627869E+07	5,516446E+09	5,532724E+09
291	8,141489E+06	8,143656E+06	2,758203E+09	2,758312E+09	1,628514E+07	5,516515E+09	5,532800E+09
292	8,145568E+06	8,141697E+06	2,758377E+09	2,758223E+09	1,628727E+07	5,516599E+09	5,532886E+09
293	8,139394E+06	8,139407E+06	2,758200E+09	2,758360E+09	1,627880E+07	5,516560E+09	5,532839E+09
294	8,142165E+06	8,145740E+06	2,758325E+09	2,758215E+09	1,628790E+07	5,516540E+09	5,532828E+09
295	8,143307E+06	8,140240E+06	2,758328E+09	2,758175E+09	1,628355E+07	5,516503E+09	5,532786E+09
296	8,138429E+06	8,141573E+06	2,758090E+09	2,758259E+09	1,628000E+07	5,516349E+09	5,532629E+09
297	8,145993E+06	8,144748E+06	2,758169E+09	2,758009E+09	1,629074E+07	5,516177E+09	5,532468E+09
298	8,141826E+06	8,140173E+06	2,757937E+09	2,757987E+09	1,628200E+07	5,515924E+09	5,532206E+09
299	8,141577E+06	8,143517E+06	2,757779E+09	2,757911E+09	1,628509E+07	5,515689E+09	5,531974E+09
300	8,147374E+06	8,144977E+06	2,757879E+09	2,757661E+09	1,629235E+07	5,515540E+09	5,531832E+09
301	8,140705E+06	8,140704E+06	2,757625E+09	2,757731E+09	1,628141E+07	5,515356E+09	5,531637E+09
302	8,144642E+06	8,145681E+06	2,757655E+09	2,757635E+09	1,629032E+07	5,515291E+09	5,531581E+09
303	8,145580E+06	8,144107E+06	2,757728E+09	2,757576E+09	1,628969E+07	5,515304E+09	5,531593E+09
304	8,141218E+06	8,141416E+06	2,757561E+09	2,757780E+09	1,628263E+07	5,515342E+09	5,531624E+09
305	8,146021E+06	8,147790E+06	2,757782E+09	2,757668E+09	1,629381E+07	5,515450E+09	5,531743E+09
306	8,143414E+06	8,140993E+06	2,757794E+09	2,757769E+09	1,628441E+07	5,515562E+09	5,531847E+09
307	8,141742E+06	8,142190E+06	2,757758E+09	2,757945E+09	1,628393E+07	5,515703E+09	5,531987E+09
308	8,146378E+06	8,145551E+06	2,758009E+09	2,757855E+09	1,629193E+07	5,515864E+09	5,532156E+09
309	8,142192E+06	8,138818E+06	2,757915E+09	2,758024E+09	1,628101E+07	5,515939E+09	5,532220E+09
310	8,141399E+06	8,145399E+06	2,757982E+09	2,758045E+09	1,628680E+07	5,516026E+09	5,532313E+09
311	8,145550E+06	8,143335E+06	2,758163E+09	2,757953E+09	1,628888E+07	5,516115E+09	5,532404E+09
312	8,139429E+06	8,140553E+06	2,757992E+09	2,758136E+09	1,627998E+07	5,516128E+09	5,532408E+09
313	8,143008E+06	8,146049E+06	2,758086E+09	2,757993E+09	1,628906E+07	5,516079E+09	5,532368E+09
314	8,144603E+06	8,140143E+06	2,758019E+09	2,757917E+09	1,628475E+07	5,515935E+09	5,532220E+09
315	8,139997E+06	8,141638E+06	2,757757E+09	2,757978E+09	1,628164E+07	5,515736E+09	5,532017E+09
316	8,147331E+06	8,145695E+06	2,757833E+09	2,757700E+09	1,629303E+07	5,515533E+09	5,531826E+09
317	8,142922E+06	8,141537E+06	2,757637E+09	2,757636E+09	1,628446E+07	5,515273E+09	5,531557E+09
318	8,141987E+06	8,144642E+06	2,757500E+09	2,757583E+09	1,628663E+07	5,515083E+09	5,531369E+09
319	8,147830E+06	8,146036E+06	2,757600E+09	2,757363E+09	1,629387E+07	5,514963E+09	5,531256E+09
320	8,141455E+06	8,141555E+06	2,757366E+09	2,757496E+09	1,628301E+07	5,514863E+09	5,531146E+09
321	8,145563E+06	8,146632E+06	2,757405E+09	2,757412E+09	1,629219E+07	5,514817E+09	5,531109E+09
322	8,146425E+06	8,144714E+06	2,757469E+09	2,757333E+09	1,629114E+07	5,514802E+09	5,531094E+09
323	8,142241E+06	8,141803E+06	2,757323E+09	2,757544E+09	1,628404E+07	5,514867E+09	5,531151E+09
324	8,146793E+06	8,148330E+06	2,757547E+09	2,757442E+09	1,629512E+07	5,514989E+09	5,531284E+09
325	8,144561E+06	8,141547E+06	2,757564E+09	2,757518E+09	1,628611E+07	5,515082E+09	5,531368E+09
326	8,142019E+06	8,143136E+06	2,757520E+09	2,757702E+09	1,628515E+07	5,515222E+09	5,531507E+09
327	8,146618E+06	8,146850E+06	2,757765E+09	2,757607E+09	1,629347E+07	5,515373E+09	5,531666E+09
328	8,142336E+06	8,140254E+06	2,757703E+09	2,757798E+09	1,628259E+07	5,515501E+09	5,531784E+09
329	8,141747E+06	8,146291E+06	2,757775E+09	2,757815E+09	1,628804E+07	5,515591E+09	5,531879E+09
330	8,146492E+06	8,143222E+06	2,757914E+09	2,757707E+09	1,628971E+07	5,515620E+09	5,531910E+09
331	8,140905E+06	8,140239E+06	2,757708E+09	2,757890E+09	1,628114E+07	5,515598E+09	5,531879E+09
332	8,144734E+06	8,146196E+06	2,757771E+09	2,757738E+09	1,629093E+07	5,515509E+09	5,531800E+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	8,146205E+06	8,141447E+06	2,757706E+09	2,757602E+09	1,628765E+07	5,515308E+09	5,531596E+09
334	8,140400E+06	8,143229E+06	2,757461E+09	2,757651E+09	1,628363E+07	5,515112E+09	5,531396E+09
335	8,147596E+06	8,147321E+06	2,757550E+09	2,757374E+09	1,629492E+07	5,514924E+09	5,531219E+09
336	8,143145E+06	8,142770E+06	2,757382E+09	2,757355E+09	1,628591E+07	5,514737E+09	5,531023E+09
337	8,142795E+06	8,145216E+06	2,757241E+09	2,757324E+09	1,628801E+07	5,514565E+09	5,530853E+09
338	8,148808E+06	8,146288E+06	2,757300E+09	2,757101E+09	1,629510E+07	5,514401E+09	5,530696E+09
339	8,142827E+06	8,141997E+06	2,757072E+09	2,757241E+09	1,628482E+07	5,514313E+09	5,530598E+09
340	8,146549E+06	8,147628E+06	2,757130E+09	2,757157E+09	1,629418E+07	5,514287E+09	5,530581E+09
341	8,147353E+06	8,145841E+06	2,757224E+09	2,757049E+09	1,629319E+07	5,514274E+09	5,530567E+09
342	8,142541E+06	8,142642E+06	2,757093E+09	2,757282E+09	1,628518E+07	5,514375E+09	5,530660E+09
343	8,147105E+06	8,149084E+06	2,757304E+09	2,757201E+09	1,629619E+07	5,514506E+09	5,530802E+09
344	8,145135E+06	8,142352E+06	2,757347E+09	2,757315E+09	1,628749E+07	5,514662E+09	5,530949E+09
345	8,142665E+06	8,144196E+06	2,757312E+09	2,757497E+09	1,628686E+07	5,514809E+09	5,531096E+09
346	8,147265E+06	8,147244E+06	2,757536E+09	2,757380E+09	1,629451E+07	5,514915E+09	5,531210E+09
347	8,143465E+06	8,140497E+06	2,757479E+09	2,757573E+09	1,628396E+07	5,515052E+09	5,531336E+09
348	8,142858E+06	8,146456E+06	2,757531E+09	2,757589E+09	1,628931E+07	5,515120E+09	5,531409E+09
349	8,147841E+06	8,143629E+06	2,757644E+09	2,757438E+09	1,629147E+07	5,515081E+09	5,531373E+09
350	8,141528E+06	8,141246E+06	2,757416E+09	2,757607E+09	1,628277E+07	5,515023E+09	5,531306E+09
351	8,145266E+06	8,147594E+06	2,757459E+09	2,757434E+09	1,629286E+07	5,514893E+09	5,531186E+09
352	8,146418E+06	8,143293E+06	2,757431E+09	2,757306E+09	1,628971E+07	5,514736E+09	5,531026E+09
353	8,140861E+06	8,144416E+06	2,757199E+09	2,757350E+09	1,628528E+07	5,514548E+09	5,530834E+09
354	8,148340E+06	8,147500E+06	2,757255E+09	2,757074E+09	1,629584E+07	5,514329E+09	5,530625E+09
355	8,144473E+06	8,142857E+06	2,757082E+09	2,757080E+09	1,628733E+07	5,514162E+09	5,530449E+09
356	8,144345E+06	8,145622E+06	2,756939E+09	2,757063E+09	1,628997E+07	5,514003E+09	5,530293E+09
357	8,150000E+06	8,147650E+06	2,757016E+09	2,756811E+09	1,629765E+07	5,513826E+09	5,530124E+09
358	8,143345E+06	8,143433E+06	2,756819E+09	2,756959E+09	1,628678E+07	5,513779E+09	5,530065E+09
359	8,146778E+06	8,148871E+06	2,756889E+09	2,756894E+09	1,629565E+07	5,513783E+09	5,530079E+09
360	8,147660E+06	8,146678E+06	2,757010E+09	2,756830E+09	1,629434E+07	5,513840E+09	5,530134E+09
361	8,143241E+06	8,142957E+06	2,756868E+09	2,757073E+09	1,628620E+07	5,513941E+09	5,530227E+09
362	8,147884E+06	8,148960E+06	2,757038E+09	2,756982E+09	1,629684E+07	5,514020E+09	5,530316E+09
363	8,146405E+06	8,142678E+06	2,757087E+09	2,757088E+09	1,628908E+07	5,514175E+09	5,530464E+09
364	8,143677E+06	8,144965E+06	2,757075E+09	2,757260E+09	1,628864E+07	5,514336E+09	5,530624E+09
365	8,148221E+06	8,148102E+06	2,757308E+09	2,757110E+09	1,629632E+07	5,514419E+09	5,530715E+09
366	8,144022E+06	8,141245E+06	2,757246E+09	2,757312E+09	1,628527E+07	5,514558E+09	5,530844E+09
367	8,143327E+06	8,147180E+06	2,757266E+09	2,757336E+09	1,629051E+07	5,514602E+09	5,530892E+09
368	8,148346E+06	8,144797E+06	2,757387E+09	2,757194E+09	1,629314E+07	5,514581E+09	5,530874E+09
369	8,141959E+06	8,142768E+06	2,757160E+09	2,757340E+09	1,628473E+07	5,514500E+09	5,530785E+09
370	8,145800E+06	8,148261E+06	2,757174E+09	2,757143E+09	1,629406E+07	5,514318E+09	5,530612E+09
371	8,147383E+06	8,143972E+06	2,757152E+09	2,757019E+09	1,629135E+07	5,514170E+09	5,530462E+09
372	8,142199E+06	8,144620E+06	2,756914E+09	2,757071E+09	1,628682E+07	5,513985E+09	5,530272E+09
373	8,149681E+06	8,148008E+06	2,756951E+09	2,756773E+09	1,629769E+07	5,513724E+09	5,530022E+09
374	8,145340E+06	8,143807E+06	2,756780E+09	2,756784E+09	1,628915E+07	5,513564E+09	5,529853E+09
375	8,144961E+06	8,146951E+06	2,756640E+09	2,756773E+09	1,629191E+07	5,513413E+09	5,529705E+09
376	8,150149E+06	8,149267E+06	2,756768E+09	2,756546E+09	1,629942E+07	5,513315E+09	5,529614E+09
377	8,143917E+06	8,144413E+06	2,756589E+09	2,756705E+09	1,628833E+07	5,513294E+09	5,529583E+09
378	8,147506E+06	8,148606E+06	2,756615E+09	2,756649E+09	1,629611E+07	5,513264E+09	5,529560E+09
379	8,149052E+06	8,146566E+06	2,756735E+09	2,756607E+09	1,629562E+07	5,513341E+09	5,529637E+09
380	8,144774E+06	8,143278E+06	2,756608E+09	2,756847E+09	1,628805E+07	5,513455E+09	5,529743E+09
381	8,148744E+06	8,150053E+06	2,756797E+09	2,756723E+09	1,629880E+07	5,513520E+09	5,529819E+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							
382	8,146866E+06	8,143955E+06	2,756887E+09	2,756834E+09	1,629082E+07	5,513721E+09	5,530012E+09
383	8,143752E+06	8,146175E+06	2,756873E+09	2,757022E+09	1,628993E+07	5,513895E+09	5,530184E+09
384	8,148318E+06	8,148931E+06	2,757117E+09	2,756901E+09	1,629725E+07	5,514018E+09	5,530315E+09
385	8,144547E+06	8,142039E+06	2,757021E+09	2,757094E+09	1,628659E+07	5,514115E+09	5,530402E+09
386	8,143878E+06	8,147250E+06	2,756973E+09	2,757091E+09	1,629113E+07	5,514064E+09	5,530355E+09
387	8,149381E+06	8,145521E+06	2,757086E+09	2,756929E+09	1,629490E+07	5,514016E+09	5,530311E+09
388	8,143079E+06	8,143551E+06	2,756875E+09	2,757047E+09	1,628663E+07	5,513922E+09	5,530209E+09
389	8,146938E+06	8,148880E+06	2,756883E+09	2,756816E+09	1,629582E+07	5,513700E+09	5,529996E+09
390	8,148328E+06	8,144646E+06	2,756862E+09	2,756702E+09	1,629297E+07	5,513564E+09	5,529857E+09
391	8,143149E+06	8,145345E+06	2,756610E+09	2,756776E+09	1,628849E+07	5,513386E+09	5,529674E+09
392	8,150261E+06	8,149382E+06	2,756676E+09	2,756505E+09	1,629964E+07	5,513181E+09	5,529480E+09
393	8,145884E+06	8,145398E+06	2,756519E+09	2,756514E+09	1,629128E+07	5,513033E+09	5,529324E+09
394	8,145565E+06	8,147452E+06	2,756360E+09	2,756503E+09	1,629302E+07	5,512863E+09	5,529156E+09
395	8,151053E+06	8,149874E+06	2,756493E+09	2,756294E+09	1,630093E+07	5,512786E+09	5,529087E+09
396	8,145332E+06	8,144432E+06	2,756320E+09	2,756457E+09	1,628976E+07	5,512777E+09	5,529067E+09
397	8,148700E+06	8,149001E+06	2,756332E+09	2,756380E+09	1,629770E+07	5,512712E+09	5,529010E+09
398	8,149866E+06	8,147491E+06	2,756473E+09	2,756340E+09	1,629736E+07	5,512813E+09	5,529110E+09
399	8,145132E+06	8,144711E+06	2,756374E+09	2,756590E+09	1,628984E+07	5,512964E+09	5,529254E+09
400	8,148518E+06	8,151580E+06	2,756619E+09	2,756493E+09	1,630010E+07	5,513113E+09	5,529413E+09
401	8,147142E+06	8,144959E+06	2,756715E+09	2,756616E+09	1,629210E+07	5,513332E+09	5,529624E+09
402	8,144159E+06	8,145944E+06	2,756639E+09	2,756812E+09	1,629010E+07	5,513450E+09	5,529740E+09
403	8,149464E+06	8,148918E+06	2,756851E+09	2,756697E+09	1,629838E+07	5,513548E+09	5,529846E+09
404	8,146042E+06	8,142506E+06	2,756748E+09	2,756858E+09	1,628855E+07	5,513607E+09	5,529895E+09
405	8,144968E+06	8,148105E+06	2,756686E+09	2,756801E+09	1,629307E+07	5,513487E+09	5,529780E+09
406	8,150253E+06	8,146650E+06	2,756823E+09	2,756624E+09	1,629690E+07	5,513447E+09	5,529744E+09
407	8,143630E+06	8,144620E+06	2,756610E+09	2,756746E+09	1,628825E+07	5,513356E+09	5,529644E+09
408	8,147276E+06	8,149663E+06	2,756633E+09	2,756542E+09	1,629694E+07	5,513176E+09	5,529473E+09
409	8,148947E+06	8,145743E+06	2,756594E+09	2,756430E+09	1,629469E+07	5,513024E+09	5,529318E+09
410	8,143843E+06	8,145746E+06	2,756288E+09	2,756495E+09	1,628959E+07	5,512783E+09	5,529072E+09
411	8,151149E+06	8,150502E+06	2,756362E+09	2,756230E+09	1,630165E+07	5,512591E+09	5,528893E+09
412	8,147194E+06	8,146290E+06	2,756232E+09	2,756226E+09	1,629348E+07	5,512458E+09	5,528752E+09
413	8,146789E+06	8,147885E+06	2,756062E+09	2,756197E+09	1,629467E+07	5,512259E+09	5,528554E+09
414	8,152052E+06	8,150417E+06	2,756209E+09	2,756003E+09	1,630247E+07	5,512212E+09	5,528515E+09
415	8,146207E+06	8,145155E+06	2,756044E+09	2,756186E+09	1,629136E+07	5,512231E+09	5,528522E+09
416	8,148886E+06	8,150431E+06	2,756115E+09	2,756137E+09	1,629932E+07	5,512252E+09	5,528551E+09
417	8,150085E+06	8,149153E+06	2,756289E+09	2,756111E+09	1,629924E+07	5,512400E+09	5,528699E+09
418	8,145404E+06	8,145256E+06	2,756174E+09	2,756376E+09	1,629066E+07	5,512550E+09	5,528841E+09
419	8,149114E+06	8,151997E+06	2,756408E+09	2,756310E+09	1,630111E+07	5,512718E+09	5,529019E+09
420	8,148642E+06	8,144721E+06	2,756485E+09	2,756422E+09	1,629336E+07	5,512907E+09	5,529201E+09
421	8,145352E+06	8,145942E+06	2,756355E+09	2,756570E+09	1,629129E+07	5,512926E+09	5,529217E+09
422	8,150531E+06	8,149549E+06	2,756563E+09	2,756424E+09	1,630008E+07	5,512987E+09	5,529287E+09
423	8,146567E+06	8,143962E+06	2,756473E+09	2,756563E+09	1,629053E+07	5,513037E+09	5,529327E+09
424	8,145067E+06	8,149602E+06	2,756458E+09	2,756509E+09	1,629467E+07	5,512967E+09	5,529262E+09
425	8,150692E+06	8,147941E+06	2,756587E+09	2,756338E+09	1,629863E+07	5,512925E+09	5,529224E+09
426	8,144255E+06	8,144772E+06	2,756321E+09	2,756472E+09	1,628903E+07	5,512793E+09	5,529082E+09
427	8,148320E+06	8,150230E+06	2,756324E+09	2,756287E+09	1,629855E+07	5,512611E+09	5,528910E+09
428	8,150315E+06	8,146615E+06	2,756293E+09	2,756157E+09	1,629693E+07	5,512450E+09	5,528747E+09
429	8,144987E+06	8,146704E+06	2,755980E+09	2,756186E+09	1,629169E+07	5,512166E+09	5,528458E+09
430	8,152135E+06	8,151591E+06	2,756078E+09	2,755918E+09	1,630373E+07	5,511995E+09	5,528299E+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	8,147996E+06	8,147295E+06	2,755953E+09	2,755931E+09	1,629529E+07	5,511883E+09	5,528179E+09
432	8,147359E+06	8,148687E+06	2,755810E+09	2,755927E+09	1,629605E+07	5,511737E+09	5,528033E+09
433	8,152521E+06	8,151571E+06	2,755957E+09	2,755748E+09	1,630409E+07	5,511705E+09	5,528009E+09
434	8,146691E+06	8,145652E+06	2,755778E+09	2,755939E+09	1,629234E+07	5,511716E+09	5,528009E+09
435	8,149282E+06	8,151544E+06	2,755877E+09	2,755918E+09	1,630083E+07	5,511796E+09	5,528097E+09
436	8,151233E+06	8,149601E+06	2,756081E+09	2,755894E+09	1,630083E+07	5,511975E+09	5,528276E+09
437	8,146619E+06	8,145304E+06	2,755935E+09	2,756142E+09	1,629192E+07	5,512077E+09	5,528369E+09
438	8,150292E+06	8,152118E+06	2,756158E+09	2,756078E+09	1,630241E+07	5,512236E+09	5,528538E+09
439	8,149634E+06	8,145454E+06	2,756221E+09	2,756182E+09	1,629509E+07	5,512403E+09	5,528698E+09
440	8,145511E+06	8,147353E+06	2,756125E+09	2,756320E+09	1,629286E+07	5,512445E+09	5,528738E+09
441	8,150705E+06	8,151247E+06	2,756348E+09	2,756163E+09	1,630195E+07	5,512511E+09	5,528813E+09
442	8,146733E+06	8,144800E+06	2,756234E+09	2,756293E+09	1,629153E+07	5,512527E+09	5,528818E+09
443	8,145599E+06	8,150264E+06	2,756205E+09	2,756267E+09	1,629586E+07	5,512472E+09	5,528768E+09
444	8,152196E+06	8,148139E+06	2,756316E+09	2,756088E+09	1,630033E+07	5,512404E+09	5,528705E+09
445	8,145586E+06	8,145044E+06	2,755996E+09	2,756183E+09	1,629063E+07	5,512179E+09	5,528469E+09
446	8,149604E+06	8,151037E+06	2,756002E+09	2,755979E+09	1,630064E+07	5,511981E+09	5,528282E+09
447	8,151056E+06	8,148167E+06	2,755984E+09	2,755838E+09	1,629922E+07	5,511823E+09	5,528122E+09
448	8,145459E+06	8,148029E+06	2,755718E+09	2,755874E+09	1,629349E+07	5,511592E+09	5,527885E+09
449	8,152700E+06	8,152754E+06	2,755812E+09	2,755623E+09	1,630545E+07	5,511435E+09	5,527741E+09
450	8,148713E+06	8,147529E+06	2,755654E+09	2,755652E+09	1,629624E+07	5,511306E+09	5,527602E+09
451	8,148283E+06	8,149437E+06	2,755520E+09	2,755687E+09	1,629772E+07	5,511207E+09	5,527505E+09
452	8,153775E+06	8,152362E+06	2,755702E+09	2,755510E+09	1,630614E+07	5,511212E+09	5,527518E+09
453	8,147812E+06	8,146306E+06	2,755531E+09	2,755684E+09	1,629412E+07	5,511216E+09	5,527510E+09
454	8,150158E+06	8,152295E+06	2,755659E+09	2,755675E+09	1,630245E+07	5,511334E+09	5,527636E+09
455	8,151913E+06	8,150189E+06	2,755858E+09	2,755671E+09	1,630210E+07	5,511529E+09	5,527831E+09
456	8,147075E+06	8,146072E+06	2,755726E+09	2,755921E+09	1,629315E+07	5,511647E+09	5,527940E+09
457	8,150525E+06	8,153209E+06	2,755922E+09	2,755847E+09	1,630373E+07	5,511768E+09	5,528072E+09
458	8,149885E+06	8,146262E+06	2,755958E+09	2,755933E+09	1,629615E+07	5,511890E+09	5,528187E+09
459	8,145737E+06	8,148713E+06	2,755880E+09	2,756079E+09	1,629445E+07	5,511959E+09	5,528254E+09
460	8,151834E+06	8,151701E+06	2,756116E+09	2,755913E+09	1,630353E+07	5,512029E+09	5,528333E+09
461	8,147995E+06	8,144841E+06	2,755960E+09	2,756020E+09	1,629284E+07	5,511980E+09	5,528273E+09
462	8,147074E+06	8,150325E+06	2,755916E+09	2,755989E+09	1,629740E+07	5,511905E+09	5,528203E+09
463	8,153260E+06	8,149059E+06	2,756014E+09	2,755807E+09	1,630232E+07	5,511822E+09	5,528124E+09
464	8,146122E+06	8,146664E+06	2,755729E+09	2,755887E+09	1,629279E+07	5,511616E+09	5,527909E+09
465	8,150036E+06	8,152761E+06	2,755742E+09	2,755682E+09	1,630280E+07	5,511424E+09	5,527727E+09
466	8,151422E+06	8,149197E+06	2,755698E+09	2,755545E+09	1,630062E+07	5,511243E+09	5,527544E+09
467	8,146198E+06	8,148746E+06	2,755426E+09	2,755614E+09	1,629494E+07	5,511040E+09	5,527335E+09
468	8,154153E+06	8,152899E+06	2,755516E+09	2,755361E+09	1,630705E+07	5,510878E+09	5,527185E+09
469	8,149994E+06	8,147798E+06	2,755331E+09	2,755362E+09	1,629779E+07	5,510694E+09	5,526991E+09
470	8,149403E+06	8,150282E+06	2,755238E+09	2,755397E+09	1,629969E+07	5,510635E+09	5,526935E+09
471	8,154218E+06	8,153783E+06	2,755456E+09	2,755241E+09	1,630800E+07	5,510698E+09	5,527006E+09
472	8,148263E+06	8,147479E+06	2,755335E+09	2,755432E+09	1,629574E+07	5,510768E+09	5,527063E+09
473	8,150457E+06	8,153246E+06	2,755453E+09	2,755451E+09	1,630370E+07	5,510903E+09	5,527207E+09
474	8,152378E+06	8,150388E+06	2,755606E+09	2,755452E+09	1,630277E+07	5,511058E+09	5,527360E+09
475	8,147550E+06	8,146961E+06	2,755474E+09	2,755720E+09	1,629451E+07	5,511193E+09	5,527488E+09
476	8,151533E+06	8,153777E+06	2,755687E+09	2,755628E+09	1,630531E+07	5,511316E+09	5,527621E+09
477	8,150926E+06	8,146713E+06	2,755710E+09	2,755675E+09	1,629764E+07	5,511385E+09	5,527682E+09
478	8,146881E+06	8,149203E+06	2,755647E+09	2,755815E+09	1,629608E+07	5,511462E+09	5,527758E+09
479	8,152747E+06	8,152154E+06	2,755861E+09	2,755660E+09	1,630490E+07	5,511521E+09	5,527826E+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							
480	8,148777E+06	8,145710E+06	2,755711E+09	2,755752E+09	1,629449E+07	5,511464E+09	5,527758E+09
481	8,147517E+06	8,151556E+06	2,755639E+09	2,755713E+09	1,629907E+07	5,511352E+09	5,527651E+09
482	8,153425E+06	8,150279E+06	2,755709E+09	2,755513E+09	1,630370E+07	5,511222E+09	5,527526E+09
483	8,146404E+06	8,148262E+06	2,755441E+09	2,755606E+09	1,629467E+07	5,511047E+09	5,527341E+09
484	8,151418E+06	8,153205E+06	2,755455E+09	2,755397E+09	1,630462E+07	5,510852E+09	5,527157E+09
485	8,152777E+06	8,149393E+06	2,755370E+09	2,755238E+09	1,630217E+07	5,510608E+09	5,526910E+09
486	8,147852E+06	8,148959E+06	2,755107E+09	2,755304E+09	1,629681E+07	5,510411E+09	5,526708E+09
487	8,154964E+06	8,153922E+06	2,755212E+09	2,755071E+09	1,630889E+07	5,510283E+09	5,526592E+09
488	8,150497E+06	8,149437E+06	2,755099E+09	2,755075E+09	1,629993E+07	5,510174E+09	5,526474E+09
489	8,149583E+06	8,151911E+06	2,755031E+09	2,755136E+09	1,630149E+07	5,510167E+09	5,526468E+09
490	8,154250E+06	8,154600E+06	2,755232E+09	2,755011E+09	1,630885E+07	5,510242E+09	5,526551E+09
491	8,148895E+06	8,148128E+06	2,755108E+09	2,755245E+09	1,629702E+07	5,510353E+09	5,526650E+09
492	8,151698E+06	8,153039E+06	2,755204E+09	2,755257E+09	1,630474E+07	5,510461E+09	5,526766E+09
493	8,153562E+06	8,150322E+06	2,755316E+09	2,755215E+09	1,630388E+07	5,510531E+09	5,526835E+09
494	8,148660E+06	8,147550E+06	2,755214E+09	2,755454E+09	1,629621E+07	5,510667E+09	5,526964E+09
495	8,152006E+06	8,154680E+06	2,755450E+09	2,755366E+09	1,630669E+07	5,510817E+09	5,527123E+09
496	8,151597E+06	8,147787E+06	2,755510E+09	2,755406E+09	1,629938E+07	5,510916E+09	5,527215E+09
497	8,147333E+06	8,150228E+06	2,755426E+09	2,755562E+09	1,629756E+07	5,510988E+09	5,527286E+09
498	8,153072E+06	8,152748E+06	2,755590E+09	2,755411E+09	1,630582E+07	5,511002E+09	5,527308E+09
499	8,149174E+06	8,147145E+06	2,755438E+09	2,755517E+09	1,629632E+07	5,510955E+09	5,527251E+09
500	8,148524E+06	8,152266E+06	2,755371E+09	2,755457E+09	1,630079E+07	5,510827E+09	5,527128E+09
501	8,154383E+06	8,150938E+06	2,755408E+09	2,755216E+09	1,630532E+07	5,510624E+09	5,526929E+09
502	8,147719E+06	8,148769E+06	2,755149E+09	2,755295E+09	1,629649E+07	5,510443E+09	5,526740E+09
503	8,152529E+06	8,153638E+06	2,755144E+09	2,755099E+09	1,630617E+07	5,510243E+09	5,526550E+09
504	8,153677E+06	8,150458E+06	2,755075E+09	2,754922E+09	1,630414E+07	5,509997E+09	5,526301E+09
505	8,148440E+06	8,150288E+06	2,754821E+09	2,755000E+09	1,629873E+07	5,509821E+09	5,526119E+09
506	8,154898E+06	8,155275E+06	2,754929E+09	2,754782E+09	1,631017E+07	5,509711E+09	5,526021E+09
507	8,150758E+06	8,150815E+06	2,754859E+09	2,754833E+09	1,630157E+07	5,509692E+09	5,525994E+09
508	8,150877E+06	8,151988E+06	2,754800E+09	2,754916E+09	1,630286E+07	5,509716E+09	5,526019E+09
509	8,155524E+06	8,154297E+06	2,754949E+09	2,754779E+09	1,630982E+07	5,509728E+09	5,526038E+09
510	8,150605E+06	8,148105E+06	2,754833E+09	2,755000E+09	1,629871E+07	5,509832E+09	5,526131E+09
511	8,152460E+06	8,153747E+06	2,754934E+09	2,755016E+09	1,630621E+07	5,509949E+09	5,526256E+09
512	8,154114E+06	8,151796E+06	2,755106E+09	2,754949E+09	1,630591E+07	5,510055E+09	5,526361E+09
513	8,148756E+06	8,149173E+06	2,755029E+09	2,755198E+09	1,629793E+07	5,510227E+09	5,526525E+09
514	8,151749E+06	8,155535E+06	2,755240E+09	2,755131E+09	1,630728E+07	5,510371E+09	5,526678E+09
515	8,151968E+06	8,148711E+06	2,755294E+09	2,755203E+09	1,630068E+07	5,510496E+09	5,526797E+09
516	8,148420E+06	8,150392E+06	2,755176E+09	2,755346E+09	1,629881E+07	5,510521E+09	5,526820E+09
517	8,154016E+06	8,153001E+06	2,755281E+09	2,755149E+09	1,630702E+07	5,510431E+09	5,526738E+09
518	8,150347E+06	8,148071E+06	2,755146E+09	2,755216E+09	1,629842E+07	5,510361E+09	5,526660E+09
519	8,149312E+06	8,152939E+06	2,755074E+09	2,755156E+09	1,630225E+07	5,510230E+09	5,526533E+09
520	8,155429E+06	8,152005E+06	2,755132E+09	2,754894E+09	1,630743E+07	5,510026E+09	5,526334E+09
521	8,148570E+06	8,149731E+06	2,754857E+09	2,754978E+09	1,629830E+07	5,509835E+09	5,526133E+09
522	8,152957E+06	8,154380E+06	2,754826E+09	2,754797E+09	1,630734E+07	5,509623E+09	5,525930E+09
523	8,154080E+06	8,152082E+06	2,754794E+09	2,754655E+09	1,630616E+07	5,509449E+09	5,525756E+09
524	8,149586E+06	8,150990E+06	2,754569E+09	2,754744E+09	1,630058E+07	5,509313E+09	5,525614E+09
525	8,155757E+06	8,155744E+06	2,754657E+09	2,754524E+09	1,631150E+07	5,509181E+09	5,525493E+09
526	8,152311E+06	8,151014E+06	2,754601E+09	2,754579E+09	1,630333E+07	5,509180E+09	5,525483E+09
527	8,151988E+06	8,152056E+06	2,754525E+09	2,754681E+09	1,630404E+07	5,509206E+09	5,525510E+09
528	8,156362E+06	8,155231E+06	2,754689E+09	2,754515E+09	1,631159E+07	5,509204E+09	5,525516E+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	8,150930E+06	8,149525E+06	2,754590E+09	2,754729E+09	1,630046E+07	5,509319E+09	5,525619E+09
530	8,151972E+06	8,155192E+06	2,754700E+09	2,754755E+09	1,630716E+07	5,509455E+09	5,525762E+09
531	8,154167E+06	8,153259E+06	2,754915E+09	2,754730E+09	1,630743E+07	5,509646E+09	5,525953E+09
532	8,149807E+06	8,149406E+06	2,754835E+09	2,754994E+09	1,629921E+07	5,509829E+09	5,526128E+09
533	8,152732E+06	8,155250E+06	2,754979E+09	2,754912E+09	1,630798E+07	5,509891E+09	5,526199E+09
534	8,153553E+06	8,148846E+06	2,755027E+09	2,754959E+09	1,630240E+07	5,509986E+09	5,526288E+09
535	8,149260E+06	8,150981E+06	2,754896E+09	2,755093E+09	1,630024E+07	5,509990E+09	5,526290E+09
536	8,154872E+06	8,154299E+06	2,755024E+09	2,754850E+09	1,630917E+07	5,509874E+09	5,526184E+09
537	8,150908E+06	8,149605E+06	2,754892E+09	2,754911E+09	1,630051E+07	5,509803E+09	5,526103E+09
538	8,149643E+06	8,153737E+06	2,754783E+09	2,754861E+09	1,630338E+07	5,509644E+09	5,525947E+09
539	8,156096E+06	8,153070E+06	2,754840E+09	2,754625E+09	1,630917E+07	5,509466E+09	5,525775E+09
540	8,149911E+06	8,150066E+06	2,754555E+09	2,754700E+09	1,629998E+07	5,509256E+09	5,525556E+09
541	8,153807E+06	8,154782E+06	2,754491E+09	2,754495E+09	1,630859E+07	5,508986E+09	5,525295E+09
542	8,155231E+06	8,153039E+06	2,754505E+09	2,754346E+09	1,630827E+07	5,508850E+09	5,525159E+09
543	8,150586E+06	8,151635E+06	2,754293E+09	2,754464E+09	1,630222E+07	5,508757E+09	5,525060E+09
544	8,156770E+06	8,156852E+06	2,754400E+09	2,754239E+09	1,631362E+07	5,508639E+09	5,524953E+09
545	8,153158E+06	8,152063E+06	2,754341E+09	2,754310E+09	1,630522E+07	5,508651E+09	5,524956E+09
546	8,152130E+06	8,153032E+06	2,754249E+09	2,754427E+09	1,630516E+07	5,508676E+09	5,524981E+09
547	8,156359E+06	8,156831E+06	2,754462E+09	2,754292E+09	1,631319E+07	5,508754E+09	5,525067E+09
548	8,151702E+06	8,150235E+06	2,754398E+09	2,754510E+09	1,630194E+07	5,508908E+09	5,525209E+09
549	8,152433E+06	8,155455E+06	2,754482E+09	2,754536E+09	1,630789E+07	5,509019E+09	5,525326E+09
550	8,155657E+06	8,153309E+06	2,754701E+09	2,754514E+09	1,630897E+07	5,509215E+09	5,525524E+09
551	8,151023E+06	8,149320E+06	2,754585E+09	2,754785E+09	1,630034E+07	5,509370E+09	5,525670E+09
552	8,153822E+06	8,155996E+06	2,754718E+09	2,754658E+09	1,630982E+07	5,509376E+09	5,525686E+09
553	8,154149E+06	8,150259E+06	2,754761E+09	2,754677E+09	1,630441E+07	5,509438E+09	5,525742E+09
554	8,149032E+06	8,152247E+06	2,754621E+09	2,754802E+09	1,630128E+07	5,509423E+09	5,525724E+09
555	8,155244E+06	8,155617E+06	2,754774E+09	2,754584E+09	1,631086E+07	5,509358E+09	5,525668E+09
556	8,152166E+06	8,150019E+06	2,754624E+09	2,754640E+09	1,630218E+07	5,509264E+09	5,525567E+09
557	8,150832E+06	8,153675E+06	2,754454E+09	2,754573E+09	1,630451E+07	5,509027E+09	5,525331E+09
558	8,157704E+06	8,153743E+06	2,754520E+09	2,754321E+09	1,631145E+07	5,508842E+09	5,525153E+09
559	8,150892E+06	8,150947E+06	2,754253E+09	2,754405E+09	1,630184E+07	5,508658E+09	5,524960E+09
560	8,154584E+06	8,156348E+06	2,754229E+09	2,754180E+09	1,631093E+07	5,508409E+09	5,524720E+09
561	8,155686E+06	8,154614E+06	2,754258E+09	2,754051E+09	1,631030E+07	5,508309E+09	5,524619E+09
562	8,150852E+06	8,152499E+06	2,754023E+09	2,754198E+09	1,630335E+07	5,508222E+09	5,524525E+09
563	8,157233E+06	8,157935E+06	2,754139E+09	2,754009E+09	1,631517E+07	5,508148E+09	5,524463E+09
564	8,154316E+06	8,152499E+06	2,754076E+09	2,754075E+09	1,630681E+07	5,508151E+09	5,524457E+09
565	8,152726E+06	8,153421E+06	2,753962E+09	2,754173E+09	1,630615E+07	5,508134E+09	5,524440E+09
566	8,157414E+06	8,157380E+06	2,754221E+09	2,754038E+09	1,631479E+07	5,508259E+09	5,524573E+09
567	8,152876E+06	8,150364E+06	2,754176E+09	2,754282E+09	1,630324E+07	5,508458E+09	5,524761E+09
568	8,153566E+06	8,156084E+06	2,754260E+09	2,754291E+09	1,630965E+07	5,508551E+09	5,524861E+09
569	8,156626E+06	8,154026E+06	2,754467E+09	2,754274E+09	1,631065E+07	5,508740E+09	5,525051E+09
570	8,151235E+06	8,150433E+06	2,754326E+09	2,754543E+09	1,630167E+07	5,508869E+09	5,525171E+09
571	8,153915E+06	8,157536E+06	2,754487E+09	2,754428E+09	1,631145E+07	5,508916E+09	5,525227E+09
572	8,154944E+06	8,151250E+06	2,754536E+09	2,754433E+09	1,630619E+07	5,508969E+09	5,525275E+09
573	8,149562E+06	8,152575E+06	2,754343E+09	2,754537E+09	1,630214E+07	5,508881E+09	5,525183E+09
574	8,156758E+06	8,155836E+06	2,754489E+09	2,754306E+09	1,631259E+07	5,508795E+09	5,525108E+09
575	8,153431E+06	8,150319E+06	2,754316E+09	2,754357E+09	1,630375E+07	5,508672E+09	5,524976E+09
576	8,151936E+06	8,154824E+06	2,754145E+09	2,754246E+09	1,630676E+07	5,508391E+09	5,524698E+09
577	8,158133E+06	8,155526E+06	2,754231E+09	2,753993E+09	1,631366E+07	5,508224E+09	5,524537E+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	8,150865E+06	8,152453E+06	2,753972E+09	2,754095E+09	1,630332E+07	5,508068E+09	5,524371E+09
579	8,155039E+06	8,157649E+06	2,753980E+09	2,753920E+09	1,631269E+07	5,507900E+09	5,524213E+09
580	8,156970E+06	8,155064E+06	2,753992E+09	2,753806E+09	1,631203E+07	5,507798E+09	5,524110E+09
581	8,152005E+06	8,152338E+06	2,753706E+09	2,753945E+09	1,630434E+07	5,507651E+09	5,523955E+09
582	8,158690E+06	8,158360E+06	2,753842E+09	2,753748E+09	1,631705E+07	5,507590E+09	5,523907E+09
583	8,155419E+06	8,152989E+06	2,753809E+09	2,753818E+09	1,630841E+07	5,507627E+09	5,523935E+09
584	8,153635E+06	8,154627E+06	2,753738E+09	2,753899E+09	1,630826E+07	5,507638E+09	5,523946E+09
585	8,157973E+06	8,158500E+06	2,754016E+09	2,753791E+09	1,631647E+07	5,507807E+09	5,524123E+09
586	8,153203E+06	8,151084E+06	2,753954E+09	2,754060E+09	1,630429E+07	5,508014E+09	5,524319E+09
587	8,153849E+06	8,157114E+06	2,754048E+09	2,754097E+09	1,631096E+07	5,508144E+09	5,524455E+09
588	8,157392E+06	8,154622E+06	2,754233E+09	2,754061E+09	1,631201E+07	5,508293E+09	5,524605E+09
589	8,151441E+06	8,151048E+06	2,754054E+09	2,754294E+09	1,630249E+07	5,508348E+09	5,524650E+09
590	8,154876E+06	8,158085E+06	2,754229E+09	2,754163E+09	1,631296E+07	5,508392E+09	5,524705E+09
591	8,156133E+06	8,151585E+06	2,754271E+09	2,754169E+09	1,630772E+07	5,508439E+09	5,524747E+09
592	8,150864E+06	8,153354E+06	2,754063E+09	2,754236E+09	1,630422E+07	5,508299E+09	5,524603E+09
593	8,157758E+06	8,156812E+06	2,754197E+09	2,754003E+09	1,631457E+07	5,508199E+09	5,524514E+09
594	8,153634E+06	8,151713E+06	2,754019E+09	2,754053E+09	1,630535E+07	5,508073E+09	5,524378E+09
595	8,152197E+06	8,156415E+06	2,753894E+09	2,753969E+09	1,630861E+07	5,507863E+09	5,524171E+09
596	8,158831E+06	8,156632E+06	2,753984E+09	2,753728E+09	1,631546E+07	5,507712E+09	5,524027E+09
597	8,151664E+06	8,152731E+06	2,753676E+09	2,753830E+09	1,630440E+07	5,507506E+09	5,523810E+09
598	8,156772E+06	8,157621E+06	2,753669E+09	2,753658E+09	1,631439E+07	5,507327E+09	5,523641E+09
599	8,158590E+06	8,155200E+06	2,753666E+09	2,753541E+09	1,631379E+07	5,507206E+09	5,523520E+09
600	8,153330E+06	8,153337E+06	2,753389E+09	2,753629E+09	1,630667E+07	5,507018E+09	5,523325E+09
601	8,159043E+06	8,159786E+06	2,753570E+09	2,753438E+09	1,631883E+07	5,507008E+09	5,523327E+09
602	8,155398E+06	8,154346E+06	2,753576E+09	2,753539E+09	1,630974E+07	5,507115E+09	5,523425E+09
603	8,153872E+06	8,155875E+06	2,753554E+09	2,753677E+09	1,630975E+07	5,507231E+09	5,523541E+09
604	8,158753E+06	8,159017E+06	2,753816E+09	2,753597E+09	1,631777E+07	5,507414E+09	5,523731E+09
605	8,153964E+06	8,151212E+06	2,753700E+09	2,753856E+09	1,630518E+07	5,507556E+09	5,523861E+09
606	8,154815E+06	8,157562E+06	2,753798E+09	2,753880E+09	1,631238E+07	5,507679E+09	5,523991E+09
607	8,158303E+06	8,155039E+06	2,753991E+09	2,753831E+09	1,631334E+07	5,507822E+09	5,524135E+09
608	8,152270E+06	8,152169E+06	2,753818E+09	2,754017E+09	1,630444E+07	5,507834E+09	5,524139E+09
609	8,155558E+06	8,158830E+06	2,753985E+09	2,753890E+09	1,631439E+07	5,507875E+09	5,524190E+09
610	8,156648E+06	8,152420E+06	2,753999E+09	2,753897E+09	1,630907E+07	5,507897E+09	5,524206E+09
611	8,151470E+06	8,154465E+06	2,753804E+09	2,753975E+09	1,630594E+07	5,507779E+09	5,524085E+09
612	8,158449E+06	8,157788E+06	2,753920E+09	2,753732E+09	1,631624E+07	5,507652E+09	5,523968E+09
613	8,153942E+06	8,152438E+06	2,753715E+09	2,753762E+09	1,630638E+07	5,507478E+09	5,523784E+09
614	8,153453E+06	8,156817E+06	2,753604E+09	2,753684E+09	1,631027E+07	5,507288E+09	5,523598E+09
615	8,160287E+06	8,156845E+06	2,753677E+09	2,753451E+09	1,631713E+07	5,507128E+09	5,523445E+09
616	8,153367E+06	8,153444E+06	2,753352E+09	2,753516E+09	1,630681E+07	5,506868E+09	5,523175E+09
617	8,157989E+06	8,158559E+06	2,753347E+09	2,753346E+09	1,631655E+07	5,506693E+09	5,523009E+09
618	8,158775E+06	8,156777E+06	2,753367E+09	2,753234E+09	1,631555E+07	5,506601E+09	5,522917E+09
619	8,153492E+06	8,154987E+06	2,753173E+09	2,753358E+09	1,630848E+07	5,506531E+09	5,522839E+09
620	8,159212E+06	8,160902E+06	2,753374E+09	2,753203E+09	1,632011E+07	5,506577E+09	5,522897E+09
621	8,155860E+06	8,154532E+06	2,753353E+09	2,753324E+09	1,631039E+07	5,506677E+09	5,522987E+09
622	8,155142E+06	8,155898E+06	2,753321E+09	2,753481E+09	1,631104E+07	5,506803E+09	5,523114E+09
623	8,159998E+06	8,158985E+06	2,753559E+09	2,753398E+09	1,631898E+07	5,506957E+09	5,523276E+09
624	8,155102E+06	8,152163E+06	2,753435E+09	2,753596E+09	1,630727E+07	5,507031E+09	5,523338E+09
625	8,155183E+06	8,158471E+06	2,753549E+09	2,753609E+09	1,631365E+07	5,507157E+09	5,523471E+09
626	8,158476E+06	8,156019E+06	2,753750E+09	2,753562E+09	1,631449E+07	5,507312E+09	5,523626E+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	8,152774E+06	8,153190E+06	2,753605E+09	2,753767E+09	1,630596E+07	5,507372E+09	5,523678E+09
628	8,156366E+06	8,159305E+06	2,753740E+09	2,753651E+09	1,631567E+07	5,507391E+09	5,523707E+09
629	8,157386E+06	8,152899E+06	2,753707E+09	2,753636E+09	1,631028E+07	5,507342E+09	5,523653E+09
630	8,152567E+06	8,155145E+06	2,753516E+09	2,753706E+09	1,630771E+07	5,507221E+09	5,523529E+09
631	8,159505E+06	8,158387E+06	2,753638E+09	2,753460E+09	1,631789E+07	5,507098E+09	5,523416E+09
632	8,155111E+06	8,153688E+06	2,753426E+09	2,753446E+09	1,630880E+07	5,506872E+09	5,523181E+09
633	8,154485E+06	8,157425E+06	2,753304E+09	2,753378E+09	1,631191E+07	5,506682E+09	5,522994E+09
634	8,160867E+06	8,157952E+06	2,753360E+09	2,753149E+09	1,631882E+07	5,506509E+09	5,522828E+09
635	8,154029E+06	8,154769E+06	2,753067E+09	2,753219E+09	1,630880E+07	5,506286E+09	5,522595E+09
636	8,158382E+06	8,159819E+06	2,753068E+09	2,753057E+09	1,631820E+07	5,506126E+09	5,522444E+09
637	8,158869E+06	8,157683E+06	2,753092E+09	2,752949E+09	1,631655E+07	5,506040E+09	5,522357E+09
638	8,154573E+06	8,155369E+06	2,752934E+09	2,753111E+09	1,630994E+07	5,506045E+09	5,522354E+09
639	8,160427E+06	8,160877E+06	2,753133E+09	2,752992E+09	1,632130E+07	5,506124E+09	5,522446E+09
640	8,157514E+06	8,154938E+06	2,753096E+09	2,753083E+09	1,631245E+07	5,506179E+09	5,522492E+09
641	8,156151E+06	8,156434E+06	2,753066E+09	2,753242E+09	1,631259E+07	5,506308E+09	5,522621E+09
642	8,160143E+06	8,160164E+06	2,753313E+09	2,753155E+09	1,632031E+07	5,506468E+09	5,522788E+09
643	8,155325E+06	8,153609E+06	2,753250E+09	2,753357E+09	1,630893E+07	5,506607E+09	5,522916E+09
644	8,155303E+06	8,159402E+06	2,753349E+09	2,753386E+09	1,631471E+07	5,506735E+09	5,523050E+09
645	8,158968E+06	8,156204E+06	2,753503E+09	2,753333E+09	1,631517E+07	5,506836E+09	5,523151E+09
646	8,154073E+06	8,153408E+06	2,753343E+09	2,753537E+09	1,630748E+07	5,506881E+09	5,523188E+09
647	8,157562E+06	8,159427E+06	2,753449E+09	2,753401E+09	1,631699E+07	5,506850E+09	5,523167E+09
648	8,158476E+06	8,154119E+06	2,753408E+09	2,753322E+09	1,631259E+07	5,506730E+09	5,523042E+09
649	8,153199E+06	8,156177E+06	2,753234E+09	2,753387E+09	1,630938E+07	5,506622E+09	5,522931E+09
650	8,159836E+06	8,159582E+06	2,753352E+09	2,753154E+09	1,631942E+07	5,506507E+09	5,522826E+09
651	8,155902E+06	8,154973E+06	2,753166E+09	2,753156E+09	1,631087E+07	5,506322E+09	5,522633E+09
652	8,155423E+06	8,158163E+06	2,753008E+09	2,753101E+09	1,631359E+07	5,506109E+09	5,522422E+09
653	8,161461E+06	8,158741E+06	2,753035E+09	2,752855E+09	1,632020E+07	5,505890E+09	5,522210E+09
654	8,155100E+06	8,155542E+06	2,752776E+09	2,752933E+09	1,631064E+07	5,505709E+09	5,522019E+09
655	8,159352E+06	8,160281E+06	2,752803E+09	2,752791E+09	1,631963E+07	5,505594E+09	5,521914E+09
656	8,160077E+06	8,158556E+06	2,752835E+09	2,752669E+09	1,631863E+07	5,505504E+09	5,521822E+09
657	8,155846E+06	8,155650E+06	2,752684E+09	2,752860E+09	1,631150E+07	5,505544E+09	5,521856E+09
658	8,160967E+06	8,161752E+06	2,752871E+09	2,752759E+09	1,632272E+07	5,505630E+09	5,521953E+09
659	8,158208E+06	8,156133E+06	2,752870E+09	2,752848E+09	1,631434E+07	5,505718E+09	5,522032E+09
660	8,156141E+06	8,157595E+06	2,752838E+09	2,753008E+09	1,631374E+07	5,505846E+09	5,522160E+09
661	8,160030E+06	8,160870E+06	2,753075E+09	2,752909E+09	1,632090E+07	5,505985E+09	5,522306E+09
662	8,156201E+06	8,154024E+06	2,753022E+09	2,753126E+09	1,631022E+07	5,506148E+09	5,522458E+09
663	8,156499E+06	8,159345E+06	2,753102E+09	2,753167E+09	1,631584E+07	5,506269E+09	5,522585E+09
664	8,160632E+06	8,156876E+06	2,753226E+09	2,753066E+09	1,631751E+07	5,506292E+09	5,522610E+09
665	8,155121E+06	8,154200E+06	2,753072E+09	2,753258E+09	1,630932E+07	5,506330E+09	5,522640E+09
666	8,157717E+06	8,160780E+06	2,753188E+09	2,753121E+09	1,631850E+07	5,506308E+09	5,522627E+09
667	8,158828E+06	8,155725E+06	2,753193E+09	2,753040E+09	1,631455E+07	5,506233E+09	5,522548E+09
668	8,153465E+06	8,157152E+06	2,752991E+09	2,753124E+09	1,631062E+07	5,506115E+09	5,522425E+09
669	8,160502E+06	8,159964E+06	2,753050E+09	2,752883E+09	1,632047E+07	5,505934E+09	5,522254E+09
670	8,157353E+06	8,155517E+06	2,752845E+09	2,752885E+09	1,631287E+07	5,505729E+09	5,522042E+09
671	8,156915E+06	8,158445E+06	2,752671E+09	2,752814E+09	1,631536E+07	5,505485E+09	5,521801E+09
672	8,162650E+06	8,159943E+06	2,752705E+09	2,752517E+09	1,632259E+07	5,505223E+09	5,521545E+09
673	8,156045E+06	8,156266E+06	2,752495E+09	2,752609E+09	1,631231E+07	5,505104E+09	5,521416E+09
674	8,159727E+06	8,161294E+06	2,752541E+09	2,752507E+09	1,632102E+07	5,505049E+09	5,521370E+09
675	8,160869E+06	8,159668E+06	2,752616E+09	2,752418E+09	1,632054E+07	5,505035E+09	5,521355E+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	8,156510E+06	8,156606E+06	2,752447E+09	2,752637E+09	1,631312E+07	5,505083E+09	5,521397E+09
677	8,161123E+06	8,162637E+06	2,752608E+09	2,752529E+09	1,632376E+07	5,505137E+09	5,521461E+09
678	8,159020E+06	8,156968E+06	2,752636E+09	2,752628E+09	1,631599E+07	5,505264E+09	5,521580E+09
679	8,156922E+06	8,157925E+06	2,752610E+09	2,752789E+09	1,631485E+07	5,505399E+09	5,521714E+09
680	8,161127E+06	8,161319E+06	2,752832E+09	2,752659E+09	1,632245E+07	5,505491E+09	5,521813E+09
681	8,157476E+06	8,154174E+06	2,752784E+09	2,752878E+09	1,631165E+07	5,505662E+09	5,521973E+09
682	8,157031E+06	8,160178E+06	2,752844E+09	2,752920E+09	1,631721E+07	5,505763E+09	5,522080E+09
683	8,161340E+06	8,158272E+06	2,752999E+09	2,752803E+09	1,631961E+07	5,505802E+09	5,522121E+09
684	8,155158E+06	8,155626E+06	2,752833E+09	2,752993E+09	1,631078E+07	5,505826E+09	5,522137E+09
685	8,157812E+06	8,161510E+06	2,752923E+09	2,752848E+09	1,631932E+07	5,505770E+09	5,522090E+09
686	8,159921E+06	8,156349E+06	2,752917E+09	2,752784E+09	1,631627E+07	5,505702E+09	5,522018E+09
687	8,155031E+06	8,157072E+06	2,752679E+09	2,752864E+09	1,631210E+07	5,505544E+09	5,521856E+09
688	8,162324E+06	8,160584E+06	2,752701E+09	2,752568E+09	1,632291E+07	5,505269E+09	5,521592E+09
689	8,158651E+06	8,156444E+06	2,752519E+09	2,752549E+09	1,631509E+07	5,505067E+09	5,521382E+09
690	8,157311E+06	8,159928E+06	2,752376E+09	2,752489E+09	1,631724E+07	5,504864E+09	5,521182E+09
691	8,163037E+06	8,161738E+06	2,752476E+09	2,752212E+09	1,632477E+07	5,504688E+09	5,521013E+09
692	8,156305E+06	8,157371E+06	2,752264E+09	2,752351E+09	1,631368E+07	5,504614E+09	5,520928E+09
693	8,160099E+06	8,161857E+06	2,752279E+09	2,752269E+09	1,632196E+07	5,504549E+09	5,520870E+09
694	8,161955E+06	8,160270E+06	2,752344E+09	2,752201E+09	1,632222E+07	5,504545E+09	5,520867E+09
695	8,157733E+06	8,156893E+06	2,752169E+09	2,752411E+09	1,631463E+07	5,504580E+09	5,520895E+09
696	8,162062E+06	8,163463E+06	2,752329E+09	2,752256E+09	1,632552E+07	5,504585E+09	5,520910E+09
697	8,160028E+06	8,157298E+06	2,752394E+09	2,752356E+09	1,631733E+07	5,504750E+09	5,521068E+09
698	8,157405E+06	8,158663E+06	2,752376E+09	2,752544E+09	1,631607E+07	5,504921E+09	5,521237E+09
699	8,162051E+06	8,162197E+06	2,752627E+09	2,752423E+09	1,632425E+07	5,505050E+09	5,521374E+09
700	8,158026E+06	8,155208E+06	2,752564E+09	2,752651E+09	1,631323E+07	5,505215E+09	5,521528E+09
701	8,157099E+06	8,161163E+06	2,752600E+09	2,752680E+09	1,631826E+07	5,505280E+09	5,521598E+09
702	8,161958E+06	8,159266E+06	2,752767E+09	2,752575E+09	1,632122E+07	5,505342E+09	5,521663E+09
703	8,156074E+06	8,156052E+06	2,752586E+09	2,752760E+09	1,631213E+07	5,505346E+09	5,521658E+09
704	8,159205E+06	8,161802E+06	2,752626E+09	2,752572E+09	1,632101E+07	5,505197E+09	5,521518E+09
705	8,161481E+06	8,156689E+06	2,752606E+09	2,752489E+09	1,631817E+07	5,505095E+09	5,521413E+09
706	8,155863E+06	8,158103E+06	2,752348E+09	2,752554E+09	1,631397E+07	5,504902E+09	5,521216E+09
707	8,163031E+06	8,162266E+06	2,752412E+09	2,752235E+09	1,632530E+07	5,504647E+09	5,520972E+09
708	8,158562E+06	8,158205E+06	2,752248E+09	2,752225E+09	1,631677E+07	5,504473E+09	5,520790E+09
709	8,157332E+06	8,160832E+06	2,752102E+09	2,752185E+09	1,631816E+07	5,504286E+09	5,520605E+09
710	8,163895E+06	8,162493E+06	2,752210E+09	2,751967E+09	1,632639E+07	5,504176E+09	5,520503E+09
711	8,158002E+06	8,157382E+06	2,751979E+09	2,752122E+09	1,631538E+07	5,504101E+09	5,520416E+09
712	8,161727E+06	8,162252E+06	2,751966E+09	2,752007E+09	1,632398E+07	5,503972E+09	5,520296E+09
713	8,163285E+06	8,160823E+06	2,752063E+09	2,751929E+09	1,632411E+07	5,503992E+09	5,520316E+09
714	8,158201E+06	8,157952E+06	2,751916E+09	2,752146E+09	1,631615E+07	5,504062E+09	5,520379E+09
715	8,162479E+06	8,164656E+06	2,752130E+09	2,751999E+09	1,632713E+07	5,504129E+09	5,520457E+09
716	8,160320E+06	8,158184E+06	2,752192E+09	2,752128E+09	1,631850E+07	5,504320E+09	5,520638E+09
717	8,157668E+06	8,159289E+06	2,752145E+09	2,752323E+09	1,631696E+07	5,504468E+09	5,520785E+09
718	8,162810E+06	8,162973E+06	2,752387E+09	2,752222E+09	1,632578E+07	5,504609E+09	5,520935E+09
719	8,159061E+06	8,155769E+06	2,752316E+09	2,752430E+09	1,631483E+07	5,504746E+09	5,521060E+09
720	8,157876E+06	8,161816E+06	2,752331E+09	2,752408E+09	1,631969E+07	5,504739E+09	5,521059E+09
721	8,162998E+06	8,159570E+06	2,752507E+09	2,752292E+09	1,632257E+07	5,504799E+09	5,521121E+09
722	8,156717E+06	8,156894E+06	2,752306E+09	2,752483E+09	1,631361E+07	5,504789E+09	5,521103E+09
723	8,160350E+06	8,162830E+06	2,752352E+09	2,752280E+09	1,632318E+07	5,504632E+09	5,520955E+09
724	8,161939E+06	8,158231E+06	2,752315E+09	2,752191E+09	1,632017E+07	5,504507E+09	5,520827E+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	8,156063E+06	8,159358E+06	2,752053E+09	2,752243E+09	1,631542E+07	5,504296E+09	5,520611E+09
726	8,163540E+06	8,163470E+06	2,752138E+09	2,751954E+09	1,632701E+07	5,504093E+09	5,520420E+09
727	8,159623E+06	8,158586E+06	2,751980E+09	2,751961E+09	1,631821E+07	5,503941E+09	5,520259E+09
728	8,158875E+06	8,160890E+06	2,751800E+09	2,751909E+09	1,631977E+07	5,503709E+09	5,520029E+09
729	8,165483E+06	8,162625E+06	2,751904E+09	2,751694E+09	1,632811E+07	5,503598E+09	5,519927E+09
730	8,159098E+06	8,158282E+06	2,751669E+09	2,751851E+09	1,631738E+07	5,503520E+09	5,519837E+09
731	8,162499E+06	8,163653E+06	2,751700E+09	2,751716E+09	1,632615E+07	5,503416E+09	5,519742E+09
732	8,163210E+06	8,162322E+06	2,751825E+09	2,751650E+09	1,632553E+07	5,503475E+09	5,519800E+09
733	8,158162E+06	8,158758E+06	2,751685E+09	2,751884E+09	1,631692E+07	5,503569E+09	5,519886E+09
734	8,162952E+06	8,165263E+06	2,751907E+09	2,751796E+09	1,632822E+07	5,503702E+09	5,520030E+09
735	8,161699E+06	8,158301E+06	2,751962E+09	2,751932E+09	1,632000E+07	5,503895E+09	5,520215E+09
736	8,158882E+06	8,159818E+06	2,751886E+09	2,752090E+09	1,631870E+07	5,503977E+09	5,520296E+09
737	8,163772E+06	8,163518E+06	2,752150E+09	2,751975E+09	1,632729E+07	5,504126E+09	5,520453E+09
738	8,159483E+06	8,156927E+06	2,752086E+09	2,752181E+09	1,631641E+07	5,504267E+09	5,520583E+09
739	8,158350E+06	8,162763E+06	2,752117E+09	2,752148E+09	1,632111E+07	5,504266E+09	5,520587E+09
740	8,163324E+06	8,160498E+06	2,752263E+09	2,752037E+09	1,632382E+07	5,504300E+09	5,520624E+09
741	8,157104E+06	8,157646E+06	2,752013E+09	2,752206E+09	1,631475E+07	5,504219E+09	5,520534E+09
742	8,161207E+06	8,163693E+06	2,752043E+09	2,752016E+09	1,632490E+07	5,504059E+09	5,520384E+09
743	8,163072E+06	8,159071E+06	2,752011E+09	2,751899E+09	1,632214E+07	5,503910E+09	5,520232E+09
744	8,157186E+06	8,159825E+06	2,751738E+09	2,751916E+09	1,631701E+07	5,503654E+09	5,519971E+09
745	8,164807E+06	8,163669E+06	2,751843E+09	2,751643E+09	1,632848E+07	5,503486E+09	5,519814E+09
746	8,160724E+06	8,159247E+06	2,751677E+09	2,751674E+09	1,631997E+07	5,503350E+09	5,519670E+09
747	8,160268E+06	8,161826E+06	2,751515E+09	2,751618E+09	1,632209E+07	5,503133E+09	5,519455E+09
748	8,165825E+06	8,164335E+06	2,751621E+09	2,751411E+09	1,633016E+07	5,503031E+09	5,519362E+09
749	8,159192E+06	8,159728E+06	2,751400E+09	2,751563E+09	1,631892E+07	5,502963E+09	5,519282E+09
750	8,162658E+06	8,164888E+06	2,751461E+09	2,751476E+09	1,632755E+07	5,502938E+09	5,519265E+09
751	8,164052E+06	8,162732E+06	2,751599E+09	2,751428E+09	1,632678E+07	5,503026E+09	5,519353E+09
752	8,159364E+06	8,158718E+06	2,751436E+09	2,751650E+09	1,631808E+07	5,503085E+09	5,519403E+09
753	8,164130E+06	8,165278E+06	2,751660E+09	2,751565E+09	1,632941E+07	5,503226E+09	5,519555E+09
754	8,162581E+06	8,159147E+06	2,751716E+09	2,751701E+09	1,632173E+07	5,503417E+09	5,519739E+09
755	8,159423E+06	8,161178E+06	2,751673E+09	2,751832E+09	1,632060E+07	5,503505E+09	5,519825E+09
756	8,163593E+06	8,164739E+06	2,751936E+09	2,751722E+09	1,632833E+07	5,503658E+09	5,519986E+09
757	8,159643E+06	8,157718E+06	2,751849E+09	2,751927E+09	1,631736E+07	5,503776E+09	5,520093E+09
758	8,159048E+06	8,163155E+06	2,751852E+09	2,751928E+09	1,632220E+07	5,503780E+09	5,520102E+09
759	8,164868E+06	8,160703E+06	2,751973E+09	2,751795E+09	1,632557E+07	5,503768E+09	5,520094E+09
760	8,158489E+06	8,158158E+06	2,751696E+09	2,751909E+09	1,631665E+07	5,503605E+09	5,519922E+09
761	8,162376E+06	8,164165E+06	2,751748E+09	2,751702E+09	1,632654E+07	5,503450E+09	5,519776E+09
762	8,163774E+06	8,160256E+06	2,751731E+09	2,751592E+09	1,632403E+07	5,503324E+09	5,519648E+09
763	8,158138E+06	8,160860E+06	2,751479E+09	2,751607E+09	1,631900E+07	5,503086E+09	5,519405E+09
764	8,165150E+06	8,164892E+06	2,751566E+09	2,751359E+09	1,633004E+07	5,502925E+09	5,519255E+09
765	8,161186E+06	8,160443E+06	2,751374E+09	2,751387E+09	1,632163E+07	5,502760E+09	5,519082E+09
766	8,160883E+06	8,162989E+06	2,751214E+09	2,751360E+09	1,632387E+07	5,502574E+09	5,518898E+09
767	8,166558E+06	8,165357E+06	2,751339E+09	2,751140E+09	1,633191E+07	5,502479E+09	5,518811E+09
768	8,160125E+06	8,160067E+06	2,751120E+09	2,751268E+09	1,632019E+07	5,502388E+09	5,518708E+09
769	8,163758E+06	8,164874E+06	2,751204E+09	2,751209E+09	1,632863E+07	5,502412E+09	5,518741E+09
770	8,165190E+06	8,163199E+06	2,751345E+09	2,751191E+09	1,632839E+07	5,502536E+09	5,518864E+09
771	8,160666E+06	8,159539E+06	2,751209E+09	2,751406E+09	1,632020E+07	5,502615E+09	5,518936E+09
772	8,164263E+06	8,166699E+06	2,751443E+09	2,751335E+09	1,633096E+07	5,502777E+09	5,519108E+09
773	8,162711E+06	8,160332E+06	2,751502E+09	2,751460E+09	1,632304E+07	5,502961E+09	5,519284E+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							
774	8,159535E+06	8,162020E+06	2,751464E+09	2,751631E+09	1,632155E+07	5,503095E+09	5,519417E+09
775	8,164571E+06	8,164858E+06	2,751706E+09	2,751515E+09	1,632943E+07	5,503221E+09	5,519550E+09
776	8,160969E+06	8,157633E+06	2,751564E+09	2,751676E+09	1,631860E+07	5,503240E+09	5,519558E+09
777	8,160483E+06	8,163179E+06	2,751549E+09	2,751657E+09	1,632366E+07	5,503205E+09	5,519529E+09
778	8,165974E+06	8,161805E+06	2,751664E+09	2,751500E+09	1,632778E+07	5,503163E+09	5,519491E+09
779	8,159232E+06	8,159714E+06	2,751428E+09	2,751572E+09	1,631895E+07	5,502999E+09	5,519318E+09
780	8,162241E+06	8,165630E+06	2,751490E+09	2,751381E+09	1,632787E+07	5,502872E+09	5,519200E+09
781	8,163897E+06	8,161485E+06	2,751460E+09	2,751288E+09	1,632538E+07	5,502749E+09	5,519074E+09
782	8,158837E+06	8,161681E+06	2,751194E+09	2,751359E+09	1,632052E+07	5,502553E+09	5,518874E+09
783	8,166485E+06	8,165635E+06	2,751264E+09	2,751106E+09	1,633212E+07	5,502370E+09	5,518702E+09
784	8,162485E+06	8,161140E+06	2,751053E+09	2,751093E+09	1,632363E+07	5,502146E+09	5,518469E+09
785	8,162153E+06	8,163400E+06	2,750921E+09	2,751065E+09	1,632555E+07	5,501985E+09	5,518311E+09
786	8,167373E+06	8,166182E+06	2,751068E+09	2,750862E+09	1,633355E+07	5,501930E+09	5,518264E+09
787	8,161288E+06	8,160711E+06	2,750883E+09	2,750989E+09	1,632200E+07	5,501872E+09	5,518194E+09
788	8,164052E+06	8,165745E+06	2,750964E+09	2,750961E+09	1,632980E+07	5,501926E+09	5,518255E+09
789	8,165703E+06	8,164201E+06	2,751099E+09	2,750952E+09	1,632990E+07	5,502052E+09	5,518382E+09
790	8,161171E+06	8,160713E+06	2,750977E+09	2,751201E+09	1,632188E+07	5,502178E+09	5,518500E+09
791	8,164801E+06	8,167518E+06	2,751222E+09	2,751120E+09	1,633232E+07	5,502341E+09	5,518673E+09
792	8,163621E+06	8,160425E+06	2,751260E+09	2,751216E+09	1,632405E+07	5,502475E+09	5,518800E+09
793	8,160637E+06	8,161753E+06	2,751209E+09	2,751390E+09	1,632239E+07	5,502599E+09	5,518921E+09
794	8,165834E+06	8,165152E+06	2,751428E+09	2,751272E+09	1,633099E+07	5,502701E+09	5,519032E+09
795	8,162242E+06	8,158814E+06	2,751298E+09	2,751385E+09	1,632106E+07	5,502683E+09	5,519004E+09
796	8,160565E+06	8,164885E+06	2,751292E+09	2,751361E+09	1,632545E+07	5,502653E+09	5,518978E+09
797	8,166038E+06	8,163550E+06	2,751416E+09	2,751198E+09	1,632959E+07	5,502614E+09	5,518943E+09
798	8,159386E+06	8,160933E+06	2,751190E+09	2,751317E+09	1,632032E+07	5,502507E+09	5,518828E+09
799	8,163144E+06	8,166008E+06	2,751231E+09	2,751136E+09	1,632915E+07	5,502366E+09	5,518696E+09
800	8,165221E+06	8,161570E+06	2,751143E+09	2,751013E+09	1,632679E+07	5,502156E+09	5,518483E+09
801	8,160492E+06	8,161762E+06	2,750858E+09	2,751072E+09	1,632225E+07	5,501930E+09	5,518252E+09
802	8,167787E+06	8,166659E+06	2,750928E+09	2,750802E+09	1,633445E+07	5,501730E+09	5,518064E+09
803	8,163591E+06	8,162457E+06	2,750758E+09	2,750751E+09	1,632605E+07	5,501508E+09	5,517834E+09
804	8,162497E+06	8,164522E+06	2,750650E+09	2,750751E+09	1,632702E+07	5,501401E+09	5,517728E+09
805	8,167787E+06	8,167166E+06	2,750799E+09	2,750576E+09	1,633495E+07	5,501375E+09	5,517710E+09
806	8,162089E+06	8,161408E+06	2,750636E+09	2,750767E+09	1,632350E+07	5,501403E+09	5,517726E+09
807	8,164987E+06	8,166613E+06	2,750727E+09	2,750751E+09	1,633160E+07	5,501478E+09	5,517810E+09
808	8,166575E+06	8,164748E+06	2,750853E+09	2,750718E+09	1,633132E+07	5,501570E+09	5,517902E+09
809	8,162139E+06	8,161140E+06	2,750752E+09	2,750971E+09	1,632328E+07	5,501723E+09	5,518046E+09
810	8,165531E+06	8,168097E+06	2,750991E+09	2,750897E+09	1,633363E+07	5,501888E+09	5,518222E+09
811	8,164753E+06	8,161054E+06	2,751032E+09	2,750961E+09	1,632581E+07	5,501993E+09	5,518319E+09
812	8,160886E+06	8,162704E+06	2,750960E+09	2,751137E+09	1,632359E+07	5,502097E+09	5,518421E+09
813	8,166223E+06	8,166369E+06	2,751160E+09	2,751004E+09	1,633259E+07	5,502164E+09	5,518497E+09
814	8,162482E+06	8,160309E+06	2,751052E+09	2,751132E+09	1,632279E+07	5,502184E+09	5,518507E+09
815	8,161044E+06	8,165868E+06	2,751054E+09	2,751097E+09	1,632691E+07	5,502151E+09	5,518478E+09
816	8,166930E+06	8,163753E+06	2,751143E+09	2,750918E+09	1,633068E+07	5,502061E+09	5,518392E+09
817	8,160848E+06	8,160798E+06	2,750894E+09	2,751048E+09	1,632165E+07	5,501943E+09	5,518264E+09
818	8,164860E+06	8,166241E+06	2,750905E+09	2,750869E+09	1,633110E+07	5,501774E+09	5,518105E+09
819	8,166863E+06	8,162837E+06	2,750823E+09	2,750695E+09	1,632970E+07	5,501518E+09	5,517848E+09
820	8,161023E+06	8,163266E+06	2,750551E+09	2,750746E+09	1,632429E+07	5,501297E+09	5,517621E+09
821	8,168089E+06	8,168223E+06	2,750639E+09	2,750479E+09	1,633631E+07	5,501118E+09	5,517455E+09
822	8,163929E+06	8,163684E+06	2,750504E+09	2,750478E+09	1,632761E+07	5,500982E+09	5,517310E+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	8,163288E+06	8,165075E+06	2,750400E+09	2,750504E+09	1,632836E+07	5,500903E+09	5,517232E+09
824	8,168747E+06	8,167359E+06	2,750520E+09	2,750330E+09	1,633611E+07	5,500850E+09	5,517186E+09
825	8,163508E+06	8,161669E+06	2,750363E+09	2,750529E+09	1,632518E+07	5,500892E+09	5,517217E+09
826	8,165877E+06	8,167555E+06	2,750471E+09	2,750513E+09	1,633343E+07	5,500984E+09	5,517317E+09
827	8,167418E+06	8,165809E+06	2,750627E+09	2,750446E+09	1,633323E+07	5,501072E+09	5,517405E+09
828	8,162284E+06	8,162050E+06	2,750532E+09	2,750717E+09	1,632433E+07	5,501249E+09	5,517573E+09
829	8,165826E+06	8,168808E+06	2,750748E+09	2,750657E+09	1,633463E+07	5,501405E+09	5,517740E+09
830	8,165433E+06	8,161858E+06	2,750796E+09	2,750750E+09	1,632729E+07	5,501546E+09	5,517873E+09
831	8,161637E+06	8,163707E+06	2,750724E+09	2,750911E+09	1,632534E+07	5,501635E+09	5,517960E+09
832	8,167007E+06	8,166889E+06	2,750903E+09	2,750745E+09	1,633390E+07	5,501648E+09	5,517982E+09
833	8,163555E+06	8,160713E+06	2,750805E+09	2,750873E+09	1,632427E+07	5,501678E+09	5,518002E+09
834	8,162180E+06	8,166195E+06	2,750789E+09	2,750844E+09	1,632837E+07	5,501633E+09	5,517961E+09
835	8,168300E+06	8,164337E+06	2,750856E+09	2,750627E+09	1,633264E+07	5,501482E+09	5,517815E+09
836	8,161616E+06	8,161797E+06	2,750583E+09	2,750751E+09	1,632341E+07	5,501334E+09	5,517657E+09
837	8,165627E+06	8,167635E+06	2,750570E+09	2,750550E+09	1,633326E+07	5,501120E+09	5,517454E+09
838	8,167188E+06	8,164691E+06	2,750525E+09	2,750388E+09	1,633188E+07	5,500913E+09	5,517245E+09
839	8,161550E+06	8,164489E+06	2,750277E+09	2,750438E+09	1,632604E+07	5,500716E+09	5,517042E+09
840	8,168759E+06	8,168486E+06	2,750343E+09	2,750177E+09	1,633725E+07	5,500520E+09	5,516858E+09
841	8,165257E+06	8,163708E+06	2,750216E+09	2,750209E+09	1,632897E+07	5,500425E+09	5,516754E+09
842	8,164816E+06	8,165460E+06	2,750114E+09	2,750258E+09	1,633028E+07	5,500372E+09	5,516702E+09
843	8,169953E+06	8,168588E+06	2,750257E+09	2,750059E+09	1,633854E+07	5,500316E+09	5,516655E+09
844	8,163993E+06	8,163028E+06	2,750132E+09	2,750270E+09	1,632702E+07	5,500402E+09	5,516729E+09
845	8,165977E+06	8,168758E+06	2,750249E+09	2,750268E+09	1,633473E+07	5,500517E+09	5,516852E+09
846	8,167660E+06	8,166570E+06	2,750426E+09	2,750242E+09	1,633423E+07	5,500668E+09	5,517002E+09
847	8,162916E+06	8,162466E+06	2,750314E+09	2,750515E+09	1,632538E+07	5,500829E+09	5,517154E+09
848	8,166603E+06	8,168685E+06	2,750479E+09	2,750434E+09	1,633529E+07	5,500913E+09	5,517248E+09
849	8,166743E+06	8,162221E+06	2,750526E+09	2,750511E+09	1,632896E+07	5,501038E+09	5,517367E+09
850	8,162649E+06	8,164523E+06	2,750465E+09	2,750655E+09	1,632717E+07	5,501121E+09	5,517448E+09
851	8,167988E+06	8,167807E+06	2,750656E+09	2,750450E+09	1,633579E+07	5,501106E+09	5,517442E+09
852	8,164094E+06	8,161566E+06	2,750548E+09	2,750585E+09	1,632566E+07	5,501132E+09	5,517458E+09
853	8,162803E+06	8,166908E+06	2,750499E+09	2,750564E+09	1,632971E+07	5,501063E+09	5,517393E+09
854	8,168964E+06	8,165597E+06	2,750571E+09	2,750363E+09	1,633456E+07	5,500934E+09	5,517269E+09
855	8,162248E+06	8,163302E+06	2,750297E+09	2,750466E+09	1,632555E+07	5,500762E+09	5,517088E+09
856	8,166339E+06	8,168366E+06	2,750263E+09	2,750244E+09	1,633470E+07	5,500507E+09	5,516842E+09
857	8,168203E+06	8,165405E+06	2,750231E+09	2,750089E+09	1,633361E+07	5,500320E+09	5,516654E+09
858	8,162904E+06	8,164719E+06	2,749989E+09	2,750155E+09	1,632762E+07	5,500144E+09	5,516471E+09
859	8,170055E+06	8,169022E+06	2,750050E+09	2,749879E+09	1,633908E+07	5,499929E+09	5,516268E+09
860	8,166140E+06	8,164557E+06	2,749930E+09	2,749927E+09	1,633070E+07	5,499857E+09	5,516188E+09
861	8,165427E+06	8,166753E+06	2,749834E+09	2,749985E+09	1,633218E+07	5,499818E+09	5,516151E+09
862	8,170063E+06	8,170153E+06	2,750026E+09	2,749815E+09	1,634022E+07	5,499841E+09	5,516181E+09
863	8,164437E+06	8,164038E+06	2,749920E+09	2,750034E+09	1,632848E+07	5,499954E+09	5,516282E+09
864	8,166506E+06	8,168576E+06	2,749996E+09	2,750038E+09	1,633508E+07	5,500033E+09	5,516368E+09
865	8,168954E+06	8,166365E+06	2,750162E+09	2,750028E+09	1,633532E+07	5,500190E+09	5,516525E+09
866	8,164381E+06	8,162784E+06	2,750053E+09	2,750291E+09	1,632716E+07	5,500343E+09	5,516671E+09
867	8,167597E+06	8,169679E+06	2,750224E+09	2,750163E+09	1,633728E+07	5,500388E+09	5,516725E+09
868	8,167274E+06	8,163538E+06	2,750304E+09	2,750237E+09	1,633081E+07	5,500541E+09	5,516872E+09
869	8,162843E+06	8,165858E+06	2,750240E+09	2,750388E+09	1,632870E+07	5,500628E+09	5,516957E+09
870	8,168121E+06	8,168743E+06	2,750439E+09	2,750215E+09	1,633686E+07	5,500654E+09	5,516991E+09
871	8,164671E+06	8,162473E+06	2,750301E+09	2,750345E+09	1,632714E+07	5,500646E+09	5,516973E+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							
872	8,163580E+06	8,166963E+06	2,750183E+09	2,750298E+09	1,633054E+07	5,500481E+09	5,516811E+09
873	8,170145E+06	8,166353E+06	2,750246E+09	2,750078E+09	1,633650E+07	5,500324E+09	5,516661E+09
874	8,163473E+06	8,164154E+06	2,749987E+09	2,750154E+09	1,632763E+07	5,500140E+09	5,516468E+09
875	8,167555E+06	8,169100E+06	2,749957E+09	2,749901E+09	1,633666E+07	5,499858E+09	5,516195E+09
876	8,169059E+06	8,166185E+06	2,749935E+09	2,749766E+09	1,633524E+07	5,499701E+09	5,516036E+09
877	8,163891E+06	8,165428E+06	2,749687E+09	2,749859E+09	1,632932E+07	5,499546E+09	5,515876E+09
878	8,170570E+06	8,170331E+06	2,749785E+09	2,749622E+09	1,634090E+07	5,499406E+09	5,515747E+09
879	8,166713E+06	8,166077E+06	2,749688E+09	2,749675E+09	1,633279E+07	5,499363E+09	5,515696E+09
880	8,165893E+06	8,167293E+06	2,749580E+09	2,749737E+09	1,633319E+07	5,499317E+09	5,515650E+09
881	8,170833E+06	8,170687E+06	2,749780E+09	2,749589E+09	1,634152E+07	5,499369E+09	5,515711E+09
882	8,165749E+06	8,164019E+06	2,749671E+09	2,749812E+09	1,632977E+07	5,499483E+09	5,515813E+09
883	8,167681E+06	8,168820E+06	2,749727E+09	2,749786E+09	1,633650E+07	5,499513E+09	5,515849E+09
884	8,169883E+06	8,167126E+06	2,749899E+09	2,749766E+09	1,633701E+07	5,499665E+09	5,516002E+09
885	8,164815E+06	8,164171E+06	2,749806E+09	2,750023E+09	1,632899E+07	5,499829E+09	5,516158E+09
886	8,167415E+06	8,171196E+06	2,750030E+09	2,749916E+09	1,633861E+07	5,499946E+09	5,516284E+09
887	8,167509E+06	8,164673E+06	2,750113E+09	2,749996E+09	1,633218E+07	5,500108E+09	5,516441E+09
888	8,163298E+06	8,165744E+06	2,749988E+09	2,750153E+09	1,632904E+07	5,500141E+09	5,516470E+09
889	8,169411E+06	8,168761E+06	2,750149E+09	2,749987E+09	1,633817E+07	5,500136E+09	5,516474E+09
890	8,166320E+06	8,163003E+06	2,749998E+09	2,750085E+09	1,632932E+07	5,500083E+09	5,516412E+09
891	8,164916E+06	8,167819E+06	2,749866E+09	2,749982E+09	1,633274E+07	5,499848E+09	5,516181E+09
892	8,171053E+06	8,167597E+06	2,749953E+09	2,749747E+09	1,633865E+07	5,499700E+09	5,516039E+09
893	8,164083E+06	8,165329E+06	2,749699E+09	2,749829E+09	1,632941E+07	5,499528E+09	5,515858E+09
894	8,167908E+06	8,170046E+06	2,749694E+09	2,749611E+09	1,633795E+07	5,499305E+09	5,515643E+09
895	8,169604E+06	8,167365E+06	2,749666E+09	2,749490E+09	1,633697E+07	5,499156E+09	5,515493E+09
896	8,164650E+06	8,165871E+06	2,749378E+09	2,749586E+09	1,633052E+07	5,498965E+09	5,515295E+09
897	8,171366E+06	8,171425E+06	2,749487E+09	2,749365E+09	1,634279E+07	5,498852E+09	5,515195E+09
898	8,167953E+06	8,166862E+06	2,749421E+09	2,749411E+09	1,633482E+07	5,498832E+09	5,515167E+09
899	8,167006E+06	8,167676E+06	2,749305E+09	2,749451E+09	1,633468E+07	5,498756E+09	5,515090E+09
900	8,171732E+06	8,171080E+06	2,749514E+09	2,749320E+09	1,634281E+07	5,498834E+09	5,515177E+09
901	8,166664E+06	8,164723E+06	2,749408E+09	2,749554E+09	1,633139E+07	5,498962E+09	5,515293E+09
902	8,167876E+06	8,170147E+06	2,749508E+09	2,749551E+09	1,633802E+07	5,499059E+09	5,515397E+09
903	8,170189E+06	8,168752E+06	2,749711E+09	2,749537E+09	1,633894E+07	5,499247E+09	5,515586E+09
904	8,165104E+06	8,164763E+06	2,749598E+09	2,749797E+09	1,632987E+07	5,499395E+09	5,515725E+09
905	8,168036E+06	8,171588E+06	2,749811E+09	2,749716E+09	1,633962E+07	5,499527E+09	5,515867E+09
906	8,168983E+06	8,164585E+06	2,749870E+09	2,749783E+09	1,633357E+07	5,499654E+09	5,515987E+09
907	8,164593E+06	8,165786E+06	2,749690E+09	2,749892E+09	1,633038E+07	5,499582E+09	5,515912E+09
908	8,170616E+06	8,169452E+06	2,749838E+09	2,749695E+09	1,634007E+07	5,499532E+09	5,515872E+09
909	8,167003E+06	8,164627E+06	2,749692E+09	2,749764E+09	1,633163E+07	5,499456E+09	5,515787E+09
910	8,165083E+06	8,169376E+06	2,749607E+09	2,749664E+09	1,633446E+07	5,499271E+09	5,515605E+09
911	8,171414E+06	8,169073E+06	2,749697E+09	2,749438E+09	1,634049E+07	5,499135E+09	5,515475E+09
912	8,164662E+06	8,165523E+06	2,749401E+09	2,749537E+09	1,633018E+07	5,498938E+09	5,515268E+09
913	8,168947E+06	8,170574E+06	2,749384E+09	2,749352E+09	1,633952E+07	5,498736E+09	5,515075E+09
914	8,171041E+06	8,168130E+06	2,749365E+09	2,749222E+09	1,633917E+07	5,498587E+09	5,514926E+09
915	8,165976E+06	8,166727E+06	2,749079E+09	2,749289E+09	1,633270E+07	5,498368E+09	5,514700E+09
916	8,172314E+06	8,172523E+06	2,749215E+09	2,749069E+09	1,634484E+07	5,498284E+09	5,514629E+09
917	8,168745E+06	8,167791E+06	2,749158E+09	2,749133E+09	1,633654E+07	5,498291E+09	5,514628E+09
918	8,167454E+06	8,168422E+06	2,749071E+09	2,749204E+09	1,633588E+07	5,498275E+09	5,514611E+09
919	8,172163E+06	8,172052E+06	2,749276E+09	2,749084E+09	1,634422E+07	5,498359E+09	5,514704E+09
920	8,167212E+06	8,165116E+06	2,749151E+09	2,749315E+09	1,633233E+07	5,498466E+09	5,514798E+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							
921	8,168334E+06	8,171211E+06	2,749270E+09	2,749333E+09	1,633955E+07	5,498602E+09	5,514942E+09
922	8,171373E+06	8,169274E+06	2,749498E+09	2,749311E+09	1,634065E+07	5,498809E+09	5,515150E+09
923	8,166265E+06	8,164959E+06	2,749355E+09	2,749548E+09	1,633122E+07	5,498903E+09	5,515234E+09
924	8,169193E+06	8,171742E+06	2,749549E+09	2,749466E+09	1,634093E+07	5,499015E+09	5,515356E+09
925	8,170013E+06	8,165451E+06	2,749588E+09	2,749521E+09	1,633546E+07	5,499109E+09	5,515445E+09
926	8,164868E+06	8,167264E+06	2,749433E+09	2,749618E+09	1,633213E+07	5,499051E+09	5,515383E+09
927	8,170851E+06	8,171289E+06	2,749593E+09	2,749407E+09	1,634214E+07	5,499000E+09	5,515342E+09
928	8,167187E+06	8,165667E+06	2,749427E+09	2,749467E+09	1,633285E+07	5,498894E+09	5,515227E+09
929	8,165693E+06	8,170075E+06	2,749330E+09	2,749399E+09	1,633577E+07	5,498729E+09	5,515065E+09
930	8,172949E+06	8,169318E+06	2,749408E+09	2,749171E+09	1,634227E+07	5,498579E+09	5,514922E+09
931	8,166196E+06	8,165710E+06	2,749066E+09	2,749236E+09	1,633191E+07	5,498302E+09	5,514634E+09
932	8,170281E+06	8,171328E+06	2,749056E+09	2,749043E+09	1,634161E+07	5,498099E+09	5,514441E+09
933	8,171827E+06	8,169721E+06	2,749061E+09	2,748909E+09	1,634155E+07	5,497970E+09	5,514311E+09
934	8,166388E+06	8,168039E+06	2,748827E+09	2,748991E+09	1,633443E+07	5,497818E+09	5,514152E+09
935	8,172679E+06	8,173713E+06	2,748969E+09	2,748796E+09	1,634639E+07	5,497765E+09	5,514111E+09
936	8,169440E+06	8,167882E+06	2,748878E+09	2,748877E+09	1,633732E+07	5,497755E+09	5,514092E+09
937	8,168347E+06	8,169037E+06	2,748796E+09	2,748984E+09	1,633738E+07	5,497780E+09	5,514118E+09
938	8,173466E+06	8,172710E+06	2,749030E+09	2,748860E+09	1,634618E+07	5,497890E+09	5,514237E+09
939	8,168356E+06	8,165754E+06	2,748914E+09	2,749065E+09	1,633411E+07	5,497979E+09	5,514313E+09
940	8,169104E+06	8,172010E+06	2,749058E+09	2,749089E+09	1,634111E+07	5,498148E+09	5,514489E+09
941	8,172026E+06	8,169998E+06	2,749278E+09	2,749079E+09	1,634202E+07	5,498357E+09	5,514699E+09
942	8,166610E+06	8,165812E+06	2,749142E+09	2,749319E+09	1,633242E+07	5,498461E+09	5,514793E+09
943	8,169492E+06	8,172871E+06	2,749305E+09	2,749226E+09	1,634236E+07	5,498530E+09	5,514873E+09
944	8,170348E+06	8,166326E+06	2,749304E+09	2,749256E+09	1,633667E+07	5,498560E+09	5,514896E+09
945	8,165208E+06	8,168587E+06	2,749158E+09	2,749356E+09	1,633379E+07	5,498514E+09	5,514848E+09
946	8,172110E+06	8,171787E+06	2,749325E+09	2,749126E+09	1,634390E+07	5,498452E+09	5,514795E+09
947	8,168520E+06	8,165778E+06	2,749123E+09	2,749160E+09	1,633430E+07	5,498283E+09	5,514617E+09
948	8,167281E+06	8,170186E+06	2,749015E+09	2,749093E+09	1,633747E+07	5,498108E+09	5,514445E+09
949	8,174073E+06	8,170332E+06	2,749085E+09	2,748869E+09	1,634440E+07	5,497954E+09	5,514299E+09
950	8,166870E+06	8,167284E+06	2,748789E+09	2,748934E+09	1,633415E+07	5,497722E+09	5,514056E+09
951	8,170731E+06	8,173098E+06	2,748795E+09	2,748747E+09	1,634383E+07	5,497542E+09	5,513886E+09
952	8,172190E+06	8,170700E+06	2,748783E+09	2,748624E+09	1,634289E+07	5,497407E+09	5,513749E+09
953	8,167099E+06	8,168728E+06	2,748547E+09	2,748746E+09	1,633583E+07	5,497293E+09	5,513629E+09
954	8,174064E+06	8,173788E+06	2,748687E+09	2,748553E+09	1,634785E+07	5,497240E+09	5,513588E+09
955	8,170786E+06	8,168059E+06	2,748574E+09	2,748604E+09	1,633884E+07	5,497178E+09	5,513517E+09
956	8,169425E+06	8,169898E+06	2,748527E+09	2,748708E+09	1,633932E+07	5,497235E+09	5,513575E+09
957	8,173844E+06	8,174143E+06	2,748798E+09	2,748597E+09	1,634799E+07	5,497396E+09	5,513743E+09
958	8,168662E+06	8,167024E+06	2,748734E+09	2,748817E+09	1,633569E+07	5,497551E+09	5,513887E+09
959	8,169172E+06	8,173052E+06	2,748865E+09	2,748867E+09	1,634222E+07	5,497732E+09	5,514074E+09
960	8,172428E+06	8,170161E+06	2,749032E+09	2,748861E+09	1,634259E+07	5,497893E+09	5,514235E+09
961	8,167155E+06	8,166629E+06	2,748876E+09	2,749114E+09	1,633378E+07	5,497990E+09	5,514324E+09
962	8,170784E+06	8,173325E+06	2,749043E+09	2,748993E+09	1,634411E+07	5,498036E+09	5,514380E+09
963	8,171595E+06	8,166890E+06	2,749023E+09	2,748969E+09	1,633848E+07	5,497992E+09	5,514331E+09
964	8,166432E+06	8,169105E+06	2,748890E+09	2,749058E+09	1,633554E+07	5,497948E+09	5,514284E+09
965	8,173080E+06	8,172430E+06	2,749044E+09	2,748840E+09	1,634551E+07	5,497883E+09	5,514229E+09
966	8,169257E+06	8,166680E+06	2,748853E+09	2,748867E+09	1,633594E+07	5,497720E+09	5,514056E+09
967	8,167847E+06	8,171427E+06	2,748725E+09	2,748802E+09	1,633927E+07	5,497527E+09	5,513867E+09
968	8,174337E+06	8,171596E+06	2,748769E+09	2,748568E+09	1,634593E+07	5,497336E+09	5,513682E+09
969	8,167281E+06	8,168851E+06	2,748494E+09	2,748653E+09	1,633613E+07	5,497147E+09	5,513483E+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	8,172098E+06	8,173563E+06	2,748510E+09	2,748467E+09	1,634566E+07	5,496977E+09	5,513323E+09
971	8,173519E+06	8,170852E+06	2,748463E+09	2,748326E+09	1,634437E+07	5,496789E+09	5,513133E+09
972	8,168674E+06	8,168864E+06	2,748240E+09	2,748452E+09	1,633754E+07	5,496692E+09	5,513030E+09
973	8,174857E+06	8,174796E+06	2,748397E+09	2,748276E+09	1,634965E+07	5,496673E+09	5,513022E+09
974	8,171239E+06	8,169632E+06	2,748357E+09	2,748333E+09	1,634087E+07	5,496691E+09	5,513032E+09
975	8,169466E+06	8,171655E+06	2,748344E+09	2,748463E+09	1,634112E+07	5,496807E+09	5,513148E+09
976	8,173773E+06	8,174888E+06	2,748594E+09	2,748381E+09	1,634866E+07	5,496975E+09	5,513323E+09
977	8,169249E+06	8,167585E+06	2,748518E+09	2,748642E+09	1,633683E+07	5,497160E+09	5,513497E+09
978	8,170463E+06	8,172696E+06	2,748615E+09	2,748675E+09	1,634316E+07	5,497291E+09	5,513634E+09
979	8,173794E+06	8,169963E+06	2,748729E+09	2,748616E+09	1,634376E+07	5,497344E+09	5,513688E+09
980	8,168374E+06	8,167321E+06	2,748591E+09	2,748829E+09	1,633569E+07	5,497419E+09	5,513755E+09
981	8,171381E+06	8,174344E+06	2,748772E+09	2,748700E+09	1,634572E+07	5,497472E+09	5,513818E+09
982	8,172196E+06	8,168157E+06	2,748793E+09	2,748666E+09	1,634035E+07	5,497460E+09	5,513800E+09
983	8,166888E+06	8,170221E+06	2,748641E+09	2,748771E+09	1,633711E+07	5,497412E+09	5,513750E+09
984	8,173466E+06	8,173055E+06	2,748748E+09	2,748561E+09	1,634652E+07	5,497309E+09	5,513656E+09
985	8,169752E+06	8,168102E+06	2,748555E+09	2,748610E+09	1,633785E+07	5,497166E+09	5,513504E+09
986	8,169062E+06	8,172179E+06	2,748438E+09	2,748530E+09	1,634124E+07	5,496968E+09	5,513309E+09
987	8,175348E+06	8,172404E+06	2,748459E+09	2,748262E+09	1,634775E+07	5,496721E+09	5,513068E+09
988	8,168620E+06	8,169464E+06	2,748198E+09	2,748341E+09	1,633808E+07	5,496539E+09	5,512877E+09
989	8,173127E+06	8,174103E+06	2,748205E+09	2,748174E+09	1,634723E+07	5,496379E+09	5,512726E+09
990	8,174331E+06	8,171875E+06	2,748185E+09	2,748027E+09	1,634621E+07	5,496212E+09	5,512558E+09
991	8,169177E+06	8,170163E+06	2,747975E+09	2,748169E+09	1,633934E+07	5,496144E+09	5,512483E+09
992	8,174729E+06	8,176047E+06	2,748137E+09	2,748010E+09	1,635078E+07	5,496148E+09	5,512499E+09
993	8,171499E+06	8,170888E+06	2,748137E+09	2,748112E+09	1,634239E+07	5,496249E+09	5,512592E+09
994	8,170687E+06	8,171700E+06	2,748132E+09	2,748258E+09	1,634239E+07	5,496390E+09	5,512732E+09
995	8,175058E+06	8,174503E+06	2,748324E+09	2,748158E+09	1,634956E+07	5,496483E+09	5,512832E+09
996	8,170916E+06	8,167520E+06	2,748245E+09	2,748401E+09	1,633844E+07	5,496646E+09	5,512985E+09
997	8,171277E+06	8,173360E+06	2,748338E+09	2,748431E+09	1,634464E+07	5,496769E+09	5,513113E+09
998	8,174395E+06	8,171383E+06	2,748501E+09	2,748338E+09	1,634578E+07	5,496839E+09	5,513185E+09
999	8,168471E+06	8,169057E+06	2,748385E+09	2,748551E+09	1,633753E+07	5,496937E+09	5,513274E+09
1000	8,171233E+06	8,175217E+06	2,748536E+09	2,748437E+09	1,634645E+07	5,496973E+09	5,513319E+09
1001	8,172607E+06	8,169147E+06	2,748548E+09	2,748436E+09	1,634175E+07	5,496984E+09	5,513326E+09
1002	8,168142E+06	8,170363E+06	2,748367E+09	2,748528E+09	1,633850E+07	5,496895E+09	5,513233E+09
1003	8,174594E+06	8,173360E+06	2,748415E+09	2,748275E+09	1,634795E+07	5,496690E+09	5,513038E+09
1004	8,171009E+06	8,169118E+06	2,748241E+09	2,748292E+09	1,634013E+07	5,496533E+09	5,512873E+09
1005	8,169944E+06	8,173062E+06	2,748129E+09	2,748214E+09	1,634301E+07	5,496343E+09	5,512686E+09
1006	8,176186E+06	8,173614E+06	2,748179E+09	2,747934E+09	1,634980E+07	5,496113E+09	5,512463E+09
1007	8,169376E+06	8,170487E+06	2,747912E+09	2,748029E+09	1,633986E+07	5,495940E+09	5,512280E+09
1008	8,173576E+06	8,174743E+06	2,747891E+09	2,747883E+09	1,634832E+07	5,495774E+09	5,512122E+09
1009	8,174862E+06	8,173295E+06	2,747908E+09	2,747777E+09	1,634816E+07	5,495685E+09	5,512033E+09
1010	8,170478E+06	8,170756E+06	2,747732E+09	2,747925E+09	1,634123E+07	5,495658E+09	5,511999E+09
1011	8,175574E+06	8,176451E+06	2,747881E+09	2,747765E+09	1,635203E+07	5,495646E+09	5,511998E+09
1012	8,172999E+06	8,171107E+06	2,747900E+09	2,747872E+09	1,634411E+07	5,495772E+09	5,512116E+09
1013	8,171626E+06	8,171826E+06	2,747875E+09	2,748035E+09	1,634345E+07	5,495910E+09	5,512253E+09
1014	8,175816E+06	8,175304E+06	2,748079E+09	2,747907E+09	1,635112E+07	5,495986E+09	5,512337E+09
1015	8,171247E+06	8,168987E+06	2,748002E+09	2,748135E+09	1,634023E+07	5,496137E+09	5,512477E+09
1016	8,170884E+06	8,174753E+06	2,748091E+09	2,748162E+09	1,634564E+07	5,496253E+09	5,512599E+09
1017	8,174499E+06	8,172909E+06	2,748288E+09	2,748101E+09	1,634741E+07	5,496388E+09	5,512736E+09
1018	8,169526E+06	8,169365E+06	2,748168E+09	2,748318E+09	1,633889E+07	5,496486E+09	5,512825E+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							
1019	8,172270E+06	8,174936E+06	2,748252E+09	2,748186E+09	1,634721E+07	5,496438E+09	5,512785E+09
1020	8,174231E+06	8,169431E+06	2,748255E+09	2,748163E+09	1,634366E+07	5,496418E+09	5,512762E+09
1021	8,169118E+06	8,171104E+06	2,748063E+09	2,748250E+09	1,634022E+07	5,496313E+09	5,512653E+09
1022	8,175464E+06	8,174872E+06	2,748143E+09	2,747961E+09	1,635034E+07	5,496103E+09	5,512454E+09
1023	8,171533E+06	8,170833E+06	2,747977E+09	2,747977E+09	1,634237E+07	5,495954E+09	5,512296E+09
1024	8,170344E+06	8,173840E+06	2,747831E+09	2,747916E+09	1,634418E+07	5,495747E+09	5,512091E+09
1025	8,176844E+06	8,174602E+06	2,747879E+09	2,747667E+09	1,635145E+07	5,495546E+09	5,511897E+09
1026	8,170876E+06	8,170613E+06	2,747608E+09	2,747756E+09	1,634149E+07	5,495364E+09	5,511706E+09
1027	8,174556E+06	8,175115E+06	2,747560E+09	2,747589E+09	1,634967E+07	5,495149E+09	5,511499E+09
1028	8,176022E+06	8,174235E+06	2,747629E+09	2,747479E+09	1,635026E+07	5,495108E+09	5,511458E+09
1029	8,171404E+06	8,171503E+06	2,747481E+09	2,747660E+09	1,634291E+07	5,495141E+09	5,511484E+09
1030	8,176344E+06	8,177499E+06	2,747652E+09	2,747500E+09	1,635384E+07	5,495151E+09	5,511505E+09
1031	8,173712E+06	8,172034E+06	2,747665E+09	2,747625E+09	1,634575E+07	5,495290E+09	5,511635E+09
1032	8,171723E+06	8,172627E+06	2,747611E+09	2,747798E+09	1,634435E+07	5,495408E+09	5,511753E+09
1033	8,175916E+06	8,176726E+06	2,747848E+09	2,747693E+09	1,635264E+07	5,495540E+09	5,511893E+09
1034	8,172110E+06	8,169738E+06	2,747800E+09	2,747909E+09	1,634185E+07	5,495708E+09	5,512050E+09
1035	8,171445E+06	8,175062E+06	2,747855E+09	2,747923E+09	1,634651E+07	5,495778E+09	5,512125E+09
1036	8,176002E+06	8,173103E+06	2,748054E+09	2,747857E+09	1,634911E+07	5,495911E+09	5,512260E+09
1037	8,170736E+06	8,169473E+06	2,747901E+09	2,748080E+09	1,634021E+07	5,495980E+09	5,512320E+09
1038	8,173325E+06	8,175697E+06	2,747974E+09	2,747908E+09	1,634902E+07	5,495883E+09	5,512232E+09
1039	8,174817E+06	8,171013E+06	2,747971E+09	2,747862E+09	1,634583E+07	5,495834E+09	5,512180E+09
1040	8,169062E+06	8,172408E+06	2,747763E+09	2,747941E+09	1,634147E+07	5,495703E+09	5,512045E+09
1041	8,175944E+06	8,176297E+06	2,747866E+09	2,747677E+09	1,635224E+07	5,495543E+09	5,511895E+09
1042	8,172931E+06	8,171313E+06	2,747687E+09	2,747686E+09	1,634424E+07	5,495373E+09	5,511717E+09
1043	8,171651E+06	8,173714E+06	2,747482E+09	2,747613E+09	1,634536E+07	5,495095E+09	5,511440E+09
1044	8,178480E+06	8,175268E+06	2,747550E+09	2,747356E+09	1,635375E+07	5,494906E+09	5,511260E+09
1045	8,171941E+06	8,171486E+06	2,747307E+09	2,747459E+09	1,634343E+07	5,494766E+09	5,511109E+09
1046	8,175216E+06	8,176724E+06	2,747315E+09	2,747285E+09	1,635194E+07	5,494600E+09	5,510952E+09
1047	8,176382E+06	8,175820E+06	2,747407E+09	2,747203E+09	1,635220E+07	5,494611E+09	5,510963E+09
1048	8,171624E+06	8,172309E+06	2,747239E+09	2,747419E+09	1,634393E+07	5,494657E+09	5,511001E+09
1049	8,176705E+06	8,178454E+06	2,747413E+09	2,747298E+09	1,635516E+07	5,494711E+09	5,511067E+09
1050	8,174957E+06	8,172257E+06	2,747415E+09	2,747410E+09	1,634721E+07	5,494826E+09	5,511173E+09
1051	8,172332E+06	8,172925E+06	2,747327E+09	2,747555E+09	1,634526E+07	5,494882E+09	5,511227E+09
1052	8,177002E+06	8,177325E+06	2,747604E+09	2,747435E+09	1,635433E+07	5,495038E+09	5,511393E+09
1053	8,173126E+06	8,170117E+06	2,747572E+09	2,747665E+09	1,634324E+07	5,495237E+09	5,511580E+09
1054	8,172414E+06	8,175811E+06	2,747630E+09	2,747662E+09	1,634822E+07	5,495291E+09	5,511640E+09
1055	8,176891E+06	8,173929E+06	2,747808E+09	2,747601E+09	1,635082E+07	5,495409E+09	5,511760E+09
1056	8,171059E+06	8,170506E+06	2,747622E+09	2,747821E+09	1,634157E+07	5,495443E+09	5,511784E+09
1057	8,173668E+06	8,177191E+06	2,747712E+09	2,747660E+09	1,635086E+07	5,495372E+09	5,511723E+09
1058	8,175806E+06	8,172070E+06	2,747717E+09	2,747594E+09	1,634788E+07	5,495311E+09	5,511659E+09
1059	8,169803E+06	8,172803E+06	2,747458E+09	2,747651E+09	1,634261E+07	5,495109E+09	5,511452E+09
1060	8,177503E+06	8,176606E+06	2,747557E+09	2,747377E+09	1,635411E+07	5,494934E+09	5,511288E+09
1061	8,174233E+06	8,171679E+06	2,747363E+09	2,747386E+09	1,634591E+07	5,494750E+09	5,511095E+09
1062	8,172819E+06	8,174789E+06	2,747165E+09	2,747279E+09	1,634761E+07	5,494444E+09	5,510791E+09
1063	8,178919E+06	8,177077E+06	2,747260E+09	2,747029E+09	1,635600E+07	5,494289E+09	5,510645E+09
1064	8,171980E+06	8,172954E+06	2,747035E+09	2,747158E+09	1,634493E+07	5,494193E+09	5,510538E+09
1065	8,175520E+06	8,178067E+06	2,747083E+09	2,747040E+09	1,635359E+07	5,494123E+09	5,510477E+09
1066	8,177579E+06	8,176132E+06	2,747165E+09	2,746978E+09	1,635371E+07	5,494143E+09	5,510497E+09
1067	8,172749E+06	8,172048E+06	2,746939E+09	2,747186E+09	1,634480E+07	5,494124E+09	5,510469E+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	8,178098E+06	8,178775E+06	2,747128E+09	2,747054E+09	1,635687E+07	5,494183E+09	5,510539E+09
1069	8,176078E+06	8,172812E+06	2,747158E+09	2,747164E+09	1,634889E+07	5,494322E+09	5,510671E+09
1070	8,173077E+06	8,174240E+06	2,747111E+09	2,747285E+09	1,634732E+07	5,494395E+09	5,510743E+09
1071	8,177473E+06	8,178536E+06	2,747403E+09	2,747184E+09	1,635601E+07	5,494587E+09	5,510943E+09
1072	8,173416E+06	8,170860E+06	2,747344E+09	2,747431E+09	1,634428E+07	5,494775E+09	5,511119E+09
1073	8,172767E+06	8,176767E+06	2,747401E+09	2,747453E+09	1,634953E+07	5,494854E+09	5,511204E+09
1074	8,177857E+06	8,174558E+06	2,747553E+09	2,747366E+09	1,635242E+07	5,494918E+09	5,511271E+09
1075	8,171437E+06	8,171172E+06	2,747319E+09	2,747547E+09	1,634261E+07	5,494866E+09	5,511209E+09
1076	8,174798E+06	8,177899E+06	2,747428E+09	2,747367E+09	1,635270E+07	5,494795E+09	5,511148E+09
1077	8,177006E+06	8,172645E+06	2,747425E+09	2,747301E+09	1,634965E+07	5,494726E+09	5,511076E+09
1078	8,171114E+06	8,173589E+06	2,747157E+09	2,747327E+09	1,634470E+07	5,494484E+09	5,510828E+09
1079	8,178539E+06	8,177611E+06	2,747244E+09	2,747056E+09	1,635615E+07	5,494300E+09	5,510656E+09
1080	8,174554E+06	8,172999E+06	2,747050E+09	2,747071E+09	1,634755E+07	5,494121E+09	5,510469E+09
1081	8,173160E+06	8,176410E+06	2,746907E+09	2,747000E+09	1,634957E+07	5,493907E+09	5,510256E+09
1082	8,179652E+06	8,178223E+06	2,747020E+09	2,746768E+09	1,635787E+07	5,493788E+09	5,510146E+09
1083	8,172813E+06	8,173204E+06	2,746756E+09	2,746906E+09	1,634602E+07	5,493662E+09	5,510008E+09
1084	8,177094E+06	8,178108E+06	2,746799E+09	2,746798E+09	1,635520E+07	5,493597E+09	5,509952E+09
1085	8,179032E+06	8,176166E+06	2,746867E+09	2,746738E+09	1,635520E+07	5,493605E+09	5,509961E+09
1086	8,173918E+06	8,172982E+06	2,746650E+09	2,746900E+09	1,634690E+07	5,493549E+09	5,509896E+09
1087	8,178364E+06	8,180138E+06	2,746871E+09	2,746768E+09	1,635850E+07	5,493640E+09	5,509998E+09
1088	8,176087E+06	8,174094E+06	2,746933E+09	2,746895E+09	1,635018E+07	5,493828E+09	5,510179E+09
1089	8,173269E+06	8,175518E+06	2,746925E+09	2,747061E+09	1,634879E+07	5,493986E+09	5,510334E+09
1090	8,178310E+06	8,178921E+06	2,747196E+09	2,746980E+09	1,635723E+07	5,494176E+09	5,510533E+09
1091	8,174263E+06	8,170948E+06	2,747076E+09	2,747212E+09	1,634521E+07	5,494288E+09	5,510633E+09
1092	8,173871E+06	8,177177E+06	2,747130E+09	2,747216E+09	1,635105E+07	5,494346E+09	5,510697E+09
1093	8,178869E+06	8,175119E+06	2,747288E+09	2,747113E+09	1,635399E+07	5,494401E+09	5,510755E+09
1094	8,172335E+06	8,172441E+06	2,747058E+09	2,747245E+09	1,634478E+07	5,494303E+09	5,510648E+09
1095	8,175629E+06	8,178782E+06	2,747157E+09	2,747068E+09	1,635441E+07	5,494226E+09	5,510580E+09
1096	8,177572E+06	8,173586E+06	2,747126E+09	2,747004E+09	1,635116E+07	5,494130E+09	5,510481E+09
1097	8,171822E+06	8,174627E+06	2,746870E+09	2,747044E+09	1,634645E+07	5,493914E+09	5,510260E+09
1098	8,179368E+06	8,178566E+06	2,746947E+09	2,746766E+09	1,635793E+07	5,493713E+09	5,510071E+09
1099	8,174970E+06	8,173800E+06	2,746733E+09	2,746766E+09	1,634877E+07	5,493499E+09	5,509848E+09
1100	8,174361E+06	8,177030E+06	2,746620E+09	2,746709E+09	1,635139E+07	5,493329E+09	5,509680E+09
1101	8,180901E+06	8,178651E+06	2,746731E+09	2,746499E+09	1,635955E+07	5,493230E+09	5,509589E+09
1102	8,174346E+06	8,173894E+06	2,746456E+09	2,746614E+09	1,634824E+07	5,493070E+09	5,509419E+09
1103	8,178155E+06	8,178937E+06	2,746500E+09	2,746514E+09	1,635709E+07	5,493014E+09	5,509371E+09
1104	8,179287E+06	8,177502E+06	2,746581E+09	2,746457E+09	1,635679E+07	5,493037E+09	5,509394E+09
1105	8,174063E+06	8,174558E+06	2,746441E+09	2,746648E+09	1,634862E+07	5,493088E+09	5,509437E+09
1106	8,178591E+06	8,181226E+06	2,746684E+09	2,746542E+09	1,635982E+07	5,493226E+09	5,509585E+09
1107	8,176563E+06	8,174285E+06	2,746714E+09	2,746681E+09	1,635085E+07	5,493395E+09	5,509745E+09
1108	8,174494E+06	8,175606E+06	2,746698E+09	2,746861E+09	1,635010E+07	5,493559E+09	5,509909E+09
1109	8,179580E+06	8,178808E+06	2,746936E+09	2,746773E+09	1,635839E+07	5,493710E+09	5,510068E+09
1110	8,175438E+06	8,171910E+06	2,746802E+09	2,746942E+09	1,634735E+07	5,493744E+09	5,510091E+09
1111	8,174329E+06	8,178178E+06	2,746863E+09	2,746930E+09	1,635251E+07	5,493793E+09	5,510145E+09
1112	8,179079E+06	8,176272E+06	2,747023E+09	2,746821E+09	1,635535E+07	5,493844E+09	5,510200E+09
1113	8,172791E+06	8,173621E+06	2,746819E+09	2,746970E+09	1,634641E+07	5,493789E+09	5,510135E+09
1114	8,176589E+06	8,179271E+06	2,746883E+09	2,746800E+09	1,635586E+07	5,493683E+09	5,510039E+09
1115	8,178361E+06	8,174079E+06	2,746803E+09	2,746715E+09	1,635244E+07	5,493518E+09	5,509870E+09
1116	8,173078E+06	8,175374E+06	2,746562E+09	2,746751E+09	1,634845E+07	5,493314E+09	5,509662E+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	8,180352E+06	8,179337E+06	2,746656E+09	2,746482E+09	1,635969E+07	5,493138E+09	5,509498E+09
1118	8,176064E+06	8,175115E+06	2,746452E+09	2,746453E+09	1,635118E+07	5,492905E+09	5,509256E+09
1119	8,175366E+06	8,177695E+06	2,746333E+09	2,746415E+09	1,635306E+07	5,492749E+09	5,509102E+09
1120	8,181452E+06	8,179637E+06	2,746429E+09	2,746217E+09	1,636109E+07	5,492646E+09	5,509007E+09
1121	8,175072E+06	8,175032E+06	2,746183E+09	2,746340E+09	1,635010E+07	5,492523E+09	5,508873E+09
1122	8,178609E+06	8,179999E+06	2,746229E+09	2,746246E+09	1,635861E+07	5,492475E+09	5,508834E+09
1123	8,179463E+06	8,178314E+06	2,746315E+09	2,746187E+09	1,635778E+07	5,492502E+09	5,508860E+09
1124	8,175073E+06	8,175005E+06	2,746215E+09	2,746407E+09	1,635008E+07	5,492621E+09	5,508971E+09
1125	8,179676E+06	8,181181E+06	2,746457E+09	2,746333E+09	1,636086E+07	5,492790E+09	5,509151E+09
1126	8,178158E+06	8,174640E+06	2,746466E+09	2,746441E+09	1,635280E+07	5,492907E+09	5,509260E+09
1127	8,175502E+06	8,176145E+06	2,746442E+09	2,746619E+09	1,635165E+07	5,493061E+09	5,509412E+09
1128	8,179840E+06	8,179961E+06	2,746679E+09	2,746521E+09	1,635980E+07	5,493200E+09	5,509560E+09
1129	8,175692E+06	8,173509E+06	2,746595E+09	2,746688E+09	1,634920E+07	5,493283E+09	5,509633E+09
1130	8,174569E+06	8,179160E+06	2,746640E+09	2,746683E+09	1,635373E+07	5,493323E+09	5,509677E+09
1131	8,179627E+06	8,176647E+06	2,746748E+09	2,746563E+09	1,635627E+07	5,493311E+09	5,509667E+09
1132	8,174056E+06	8,173986E+06	2,746531E+09	2,746707E+09	1,634804E+07	5,493239E+09	5,509587E+09
1133	8,177834E+06	8,179465E+06	2,746570E+09	2,746523E+09	1,635730E+07	5,493094E+09	5,509451E+09
1134	8,179445E+06	8,175376E+06	2,746484E+09	2,746382E+09	1,635482E+07	5,492866E+09	5,509221E+09
1135	8,173834E+06	8,176495E+06	2,746269E+09	2,746420E+09	1,635033E+07	5,492690E+09	5,509040E+09
1136	8,180697E+06	8,180667E+06	2,746364E+09	2,746168E+09	1,636136E+07	5,492532E+09	5,508894E+09
1137	8,176834E+06	8,176344E+06	2,746190E+09	2,746167E+09	1,635318E+07	5,492357E+09	5,508710E+09
1138	8,176383E+06	8,178320E+06	2,746043E+09	2,746149E+09	1,635470E+07	5,492192E+09	5,508546E+09
1139	8,182046E+06	8,180248E+06	2,746106E+09	2,745939E+09	1,636229E+07	5,492045E+09	5,508408E+09
1140	8,176207E+06	8,175744E+06	2,745902E+09	2,746071E+09	1,635195E+07	5,491973E+09	5,508325E+09
1141	8,179541E+06	8,180484E+06	2,745979E+09	2,745996E+09	1,636003E+07	5,491974E+09	5,508334E+09
1142	8,180655E+06	8,179183E+06	2,746080E+09	2,745923E+09	1,635984E+07	5,492003E+09	5,508363E+09
1143	8,176237E+06	8,175372E+06	2,745989E+09	2,746169E+09	1,635161E+07	5,492158E+09	5,508509E+09
1144	8,180117E+06	8,181951E+06	2,746213E+09	2,746110E+09	1,636207E+07	5,492323E+09	5,508685E+09
1145	8,178791E+06	8,175739E+06	2,746248E+09	2,746214E+09	1,635453E+07	5,492462E+09	5,508817E+09
1146	8,175536E+06	8,177285E+06	2,746209E+09	2,746383E+09	1,635282E+07	5,492592E+09	5,508945E+09
1147	8,179763E+06	8,180722E+06	2,746427E+09	2,746263E+09	1,636049E+07	5,492691E+09	5,509051E+09
1148	8,176543E+06	8,174227E+06	2,746354E+09	2,746436E+09	1,635077E+07	5,492791E+09	5,509141E+09
1149	8,175747E+06	8,179159E+06	2,746372E+09	2,746440E+09	1,635491E+07	5,492812E+09	5,509167E+09
1150	8,181302E+06	8,177312E+06	2,746447E+09	2,746271E+09	1,635861E+07	5,492718E+09	5,509076E+09
1151	8,175227E+06	8,174719E+06	2,746228E+09	2,746400E+09	1,634995E+07	5,492628E+09	5,508978E+09
1152	8,178164E+06	8,180787E+06	2,746278E+09	2,746216E+09	1,635895E+07	5,492494E+09	5,508853E+09
1153	8,179848E+06	8,177137E+06	2,746246E+09	2,746079E+09	1,635698E+07	5,492325E+09	5,508682E+09
1154	8,174264E+06	8,177533E+06	2,746011E+09	2,746143E+09	1,635180E+07	5,492154E+09	5,508506E+09
1155	8,181372E+06	8,181156E+06	2,746058E+09	2,745894E+09	1,636253E+07	5,491952E+09	5,508314E+09
1156	8,178356E+06	8,176818E+06	2,745871E+09	2,745899E+09	1,635517E+07	5,491770E+09	5,508125E+09
1157	8,177942E+06	8,178470E+06	2,745711E+09	2,745873E+09	1,635641E+07	5,491584E+09	5,507940E+09
1158	8,183218E+06	8,181387E+06	2,745784E+09	2,745615E+09	1,636460E+07	5,491400E+09	5,507764E+09
1159	8,177106E+06	8,176542E+06	2,745637E+09	2,745758E+09	1,635365E+07	5,491395E+09	5,507749E+09
1160	8,179734E+06	8,181645E+06	2,745739E+09	2,745724E+09	1,636138E+07	5,491463E+09	5,507824E+09
1161	8,181313E+06	8,180292E+06	2,745883E+09	2,745686E+09	1,636161E+07	5,491568E+09	5,507930E+09
1162	8,176828E+06	8,176263E+06	2,745769E+09	2,745958E+09	1,635309E+07	5,491726E+09	5,508079E+09
1163	8,180257E+06	8,182765E+06	2,745958E+09	2,745889E+09	1,636302E+07	5,491848E+09	5,508211E+09
1164	8,179555E+06	8,176643E+06	2,746017E+09	2,745995E+09	1,635620E+07	5,492013E+09	5,508369E+09
1165	8,176246E+06	8,177699E+06	2,745979E+09	2,746161E+09	1,635394E+07	5,492141E+09	5,508494E+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	8,180908E+06	8,181211E+06	2,746173E+09	2,746002E+09	1,636212E+07	5,492174E+09	5,508537E+09
1167	8,177856E+06	8,174477E+06	2,746096E+09	2,746168E+09	1,635233E+07	5,492264E+09	5,508617E+09
1168	8,176453E+06	8,179923E+06	2,746085E+09	2,746164E+09	1,635638E+07	5,492249E+09	5,508605E+09
1169	8,182126E+06	8,178698E+06	2,746185E+09	2,745980E+09	1,636082E+07	5,492165E+09	5,508526E+09
1170	8,175444E+06	8,176193E+06	2,745961E+09	2,746108E+09	1,635164E+07	5,492069E+09	5,508421E+09
1171	8,178298E+06	8,181644E+06	2,745989E+09	2,745920E+09	1,635994E+07	5,491909E+09	5,508269E+09
1172	8,180888E+06	8,177958E+06	2,745961E+09	2,745806E+09	1,635885E+07	5,491767E+09	5,508126E+09
1173	8,175899E+06	8,177461E+06	2,745694E+09	2,745877E+09	1,635336E+07	5,491571E+09	5,507924E+09
1174	8,183214E+06	8,181744E+06	2,745707E+09	2,745580E+09	1,636496E+07	5,491287E+09	5,507652E+09
1175	8,179749E+06	8,177671E+06	2,745544E+09	2,745571E+09	1,635742E+07	5,491115E+09	5,507473E+09
1176	8,178361E+06	8,179938E+06	2,745419E+09	2,745559E+09	1,635830E+07	5,490977E+09	5,507336E+09
1177	8,183501E+06	8,183163E+06	2,745570E+09	2,745325E+09	1,636666E+07	5,490895E+09	5,507262E+09
1178	8,177364E+06	8,177673E+06	2,745429E+09	2,745516E+09	1,635504E+07	5,490945E+09	5,507300E+09
1179	8,179886E+06	8,182229E+06	2,745502E+09	2,745504E+09	1,636212E+07	5,491007E+09	5,507369E+09
1180	8,182312E+06	8,180791E+06	2,745640E+09	2,745488E+09	1,636310E+07	5,491128E+09	5,507491E+09
1181	8,178003E+06	8,176430E+06	2,745508E+09	2,745751E+09	1,635443E+07	5,491259E+09	5,507614E+09
1182	8,181230E+06	8,183497E+06	2,745686E+09	2,745628E+09	1,636473E+07	5,491314E+09	5,507679E+09
1183	8,180612E+06	8,177045E+06	2,745770E+09	2,745719E+09	1,635766E+07	5,491489E+09	5,507847E+09
1184	8,176710E+06	8,178471E+06	2,745728E+09	2,745901E+09	1,635518E+07	5,491629E+09	5,507984E+09
1185	8,181898E+06	8,182100E+06	2,745943E+09	2,745742E+09	1,636400E+07	5,491685E+09	5,508049E+09
1186	8,178456E+06	8,175524E+06	2,745843E+09	2,745910E+09	1,635398E+07	5,491753E+09	5,508107E+09
1187	8,176664E+06	8,180898E+06	2,745807E+09	2,745893E+09	1,635756E+07	5,491699E+09	5,508057E+09
1188	8,182845E+06	8,179889E+06	2,745923E+09	2,745719E+09	1,636273E+07	5,491642E+09	5,508005E+09
1189	8,176473E+06	8,176756E+06	2,745692E+09	2,745848E+09	1,635323E+07	5,491540E+09	5,507893E+09
1190	8,179784E+06	8,182145E+06	2,745678E+09	2,745625E+09	1,636193E+07	5,491303E+09	5,507665E+09
1191	8,182439E+06	8,178447E+06	2,745641E+09	2,745499E+09	1,636089E+07	5,491140E+09	5,507501E+09
1192	8,176775E+06	8,178464E+06	2,745355E+09	2,745563E+09	1,635524E+07	5,490918E+09	5,507273E+09
1193	8,183915E+06	8,183389E+06	2,745411E+09	2,745249E+09	1,636730E+07	5,490660E+09	5,507027E+09
1194	8,179696E+06	8,179443E+06	2,745275E+09	2,745252E+09	1,635914E+07	5,490527E+09	5,506886E+09
1195	8,178274E+06	8,181014E+06	2,745160E+09	2,745264E+09	1,635929E+07	5,490425E+09	5,506784E+09
1196	8,184169E+06	8,183982E+06	2,745330E+09	2,745096E+09	1,636815E+07	5,490426E+09	5,506795E+09
1197	8,178978E+06	8,177545E+06	2,745176E+09	2,745313E+09	1,635652E+07	5,490488E+09	5,506845E+09
1198	8,181433E+06	8,182469E+06	2,745212E+09	2,745267E+09	1,636390E+07	5,490479E+09	5,506843E+09
1199	8,183677E+06	8,181124E+06	2,745374E+09	2,745237E+09	1,636480E+07	5,490611E+09	5,506976E+09
1200	8,178453E+06	8,177513E+06	2,745261E+09	2,745496E+09	1,635597E+07	5,490757E+09	5,507112E+09
1201	8,181621E+06	8,184659E+06	2,745486E+09	2,745373E+09	1,636628E+07	5,490858E+09	5,507225E+09
1202	8,180937E+06	8,178053E+06	2,745561E+09	2,745484E+09	1,635899E+07	5,491045E+09	5,507404E+09
1203	8,176953E+06	8,179096E+06	2,745481E+09	2,745663E+09	1,635605E+07	5,491144E+09	5,507500E+09
1204	8,182762E+06	8,182819E+06	2,745683E+09	2,745519E+09	1,636558E+07	5,491203E+09	5,507568E+09
1205	8,179583E+06	8,176056E+06	2,745568E+09	2,745664E+09	1,635564E+07	5,491232E+09	5,507587E+09
1206	8,177609E+06	8,181648E+06	2,745513E+09	2,745593E+09	1,635926E+07	5,491106E+09	5,507466E+09
1207	8,183885E+06	8,180475E+06	2,745644E+09	2,745410E+09	1,636436E+07	5,491054E+09	5,507419E+09
1208	8,177147E+06	8,177741E+06	2,745394E+09	2,745550E+09	1,635489E+07	5,490944E+09	5,507299E+09
1209	8,180990E+06	8,183168E+06	2,745388E+09	2,745319E+09	1,636416E+07	5,490707E+09	5,507071E+09
1210	8,182997E+06	8,180021E+06	2,745333E+09	2,745191E+09	1,636302E+07	5,490525E+09	5,506888E+09
1211	8,177007E+06	8,179690E+06	2,745046E+09	2,745246E+09	1,635670E+07	5,490293E+09	5,506649E+09
1212	8,184386E+06	8,184678E+06	2,745138E+09	2,744970E+09	1,636906E+07	5,490108E+09	5,506477E+09
1213	8,180759E+06	8,179786E+06	2,745018E+09	2,744997E+09	1,636055E+07	5,490016E+09	5,506376E+09
1214	8,179809E+06	8,181106E+06	2,744880E+09	2,745004E+09	1,636092E+07	5,489885E+09	5,506245E+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	8,185742E+06	8,184014E+06	2,745048E+09	2,744843E+09	1,636976E+07	5,489891E+09	5,506260E+09
1216	8,180100E+06	8,178241E+06	2,744884E+09	2,745063E+09	1,635834E+07	5,489947E+09	5,506306E+09
1217	8,182125E+06	8,183766E+06	2,744962E+09	2,744997E+09	1,636589E+07	5,489959E+09	5,506325E+09
1218	8,183553E+06	8,182578E+06	2,745143E+09	2,744970E+09	1,636613E+07	5,490113E+09	5,506479E+09
1219	8,178241E+06	8,178482E+06	2,745034E+09	2,745236E+09	1,635672E+07	5,490271E+09	5,506627E+09
1220	8,182056E+06	8,185303E+06	2,745259E+09	2,745162E+09	1,636736E+07	5,490420E+09	5,506788E+09
1221	8,182351E+06	8,178136E+06	2,745319E+09	2,745274E+09	1,636049E+07	5,490593E+09	5,506953E+09
1222	8,178276E+06	8,179635E+06	2,745202E+09	2,745408E+09	1,635791E+07	5,490610E+09	5,506968E+09
1223	8,183832E+06	8,183416E+06	2,745422E+09	2,745246E+09	1,636725E+07	5,490668E+09	5,507035E+09
1224	8,180006E+06	8,177376E+06	2,745315E+09	2,745388E+09	1,635738E+07	5,490703E+09	5,507060E+09
1225	8,178173E+06	8,182761E+06	2,745280E+09	2,745308E+09	1,636093E+07	5,490588E+09	5,506949E+09
1226	8,184192E+06	8,181650E+06	2,745383E+09	2,745135E+09	1,636584E+07	5,490518E+09	5,506883E+09
1227	8,177572E+06	8,178608E+06	2,745087E+09	2,745260E+09	1,635618E+07	5,490347E+09	5,506703E+09
1228	8,181965E+06	8,184013E+06	2,745064E+09	2,745046E+09	1,636598E+07	5,490111E+09	5,506477E+09
1229	8,184207E+06	8,180783E+06	2,745014E+09	2,744897E+09	1,636499E+07	5,489911E+09	5,506276E+09
1230	8,178235E+06	8,180172E+06	2,744724E+09	2,744915E+09	1,635841E+07	5,489639E+09	5,505997E+09
1231	8,185592E+06	8,184954E+06	2,744849E+09	2,744660E+09	1,637055E+07	5,489508E+09	5,505879E+09
1232	8,181816E+06	8,180463E+06	2,744731E+09	2,744719E+09	1,636228E+07	5,489450E+09	5,505813E+09
1233	8,181071E+06	8,181955E+06	2,744617E+09	2,744732E+09	1,636303E+07	5,489349E+09	5,505712E+09
1234	8,186037E+06	8,185576E+06	2,744787E+09	2,744585E+09	1,637161E+07	5,489372E+09	5,505744E+09
1235	8,180167E+06	8,179577E+06	2,744632E+09	2,744800E+09	1,635974E+07	5,489432E+09	5,505792E+09
1236	8,182207E+06	8,184928E+06	2,744739E+09	2,744777E+09	1,636714E+07	5,489516E+09	5,505883E+09
1237	8,184422E+06	8,182877E+06	2,744926E+09	2,744759E+09	1,636730E+07	5,489685E+09	5,506053E+09
1238	8,179415E+06	8,178521E+06	2,744788E+09	2,745002E+09	1,635794E+07	5,489789E+09	5,506147E+09
1239	8,183261E+06	8,185250E+06	2,745009E+09	2,744923E+09	1,636851E+07	5,489931E+09	5,506300E+09
1240	8,183294E+06	8,178976E+06	2,745057E+09	2,745025E+09	1,636227E+07	5,490081E+09	5,506444E+09
1241	8,178864E+06	8,181023E+06	2,744969E+09	2,745127E+09	1,635989E+07	5,490096E+09	5,506456E+09
1242	8,183686E+06	8,184874E+06	2,745189E+09	2,744967E+09	1,636856E+07	5,490156E+09	5,506524E+09
1243	8,180045E+06	8,178448E+06	2,745059E+09	2,745110E+09	1,635849E+07	5,490169E+09	5,506528E+09
1244	8,178925E+06	8,183253E+06	2,744997E+09	2,745069E+09	1,636218E+07	5,490066E+09	5,506429E+09
1245	8,185812E+06	8,181816E+06	2,745066E+09	2,744876E+09	1,636763E+07	5,489942E+09	5,506310E+09
1246	8,179169E+06	8,179056E+06	2,744740E+09	2,744943E+09	1,635822E+07	5,489682E+09	5,506040E+09
1247	8,183355E+06	8,184535E+06	2,744742E+09	2,744710E+09	1,636789E+07	5,489452E+09	5,505820E+09
1248	8,184916E+06	8,182082E+06	2,744718E+09	2,744573E+09	1,636700E+07	5,489291E+09	5,505658E+09
1249	8,179202E+06	8,181321E+06	2,744469E+09	2,744602E+09	1,636052E+07	5,489071E+09	5,505431E+09
1250	8,185781E+06	8,186277E+06	2,744586E+09	2,744384E+09	1,637206E+07	5,488971E+09	5,505343E+09
1251	8,182209E+06	8,181540E+06	2,744452E+09	2,744453E+09	1,636375E+07	5,488904E+09	5,505268E+09
1252	8,181668E+06	8,182985E+06	2,744338E+09	2,744500E+09	1,636465E+07	5,488838E+09	5,505203E+09
1253	8,186780E+06	8,186392E+06	2,744523E+09	2,744341E+09	1,637317E+07	5,488864E+09	5,505237E+09
1254	8,181071E+06	8,179964E+06	2,744369E+09	2,744524E+09	1,636104E+07	5,488893E+09	5,505254E+09
1255	8,183200E+06	8,184952E+06	2,744495E+09	2,744520E+09	1,636815E+07	5,489015E+09	5,505383E+09
1256	8,185510E+06	8,183310E+06	2,744680E+09	2,744526E+09	1,636882E+07	5,489206E+09	5,505575E+09
1257	8,180671E+06	8,179342E+06	2,744562E+09	2,744753E+09	1,636001E+07	5,489315E+09	5,505675E+09
1258	8,183347E+06	8,186637E+06	2,744783E+09	2,744681E+09	1,636998E+07	5,489463E+09	5,505833E+09
1259	8,183358E+06	8,180324E+06	2,744833E+09	2,744770E+09	1,636368E+07	5,489603E+09	5,505967E+09
1260	8,178985E+06	8,182005E+06	2,744748E+09	2,744911E+09	1,636099E+07	5,489659E+09	5,506020E+09
1261	8,184773E+06	8,185052E+06	2,744943E+09	2,744746E+09	1,636982E+07	5,489689E+09	5,506059E+09
1262	8,181513E+06	8,178490E+06	2,744751E+09	2,744839E+09	1,636000E+07	5,489590E+09	5,505950E+09
1263	8,180588E+06	8,183160E+06	2,744667E+09	2,744776E+09	1,636375E+07	5,489443E+09	5,505806E+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	8,187041E+06	8,182941E+06	2,744726E+09	2,744557E+09	1,636998E+07	5,489283E+09	5,505653E+09
1265	8,179970E+06	8,180606E+06	2,744445E+09	2,744582E+09	1,636058E+07	5,489027E+09	5,505387E+09
1266	8,183183E+06	8,186165E+06	2,744472E+09	2,744373E+09	1,636935E+07	5,488845E+09	5,505215E+09
1267	8,184941E+06	8,183422E+06	2,744446E+09	2,744263E+09	1,636836E+07	5,488709E+09	5,505077E+09
1268	8,179966E+06	8,182113E+06	2,744195E+09	2,744360E+09	1,636208E+07	5,488555E+09	5,504917E+09
1269	8,187111E+06	8,186875E+06	2,744296E+09	2,744148E+09	1,637399E+07	5,488445E+09	5,504819E+09
1270	8,183592E+06	8,182052E+06	2,744144E+09	2,744179E+09	1,636564E+07	5,488323E+09	5,504689E+09
1271	8,182883E+06	8,183325E+06	2,744062E+09	2,744225E+09	1,636621E+07	5,488287E+09	5,504653E+09
1272	8,187501E+06	8,187208E+06	2,744268E+09	2,744080E+09	1,637471E+07	5,488347E+09	5,504722E+09
1273	8,182111E+06	8,180677E+06	2,744151E+09	2,744257E+09	1,636279E+07	5,488407E+09	5,504770E+09
1274	8,183360E+06	8,185957E+06	2,744272E+09	2,744282E+09	1,636932E+07	5,488554E+09	5,504923E+09
1275	8,185961E+06	8,184298E+06	2,744442E+09	2,744292E+09	1,637026E+07	5,488734E+09	5,505105E+09
1276	8,181171E+06	8,180505E+06	2,744329E+09	2,744548E+09	1,636168E+07	5,488877E+09	5,505239E+09
1277	8,183949E+06	8,187370E+06	2,744548E+09	2,744456E+09	1,637132E+07	5,489005E+09	5,505376E+09
1278	8,184283E+06	8,180590E+06	2,744576E+09	2,744506E+09	1,636487E+07	5,489082E+09	5,505447E+09
1279	8,180124E+06	8,181898E+06	2,744474E+09	2,744644E+09	1,636202E+07	5,489118E+09	5,505480E+09
1280	8,186095E+06	8,185446E+06	2,744639E+09	2,744475E+09	1,637154E+07	5,489114E+09	5,505486E+09
1281	8,182880E+06	8,179766E+06	2,744458E+09	2,744521E+09	1,636265E+07	5,488979E+09	5,505341E+09
1282	8,180824E+06	8,184859E+06	2,744375E+09	2,744454E+09	1,636568E+07	5,488829E+09	5,505195E+09
1283	8,187131E+06	8,184770E+06	2,744451E+09	2,744231E+09	1,637190E+07	5,488682E+09	5,505054E+09
1284	8,180217E+06	8,181886E+06	2,744191E+09	2,744310E+09	1,636210E+07	5,488501E+09	5,504863E+09
1285	8,184119E+06	8,186590E+06	2,744208E+09	2,744121E+09	1,637071E+07	5,488329E+09	5,504699E+09
1286	8,186262E+06	8,183531E+06	2,744136E+09	2,743991E+09	1,636979E+07	5,488127E+09	5,504497E+09
1287	8,181727E+06	8,182085E+06	2,743872E+09	2,744086E+09	1,636381E+07	5,487958E+09	5,504322E+09
1288	8,188353E+06	8,187849E+06	2,743973E+09	2,743865E+09	1,637620E+07	5,487838E+09	5,504214E+09
1289	8,184668E+06	8,183371E+06	2,743868E+09	2,743859E+09	1,636804E+07	5,487727E+09	5,504095E+09
1290	8,182936E+06	8,184588E+06	2,743814E+09	2,743933E+09	1,636752E+07	5,487747E+09	5,504114E+09
1291	8,187666E+06	8,188207E+06	2,744026E+09	2,743816E+09	1,637587E+07	5,487842E+09	5,504218E+09
1292	8,182811E+06	8,181288E+06	2,743923E+09	2,744054E+09	1,636410E+07	5,487977E+09	5,504341E+09
1293	8,184337E+06	8,186604E+06	2,744043E+09	2,744084E+09	1,637094E+07	5,488127E+09	5,504498E+09
1294	8,187007E+06	8,184756E+06	2,744192E+09	2,744056E+09	1,637176E+07	5,488247E+09	5,504619E+09
1295	8,182196E+06	8,180918E+06	2,744096E+09	2,744307E+09	1,636311E+07	5,488404E+09	5,504767E+09
1296	8,184749E+06	8,188030E+06	2,744308E+09	2,744220E+09	1,637278E+07	5,488528E+09	5,504901E+09
1297	8,185413E+06	8,181376E+06	2,744334E+09	2,744234E+09	1,636679E+07	5,488568E+09	5,504935E+09
1298	8,180394E+06	8,182890E+06	2,744207E+09	2,744373E+09	1,636328E+07	5,488580E+09	5,504943E+09
1299	8,186637E+06	8,186599E+06	2,744342E+09	2,744184E+09	1,637324E+07	5,488526E+09	5,504899E+09
1300	8,183283E+06	8,181269E+06	2,744177E+09	2,744241E+09	1,636455E+07	5,488418E+09	5,504782E+09
1301	8,181483E+06	8,185855E+06	2,744104E+09	2,744162E+09	1,636734E+07	5,488266E+09	5,504633E+09
1302	8,188047E+06	8,185192E+06	2,744155E+09	2,743924E+09	1,637324E+07	5,488078E+09	5,504452E+09
1303	8,181708E+06	8,181816E+06	2,743887E+09	2,744023E+09	1,636352E+07	5,487910E+09	5,504273E+09
1304	8,185801E+06	8,186920E+06	2,743879E+09	2,743847E+09	1,637272E+07	5,487726E+09	5,504099E+09
1305	8,187834E+06	8,184775E+06	2,743822E+09	2,743677E+09	1,637261E+07	5,487499E+09	5,503871E+09
1306	8,182217E+06	8,183663E+06	2,743577E+09	2,743775E+09	1,636588E+07	5,487352E+09	5,503717E+09
1307	8,188455E+06	8,189467E+06	2,743702E+09	2,743562E+09	1,637792E+07	5,487264E+09	5,503642E+09
1308	8,184965E+06	8,184567E+06	2,743636E+09	2,743611E+09	1,636953E+07	5,487247E+09	5,503616E+09
1309	8,183683E+06	8,185104E+06	2,743581E+09	2,743708E+09	1,636879E+07	5,487289E+09	5,503658E+09
1310	8,188657E+06	8,188265E+06	2,743763E+09	2,743586E+09	1,637692E+07	5,487348E+09	5,503725E+09
1311	8,184303E+06	8,181429E+06	2,743664E+09	2,743823E+09	1,636573E+07	5,487487E+09	5,503853E+09
1312	8,185179E+06	8,187497E+06	2,743789E+09	2,743847E+09	1,637268E+07	5,487636E+09	5,504009E+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	8,187808E+06	8,185878E+06	2,743970E+09	2,743780E+09	1,637369E+07	5,487750E+09	5,504124E+09
1314	8,182221E+06	8,182010E+06	2,743873E+09	2,744046E+09	1,636423E+07	5,487919E+09	5,504283E+09
1315	8,185064E+06	8,188774E+06	2,744057E+09	2,743968E+09	1,637384E+07	5,488025E+09	5,504399E+09
1316	8,186189E+06	8,182222E+06	2,744076E+09	2,744007E+09	1,636841E+07	5,488083E+09	5,504451E+09
1317	8,181327E+06	8,183778E+06	2,743936E+09	2,744124E+09	1,636511E+07	5,488061E+09	5,504426E+09
1318	8,187596E+06	8,187173E+06	2,744049E+09	2,743895E+09	1,637477E+07	5,487944E+09	5,504318E+09
1319	8,184391E+06	8,181798E+06	2,743901E+09	2,743947E+09	1,636619E+07	5,487848E+09	5,504214E+09
1320	8,182630E+06	8,186355E+06	2,743821E+09	2,743880E+09	1,636899E+07	5,487701E+09	5,504070E+09
1321	8,189356E+06	8,186061E+06	2,743865E+09	2,743616E+09	1,637542E+07	5,487481E+09	5,503857E+09
1322	8,182422E+06	8,182903E+06	2,743579E+09	2,743725E+09	1,636533E+07	5,487305E+09	5,503670E+09
1323	8,186535E+06	8,188284E+06	2,743554E+09	2,743541E+09	1,637482E+07	5,487095E+09	5,503470E+09
1324	8,188192E+06	8,186483E+06	2,743527E+09	2,743388E+09	1,637468E+07	5,486916E+09	5,503290E+09
1325	8,182782E+06	8,184762E+06	2,743309E+09	2,743486E+09	1,636754E+07	5,486796E+09	5,503163E+09
1326	8,189085E+06	8,189735E+06	2,743418E+09	2,743272E+09	1,637882E+07	5,486690E+09	5,503069E+09
1327	8,186295E+06	8,184472E+06	2,743364E+09	2,743355E+09	1,637077E+07	5,486719E+09	5,503089E+09
1328	8,185152E+06	8,185464E+06	2,743313E+09	2,743475E+09	1,637062E+07	5,486788E+09	5,503159E+09
1329	8,189875E+06	8,189330E+06	2,743514E+09	2,743326E+09	1,637921E+07	5,486840E+09	5,503219E+09
1330	8,184751E+06	8,182766E+06	2,743444E+09	2,743574E+09	1,636752E+07	5,487018E+09	5,503385E+09
1331	8,185200E+06	8,188722E+06	2,743574E+09	2,743605E+09	1,637392E+07	5,487179E+09	5,503553E+09
1332	8,188051E+06	8,186650E+06	2,743770E+09	2,743574E+09	1,637470E+07	5,487344E+09	5,503719E+09
1333	8,182861E+06	8,182503E+06	2,743646E+09	2,743836E+09	1,636536E+07	5,487482E+09	5,503847E+09
1334	8,186026E+06	8,188630E+06	2,743767E+09	2,743727E+09	1,637466E+07	5,487494E+09	5,503868E+09
1335	8,187626E+06	8,182617E+06	2,743777E+09	2,743742E+09	1,637024E+07	5,487519E+09	5,503889E+09
1336	8,182423E+06	8,184720E+06	2,743643E+09	2,743833E+09	1,636714E+07	5,487476E+09	5,503844E+09
1337	8,188501E+06	8,188360E+06	2,743777E+09	2,743563E+09	1,637686E+07	5,487339E+09	5,503716E+09
1338	8,184717E+06	8,182977E+06	2,743631E+09	2,743632E+09	1,636769E+07	5,487263E+09	5,503631E+09
1339	8,183215E+06	8,187206E+06	2,743524E+09	2,743585E+09	1,637042E+07	5,487109E+09	5,503480E+09
1340	8,190046E+06	8,187324E+06	2,743573E+09	2,743350E+09	1,637737E+07	5,486923E+09	5,503301E+09
1341	8,183290E+06	8,184253E+06	2,743280E+09	2,743443E+09	1,636754E+07	5,486723E+09	5,503090E+09
1342	8,187407E+06	8,188938E+06	2,743239E+09	2,743238E+09	1,637634E+07	5,486476E+09	5,502852E+09
1343	8,189280E+06	8,187185E+06	2,743237E+09	2,743095E+09	1,637646E+07	5,486332E+09	5,502709E+09
1344	8,184058E+06	8,185022E+06	2,743030E+09	2,743213E+09	1,636908E+07	5,486243E+09	5,502612E+09
1345	8,190267E+06	8,190270E+06	2,743148E+09	2,742991E+09	1,638054E+07	5,486139E+09	5,502520E+09
1346	8,187145E+06	8,185227E+06	2,743103E+09	2,743094E+09	1,637237E+07	5,486197E+09	5,502569E+09
1347	8,185731E+06	8,186694E+06	2,743056E+09	2,743223E+09	1,637243E+07	5,486279E+09	5,502652E+09
1348	8,189962E+06	8,190784E+06	2,743299E+09	2,743100E+09	1,638075E+07	5,486399E+09	5,502780E+09
1349	8,185124E+06	8,183786E+06	2,743242E+09	2,743349E+09	1,636891E+07	5,486591E+09	5,502960E+09
1350	8,185612E+06	8,188580E+06	2,743328E+09	2,743377E+09	1,637419E+07	5,486705E+09	5,503079E+09
1351	8,189336E+06	8,186434E+06	2,743504E+09	2,743353E+09	1,637577E+07	5,486856E+09	5,503232E+09
1352	8,184275E+06	8,182872E+06	2,743368E+09	2,743597E+09	1,636715E+07	5,486964E+09	5,503331E+09
1353	8,187150E+06	8,189669E+06	2,743491E+09	2,743434E+09	1,637682E+07	5,486925E+09	5,503302E+09
1354	8,188090E+06	8,184121E+06	2,743529E+09	2,743442E+09	1,637221E+07	5,486971E+09	5,503343E+09
1355	8,182648E+06	8,186155E+06	2,743398E+09	2,743541E+09	1,636880E+07	5,486939E+09	5,503308E+09
1356	8,188678E+06	8,189380E+06	2,743537E+09	2,743307E+09	1,637806E+07	5,486844E+09	5,503222E+09
1357	8,185393E+06	8,183847E+06	2,743365E+09	2,743377E+09	1,636924E+07	5,486742E+09	5,503111E+09
1358	8,184262E+06	8,187226E+06	2,743191E+09	2,743305E+09	1,637149E+07	5,486496E+09	5,502867E+09
1359	8,191354E+06	8,188045E+06	2,743230E+09	2,743055E+09	1,637940E+07	5,486286E+09	5,502665E+09
1360	8,184611E+06	8,185148E+06	2,742957E+09	2,743127E+09	1,636976E+07	5,486084E+09	5,502454E+09
1361	8,188596E+06	8,189778E+06	2,742931E+09	2,742893E+09	1,637837E+07	5,485824E+09	5,502202E+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	8,190002E+06	8,188042E+06	2,742951E+09	2,742780E+09	1,637804E+07	5,485731E+09	5,502109E+09
1363	8,184986E+06	8,185724E+06	2,742746E+09	2,742930E+09	1,637071E+07	5,485676E+09	5,502047E+09
1364	8,190724E+06	8,191453E+06	2,742900E+09	2,742753E+09	1,638218E+07	5,485653E+09	5,502035E+09
1365	8,187749E+06	8,186595E+06	2,742878E+09	2,742861E+09	1,637434E+07	5,485739E+09	5,502113E+09
1366	8,186133E+06	8,187275E+06	2,742820E+09	2,742988E+09	1,637341E+07	5,485807E+09	5,502181E+09
1367	8,190653E+06	8,191301E+06	2,743070E+09	2,742885E+09	1,638195E+07	5,485955E+09	5,502337E+09
1368	8,186317E+06	8,183981E+06	2,743006E+09	2,743132E+09	1,637030E+07	5,486138E+09	5,502509E+09
1369	8,186634E+06	8,188892E+06	2,743066E+09	2,743126E+09	1,637553E+07	5,486192E+09	5,502568E+09
1370	8,190204E+06	8,187207E+06	2,743238E+09	2,743089E+09	1,637741E+07	5,486327E+09	5,502704E+09
1371	8,184736E+06	8,184263E+06	2,743103E+09	2,743315E+09	1,636900E+07	5,486418E+09	5,502787E+09
1372	8,187094E+06	8,191119E+06	2,743269E+09	2,743165E+09	1,637821E+07	5,486434E+09	5,502813E+09
1373	8,188384E+06	8,185377E+06	2,743308E+09	2,743171E+09	1,637376E+07	5,486479E+09	5,502853E+09
1374	8,183224E+06	8,186117E+06	2,743121E+09	2,743275E+09	1,636934E+07	5,486396E+09	5,502765E+09
1375	8,190086E+06	8,189494E+06	2,743227E+09	2,743056E+09	1,637958E+07	5,486283E+09	5,502663E+09
1376	8,187136E+06	8,184406E+06	2,743037E+09	2,743102E+09	1,637154E+07	5,486139E+09	5,502510E+09
1377	8,185771E+06	8,188089E+06	2,742858E+09	2,742978E+09	1,637386E+07	5,485836E+09	5,502210E+09
1378	8,192202E+06	8,189388E+06	2,742926E+09	2,742718E+09	1,638159E+07	5,485644E+09	5,502026E+09
1379	8,185246E+06	8,186379E+06	2,742670E+09	2,742800E+09	1,637163E+07	5,485471E+09	5,501842E+09
1380	8,188923E+06	8,190784E+06	2,742675E+09	2,742612E+09	1,637971E+07	5,485287E+09	5,501667E+09
1381	8,190554E+06	8,189129E+06	2,742696E+09	2,742521E+09	1,637968E+07	5,485216E+09	5,501596E+09
1382	8,185800E+06	8,186034E+06	2,742459E+09	2,742677E+09	1,637183E+07	5,485136E+09	5,501508E+09
1383	8,191496E+06	8,192437E+06	2,742625E+09	2,742516E+09	1,638393E+07	5,485140E+09	5,501524E+09
1384	8,188855E+06	8,187350E+06	2,742633E+09	2,742616E+09	1,637621E+07	5,485249E+09	5,501626E+09
1385	8,186998E+06	8,187785E+06	2,742574E+09	2,742719E+09	1,637478E+07	5,485293E+09	5,501667E+09
1386	8,191326E+06	8,191682E+06	2,742825E+09	2,742633E+09	1,638301E+07	5,485458E+09	5,501841E+09
1387	8,187187E+06	8,184664E+06	2,742751E+09	2,742884E+09	1,637185E+07	5,485635E+09	5,502007E+09
1388	8,186970E+06	8,190023E+06	2,742831E+09	2,742890E+09	1,637699E+07	5,485722E+09	5,502099E+09
1389	8,190722E+06	8,188704E+06	2,743021E+09	2,742844E+09	1,637943E+07	5,485865E+09	5,502244E+09
1390	8,185146E+06	8,184931E+06	2,742867E+09	2,743058E+09	1,637008E+07	5,485926E+09	5,502296E+09
1391	8,187772E+06	8,191548E+06	2,743024E+09	2,742930E+09	1,637932E+07	5,485954E+09	5,502333E+09
1392	8,189829E+06	8,185535E+06	2,743044E+09	2,742929E+09	1,637536E+07	5,485973E+09	5,502348E+09
1393	8,184645E+06	8,186278E+06	2,742805E+09	2,742990E+09	1,637092E+07	5,485794E+09	5,502165E+09
1394	8,191381E+06	8,190294E+06	2,742897E+09	2,742747E+09	1,638167E+07	5,485644E+09	5,502025E+09
1395	8,187954E+06	8,186142E+06	2,742709E+09	2,742764E+09	1,637410E+07	5,485473E+09	5,501848E+09
1396	8,186029E+06	8,189698E+06	2,742578E+09	2,742648E+09	1,637573E+07	5,485226E+09	5,501602E+09
1397	8,192439E+06	8,190974E+06	2,742661E+09	2,742400E+09	1,638341E+07	5,485061E+09	5,501444E+09
1398	8,185795E+06	8,186608E+06	2,742374E+09	2,742502E+09	1,637240E+07	5,484876E+09	5,501248E+09
1399	8,189884E+06	8,191307E+06	2,742376E+09	2,742357E+09	1,638119E+07	5,484733E+09	5,501115E+09
1400	8,191988E+06	8,189896E+06	2,742412E+09	2,742268E+09	1,638188E+07	5,484680E+09	5,501062E+09
1401	8,187080E+06	8,186923E+06	2,742186E+09	2,742400E+09	1,637400E+07	5,484586E+09	5,500960E+09
1402	8,192207E+06	8,193552E+06	2,742383E+09	2,742250E+09	1,638576E+07	5,484634E+09	5,501019E+09
1403	8,189556E+06	8,188203E+06	2,742397E+09	2,742365E+09	1,637776E+07	5,484762E+09	5,501139E+09
1404	8,187342E+06	8,188404E+06	2,742357E+09	2,742496E+09	1,637575E+07	5,484853E+09	5,501229E+09
1405	8,191828E+06	8,192474E+06	2,742592E+09	2,742407E+09	1,638430E+07	5,485000E+09	5,501384E+09
1406	8,187827E+06	8,184969E+06	2,742486E+09	2,742642E+09	1,637280E+07	5,485128E+09	5,501501E+09
1407	8,187547E+06	8,191057E+06	2,742578E+09	2,742658E+09	1,637860E+07	5,485236E+09	5,501615E+09
1408	8,191931E+06	8,189384E+06	2,742787E+09	2,742595E+09	1,638132E+07	5,485382E+09	5,501764E+09
1409	8,186248E+06	8,185327E+06	2,742611E+09	2,742782E+09	1,637158E+07	5,485393E+09	5,501765E+09
1410	8,188874E+06	8,191796E+06	2,742747E+09	2,742659E+09	1,638067E+07	5,485406E+09	5,501786E+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							
1411	8,190892E+06	8,186492E+06	2,742744E+09	2,742646E+09	1,637738E+07	5,485390E+09	5,501768E+09
1412	8,185109E+06	8,187700E+06	2,742523E+09	2,742700E+09	1,637281E+07	5,485222E+09	5,501595E+09
1413	8,191790E+06	8,192167E+06	2,742625E+09	2,742441E+09	1,638396E+07	5,485065E+09	5,501449E+09
1414	8,188245E+06	8,187252E+06	2,742423E+09	2,742448E+09	1,637550E+07	5,484871E+09	5,501247E+09
1415	8,186733E+06	8,190486E+06	2,742288E+09	2,742368E+09	1,637722E+07	5,484656E+09	5,501033E+09
1416	8,193854E+06	8,191334E+06	2,742369E+09	2,742128E+09	1,638519E+07	5,484497E+09	5,500882E+09
1417	8,187336E+06	8,186803E+06	2,742055E+09	2,742208E+09	1,637414E+07	5,484263E+09	5,500638E+09
1418	8,191104E+06	8,192014E+06	2,742068E+09	2,742067E+09	1,638312E+07	5,484136E+09	5,500519E+09
1419	8,192774E+06	8,191339E+06	2,742130E+09	2,741978E+09	1,638411E+07	5,484108E+09	5,500492E+09
1420	8,187478E+06	8,188168E+06	2,741953E+09	2,742125E+09	1,637565E+07	5,484078E+09	5,500454E+09
1421	8,192458E+06	8,194677E+06	2,742155E+09	2,741998E+09	1,638713E+07	5,484153E+09	5,500540E+09
1422	8,190248E+06	8,188237E+06	2,742132E+09	2,742124E+09	1,637848E+07	5,484256E+09	5,500635E+09
1423	8,188180E+06	8,188916E+06	2,742085E+09	2,742284E+09	1,637710E+07	5,484370E+09	5,500747E+09
1424	8,193192E+06	8,193049E+06	2,742341E+09	2,742183E+09	1,638624E+07	5,484524E+09	5,500911E+09
1425	8,189002E+06	8,185719E+06	2,742241E+09	2,742378E+09	1,637472E+07	5,484619E+09	5,500994E+09
1426	8,188262E+06	8,191978E+06	2,742357E+09	2,742396E+09	1,638024E+07	5,484753E+09	5,501134E+09
1427	8,192576E+06	8,190334E+06	2,742557E+09	2,742341E+09	1,638291E+07	5,484898E+09	5,501281E+09
1428	8,186591E+06	8,186275E+06	2,742383E+09	2,742535E+09	1,637287E+07	5,484919E+09	5,501291E+09
1429	8,189311E+06	8,192932E+06	2,742485E+09	2,742401E+09	1,638224E+07	5,484886E+09	5,501269E+09
1430	8,191391E+06	8,187444E+06	2,742435E+09	2,742359E+09	1,637884E+07	5,484794E+09	5,501172E+09
1431	8,185577E+06	8,189034E+06	2,742218E+09	2,742414E+09	1,637461E+07	5,484632E+09	5,501007E+09
1432	8,193065E+06	8,192870E+06	2,742335E+09	2,742138E+09	1,638594E+07	5,484473E+09	5,500859E+09
1433	8,189489E+06	8,187570E+06	2,742110E+09	2,742123E+09	1,637706E+07	5,484232E+09	5,500610E+09
1434	8,188237E+06	8,190647E+06	2,741973E+09	2,742058E+09	1,637888E+07	5,484032E+09	5,500410E+09
1435	8,195015E+06	8,192300E+06	2,742048E+09	2,741830E+09	1,638731E+07	5,483878E+09	5,500266E+09
1436	8,188154E+06	8,188171E+06	2,741784E+09	2,741920E+09	1,637633E+07	5,483704E+09	5,500080E+09
1437	8,191533E+06	8,193771E+06	2,741820E+09	2,741789E+09	1,638530E+07	5,483609E+09	5,499995E+09
1438	8,193065E+06	8,192208E+06	2,741872E+09	2,741712E+09	1,638527E+07	5,483584E+09	5,499969E+09
1439	8,188100E+06	8,188835E+06	2,741697E+09	2,741906E+09	1,637693E+07	5,483603E+09	5,499980E+09
1440	8,193735E+06	8,194676E+06	2,741893E+09	2,741779E+09	1,638841E+07	5,483672E+09	5,500060E+09
1441	8,191658E+06	8,188311E+06	2,741846E+09	2,741869E+09	1,637997E+07	5,483715E+09	5,500095E+09
1442	8,189235E+06	8,189736E+06	2,741822E+09	2,742019E+09	1,637897E+07	5,483840E+09	5,500219E+09
1443	8,193635E+06	8,194462E+06	2,742107E+09	2,741917E+09	1,638810E+07	5,484024E+09	5,500412E+09
1444	8,189210E+06	8,187052E+06	2,742057E+09	2,742119E+09	1,637626E+07	5,484175E+09	5,500551E+09
1445	8,188283E+06	8,193110E+06	2,742156E+09	2,742156E+09	1,638139E+07	5,484312E+09	5,500694E+09
1446	8,192982E+06	8,190561E+06	2,742297E+09	2,742104E+09	1,638354E+07	5,484401E+09	5,500785E+09
1447	8,187258E+06	8,187158E+06	2,742095E+09	2,742311E+09	1,637442E+07	5,484406E+09	5,500781E+09
1448	8,190779E+06	8,193447E+06	2,742194E+09	2,742146E+09	1,638423E+07	5,484341E+09	5,500725E+09
1449	8,192710E+06	8,188235E+06	2,742129E+09	2,742049E+09	1,638095E+07	5,484178E+09	5,500559E+09
1450	8,186813E+06	8,189623E+06	2,741925E+09	2,742094E+09	1,637644E+07	5,484020E+09	5,500396E+09
1451	8,194103E+06	8,193600E+06	2,742034E+09	2,741829E+09	1,638770E+07	5,483863E+09	5,500251E+09
1452	8,190263E+06	8,188456E+06	2,741825E+09	2,741815E+09	1,637872E+07	5,483641E+09	5,500019E+09
1453	8,188899E+06	8,191869E+06	2,741678E+09	2,741762E+09	1,638077E+07	5,483440E+09	5,499821E+09
1454	8,195347E+06	8,193586E+06	2,741735E+09	2,741533E+09	1,638893E+07	5,483267E+09	5,499656E+09
1455	8,188609E+06	8,189700E+06	2,741496E+09	2,741652E+09	1,637831E+07	5,483148E+09	5,499526E+09
1456	8,192717E+06	8,194309E+06	2,741556E+09	2,741525E+09	1,638703E+07	5,483081E+09	5,499468E+09
1457	8,194276E+06	8,192330E+06	2,741578E+09	2,741434E+09	1,638661E+07	5,483012E+09	5,499398E+09
1458	8,189512E+06	8,188935E+06	2,741413E+09	2,741635E+09	1,637845E+07	5,483048E+09	5,499427E+09
1459	8,194509E+06	8,195581E+06	2,741617E+09	2,741520E+09	1,639009E+07	5,483138E+09	5,499528E+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							
1460	8,192171E+06	8,189744E+06	2,741636E+09	2,741609E+09	1,638192E+07	5,483246E+09	5,499628E+09
1461	8,189241E+06	8,191554E+06	2,741643E+09	2,741776E+09	1,638079E+07	5,483418E+09	5,499799E+09
1462	8,193575E+06	8,195243E+06	2,741905E+09	2,741693E+09	1,638882E+07	5,483597E+09	5,499986E+09
1463	8,189704E+06	8,187713E+06	2,741838E+09	2,741934E+09	1,637742E+07	5,483772E+09	5,500150E+09
1464	8,189574E+06	8,192828E+06	2,741903E+09	2,741956E+09	1,638240E+07	5,483860E+09	5,500242E+09
1465	8,194418E+06	8,190431E+06	2,741984E+09	2,741847E+09	1,638485E+07	5,483832E+09	5,500217E+09
1466	8,188575E+06	8,187892E+06	2,741787E+09	2,742013E+09	1,637647E+07	5,483800E+09	5,500177E+09
1467	8,191612E+06	8,194535E+06	2,741891E+09	2,741829E+09	1,638615E+07	5,483720E+09	5,500106E+09
1468	8,193318E+06	8,189581E+06	2,741868E+09	2,741719E+09	1,638290E+07	5,483587E+09	5,499970E+09
1469	8,187312E+06	8,190817E+06	2,741654E+09	2,741780E+09	1,637813E+07	5,483434E+09	5,499812E+09
1470	8,194503E+06	8,194224E+06	2,741721E+09	2,741531E+09	1,638873E+07	5,483252E+09	5,499641E+09
1471	8,190860E+06	8,189800E+06	2,741518E+09	2,741552E+09	1,638066E+07	5,483070E+09	5,499451E+09
1472	8,190268E+06	8,192599E+06	2,741388E+09	2,741491E+09	1,638287E+07	5,482879E+09	5,499262E+09
1473	8,196372E+06	8,194441E+06	2,741435E+09	2,741236E+09	1,639081E+07	5,482672E+09	5,499063E+09
1474	8,189936E+06	8,190313E+06	2,741216E+09	2,741359E+09	1,638025E+07	5,482576E+09	5,498956E+09
1475	8,193656E+06	8,194831E+06	2,741270E+09	2,741255E+09	1,638849E+07	5,482524E+09	5,498913E+09
1476	8,195023E+06	8,193148E+06	2,741321E+09	2,741160E+09	1,638817E+07	5,482482E+09	5,498870E+09
1477	8,189980E+06	8,190149E+06	2,741165E+09	2,741371E+09	1,638013E+07	5,482536E+09	5,498916E+09
1478	8,194380E+06	8,196718E+06	2,741369E+09	2,741266E+09	1,639110E+07	5,482634E+09	5,499025E+09
1479	8,192421E+06	8,191081E+06	2,741425E+09	2,741393E+09	1,638350E+07	5,482818E+09	5,499201E+09
1480	8,190278E+06	8,191778E+06	2,741439E+09	2,741569E+09	1,638206E+07	5,483008E+09	5,499390E+09
1481	8,194756E+06	8,194915E+06	2,741644E+09	2,741467E+09	1,638967E+07	5,483111E+09	5,499500E+09
1482	8,191317E+06	8,187688E+06	2,741557E+09	2,741689E+09	1,637900E+07	5,483246E+09	5,499625E+09
1483	8,190560E+06	8,193415E+06	2,741606E+09	2,741697E+09	1,638397E+07	5,483303E+09	5,499687E+09
1484	8,195156E+06	8,191889E+06	2,741726E+09	2,741545E+09	1,638704E+07	5,483271E+09	5,499658E+09
1485	8,188700E+06	8,189785E+06	2,741548E+09	2,741703E+09	1,637848E+07	5,483252E+09	5,499630E+09
1486	8,191606E+06	8,195540E+06	2,741626E+09	2,741533E+09	1,638715E+07	5,483160E+09	5,499547E+09
1487	8,193721E+06	8,190723E+06	2,741595E+09	2,741462E+09	1,638444E+07	5,483057E+09	5,499441E+09
1488	8,188704E+06	8,190957E+06	2,741364E+09	2,741518E+09	1,637966E+07	5,482882E+09	5,499262E+09
1489	8,195718E+06	8,194560E+06	2,741379E+09	2,741235E+09	1,639028E+07	5,482614E+09	5,499004E+09
1490	8,192189E+06	8,190784E+06	2,741200E+09	2,741234E+09	1,638297E+07	5,482434E+09	5,498817E+09
1491	8,191198E+06	8,193570E+06	2,741085E+09	2,741180E+09	1,638477E+07	5,482264E+09	5,498649E+09
1492	8,197053E+06	8,195670E+06	2,741168E+09	2,740921E+09	1,639272E+07	5,482090E+09	5,498482E+09
1493	8,190574E+06	8,191321E+06	2,740949E+09	2,741066E+09	1,638189E+07	5,482015E+09	5,498397E+09
1494	8,194052E+06	8,195426E+06	2,740974E+09	2,740985E+09	1,638948E+07	5,481959E+09	5,498349E+09
1495	8,195536E+06	8,194454E+06	2,741059E+09	2,740933E+09	1,638999E+07	5,481992E+09	5,498382E+09
1496	8,191222E+06	8,190759E+06	2,740944E+09	2,741146E+09	1,638198E+07	5,482090E+09	5,498472E+09
1497	8,195108E+06	8,197083E+06	2,741134E+09	2,741033E+09	1,639219E+07	5,482167E+09	5,498560E+09
1498	8,193841E+06	8,191266E+06	2,741205E+09	2,741164E+09	1,638511E+07	5,482370E+09	5,498755E+09
1499	8,191204E+06	8,191934E+06	2,741189E+09	2,741348E+09	1,638314E+07	5,482537E+09	5,498920E+09
1500	8,195573E+06	8,195553E+06	2,741395E+09	2,741216E+09	1,639113E+07	5,482611E+09	5,499002E+09
1501	8,191750E+06	8,189218E+06	2,741300E+09	2,741415E+09	1,638097E+07	5,482715E+09	5,499096E+09
1502	8,190329E+06	8,194727E+06	2,741330E+09	2,741410E+09	1,638506E+07	5,482740E+09	5,499125E+09
1503	8,195321E+06	8,193499E+06	2,741481E+09	2,741282E+09	1,638882E+07	5,482763E+09	5,499152E+09
1504	8,189773E+06	8,190187E+06	2,741302E+09	2,741436E+09	1,637996E+07	5,482738E+09	5,499118E+09
1505	8,192713E+06	8,195293E+06	2,741318E+09	2,741251E+09	1,638801E+07	5,482570E+09	5,498958E+09
1506	8,195366E+06	8,191061E+06	2,741280E+09	2,741166E+09	1,638643E+07	5,482446E+09	5,498832E+09
1507	8,189919E+06	8,191725E+06	2,741041E+09	2,741223E+09	1,638164E+07	5,482264E+09	5,498646E+09
1508	8,196614E+06	8,196148E+06	2,741096E+09	2,740914E+09	1,639276E+07	5,482010E+09	5,498403E+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							
1509	8,192709E+06	8,192603E+06	2,740934E+09	2,740918E+09	1,638531E+07	5,481852E+09	5,498237E+09
1510	8,191548E+06	8,194383E+06	2,740793E+09	2,740888E+09	1,638593E+07	5,481681E+09	5,498067E+09
1511	8,197564E+06	8,196705E+06	2,740882E+09	2,740672E+09	1,639427E+07	5,481554E+09	5,497948E+09
1512	8,192028E+06	8,191386E+06	2,740665E+09	2,740814E+09	1,638341E+07	5,481479E+09	5,497863E+09
1513	8,195013E+06	8,195746E+06	2,740665E+09	2,740714E+09	1,639076E+07	5,481379E+09	5,497770E+09
1514	8,196743E+06	8,195315E+06	2,740795E+09	2,740655E+09	1,639206E+07	5,481450E+09	5,497842E+09
1515	8,192111E+06	8,191557E+06	2,740710E+09	2,740891E+09	1,638367E+07	5,481601E+09	5,497984E+09
1516	8,195710E+06	8,198120E+06	2,740923E+09	2,740776E+09	1,639383E+07	5,481698E+09	5,498092E+09
1517	8,194392E+06	8,192189E+06	2,740981E+09	2,740921E+09	1,638658E+07	5,481902E+09	5,498289E+09
1518	8,191266E+06	8,192660E+06	2,740927E+09	2,741112E+09	1,638393E+07	5,482038E+09	5,498422E+09
1519	8,195819E+06	8,196881E+06	2,741147E+09	2,740996E+09	1,639270E+07	5,482143E+09	5,498536E+09
1520	8,192752E+06	8,190065E+06	2,741076E+09	2,741172E+09	1,638282E+07	5,482248E+09	5,498631E+09
1521	8,191043E+06	8,195080E+06	2,741068E+09	2,741145E+09	1,638612E+07	5,482213E+09	5,498599E+09
1522	8,196872E+06	8,193803E+06	2,741220E+09	2,741010E+09	1,639067E+07	5,482230E+09	5,498621E+09
1523	8,191018E+06	8,190386E+06	2,741013E+09	2,741168E+09	1,638140E+07	5,482182E+09	5,498563E+09
1524	8,193809E+06	8,196036E+06	2,741023E+09	2,740951E+09	1,638984E+07	5,481973E+09	5,498363E+09
1525	8,195944E+06	8,192755E+06	2,740981E+09	2,740850E+09	1,638870E+07	5,481831E+09	5,498220E+09
1526	8,190011E+06	8,193153E+06	2,740731E+09	2,740904E+09	1,638316E+07	5,481636E+09	5,498019E+09
1527	8,196976E+06	8,197780E+06	2,740816E+09	2,740630E+09	1,639476E+07	5,481445E+09	5,497840E+09
1528	8,194045E+06	8,193142E+06	2,740653E+09	2,740635E+09	1,638719E+07	5,481288E+09	5,497676E+09
1529	8,192826E+06	8,194146E+06	2,740454E+09	2,740599E+09	1,638697E+07	5,481053E+09	5,497440E+09
1530	8,199199E+06	8,197131E+06	2,740563E+09	2,740380E+09	1,639633E+07	5,480942E+09	5,497339E+09
1531	8,193237E+06	8,192135E+06	2,740374E+09	2,740531E+09	1,638537E+07	5,480906E+09	5,497291E+09
1532	8,195603E+06	8,197293E+06	2,740436E+09	2,740425E+09	1,639290E+07	5,480861E+09	5,497254E+09
1533	8,197049E+06	8,196929E+06	2,740598E+09	2,740396E+09	1,639398E+07	5,480993E+09	5,497387E+09
1534	8,192249E+06	8,192343E+06	2,740488E+09	2,740665E+09	1,638459E+07	5,481153E+09	5,497537E+09
1535	8,195987E+06	8,198972E+06	2,740699E+09	2,740591E+09	1,639496E+07	5,481290E+09	5,497685E+09
1536	8,195706E+06	8,192286E+06	2,740738E+09	2,740714E+09	1,638799E+07	5,481452E+09	5,497840E+09
1537	8,191973E+06	8,192861E+06	2,740634E+09	2,740866E+09	1,638483E+07	5,481500E+09	5,497885E+09
1538	8,197029E+06	8,197475E+06	2,740884E+09	2,740722E+09	1,639450E+07	5,481606E+09	5,498001E+09
1539	8,193768E+06	8,190663E+06	2,740824E+09	2,740897E+09	1,638443E+07	5,481722E+09	5,498106E+09
1540	8,191976E+06	8,195910E+06	2,740820E+09	2,740852E+09	1,638789E+07	5,481671E+09	5,498059E+09
1541	8,197727E+06	8,194874E+06	2,740951E+09	2,740722E+09	1,639260E+07	5,481672E+09	5,498065E+09
1542	8,191366E+06	8,191478E+06	2,740711E+09	2,740883E+09	1,638284E+07	5,481593E+09	5,497976E+09
1543	8,194212E+06	8,197666E+06	2,740741E+09	2,740685E+09	1,639188E+07	5,481427E+09	5,497819E+09
1544	8,196938E+06	8,193959E+06	2,740715E+09	2,740569E+09	1,639090E+07	5,481284E+09	5,497675E+09
1545	8,190868E+06	8,193582E+06	2,740421E+09	2,740610E+09	1,638445E+07	5,481030E+09	5,497415E+09
1546	8,198567E+06	8,198115E+06	2,740501E+09	2,740328E+09	1,639668E+07	5,480829E+09	5,497226E+09
1547	8,195443E+06	8,193439E+06	2,740328E+09	2,740339E+09	1,638888E+07	5,480668E+09	5,497056E+09
1548	8,194037E+06	8,195137E+06	2,740145E+09	2,740276E+09	1,638917E+07	5,480421E+09	5,496810E+09
1549	8,199606E+06	8,198879E+06	2,740284E+09	2,740067E+09	1,639848E+07	5,480351E+09	5,496750E+09
1550	8,193294E+06	8,193543E+06	2,740124E+09	2,740247E+09	1,638684E+07	5,480372E+09	5,496758E+09
1551	8,195708E+06	8,198674E+06	2,740227E+09	2,740202E+09	1,639438E+07	5,480429E+09	5,496823E+09
1552	8,198149E+06	8,197120E+06	2,740384E+09	2,740191E+09	1,639527E+07	5,480574E+09	5,496969E+09
1553	8,193318E+06	8,191998E+06	2,740207E+09	2,740451E+09	1,638532E+07	5,480658E+09	5,497044E+09
1554	8,197420E+06	8,199131E+06	2,740421E+09	2,740360E+09	1,639655E+07	5,480780E+09	5,497177E+09
1555	8,196910E+06	8,192842E+06	2,740476E+09	2,740468E+09	1,638975E+07	5,480944E+09	5,497334E+09
1556	8,192689E+06	8,194221E+06	2,740407E+09	2,740584E+09	1,638691E+07	5,480991E+09	5,497378E+09
1557	8,197473E+06	8,198810E+06	2,740668E+09	2,740452E+09	1,639628E+07	5,481119E+09	5,497516E+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							
1558	8,193998E+06	8,191588E+06	2,740581E+09	2,740639E+09	1,638559E+07	5,481221E+09	5,497606E+09
1559	8,192300E+06	8,196913E+06	2,740573E+09	2,740623E+09	1,638921E+07	5,481196E+09	5,497586E+09
1560	8,198782E+06	8,195547E+06	2,740680E+09	2,740471E+09	1,639433E+07	5,481151E+09	5,497545E+09
1561	8,191972E+06	8,192106E+06	2,740385E+09	2,740593E+09	1,638408E+07	5,480978E+09	5,497362E+09
1562	8,195559E+06	8,198385E+06	2,740435E+09	2,740376E+09	1,639394E+07	5,480811E+09	5,497205E+09
1563	8,198211E+06	8,194691E+06	2,740404E+09	2,740257E+09	1,639290E+07	5,480662E+09	5,497055E+09
1564	8,192161E+06	8,194340E+06	2,740106E+09	2,740274E+09	1,638650E+07	5,480381E+09	5,496767E+09
1565	8,199561E+06	8,199147E+06	2,740183E+09	2,740005E+09	1,639871E+07	5,480188E+09	5,496587E+09
1566	8,195859E+06	8,194654E+06	2,740013E+09	2,740027E+09	1,639051E+07	5,480040E+09	5,496431E+09
1567	8,194394E+06	8,196755E+06	2,739892E+09	2,740009E+09	1,639115E+07	5,479902E+09	5,496293E+09
1568	8,200342E+06	8,199986E+06	2,740062E+09	2,739821E+09	1,640033E+07	5,479883E+09	5,496284E+09
1569	8,194152E+06	8,193722E+06	2,739870E+09	2,740015E+09	1,638787E+07	5,479884E+09	5,496272E+09
1570	8,197122E+06	8,198699E+06	2,739970E+09	2,739980E+09	1,639582E+07	5,479951E+09	5,496346E+09
1571	8,199533E+06	8,197024E+06	2,740107E+09	2,739969E+09	1,639656E+07	5,480076E+09	5,496472E+09
1572	8,194371E+06	8,192884E+06	2,739932E+09	2,740180E+09	1,638725E+07	5,480112E+09	5,496499E+09
1573	8,197679E+06	8,200579E+06	2,740166E+09	2,740078E+09	1,639826E+07	5,480244E+09	5,496642E+09
1574	8,196844E+06	8,194299E+06	2,740246E+09	2,740191E+09	1,639114E+07	5,480436E+09	5,496828E+09
1575	8,192704E+06	8,195690E+06	2,740212E+09	2,740348E+09	1,638839E+07	5,480560E+09	5,496949E+09
1576	8,198280E+06	8,199201E+06	2,740449E+09	2,740228E+09	1,639748E+07	5,480677E+09	5,497075E+09
1577	8,194897E+06	8,191613E+06	2,740294E+09	2,740400E+09	1,638651E+07	5,480694E+09	5,497081E+09
1578	8,193669E+06	8,197268E+06	2,740275E+09	2,740362E+09	1,639094E+07	5,480637E+09	5,497028E+09
1579	8,199967E+06	8,196224E+06	2,740385E+09	2,740194E+09	1,639619E+07	5,480579E+09	5,496975E+09
1580	8,192993E+06	8,193509E+06	2,740102E+09	2,740271E+09	1,638650E+07	5,480373E+09	5,496760E+09
1581	8,196474E+06	8,199414E+06	2,740145E+09	2,740061E+09	1,639589E+07	5,480206E+09	5,496602E+09
1582	8,198783E+06	8,195719E+06	2,740094E+09	2,739950E+09	1,639450E+07	5,480044E+09	5,496438E+09
1583	8,192894E+06	8,195303E+06	2,739811E+09	2,739990E+09	1,638820E+07	5,479800E+09	5,496188E+09
1584	8,200473E+06	8,199990E+06	2,739886E+09	2,739719E+09	1,640046E+07	5,479605E+09	5,496006E+09
1585	8,196387E+06	8,195371E+06	2,739703E+09	2,739732E+09	1,639176E+07	5,479435E+09	5,495827E+09
1586	8,195582E+06	8,197431E+06	2,739624E+09	2,739731E+09	1,639301E+07	5,479355E+09	5,495748E+09
1587	8,201445E+06	8,200429E+06	2,739800E+09	2,739571E+09	1,640187E+07	5,479371E+09	5,495773E+09
1588	8,195545E+06	8,194334E+06	2,739600E+09	2,739746E+09	1,638988E+07	5,479346E+09	5,495736E+09
1589	8,197955E+06	8,199438E+06	2,739697E+09	2,739721E+09	1,639739E+07	5,479418E+09	5,495815E+09
1590	8,199768E+06	8,198226E+06	2,739839E+09	2,739709E+09	1,639799E+07	5,479548E+09	5,495946E+09
1591	8,194388E+06	8,194494E+06	2,739729E+09	2,739943E+09	1,638888E+07	5,479672E+09	5,496061E+09
1592	8,197948E+06	8,201584E+06	2,739980E+09	2,739855E+09	1,639953E+07	5,479835E+09	5,496235E+09
1593	8,197422E+06	8,194466E+06	2,740015E+09	2,739967E+09	1,639189E+07	5,479982E+09	5,496374E+09
1594	8,194038E+06	8,195744E+06	2,739970E+09	2,740129E+09	1,638978E+07	5,480099E+09	5,496489E+09
1595	8,199681E+06	8,199084E+06	2,740170E+09	2,739997E+09	1,639876E+07	5,480167E+09	5,496566E+09
1596	8,196124E+06	8,192577E+06	2,739995E+09	2,740107E+09	1,638870E+07	5,480102E+09	5,496491E+09
1597	8,194278E+06	8,198398E+06	2,739985E+09	2,740052E+09	1,639268E+07	5,480037E+09	5,496430E+09
1598	8,200225E+06	8,197602E+06	2,740095E+09	2,739877E+09	1,639783E+07	5,479972E+09	5,496370E+09
1599	8,193444E+06	8,194852E+06	2,739839E+09	2,739976E+09	1,638830E+07	5,479815E+09	5,496204E+09
1600	8,197556E+06	8,199933E+06	2,739851E+09	2,739774E+09	1,639749E+07	5,479625E+09	5,496023E+09
1601	8,199641E+06	8,196167E+06	2,739751E+09	2,739647E+09	1,639581E+07	5,479399E+09	5,495794E+09
1602	8,194290E+06	8,196006E+06	2,739494E+09	2,739688E+09	1,639030E+07	5,479181E+09	5,495572E+09
1603	8,201447E+06	8,200853E+06	2,739597E+09	2,739431E+09	1,640230E+07	5,479028E+09	5,495430E+09
1604	8,197394E+06	8,196710E+06	2,739439E+09	2,739428E+09	1,639410E+07	5,478867E+09	5,495261E+09
1605	8,196430E+06	8,198296E+06	2,739368E+09	2,739457E+09	1,639473E+07	5,478824E+09	5,495219E+09
1606	8,201781E+06	8,201415E+06	2,739530E+09	2,739318E+09	1,640320E+07	5,478848E+09	5,495251E+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							
1607	8,196124E+06	8,195386E+06	2,739356E+09	2,739510E+09	1,639151E+07	5,478865E+09	5,495257E+09
1608	8,198381E+06	8,200271E+06	2,739444E+09	2,739483E+09	1,639865E+07	5,478927E+09	5,495326E+09
1609	8,200067E+06	8,198810E+06	2,739579E+09	2,739456E+09	1,639888E+07	5,479035E+09	5,495434E+09
1610	8,195420E+06	8,195000E+06	2,739503E+09	2,739700E+09	1,639042E+07	5,479203E+09	5,495593E+09
1611	8,198999E+06	8,201528E+06	2,739747E+09	2,739634E+09	1,640053E+07	5,479381E+09	5,495782E+09
1612	8,198967E+06	8,194889E+06	2,739762E+09	2,739713E+09	1,639386E+07	5,479475E+09	5,495869E+09
1613	8,195052E+06	8,196337E+06	2,739700E+09	2,739870E+09	1,639139E+07	5,479570E+09	5,495962E+09
1614	8,200055E+06	8,200276E+06	2,739895E+09	2,739728E+09	1,640033E+07	5,479623E+09	5,496023E+09
1615	8,196421E+06	8,194326E+06	2,739765E+09	2,739836E+09	1,639075E+07	5,479601E+09	5,495992E+09
1616	8,194711E+06	8,199382E+06	2,739741E+09	2,739786E+09	1,639409E+07	5,479526E+09	5,495920E+09
1617	8,200845E+06	8,198043E+06	2,739797E+09	2,739598E+09	1,639889E+07	5,479394E+09	5,495793E+09
1618	8,194819E+06	8,195216E+06	2,739530E+09	2,739692E+09	1,639004E+07	5,479222E+09	5,495612E+09
1619	8,198940E+06	8,200097E+06	2,739520E+09	2,739482E+09	1,639904E+07	5,479001E+09	5,495400E+09
1620	8,200779E+06	8,197513E+06	2,739422E+09	2,739305E+09	1,639829E+07	5,478727E+09	5,495125E+09
1621	8,195045E+06	8,197243E+06	2,739203E+09	2,739355E+09	1,639229E+07	5,478558E+09	5,494950E+09
1622	8,201606E+06	8,202350E+06	2,739324E+09	2,739128E+09	1,640396E+07	5,478452E+09	5,494856E+09
1623	8,197969E+06	8,197898E+06	2,739202E+09	2,739166E+09	1,639587E+07	5,478368E+09	5,494764E+09
1624	8,197371E+06	8,198729E+06	2,739104E+09	2,739219E+09	1,639610E+07	5,478323E+09	5,494719E+09
1625	8,202422E+06	8,201731E+06	2,739222E+09	2,739067E+09	1,640415E+07	5,478289E+09	5,494693E+09
1626	8,197378E+06	8,195938E+06	2,739084E+09	2,739259E+09	1,639332E+07	5,478343E+09	5,494737E+09
1627	8,199358E+06	8,200766E+06	2,739200E+09	2,739242E+09	1,640012E+07	5,478442E+09	5,494842E+09
1628	8,201255E+06	8,199681E+06	2,739349E+09	2,739193E+09	1,640094E+07	5,478542E+09	5,494943E+09
1629	8,196476E+06	8,195506E+06	2,739283E+09	2,739457E+09	1,639198E+07	5,478740E+09	5,495132E+09
1630	8,199382E+06	8,202269E+06	2,739503E+09	2,739402E+09	1,640165E+07	5,478905E+09	5,495307E+09
1631	8,199568E+06	8,196019E+06	2,739536E+09	2,739477E+09	1,639559E+07	5,479013E+09	5,495408E+09
1632	8,195222E+06	8,197497E+06	2,739451E+09	2,739620E+09	1,639272E+07	5,479071E+09	5,495464E+09
1633	8,200139E+06	8,201122E+06	2,739619E+09	2,739450E+09	1,640126E+07	5,479069E+09	5,495470E+09
1634	8,197327E+06	8,195271E+06	2,739501E+09	2,739558E+09	1,639260E+07	5,479058E+09	5,495451E+09
1635	8,195992E+06	8,199459E+06	2,739446E+09	2,739513E+09	1,639545E+07	5,478959E+09	5,495355E+09
1636	8,202471E+06	8,198771E+06	2,739471E+09	2,739280E+09	1,640124E+07	5,478750E+09	5,495152E+09
1637	8,196018E+06	8,196033E+06	2,739209E+09	2,739364E+09	1,639205E+07	5,478573E+09	5,494965E+09
1638	8,199260E+06	8,201508E+06	2,739216E+09	2,739163E+09	1,640077E+07	5,478379E+09	5,494779E+09
1639	8,201106E+06	8,199355E+06	2,739184E+09	2,739006E+09	1,640046E+07	5,478190E+09	5,494591E+09
1640	8,195608E+06	8,198253E+06	2,738955E+09	2,739089E+09	1,639386E+07	5,478044E+09	5,494438E+09
1641	8,202260E+06	8,202755E+06	2,739032E+09	2,738873E+09	1,640501E+07	5,477905E+09	5,494310E+09
1642	8,199554E+06	8,198201E+06	2,738901E+09	2,738919E+09	1,639775E+07	5,477820E+09	5,494218E+09
1643	8,198902E+06	8,198684E+06	2,738788E+09	2,738968E+09	1,639759E+07	5,477755E+09	5,494153E+09
1644	8,203570E+06	8,202742E+06	2,738918E+09	2,738767E+09	1,640631E+07	5,477685E+09	5,494091E+09
1645	8,198220E+06	8,196780E+06	2,738834E+09	2,738963E+09	1,639500E+07	5,477797E+09	5,494192E+09
1646	8,199424E+06	8,202003E+06	2,738976E+09	2,738980E+09	1,640143E+07	5,477956E+09	5,494357E+09
1647	8,201834E+06	8,200787E+06	2,739162E+09	2,738963E+09	1,640262E+07	5,478125E+09	5,494528E+09
1648	8,197077E+06	8,196300E+06	2,739067E+09	2,739246E+09	1,639338E+07	5,478314E+09	5,494707E+09
1649	8,199610E+06	8,202906E+06	2,739241E+09	2,739176E+09	1,640252E+07	5,478417E+09	5,494819E+09
1650	8,200440E+06	8,196950E+06	2,739290E+09	2,739243E+09	1,639739E+07	5,478533E+09	5,494930E+09
1651	8,196016E+06	8,197971E+06	2,739202E+09	2,739379E+09	1,639399E+07	5,478580E+09	5,494974E+09
1652	8,201400E+06	8,201810E+06	2,739343E+09	2,739164E+09	1,640321E+07	5,478508E+09	5,494911E+09
1653	8,198590E+06	8,195789E+06	2,739220E+09	2,739263E+09	1,639438E+07	5,478483E+09	5,494878E+09
1654	8,196728E+06	8,200271E+06	2,739138E+09	2,739216E+09	1,639700E+07	5,478354E+09	5,494751E+09
1655	8,203293E+06	8,200140E+06	2,739185E+09	2,738973E+09	1,640343E+07	5,478158E+09	5,494562E+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							
1656	8,196429E+06	8,197409E+06	2,738923E+09	2,739058E+09	1,639384E+07	5,477981E+09	5,494375E+09
1657	8,199489E+06	8,202407E+06	2,738913E+09	2,738854E+09	1,640190E+07	5,477767E+09	5,494169E+09
1658	8,202129E+06	8,200233E+06	2,738898E+09	2,738727E+09	1,640236E+07	5,477625E+09	5,494027E+09
1659	8,197281E+06	8,198216E+06	2,738646E+09	2,738828E+09	1,639550E+07	5,477474E+09	5,493870E+09
1660	8,203991E+06	8,203324E+06	2,738692E+09	2,738574E+09	1,640731E+07	5,477266E+09	5,493673E+09
1661	8,200950E+06	8,198974E+06	2,738591E+09	2,738611E+09	1,639992E+07	5,477202E+09	5,493602E+09
1662	8,199248E+06	8,200143E+06	2,738510E+09	2,738673E+09	1,639939E+07	5,477184E+09	5,493583E+09
1663	8,203751E+06	8,204458E+06	2,738721E+09	2,738497E+09	1,640821E+07	5,477218E+09	5,493627E+09
1664	8,198458E+06	8,197917E+06	2,738648E+09	2,738733E+09	1,639638E+07	5,477381E+09	5,493777E+09
1665	8,199497E+06	8,202567E+06	2,738754E+09	2,738770E+09	1,640206E+07	5,477524E+09	5,493926E+09
1666	8,202847E+06	8,201204E+06	2,738930E+09	2,738770E+09	1,640405E+07	5,477700E+09	5,494104E+09
1667	8,198293E+06	8,196446E+06	2,738807E+09	2,739038E+09	1,639474E+07	5,477845E+09	5,494240E+09
1668	8,200636E+06	8,203662E+06	2,738962E+09	2,738907E+09	1,640430E+07	5,477869E+09	5,494273E+09
1669	8,201461E+06	8,197634E+06	2,739034E+09	2,738955E+09	1,639909E+07	5,477989E+09	5,494388E+09
1670	8,196386E+06	8,198887E+06	2,738936E+09	2,739101E+09	1,639527E+07	5,478036E+09	5,494431E+09
1671	8,202380E+06	8,202692E+06	2,739093E+09	2,738887E+09	1,640507E+07	5,477981E+09	5,494386E+09
1672	8,199305E+06	8,196794E+06	2,738938E+09	2,738981E+09	1,639610E+07	5,477919E+09	5,494315E+09
1673	8,197169E+06	8,201109E+06	2,738826E+09	2,738919E+09	1,639828E+07	5,477746E+09	5,494144E+09
1674	8,204174E+06	8,201440E+06	2,738899E+09	2,738687E+09	1,640561E+07	5,477586E+09	5,493992E+09
1675	8,197577E+06	8,197977E+06	2,738640E+09	2,738782E+09	1,639555E+07	5,477422E+09	5,493818E+09
1676	8,200997E+06	8,203023E+06	2,738604E+09	2,738556E+09	1,640402E+07	5,477160E+09	5,493564E+09
1677	8,203634E+06	8,200746E+06	2,738586E+09	2,738428E+09	1,640438E+07	5,477014E+09	5,493418E+09
1678	8,198177E+06	8,199108E+06	2,738321E+09	2,738532E+09	1,639729E+07	5,476853E+09	5,493250E+09
1679	8,204641E+06	8,204810E+06	2,738408E+09	2,738267E+09	1,640945E+07	5,476675E+09	5,493084E+09
1680	8,201008E+06	8,200599E+06	2,738335E+09	2,738314E+09	1,640161E+07	5,476649E+09	5,493051E+09
1681	8,199095E+06	8,201220E+06	2,738268E+09	2,738396E+09	1,640031E+07	5,476665E+09	5,493065E+09
1682	8,204360E+06	8,205248E+06	2,738501E+09	2,738279E+09	1,640961E+07	5,476780E+09	5,493190E+09
1683	8,199984E+06	8,197705E+06	2,738412E+09	2,738540E+09	1,639769E+07	5,476952E+09	5,493350E+09
1684	8,200957E+06	8,202830E+06	2,738479E+09	2,738540E+09	1,640379E+07	5,477019E+09	5,493423E+09
1685	8,204137E+06	8,201551E+06	2,738672E+09	2,738522E+09	1,640569E+07	5,477194E+09	5,493599E+09
1686	8,198672E+06	8,197647E+06	2,738560E+09	2,738783E+09	1,639632E+07	5,477343E+09	5,493739E+09
1687	8,201070E+06	8,204811E+06	2,738750E+09	2,738646E+09	1,640588E+07	5,477396E+09	5,493802E+09
1688	8,201910E+06	8,198709E+06	2,738805E+09	2,738703E+09	1,640062E+07	5,477508E+09	5,493908E+09
1689	8,196743E+06	8,199512E+06	2,738657E+09	2,738836E+09	1,639626E+07	5,477493E+09	5,493890E+09
1690	8,203391E+06	8,203393E+06	2,738799E+09	2,738632E+09	1,640678E+07	5,477431E+09	5,493838E+09
1691	8,200518E+06	8,197366E+06	2,738632E+09	2,738704E+09	1,639788E+07	5,477336E+09	5,493734E+09
1692	8,198246E+06	8,201989E+06	2,738508E+09	2,738593E+09	1,640023E+07	5,477101E+09	5,493501E+09
1693	8,205173E+06	8,202316E+06	2,738610E+09	2,738360E+09	1,640749E+07	5,476970E+09	5,493378E+09
1694	8,198259E+06	8,199086E+06	2,738338E+09	2,738476E+09	1,639734E+07	5,476815E+09	5,493212E+09
1695	8,202159E+06	8,204015E+06	2,738317E+09	2,738255E+09	1,640617E+07	5,476571E+09	5,492977E+09
1696	8,204232E+06	8,202195E+06	2,738283E+09	2,738132E+09	1,640643E+07	5,476415E+09	5,492821E+09
1697	8,198469E+06	8,200206E+06	2,738014E+09	2,738231E+09	1,639868E+07	5,476245E+09	5,492643E+09
1698	8,205098E+06	8,206057E+06	2,738146E+09	2,738003E+09	1,641116E+07	5,476150E+09	5,492561E+09
1699	8,202105E+06	8,200943E+06	2,738097E+09	2,738075E+09	1,640305E+07	5,476173E+09	5,492576E+09
1700	8,200464E+06	8,201452E+06	2,738016E+09	2,738153E+09	1,640192E+07	5,476169E+09	5,492571E+09
1701	8,205768E+06	8,205286E+06	2,738253E+09	2,738048E+09	1,641105E+07	5,476300E+09	5,492711E+09
1702	8,200999E+06	8,198294E+06	2,738147E+09	2,738313E+09	1,639929E+07	5,476459E+09	5,492859E+09
1703	8,201577E+06	8,203930E+06	2,738243E+09	2,738289E+09	1,640551E+07	5,476532E+09	5,492938E+09
1704	8,204117E+06	8,202892E+06	2,738441E+09	2,738260E+09	1,640701E+07	5,476701E+09	5,493108E+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							
1705	8,198466E+06	8,198663E+06	2,738320E+09	2,738517E+09	1,639713E+07	5,476837E+09	5,493234E+09
1706	8,201645E+06	8,205490E+06	2,738505E+09	2,738416E+09	1,640714E+07	5,476921E+09	5,493328E+09
1707	8,203378E+06	8,198781E+06	2,738534E+09	2,738467E+09	1,640216E+07	5,477001E+09	5,493403E+09
1708	8,198188E+06	8,200012E+06	2,738350E+09	2,738552E+09	1,639820E+07	5,476902E+09	5,493300E+09
1709	8,204584E+06	8,204038E+06	2,738509E+09	2,738329E+09	1,640862E+07	5,476838E+09	5,493246E+09
1710	8,200987E+06	8,198788E+06	2,738357E+09	2,738403E+09	1,639977E+07	5,476759E+09	5,493159E+09
1711	8,198919E+06	8,203193E+06	2,738261E+09	2,738291E+09	1,640211E+07	5,476553E+09	5,492955E+09
1712	8,205525E+06	8,203623E+06	2,738339E+09	2,738076E+09	1,640915E+07	5,476415E+09	5,492824E+09
1713	8,198758E+06	8,199923E+06	2,738025E+09	2,738186E+09	1,639868E+07	5,476211E+09	5,492609E+09
1714	8,203258E+06	8,204791E+06	2,737989E+09	2,737984E+09	1,640805E+07	5,475973E+09	5,492382E+09
1715	8,205487E+06	8,202851E+06	2,737962E+09	2,737844E+09	1,640834E+07	5,475806E+09	5,492215E+09
1716	8,199673E+06	8,200793E+06	2,737703E+09	2,737910E+09	1,640047E+07	5,475613E+09	5,492013E+09
1717	8,206100E+06	8,206463E+06	2,737880E+09	2,737708E+09	1,641256E+07	5,475588E+09	5,492000E+09
1718	8,203023E+06	8,201633E+06	2,737840E+09	2,737819E+09	1,640466E+07	5,475659E+09	5,492064E+09
1719	8,201581E+06	8,202221E+06	2,737779E+09	2,737903E+09	1,640380E+07	5,475683E+09	5,492087E+09
1720	8,206081E+06	8,206612E+06	2,738009E+09	2,737810E+09	1,641269E+07	5,475819E+09	5,492232E+09
1721	8,201101E+06	8,199566E+06	2,737900E+09	2,738062E+09	1,640067E+07	5,475962E+09	5,492362E+09
1722	8,201643E+06	8,205041E+06	2,738019E+09	2,738072E+09	1,640668E+07	5,476091E+09	5,492497E+09
1723	8,205032E+06	8,203193E+06	2,738219E+09	2,738045E+09	1,640822E+07	5,476264E+09	5,492672E+09
1724	8,199625E+06	8,198845E+06	2,738060E+09	2,738268E+09	1,639847E+07	5,476328E+09	5,492726E+09
1725	8,202938E+06	8,205440E+06	2,738238E+09	2,738158E+09	1,640838E+07	5,476396E+09	5,492804E+09
1726	8,204381E+06	8,199671E+06	2,738248E+09	2,738194E+09	1,640405E+07	5,476442E+09	5,492846E+09
1727	8,198915E+06	8,201363E+06	2,738092E+09	2,738246E+09	1,640028E+07	5,476338E+09	5,492738E+09
1728	8,204507E+06	8,205622E+06	2,738254E+09	2,738027E+09	1,641013E+07	5,476281E+09	5,492691E+09
1729	8,201015E+06	8,200005E+06	2,738082E+09	2,738105E+09	1,640102E+07	5,476187E+09	5,492588E+09
1730	8,199768E+06	8,203766E+06	2,737966E+09	2,738038E+09	1,640353E+07	5,476004E+09	5,492408E+09
1731	8,207158E+06	8,203869E+06	2,738013E+09	2,737810E+09	1,641103E+07	5,475823E+09	5,492234E+09
1732	8,200386E+06	8,200391E+06	2,737671E+09	2,737868E+09	1,640078E+07	5,475539E+09	5,491939E+09
1733	8,204654E+06	8,205361E+06	2,737670E+09	2,737656E+09	1,641001E+07	5,475326E+09	5,491736E+09
1734	8,206158E+06	8,204129E+06	2,737675E+09	2,737534E+09	1,641029E+07	5,475210E+09	5,491620E+09
1735	8,200641E+06	8,201840E+06	2,737469E+09	2,737615E+09	1,640248E+07	5,475085E+09	5,491487E+09
1736	8,206237E+06	8,207708E+06	2,737641E+09	2,737453E+09	1,641394E+07	5,475094E+09	5,491508E+09
1737	8,203399E+06	8,202482E+06	2,737583E+09	2,737576E+09	1,640588E+07	5,475160E+09	5,491565E+09
1738	8,202177E+06	8,203138E+06	2,737522E+09	2,737695E+09	1,640532E+07	5,475217E+09	5,491623E+09
1739	8,206856E+06	8,207230E+06	2,737756E+09	2,737585E+09	1,641409E+07	5,475341E+09	5,491755E+09
1740	8,201981E+06	8,200025E+06	2,737646E+09	2,737795E+09	1,640201E+07	5,475441E+09	5,491843E+09
1741	8,202569E+06	8,205095E+06	2,737777E+09	2,737814E+09	1,640766E+07	5,475590E+09	5,491998E+09
1742	8,206112E+06	8,203624E+06	2,737964E+09	2,737802E+09	1,640974E+07	5,475766E+09	5,492175E+09
1743	8,200859E+06	8,199653E+06	2,737818E+09	2,738001E+09	1,640051E+07	5,475819E+09	5,492220E+09
1744	8,203137E+06	8,206759E+06	2,737986E+09	2,737891E+09	1,640990E+07	5,475876E+09	5,492286E+09
1745	8,204480E+06	8,201120E+06	2,737995E+09	2,737912E+09	1,640560E+07	5,475907E+09	5,492313E+09
1746	8,199190E+06	8,202528E+06	2,737847E+09	2,738001E+09	1,640172E+07	5,475848E+09	5,492250E+09
1747	8,205639E+06	8,206003E+06	2,737988E+09	2,737782E+09	1,641164E+07	5,475770E+09	5,492182E+09
1748	8,202485E+06	8,200307E+06	2,737762E+09	2,737818E+09	1,640279E+07	5,475580E+09	5,491983E+09
1749	8,201478E+06	8,203698E+06	2,737627E+09	2,737736E+09	1,640518E+07	5,475363E+09	5,491768E+09
1750	8,208371E+06	8,204959E+06	2,737663E+09	2,737489E+09	1,641333E+07	5,475151E+09	5,491565E+09
1751	8,201298E+06	8,201861E+06	2,737368E+09	2,737505E+09	1,640316E+07	5,474873E+09	5,491277E+09
1752	8,204510E+06	8,207041E+06	2,737400E+09	2,737321E+09	1,641155E+07	5,474721E+09	5,491132E+09
1753	8,206150E+06	8,205522E+06	2,737415E+09	2,737232E+09	1,641167E+07	5,474647E+09	5,491059E+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							
1754	8,201380E+06	8,202592E+06	2,737215E+09	2,737389E+09	1,640397E+07	5,474604E+09	5,491008E+09
1755	8,207475E+06	8,208156E+06	2,737376E+09	2,737241E+09	1,641563E+07	5,474617E+09	5,491032E+09
1756	8,204786E+06	8,202824E+06	2,737297E+09	2,737327E+09	1,640761E+07	5,474623E+09	5,491031E+09
1757	8,203307E+06	8,203395E+06	2,737266E+09	2,737442E+09	1,640670E+07	5,474708E+09	5,491115E+09
1758	8,207538E+06	8,207984E+06	2,737515E+09	2,737340E+09	1,641552E+07	5,474854E+09	5,491270E+09
1759	8,202993E+06	8,200781E+06	2,737437E+09	2,737534E+09	1,640377E+07	5,474971E+09	5,491375E+09
1760	8,202717E+06	8,206104E+06	2,737553E+09	2,737575E+09	1,640882E+07	5,475127E+09	5,491536E+09
1761	8,206622E+06	8,204566E+06	2,737714E+09	2,737557E+09	1,641119E+07	5,475271E+09	5,491682E+09
1762	8,201410E+06	8,200788E+06	2,737567E+09	2,737777E+09	1,640220E+07	5,475345E+09	5,491747E+09
1763	8,203836E+06	8,207512E+06	2,737733E+09	2,737645E+09	1,641135E+07	5,475378E+09	5,491789E+09
1764	8,205336E+06	8,201657E+06	2,737722E+09	2,737625E+09	1,640699E+07	5,475347E+09	5,491754E+09
1765	8,200346E+06	8,202570E+06	2,737563E+09	2,737717E+09	1,640292E+07	5,475280E+09	5,491682E+09
1766	8,207023E+06	8,206455E+06	2,737667E+09	2,737497E+09	1,641348E+07	5,475164E+09	5,491578E+09
1767	8,204015E+06	8,201491E+06	2,737448E+09	2,737488E+09	1,640551E+07	5,474936E+09	5,491341E+09
1768	8,201952E+06	8,205312E+06	2,737310E+09	2,737401E+09	1,640726E+07	5,474711E+09	5,491118E+09
1769	8,208483E+06	8,206745E+06	2,737367E+09	2,737152E+09	1,641523E+07	5,474519E+09	5,490934E+09
1770	8,201633E+06	8,203154E+06	2,737111E+09	2,737229E+09	1,640479E+07	5,474340E+09	5,490745E+09
1771	8,205419E+06	8,207491E+06	2,737143E+09	2,737074E+09	1,641291E+07	5,474217E+09	5,490630E+09
1772	8,207445E+06	8,205624E+06	2,737127E+09	2,736975E+09	1,641307E+07	5,474102E+09	5,490515E+09
1773	8,203160E+06	8,202450E+06	2,736919E+09	2,737137E+09	1,640561E+07	5,474056E+09	5,490461E+09
1774	8,208646E+06	8,208986E+06	2,737075E+09	2,736984E+09	1,641763E+07	5,474059E+09	5,490477E+09
1775	8,205838E+06	8,204011E+06	2,737043E+09	2,737030E+09	1,640985E+07	5,474072E+09	5,490482E+09
1776	8,203210E+06	8,204705E+06	2,737033E+09	2,737165E+09	1,640792E+07	5,474199E+09	5,490606E+09
1777	8,207588E+06	8,208968E+06	2,737281E+09	2,737084E+09	1,641656E+07	5,474365E+09	5,490781E+09
1778	8,203632E+06	8,201510E+06	2,737210E+09	2,737328E+09	1,640514E+07	5,474538E+09	5,490943E+09
1779	8,203652E+06	8,206743E+06	2,737315E+09	2,737365E+09	1,641039E+07	5,474680E+09	5,491090E+09
1780	8,207701E+06	8,205170E+06	2,737453E+09	2,737304E+09	1,641287E+07	5,474757E+09	5,491170E+09
1781	8,202422E+06	8,201299E+06	2,737322E+09	2,737518E+09	1,640372E+07	5,474840E+09	5,491243E+09
1782	8,204697E+06	8,208222E+06	2,737477E+09	2,737391E+09	1,641292E+07	5,474868E+09	5,491281E+09
1783	8,206541E+06	8,202581E+06	2,737462E+09	2,737333E+09	1,640912E+07	5,474795E+09	5,491204E+09
1784	8,200752E+06	8,203589E+06	2,737272E+09	2,737428E+09	1,640434E+07	5,474700E+09	5,491104E+09
1785	8,207718E+06	8,207628E+06	2,737346E+09	2,737188E+09	1,641535E+07	5,474534E+09	5,490949E+09
1786	8,204558E+06	8,202981E+06	2,737140E+09	2,737190E+09	1,640754E+07	5,474330E+09	5,490738E+09
1787	8,202743E+06	8,206289E+06	2,737021E+09	2,737096E+09	1,640903E+07	5,474117E+09	5,490526E+09
1788	8,209376E+06	8,207299E+06	2,737065E+09	2,736836E+09	1,641668E+07	5,473901E+09	5,490318E+09
1789	8,203135E+06	8,203083E+06	2,736819E+09	2,736944E+09	1,640622E+07	5,473763E+09	5,490169E+09
1790	8,206964E+06	8,207823E+06	2,736834E+09	2,736814E+09	1,641479E+07	5,473648E+09	5,490062E+09
1791	8,208973E+06	8,206668E+06	2,736836E+09	2,736684E+09	1,641564E+07	5,473520E+09	5,489935E+09
1792	8,203625E+06	8,203931E+06	2,736646E+09	2,736854E+09	1,640756E+07	5,473500E+09	5,489908E+09
1793	8,208653E+06	8,210541E+06	2,736824E+09	2,736707E+09	1,641919E+07	5,473531E+09	5,489950E+09
1794	8,206097E+06	8,205149E+06	2,736829E+09	2,736804E+09	1,641125E+07	5,473633E+09	5,490044E+09
1795	8,203852E+06	8,205252E+06	2,736817E+09	2,736958E+09	1,640910E+07	5,473776E+09	5,490185E+09
1796	8,208539E+06	8,208973E+06	2,737029E+09	2,736862E+09	1,641751E+07	5,473891E+09	5,490308E+09
1797	8,205125E+06	8,201553E+06	2,736956E+09	2,737099E+09	1,640668E+07	5,474055E+09	5,490462E+09
1798	8,204572E+06	8,207532E+06	2,737050E+09	2,737120E+09	1,641210E+07	5,474171E+09	5,490583E+09
1799	8,208601E+06	8,206299E+06	2,737218E+09	2,737011E+09	1,641490E+07	5,474230E+09	5,490645E+09
1800	8,202485E+06	8,202582E+06	2,737081E+09	2,737234E+09	1,640507E+07	5,474315E+09	5,490721E+09
1801	8,205085E+06	8,209043E+06	2,737203E+09	2,737115E+09	1,641413E+07	5,474318E+09	5,490732E+09
1802	8,207388E+06	8,203549E+06	2,737179E+09	2,737084E+09	1,641094E+07	5,474263E+09	5,490673E+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							
1803	8,201845E+06	8,204387E+06	2,736968E+09	2,737156E+09	1,640623E+07	5,474124E+09	5,490530E+09
1804	8,208843E+06	8,208242E+06	2,737022E+09	2,736874E+09	1,641708E+07	5,473896E+09	5,490313E+09
1805	8,205735E+06	8,203601E+06	2,736843E+09	2,736873E+09	1,640934E+07	5,473716E+09	5,490125E+09
1806	8,203928E+06	8,206898E+06	2,736727E+09	2,736800E+09	1,641083E+07	5,473527E+09	5,489938E+09
1807	8,210628E+06	8,208284E+06	2,736782E+09	2,736526E+09	1,641891E+07	5,473308E+09	5,489726E+09
1808	8,203853E+06	8,204177E+06	2,736525E+09	2,736656E+09	1,640803E+07	5,473181E+09	5,489589E+09
1809	8,207580E+06	8,209146E+06	2,736527E+09	2,736527E+09	1,641673E+07	5,473054E+09	5,489471E+09
1810	8,209286E+06	8,208316E+06	2,736561E+09	2,736421E+09	1,641760E+07	5,472982E+09	5,489400E+09
1811	8,204017E+06	8,205052E+06	2,736401E+09	2,736591E+09	1,640907E+07	5,472992E+09	5,489401E+09
1812	8,209082E+06	8,210871E+06	2,736567E+09	2,736441E+09	1,641995E+07	5,473008E+09	5,489428E+09
1813	8,207367E+06	8,204992E+06	2,736579E+09	2,736566E+09	1,641236E+07	5,473145E+09	5,489558E+09
1814	8,205257E+06	8,205533E+06	2,736559E+09	2,736737E+09	1,641079E+07	5,473296E+09	5,489707E+09
1815	8,209850E+06	8,209883E+06	2,736781E+09	2,736602E+09	1,641973E+07	5,473383E+09	5,489803E+09
1816	8,205574E+06	8,202884E+06	2,736728E+09	2,736842E+09	1,640846E+07	5,473570E+09	5,489979E+09
1817	8,204619E+06	8,208843E+06	2,736828E+09	2,736867E+09	1,641346E+07	5,473695E+09	5,490108E+09
1818	8,208872E+06	8,207193E+06	2,737004E+09	2,736792E+09	1,641606E+07	5,473796E+09	5,490212E+09
1819	8,203177E+06	8,203162E+06	2,736838E+09	2,737010E+09	1,640634E+07	5,473848E+09	5,490255E+09
1820	8,206254E+06	8,208901E+06	2,736892E+09	2,736855E+09	1,641515E+07	5,473747E+09	5,490162E+09
1821	8,208979E+06	8,203940E+06	2,736854E+09	2,736797E+09	1,641292E+07	5,473651E+09	5,490064E+09
1822	8,203076E+06	8,205291E+06	2,736644E+09	2,736842E+09	1,640837E+07	5,473486E+09	5,489895E+09
1823	8,209814E+06	8,209495E+06	2,736728E+09	2,736518E+09	1,641931E+07	5,473246E+09	5,489666E+09
1824	8,205984E+06	8,204911E+06	2,736565E+09	2,736542E+09	1,641089E+07	5,473107E+09	5,489518E+09
1825	8,204519E+06	8,207871E+06	2,736433E+09	2,736498E+09	1,641239E+07	5,472931E+09	5,489344E+09
1826	8,211231E+06	8,209573E+06	2,736497E+09	2,736268E+09	1,642080E+07	5,472765E+09	5,489186E+09
1827	8,204765E+06	8,205410E+06	2,736239E+09	2,736395E+09	1,641017E+07	5,472634E+09	5,489044E+09
1828	8,208375E+06	8,209719E+06	2,736230E+09	2,736248E+09	1,641809E+07	5,472478E+09	5,488896E+09
1829	8,210358E+06	8,208838E+06	2,736294E+09	2,736154E+09	1,641920E+07	5,472448E+09	5,488867E+09
1830	8,205250E+06	8,205271E+06	2,736138E+09	2,736340E+09	1,641052E+07	5,472479E+09	5,488889E+09
1831	8,210240E+06	8,211294E+06	2,736314E+09	2,736177E+09	1,642153E+07	5,472491E+09	5,488912E+09
1832	8,208241E+06	8,205704E+06	2,736332E+09	2,736316E+09	1,641394E+07	5,472648E+09	5,489062E+09
1833	8,205817E+06	8,206722E+06	2,736307E+09	2,736488E+09	1,641254E+07	5,472796E+09	5,489208E+09
1834	8,209968E+06	8,211277E+06	2,736565E+09	2,736375E+09	1,642124E+07	5,472941E+09	5,489362E+09
1835	8,205921E+06	8,203964E+06	2,736520E+09	2,736609E+09	1,640988E+07	5,473129E+09	5,489539E+09
1836	8,205035E+06	8,208794E+06	2,736574E+09	2,736624E+09	1,641383E+07	5,473198E+09	5,489612E+09
1837	8,210188E+06	8,207075E+06	2,736724E+09	2,736552E+09	1,641726E+07	5,473276E+09	5,489693E+09
1838	8,204641E+06	8,203614E+06	2,736533E+09	2,736748E+09	1,640825E+07	5,473281E+09	5,489689E+09
1839	8,207581E+06	8,209942E+06	2,736586E+09	2,736535E+09	1,641752E+07	5,473121E+09	5,489538E+09
1840	8,209464E+06	8,205612E+06	2,736574E+09	2,736467E+09	1,641508E+07	5,473040E+09	5,489456E+09
1841	8,203339E+06	8,206832E+06	2,736377E+09	2,736521E+09	1,641017E+07	5,472898E+09	5,489308E+09
1842	8,209965E+06	8,210738E+06	2,736478E+09	2,736246E+09	1,642070E+07	5,472724E+09	5,489145E+09
1843	8,206594E+06	8,205840E+06	2,736298E+09	2,736285E+09	1,641243E+07	5,472583E+09	5,488995E+09
1844	8,205616E+06	8,207884E+06	2,736111E+09	2,736227E+09	1,641350E+07	5,472338E+09	5,488752E+09
1845	8,212590E+06	8,210154E+06	2,736165E+09	2,735989E+09	1,642274E+07	5,472154E+09	5,488577E+09
1846	8,206193E+06	8,206162E+06	2,735924E+09	2,736100E+09	1,641236E+07	5,472024E+09	5,488437E+09
1847	8,209542E+06	8,210538E+06	2,735937E+09	2,735921E+09	1,642008E+07	5,471858E+09	5,488278E+09
1848	8,210961E+06	8,209652E+06	2,736025E+09	2,735858E+09	1,642061E+07	5,471883E+09	5,488304E+09
1849	8,206060E+06	8,205980E+06	2,735878E+09	2,736076E+09	1,641204E+07	5,471953E+09	5,488365E+09
1850	8,210634E+06	8,212333E+06	2,736081E+09	2,735957E+09	1,642297E+07	5,472038E+09	5,488461E+09
1851	8,208893E+06	8,206920E+06	2,736120E+09	2,736097E+09	1,641581E+07	5,472216E+09	5,488632E+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	8,206222E+06	8,207290E+06	2,736079E+09	2,736257E+09	1,641351E+07	5,472337E+09	5,488750E+09
1853	8,210717E+06	8,211707E+06	2,736342E+09	2,736159E+09	1,642242E+07	5,472501E+09	5,488924E+09
1854	8,207112E+06	8,204264E+06	2,736279E+09	2,736389E+09	1,641138E+07	5,472668E+09	5,489079E+09
1855	8,206142E+06	8,209077E+06	2,736301E+09	2,736362E+09	1,641522E+07	5,472663E+09	5,489078E+09
1856	8,211094E+06	8,207856E+06	2,736438E+09	2,736271E+09	1,641895E+07	5,472710E+09	5,489129E+09
1857	8,205190E+06	8,205095E+06	2,736241E+09	2,736441E+09	1,641029E+07	5,472682E+09	5,489092E+09
1858	8,207605E+06	8,211468E+06	2,736333E+09	2,736238E+09	1,641907E+07	5,472572E+09	5,488991E+09
1859	8,209695E+06	8,207062E+06	2,736332E+09	2,736172E+09	1,641676E+07	5,472503E+09	5,488920E+09
1860	8,203962E+06	8,206875E+06	2,736086E+09	2,736236E+09	1,641084E+07	5,472323E+09	5,488733E+09
1861	8,211399E+06	8,210844E+06	2,736161E+09	2,735986E+09	1,642224E+07	5,472147E+09	5,488569E+09
1862	8,208451E+06	8,206322E+06	2,735959E+09	2,736006E+09	1,641477E+07	5,471966E+09	5,488380E+09
1863	8,207286E+06	8,208662E+06	2,735773E+09	2,735902E+09	1,641595E+07	5,471675E+09	5,488091E+09
1864	8,213378E+06	8,211564E+06	2,735864E+09	2,735661E+09	1,642494E+07	5,471525E+09	5,487950E+09
1865	8,206790E+06	8,207418E+06	2,735648E+09	2,735785E+09	1,641421E+07	5,471433E+09	5,487847E+09
1866	8,209781E+06	8,211601E+06	2,735698E+09	2,735660E+09	1,642138E+07	5,471358E+09	5,487779E+09
1867	8,211495E+06	8,210666E+06	2,735790E+09	2,735620E+09	1,642216E+07	5,471410E+09	5,487832E+09
1868	8,206867E+06	8,206194E+06	2,735614E+09	2,735840E+09	1,641306E+07	5,471455E+09	5,487868E+09
1869	8,211377E+06	8,213163E+06	2,735824E+09	2,735734E+09	1,642454E+07	5,471559E+09	5,487983E+09
1870	8,209964E+06	8,207652E+06	2,735885E+09	2,735861E+09	1,641762E+07	5,471746E+09	5,488164E+09
1871	8,206969E+06	8,207905E+06	2,735845E+09	2,735990E+09	1,641487E+07	5,471835E+09	5,488250E+09
1872	8,211310E+06	8,212192E+06	2,736100E+09	2,735904E+09	1,642350E+07	5,472004E+09	5,488427E+09
1873	8,207909E+06	8,205095E+06	2,736017E+09	2,736131E+09	1,641300E+07	5,472148E+09	5,488561E+09
1874	8,206546E+06	8,210198E+06	2,736048E+09	2,736114E+09	1,641674E+07	5,472163E+09	5,488579E+09
1875	8,211672E+06	8,209353E+06	2,736194E+09	2,736008E+09	1,642103E+07	5,472202E+09	5,488623E+09
1876	8,205656E+06	8,205783E+06	2,735981E+09	2,736159E+09	1,641144E+07	5,472140E+09	5,488552E+09
1877	8,208402E+06	8,211880E+06	2,736064E+09	2,735977E+09	1,642028E+07	5,472041E+09	5,488461E+09
1878	8,211192E+06	8,207316E+06	2,736046E+09	2,735909E+09	1,641851E+07	5,471954E+09	5,488373E+09
1879	8,205596E+06	8,207114E+06	2,735760E+09	2,735935E+09	1,641271E+07	5,471695E+09	5,488108E+09
1880	8,212707E+06	8,211690E+06	2,735822E+09	2,735672E+09	1,642440E+07	5,471494E+09	5,487919E+09
1881	8,209361E+06	8,208020E+06	2,735629E+09	2,735673E+09	1,641738E+07	5,471302E+09	5,487719E+09
1882	8,207593E+06	8,210203E+06	2,735492E+09	2,735583E+09	1,641780E+07	5,471074E+09	5,487492E+09
1883	8,213523E+06	8,213105E+06	2,735608E+09	2,735357E+09	1,642663E+07	5,470965E+09	5,487391E+09
1884	8,207327E+06	8,207589E+06	2,735369E+09	2,735501E+09	1,641492E+07	5,470871E+09	5,487286E+09
1885	8,210712E+06	8,212010E+06	2,735419E+09	2,735423E+09	1,642272E+07	5,470843E+09	5,487265E+09
1886	8,212983E+06	8,211276E+06	2,735525E+09	2,735388E+09	1,642426E+07	5,470912E+09	5,487337E+09
1887	8,208193E+06	8,207033E+06	2,735360E+09	2,735579E+09	1,641523E+07	5,470938E+09	5,487354E+09
1888	8,211936E+06	8,214256E+06	2,735601E+09	2,735483E+09	1,642619E+07	5,471084E+09	5,487510E+09
1889	8,210568E+06	8,208597E+06	2,735666E+09	2,735618E+09	1,641917E+07	5,471284E+09	5,487703E+09
1890	8,207129E+06	8,208590E+06	2,735636E+09	2,735774E+09	1,641572E+07	5,471410E+09	5,487826E+09
1891	8,211814E+06	8,212938E+06	2,735868E+09	2,735681E+09	1,642475E+07	5,471548E+09	5,487973E+09
1892	8,208647E+06	8,205383E+06	2,735737E+09	2,735878E+09	1,641403E+07	5,471615E+09	5,488029E+09
1893	8,207344E+06	8,211085E+06	2,735766E+09	2,735860E+09	1,641843E+07	5,471626E+09	5,488045E+09
1894	8,213023E+06	8,210146E+06	2,735923E+09	2,735726E+09	1,642317E+07	5,471650E+09	5,488073E+09
1895	8,206791E+06	8,206338E+06	2,735697E+09	2,735847E+09	1,641313E+07	5,471543E+09	5,487956E+09
1896	8,209455E+06	8,212334E+06	2,735769E+09	2,735677E+09	1,642179E+07	5,471446E+09	5,487868E+09
1897	8,212199E+06	8,208434E+06	2,735730E+09	2,735605E+09	1,642063E+07	5,471335E+09	5,487755E+09
1898	8,206189E+06	8,208530E+06	2,735465E+09	2,735636E+09	1,641472E+07	5,471101E+09	5,487515E+09
1899	8,213189E+06	8,213610E+06	2,735539E+09	2,735363E+09	1,642680E+07	5,470901E+09	5,487328E+09
1900	8,209754E+06	8,209129E+06	2,735339E+09	2,735357E+09	1,641888E+07	5,470696E+09	5,487115E+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	8,208331E+06	8,210972E+06	2,735206E+09	2,735310E+09	1,641930E+07	5,470516E+09	5,486935E+09
1902	8,214876E+06	8,213432E+06	2,735325E+09	2,735098E+09	1,642831E+07	5,470424E+09	5,486852E+09
1903	8,208883E+06	8,207727E+06	2,735075E+09	2,735224E+09	1,641661E+07	5,470299E+09	5,486715E+09
1904	8,211806E+06	8,212741E+06	2,735138E+09	2,735154E+09	1,642455E+07	5,470293E+09	5,486717E+09
1905	8,213680E+06	8,212670E+06	2,735268E+09	2,735119E+09	1,642635E+07	5,470388E+09	5,486814E+09
1906	8,208420E+06	8,208325E+06	2,735155E+09	2,735328E+09	1,641675E+07	5,470483E+09	5,486900E+09
1907	8,211992E+06	8,215358E+06	2,735396E+09	2,735252E+09	1,642735E+07	5,470648E+09	5,487075E+09
1908	8,211215E+06	8,208550E+06	2,735416E+09	2,735391E+09	1,641976E+07	5,470808E+09	5,487227E+09
1909	8,208008E+06	8,208946E+06	2,735358E+09	2,735565E+09	1,641695E+07	5,470924E+09	5,487340E+09
1910	8,213364E+06	8,213339E+06	2,735595E+09	2,735446E+09	1,642670E+07	5,471040E+09	5,487467E+09
1911	8,209949E+06	8,206236E+06	2,735469E+09	2,735588E+09	1,641618E+07	5,471057E+09	5,487473E+09
1912	8,208087E+06	8,212073E+06	2,735520E+09	2,735569E+09	1,642016E+07	5,471088E+09	5,487509E+09
1913	8,213700E+06	8,211311E+06	2,735674E+09	2,735445E+09	1,642501E+07	5,471119E+09	5,487544E+09
1914	8,207177E+06	8,207335E+06	2,735450E+09	2,735580E+09	1,641451E+07	5,471030E+09	5,487444E+09
1915	8,210027E+06	8,213451E+06	2,735492E+09	2,735407E+09	1,642348E+07	5,470899E+09	5,487322E+09
1916	8,212836E+06	8,209380E+06	2,735405E+09	2,735307E+09	1,642222E+07	5,470712E+09	5,487134E+09
1917	8,206869E+06	8,209776E+06	2,735142E+09	2,735342E+09	1,641664E+07	5,470484E+09	5,486901E+09
1918	8,214492E+06	8,214359E+06	2,735236E+09	2,735053E+09	1,642885E+07	5,470289E+09	5,486718E+09
1919	8,211021E+06	8,209556E+06	2,735026E+09	2,735026E+09	1,642058E+07	5,470052E+09	5,486473E+09
1920	8,209695E+06	8,211220E+06	2,734900E+09	2,735005E+09	1,642092E+07	5,469906E+09	5,486327E+09
1921	8,215946E+06	8,214444E+06	2,735023E+09	2,734815E+09	1,643039E+07	5,469838E+09	5,486268E+09
1922	8,209641E+06	8,208981E+06	2,734825E+09	2,734960E+09	1,641862E+07	5,469785E+09	5,486203E+09
1923	8,212061E+06	8,214464E+06	2,734918E+09	2,734904E+09	1,642653E+07	5,469822E+09	5,486248E+09
1924	8,213914E+06	8,213380E+06	2,735036E+09	2,734876E+09	1,642729E+07	5,469912E+09	5,486339E+09
1925	8,209018E+06	8,208917E+06	2,734917E+09	2,735128E+09	1,641794E+07	5,470045E+09	5,486463E+09
1926	8,213279E+06	8,215316E+06	2,735141E+09	2,735043E+09	1,642860E+07	5,470184E+09	5,486613E+09
1927	8,212681E+06	8,208608E+06	2,735130E+09	2,735136E+09	1,642129E+07	5,470266E+09	5,486687E+09
1928	8,209048E+06	8,209797E+06	2,735085E+09	2,735292E+09	1,641884E+07	5,470378E+09	5,486796E+09
1929	8,213892E+06	8,214794E+06	2,735340E+09	2,735160E+09	1,642869E+07	5,470500E+09	5,486929E+09
1930	8,210082E+06	8,207679E+06	2,735266E+09	2,735305E+09	1,641776E+07	5,470570E+09	5,486988E+09
1931	8,208115E+06	8,213306E+06	2,735302E+09	2,735304E+09	1,642142E+07	5,470606E+09	5,487027E+09
1932	8,214158E+06	8,211645E+06	2,735398E+09	2,735185E+09	1,642580E+07	5,470582E+09	5,487008E+09
1933	8,208012E+06	8,208205E+06	2,735141E+09	2,735338E+09	1,641622E+07	5,470479E+09	5,486895E+09
1934	8,211740E+06	8,213957E+06	2,735175E+09	2,735135E+09	1,642570E+07	5,470310E+09	5,486736E+09
1935	8,214254E+06	8,210289E+06	2,735080E+09	2,734981E+09	1,642454E+07	5,470061E+09	5,486486E+09
1936	8,208109E+06	8,210507E+06	2,734839E+09	2,735012E+09	1,641862E+07	5,469851E+09	5,486270E+09
1937	8,215422E+06	8,215247E+06	2,734935E+09	2,734741E+09	1,643067E+07	5,469676E+09	5,486106E+09
1938	8,211697E+06	8,210457E+06	2,734756E+09	2,734730E+09	1,642215E+07	5,469485E+09	5,485908E+09
1939	8,210297E+06	8,212367E+06	2,734627E+09	2,734729E+09	1,642266E+07	5,469356E+09	5,485779E+09
1940	8,216329E+06	8,215498E+06	2,734733E+09	2,734543E+09	1,643183E+07	5,469277E+09	5,485708E+09
1941	8,210230E+06	8,210302E+06	2,734556E+09	2,734717E+09	1,642053E+07	5,469273E+09	5,485693E+09
1942	8,213128E+06	8,214910E+06	2,734673E+09	2,734662E+09	1,642804E+07	5,469335E+09	5,485763E+09
1943	8,215057E+06	8,213446E+06	2,734767E+09	2,734616E+09	1,642850E+07	5,469383E+09	5,485812E+09
1944	8,210243E+06	8,209015E+06	2,734647E+09	2,734873E+09	1,641926E+07	5,469520E+09	5,485940E+09
1945	8,214074E+06	8,216126E+06	2,734870E+09	2,734793E+09	1,643020E+07	5,469663E+09	5,486093E+09
1946	8,213262E+06	8,209962E+06	2,734911E+09	2,734874E+09	1,642322E+07	5,469785E+09	5,486208E+09
1947	8,209077E+06	8,211626E+06	2,734892E+09	2,735036E+09	1,642070E+07	5,469929E+09	5,486350E+09
1948	8,213899E+06	8,215588E+06	2,735123E+09	2,734915E+09	1,642949E+07	5,470038E+09	5,486467E+09
1949	8,210609E+06	8,208419E+06	2,735027E+09	2,735098E+09	1,641903E+07	5,470125E+09	5,486544E+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	8,209526E+06	8,213086E+06	2,735030E+09	2,735082E+09	1,642261E+07	5,470112E+09	5,486535E+09
1951	8,215716E+06	8,211684E+06	2,735066E+09	2,734905E+09	1,642740E+07	5,469971E+09	5,486398E+09
1952	8,209382E+06	8,209064E+06	2,734810E+09	2,735021E+09	1,641845E+07	5,469830E+09	5,486249E+09
1953	8,212694E+06	8,215244E+06	2,734852E+09	2,734800E+09	1,642794E+07	5,469652E+09	5,486080E+09
1954	8,214728E+06	8,211804E+06	2,734805E+09	2,734638E+09	1,642653E+07	5,469443E+09	5,485869E+09
1955	8,208521E+06	8,211748E+06	2,734564E+09	2,734692E+09	1,642027E+07	5,469256E+09	5,485676E+09
1956	8,215809E+06	8,215828E+06	2,734622E+09	2,734441E+09	1,643164E+07	5,469063E+09	5,485495E+09
1957	8,212408E+06	8,211630E+06	2,734452E+09	2,734474E+09	1,642404E+07	5,468926E+09	5,485350E+09
1958	8,211763E+06	8,213092E+06	2,734347E+09	2,734470E+09	1,642485E+07	5,468818E+09	5,485242E+09
1959	8,217302E+06	8,216342E+06	2,734453E+09	2,734263E+09	1,643364E+07	5,468717E+09	5,485150E+09
1960	8,211442E+06	8,210913E+06	2,734304E+09	2,734449E+09	1,642235E+07	5,468754E+09	5,485176E+09
1961	8,213910E+06	8,215409E+06	2,734412E+09	2,734417E+09	1,642932E+07	5,468828E+09	5,485258E+09
1962	8,215735E+06	8,214079E+06	2,734532E+09	2,734368E+09	1,642981E+07	5,468900E+09	5,485330E+09
1963	8,210647E+06	8,210165E+06	2,734411E+09	2,734625E+09	1,642081E+07	5,469036E+09	5,485457E+09
1964	8,214052E+06	8,217090E+06	2,734620E+09	2,734542E+09	1,643114E+07	5,469162E+09	5,485593E+09
1965	8,213591E+06	8,211298E+06	2,734691E+09	2,734650E+09	1,642489E+07	5,469341E+09	5,485766E+09
1966	8,210125E+06	8,211970E+06	2,734677E+09	2,734811E+09	1,642209E+07	5,469488E+09	5,485910E+09
1967	8,215047E+06	8,215378E+06	2,734853E+09	2,734668E+09	1,643042E+07	5,469521E+09	5,485951E+09
1968	8,212142E+06	8,208569E+06	2,734735E+09	2,734836E+09	1,642071E+07	5,469572E+09	5,485992E+09
1969	8,210601E+06	8,213734E+06	2,734715E+09	2,734806E+09	1,642433E+07	5,469521E+09	5,485946E+09
1970	8,216480E+06	8,213206E+06	2,734789E+09	2,734590E+09	1,642969E+07	5,469379E+09	5,485809E+09
1971	8,209576E+06	8,210995E+06	2,734548E+09	2,734696E+09	1,642057E+07	5,469244E+09	5,485665E+09
1972	8,212892E+06	8,216198E+06	2,734566E+09	2,734488E+09	1,642909E+07	5,469054E+09	5,485483E+09
1973	8,215241E+06	8,212955E+06	2,734512E+09	2,734366E+09	1,642820E+07	5,468878E+09	5,485307E+09
1974	8,210057E+06	8,211797E+06	2,734264E+09	2,734422E+09	1,642185E+07	5,468686E+09	5,485108E+09
1975	8,217071E+06	8,216157E+06	2,734286E+09	2,734147E+09	1,643323E+07	5,468433E+09	5,484866E+09
1976	8,213749E+06	8,212506E+06	2,734143E+09	2,734169E+09	1,642626E+07	5,468312E+09	5,484738E+09
1977	8,212658E+06	8,214099E+06	2,734065E+09	2,734176E+09	1,642676E+07	5,468240E+09	5,484667E+09
1978	8,217811E+06	8,217530E+06	2,734212E+09	2,733972E+09	1,643534E+07	5,468183E+09	5,484619E+09
1979	8,211948E+06	8,211886E+06	2,734062E+09	2,734182E+09	1,642383E+07	5,468244E+09	5,484668E+09
1980	8,214219E+06	8,215862E+06	2,734134E+09	2,734170E+09	1,643008E+07	5,468304E+09	5,484734E+09
1981	8,216338E+06	8,215185E+06	2,734273E+09	2,734155E+09	1,643152E+07	5,468428E+09	5,484860E+09
1982	8,211906E+06	8,210785E+06	2,734189E+09	2,734401E+09	1,642269E+07	5,468590E+09	5,485013E+09
1983	8,214771E+06	8,217554E+06	2,734386E+09	2,734297E+09	1,643232E+07	5,468683E+09	5,485115E+09
1984	8,214850E+06	8,211689E+06	2,734469E+09	2,734407E+09	1,642654E+07	5,468877E+09	5,485303E+09
1985	8,210956E+06	8,212385E+06	2,734427E+09	2,734577E+09	1,642334E+07	5,469004E+09	5,485428E+09
1986	8,215821E+06	8,216064E+06	2,734598E+09	2,734407E+09	1,643188E+07	5,469005E+09	5,485437E+09
1987	8,212625E+06	8,210158E+06	2,734462E+09	2,734552E+09	1,642278E+07	5,469014E+09	5,485437E+09
1988	8,210634E+06	8,214951E+06	2,734410E+09	2,734500E+09	1,642559E+07	5,468910E+09	5,485336E+09
1989	8,216758E+06	8,214852E+06	2,734509E+09	2,734302E+09	1,643161E+07	5,468810E+09	5,485242E+09
1990	8,210728E+06	8,211530E+06	2,734276E+09	2,734399E+09	1,642226E+07	5,468675E+09	5,485097E+09
1991	8,214040E+06	8,216047E+06	2,734240E+09	2,734182E+09	1,643009E+07	5,468422E+09	5,484852E+09
1992	8,216845E+06	8,213341E+06	2,734189E+09	2,734062E+09	1,643019E+07	5,468251E+09	5,484681E+09
1993	8,211421E+06	8,212553E+06	2,733940E+09	2,734127E+09	1,642397E+07	5,468067E+09	5,484491E+09
1994	8,217909E+06	8,217725E+06	2,734013E+09	2,733838E+09	1,643563E+07	5,467851E+09	5,484287E+09
1995	8,214202E+06	8,214293E+06	2,733897E+09	2,733873E+09	1,642850E+07	5,467770E+09	5,484198E+09
1996	8,212933E+06	8,214832E+06	2,733797E+09	2,733909E+09	1,642776E+07	5,467706E+09	5,484134E+09
1997	8,218219E+06	8,218435E+06	2,733949E+09	2,733752E+09	1,643665E+07	5,467700E+09	5,484137E+09
1998	8,213413E+06	8,211864E+06	2,733801E+09	2,733953E+09	1,642528E+07	5,467754E+09	5,484179E+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	8,215165E+06	8,216118E+06	2,733842E+09	2,733917E+09	1,643128E+07	5,467759E+09	5,484190E+09
2000	8,217559E+06	8,216039E+06	2,734022E+09	2,733890E+09	1,643360E+07	5,467912E+09	5,484345E+09
2001	8,212664E+06	8,211700E+06	2,733966E+09	2,734148E+09	1,642436E+07	5,468113E+09	5,484538E+09
2002	8,215191E+06	8,218553E+06	2,734186E+09	2,734041E+09	1,643374E+07	5,468227E+09	5,484660E+09
2003	8,215306E+06	8,212642E+06	2,734246E+09	2,734159E+09	1,642795E+07	5,468405E+09	5,484833E+09
2004	8,211138E+06	8,212980E+06	2,734152E+09	2,734331E+09	1,642412E+07	5,468483E+09	5,484907E+09
2005	8,216336E+06	8,217347E+06	2,734322E+09	2,734170E+09	1,643368E+07	5,468492E+09	5,484926E+09
2006	8,213812E+06	8,211099E+06	2,734204E+09	2,734283E+09	1,642491E+07	5,468486E+09	5,484911E+09
2007	8,211539E+06	8,215375E+06	2,734118E+09	2,734206E+09	1,642691E+07	5,468324E+09	5,484751E+09
2008	8,218312E+06	8,215270E+06	2,734219E+09	2,734001E+09	1,643358E+07	5,468220E+09	5,484654E+09
2009	8,212012E+06	8,211805E+06	2,733969E+09	2,734107E+09	1,642382E+07	5,468076E+09	5,484500E+09
2010	8,215133E+06	8,216777E+06	2,733936E+09	2,733868E+09	1,643191E+07	5,467804E+09	5,484236E+09
2011	8,217438E+06	8,215057E+06	2,733887E+09	2,733743E+09	1,643249E+07	5,467630E+09	5,484063E+09
2012	8,211664E+06	8,213969E+06	2,733633E+09	2,733813E+09	1,642563E+07	5,467446E+09	5,483872E+09
2013	8,218183E+06	8,219444E+06	2,733739E+09	2,733566E+09	1,643763E+07	5,467305E+09	5,483743E+09
2014	8,215451E+06	8,214828E+06	2,733633E+09	2,733607E+09	1,643028E+07	5,467241E+09	5,483671E+09
2015	8,214070E+06	8,214659E+06	2,733482E+09	2,733640E+09	1,642873E+07	5,467122E+09	5,483551E+09
2016	8,219654E+06	8,218786E+06	2,733651E+09	2,733482E+09	1,643844E+07	5,467134E+09	5,483572E+09
2017	8,214557E+06	8,212617E+06	2,733532E+09	2,733691E+09	1,642717E+07	5,467223E+09	5,483650E+09
2018	8,215625E+06	8,217637E+06	2,733631E+09	2,733645E+09	1,643326E+07	5,467275E+09	5,483708E+09
2019	8,217847E+06	8,217644E+06	2,733839E+09	2,733641E+09	1,643549E+07	5,467480E+09	5,483916E+09
2020	8,212825E+06	8,212488E+06	2,733749E+09	2,733924E+09	1,642531E+07	5,467673E+09	5,484098E+09
2021	8,215489E+06	8,219314E+06	2,733957E+09	2,733856E+09	1,643480E+07	5,467813E+09	5,484247E+09
2022	8,216711E+06	8,212749E+06	2,733995E+09	2,733945E+09	1,642946E+07	5,467940E+09	5,484370E+09
2023	8,211982E+06	8,213142E+06	2,733840E+09	2,734070E+09	1,642512E+07	5,467910E+09	5,484335E+09
2024	8,217697E+06	8,217985E+06	2,734033E+09	2,733876E+09	1,643568E+07	5,467909E+09	5,484345E+09
2025	8,214860E+06	8,211923E+06	2,733924E+09	2,733978E+09	1,642678E+07	5,467902E+09	5,484329E+09
2026	8,212468E+06	8,216247E+06	2,733848E+09	2,733885E+09	1,642872E+07	5,467732E+09	5,484161E+09
2027	8,219112E+06	8,216473E+06	2,733931E+09	2,733692E+09	1,643558E+07	5,467623E+09	5,484058E+09
2028	8,212483E+06	8,212819E+06	2,733650E+09	2,733806E+09	1,642530E+07	5,467456E+09	5,483882E+09
2029	8,215607E+06	8,218393E+06	2,733642E+09	2,733598E+09	1,643400E+07	5,467240E+09	5,483674E+09
2030	8,218473E+06	8,216305E+06	2,733620E+09	2,733461E+09	1,643478E+07	5,467081E+09	5,483516E+09
2031	8,212548E+06	8,214446E+06	2,733332E+09	2,733526E+09	1,642699E+07	5,466859E+09	5,483286E+09
2032	8,219626E+06	8,219861E+06	2,733445E+09	2,733284E+09	1,643949E+07	5,466729E+09	5,483169E+09
2033	8,216795E+06	8,215065E+06	2,733332E+09	2,733337E+09	1,643186E+07	5,466669E+09	5,483101E+09
2034	8,215174E+06	8,215464E+06	2,733198E+09	2,733348E+09	1,643064E+07	5,466546E+09	5,482977E+09
2035	8,220081E+06	8,220343E+06	2,733389E+09	2,733195E+09	1,644042E+07	5,466584E+09	5,483025E+09
2036	8,214696E+06	8,213886E+06	2,733295E+09	2,733422E+09	1,642858E+07	5,466717E+09	5,483145E+09
2037	8,215640E+06	8,219083E+06	2,733433E+09	2,733428E+09	1,643472E+07	5,466861E+09	5,483296E+09
2038	8,218873E+06	8,217818E+06	2,733635E+09	2,733436E+09	1,643669E+07	5,467072E+09	5,483509E+09
2039	8,213842E+06	8,212173E+06	2,733475E+09	2,733709E+09	1,642602E+07	5,467184E+09	5,483610E+09
2040	8,217006E+06	8,219392E+06	2,733670E+09	2,733619E+09	1,643640E+07	5,467289E+09	5,483725E+09
2041	8,218030E+06	8,213398E+06	2,733715E+09	2,733684E+09	1,643143E+07	5,467399E+09	5,483831E+09
2042	8,212704E+06	8,214556E+06	2,733589E+09	2,733767E+09	1,642726E+07	5,467355E+09	5,483783E+09
2043	8,218189E+06	8,219453E+06	2,733791E+09	2,733577E+09	1,643764E+07	5,467368E+09	5,483806E+09
2044	8,215081E+06	8,213012E+06	2,733657E+09	2,733689E+09	1,642809E+07	5,467346E+09	5,483774E+09
2045	8,212850E+06	8,217337E+06	2,733577E+09	2,733630E+09	1,643019E+07	5,467207E+09	5,483637E+09
2046	8,220213E+06	8,217236E+06	2,733644E+09	2,733422E+09	1,643745E+07	5,467066E+09	5,483503E+09
2047	8,213242E+06	8,213513E+06	2,733315E+09	2,733507E+09	1,642676E+07	5,466822E+09	5,483249E+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	8,216932E+06	8,219237E+06	2,733335E+09	2,733286E+09	1,643617E+07	5,466621E+09	5,483057E+09
2049	8,219633E+06	8,217161E+06	2,733321E+09	2,733156E+09	1,643679E+07	5,466476E+09	5,482913E+09
2050	8,213732E+06	8,215135E+06	2,733033E+09	2,733207E+09	1,642887E+07	5,466240E+09	5,482669E+09
2051	8,220534E+06	8,220769E+06	2,733142E+09	2,732983E+09	1,644130E+07	5,466124E+09	5,482566E+09
2052	8,217360E+06	8,216101E+06	2,733028E+09	2,733044E+09	1,643346E+07	5,466072E+09	5,482506E+09
2053	8,215526E+06	8,217019E+06	2,732954E+09	2,733101E+09	1,643255E+07	5,466055E+09	5,482488E+09
2054	8,220819E+06	8,221393E+06	2,733187E+09	2,732966E+09	1,644221E+07	5,466153E+09	5,482595E+09
2055	8,215518E+06	8,214016E+06	2,733062E+09	2,733202E+09	1,642953E+07	5,466264E+09	5,482694E+09
2056	8,216925E+06	8,219092E+06	2,733199E+09	2,733220E+09	1,643602E+07	5,466419E+09	5,482855E+09
2057	8,220223E+06	8,217654E+06	2,733374E+09	2,733223E+09	1,643788E+07	5,466598E+09	5,483036E+09
2058	8,214870E+06	8,212972E+06	2,733204E+09	2,733444E+09	1,642784E+07	5,466648E+09	5,483076E+09
2059	8,217393E+06	8,220781E+06	2,733405E+09	2,733335E+09	1,643817E+07	5,466739E+09	5,483178E+09
2060	8,218078E+06	8,214933E+06	2,733461E+09	2,733390E+09	1,643301E+07	5,466852E+09	5,483285E+09
2061	8,212697E+06	8,216120E+06	2,733368E+09	2,733506E+09	1,642882E+07	5,466873E+09	5,483302E+09
2062	8,219037E+06	8,219954E+06	2,733550E+09	2,733322E+09	1,643899E+07	5,466873E+09	5,483312E+09
2063	8,215920E+06	8,213093E+06	2,733348E+09	2,733422E+09	1,642901E+07	5,466770E+09	5,483199E+09
2064	8,214339E+06	8,217735E+06	2,733264E+09	2,733350E+09	1,643207E+07	5,466614E+09	5,483046E+09
2065	8,221452E+06	8,218058E+06	2,733335E+09	2,733132E+09	1,643951E+07	5,466466E+09	5,482906E+09
2066	8,214343E+06	8,214910E+06	2,733026E+09	2,733181E+09	1,642925E+07	5,466207E+09	5,482636E+09
2067	8,217908E+06	8,220325E+06	2,733041E+09	2,732971E+09	1,643823E+07	5,466011E+09	5,482450E+09
2068	8,220234E+06	8,218152E+06	2,733009E+09	2,732853E+09	1,643839E+07	5,465862E+09	5,482301E+09
2069	8,214460E+06	8,216077E+06	2,732742E+09	2,732935E+09	1,643054E+07	5,465676E+09	5,482107E+09
2070	8,221440E+06	8,221498E+06	2,732854E+09	2,732711E+09	1,644294E+07	5,465565E+09	5,482008E+09
2071	8,217960E+06	8,216734E+06	2,732734E+09	2,732766E+09	1,643469E+07	5,465500E+09	5,481934E+09
2072	8,216627E+06	8,217782E+06	2,732708E+09	2,732837E+09	1,643441E+07	5,465544E+09	5,481979E+09
2073	8,221770E+06	8,221879E+06	2,732952E+09	2,732730E+09	1,644365E+07	5,465682E+09	5,482126E+09
2074	8,216712E+06	8,214624E+06	2,732819E+09	2,732951E+09	1,643134E+07	5,465770E+09	5,482201E+09
2075	8,217575E+06	8,219785E+06	2,732941E+09	2,732975E+09	1,643736E+07	5,465916E+09	5,482354E+09
2076	8,220484E+06	8,218740E+06	2,733109E+09	2,732970E+09	1,643922E+07	5,466079E+09	5,482518E+09
2077	8,214870E+06	8,214713E+06	2,732988E+09	2,733203E+09	1,642958E+07	5,466191E+09	5,482620E+09
2078	8,217737E+06	8,221841E+06	2,733203E+09	2,733095E+09	1,643958E+07	5,466298E+09	5,482737E+09
2079	8,218661E+06	8,215286E+06	2,733214E+09	2,733144E+09	1,643395E+07	5,466358E+09	5,482792E+09
2080	8,214014E+06	8,216256E+06	2,733108E+09	2,733263E+09	1,643027E+07	5,466371E+09	5,482801E+09
2081	8,220462E+06	8,219865E+06	2,733256E+09	2,733072E+09	1,644033E+07	5,466328E+09	5,482769E+09
2082	8,217215E+06	8,213994E+06	2,733032E+09	2,733113E+09	1,643121E+07	5,466145E+09	5,482576E+09
2083	8,215165E+06	8,218881E+06	2,732954E+09	2,733027E+09	1,643405E+07	5,465981E+09	5,482415E+09
2084	8,221792E+06	8,219623E+06	2,733029E+09	2,732802E+09	1,644141E+07	5,465831E+09	5,482272E+09
2085	8,214774E+06	8,216367E+06	2,732750E+09	2,732881E+09	1,643114E+07	5,465631E+09	5,482062E+09
2086	8,219007E+06	8,220850E+06	2,732746E+09	2,732686E+09	1,643986E+07	5,465432E+09	5,481872E+09
2087	8,221108E+06	8,218465E+06	2,732667E+09	2,732559E+09	1,643957E+07	5,465226E+09	5,481666E+09
2088	8,215929E+06	8,216629E+06	2,732434E+09	2,732645E+09	1,643256E+07	5,465079E+09	5,481512E+09
2089	8,222405E+06	8,222312E+06	2,732582E+09	2,732437E+09	1,644472E+07	5,465019E+09	5,481464E+09
2090	8,218948E+06	8,217982E+06	2,732498E+09	2,732481E+09	1,643693E+07	5,464979E+09	5,481416E+09
2091	8,217335E+06	8,218702E+06	2,732483E+09	2,732586E+09	1,643604E+07	5,465069E+09	5,481505E+09
2092	8,222034E+06	8,222756E+06	2,732708E+09	2,732500E+09	1,644479E+07	5,465208E+09	5,481653E+09
2093	8,217195E+06	8,215596E+06	2,732592E+09	2,732737E+09	1,643279E+07	5,465329E+09	5,481762E+09
2094	8,218019E+06	8,220501E+06	2,732697E+09	2,732750E+09	1,643852E+07	5,465447E+09	5,481886E+09
2095	8,220809E+06	8,219258E+06	2,732844E+09	2,732718E+09	1,644007E+07	5,465562E+09	5,482002E+09
2096	8,215819E+06	8,215369E+06	2,732755E+09	2,732947E+09	1,643119E+07	5,465703E+09	5,482134E+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	8,218785E+06	8,221838E+06	2,732955E+09	2,732853E+09	1,644062E+07	5,465808E+09	5,482248E+09
2098	8,220183E+06	8,215754E+06	2,732942E+09	2,732868E+09	1,643594E+07	5,465809E+09	5,482245E+09
2099	8,215153E+06	8,216888E+06	2,732812E+09	2,732978E+09	1,643204E+07	5,465790E+09	5,482222E+09
2100	8,220973E+06	8,221108E+06	2,732950E+09	2,732777E+09	1,644208E+07	5,465728E+09	5,482170E+09
2101	8,217551E+06	8,215944E+06	2,732775E+09	2,732823E+09	1,643350E+07	5,465598E+09	5,482031E+09
2102	8,215735E+06	8,219964E+06	2,732691E+09	2,732742E+09	1,643570E+07	5,465433E+09	5,481869E+09
2103	8,222391E+06	8,220205E+06	2,732720E+09	2,732510E+09	1,644260E+07	5,465230E+09	5,481672E+09
2104	8,216181E+06	8,216769E+06	2,732436E+09	2,732589E+09	1,643295E+07	5,465025E+09	5,481458E+09
2105	8,220456E+06	8,220991E+06	2,732415E+09	2,732395E+09	1,644145E+07	5,464811E+09	5,481252E+09
2106	8,222279E+06	8,219733E+06	2,732345E+09	2,732228E+09	1,644201E+07	5,464573E+09	5,481015E+09
2107	8,216712E+06	8,217878E+06	2,732157E+09	2,732327E+09	1,643459E+07	5,464484E+09	5,480919E+09
2108	8,222394E+06	8,223858E+06	2,732334E+09	2,732152E+09	1,644625E+07	5,464486E+09	5,480932E+09
2109	8,219338E+06	8,219188E+06	2,732290E+09	2,732243E+09	1,643853E+07	5,464533E+09	5,480971E+09
2110	8,218061E+06	8,219100E+06	2,732250E+09	2,732373E+09	1,643716E+07	5,464624E+09	5,481061E+09
2111	8,222593E+06	8,222928E+06	2,732424E+09	2,732276E+09	1,644552E+07	5,464700E+09	5,481146E+09
2112	8,218426E+06	8,216096E+06	2,732333E+09	2,732505E+09	1,643452E+07	5,464838E+09	5,481273E+09
2113	8,219001E+06	8,220932E+06	2,732455E+09	2,732518E+09	1,643993E+07	5,464972E+09	5,481412E+09
2114	8,222060E+06	8,220099E+06	2,732608E+09	2,732449E+09	1,644216E+07	5,465056E+09	5,481498E+09
2115	8,216857E+06	8,215956E+06	2,732523E+09	2,732689E+09	1,643281E+07	5,465212E+09	5,481644E+09
2116	8,219208E+06	8,222596E+06	2,732696E+09	2,732599E+09	1,644180E+07	5,465295E+09	5,481736E+09
2117	8,220751E+06	8,216942E+06	2,732695E+09	2,732612E+09	1,643769E+07	5,465307E+09	5,481744E+09
2118	8,215526E+06	8,218048E+06	2,732544E+09	2,732710E+09	1,643357E+07	5,465254E+09	5,481688E+09
2119	8,221229E+06	8,222033E+06	2,732649E+09	2,732482E+09	1,644326E+07	5,465131E+09	5,481575E+09
2120	8,218531E+06	8,217033E+06	2,732493E+09	2,732525E+09	1,643556E+07	5,465018E+09	5,481454E+09
2121	8,217099E+06	8,220072E+06	2,732382E+09	2,732453E+09	1,643717E+07	5,464835E+09	5,481272E+09
2122	8,223974E+06	8,220893E+06	2,732382E+09	2,732182E+09	1,644487E+07	5,464565E+09	5,481009E+09
2123	8,217444E+06	8,217533E+06	2,732108E+09	2,732257E+09	1,643498E+07	5,464366E+09	5,480801E+09
2124	8,220840E+06	8,222430E+06	2,732108E+09	2,732076E+09	1,644327E+07	5,464184E+09	5,480628E+09
2125	8,222534E+06	8,221625E+06	2,732115E+09	2,731939E+09	1,644416E+07	5,464055E+09	5,480499E+09
2126	8,217276E+06	8,218975E+06	2,731936E+09	2,732078E+09	1,643625E+07	5,464014E+09	5,480450E+09
2127	8,222822E+06	8,224277E+06	2,732071E+09	2,731923E+09	1,644710E+07	5,463994E+09	5,480441E+09
2128	8,220787E+06	8,219347E+06	2,732024E+09	2,732027E+09	1,644013E+07	5,464051E+09	5,480491E+09
2129	8,219494E+06	8,218867E+06	2,731958E+09	2,732150E+09	1,643836E+07	5,464108E+09	5,480546E+09
2130	8,223797E+06	8,223720E+06	2,732132E+09	2,731996E+09	1,644752E+07	5,464128E+09	5,480575E+09
2131	8,219294E+06	8,217071E+06	2,732084E+09	2,732211E+09	1,643637E+07	5,464295E+09	5,480732E+09
2132	8,218988E+06	8,222302E+06	2,732225E+09	2,732245E+09	1,644129E+07	5,464470E+09	5,480911E+09
2133	8,222535E+06	8,221365E+06	2,732414E+09	2,732205E+09	1,644390E+07	5,464619E+09	5,481063E+09
2134	8,217411E+06	8,216778E+06	2,732296E+09	2,732459E+09	1,643419E+07	5,464754E+09	5,481188E+09
2135	8,219515E+06	8,223141E+06	2,732416E+09	2,732354E+09	1,644266E+07	5,464770E+09	5,481213E+09
2136	8,221712E+06	8,217974E+06	2,732428E+09	2,732356E+09	1,643969E+07	5,464784E+09	5,481223E+09
2137	8,216484E+06	8,218596E+06	2,732273E+09	2,732447E+09	1,643508E+07	5,464720E+09	5,481155E+09
2138	8,222608E+06	8,222869E+06	2,732356E+09	2,732176E+09	1,644548E+07	5,464533E+09	5,480978E+09
2139	8,219868E+06	8,217733E+06	2,732194E+09	2,732213E+09	1,643760E+07	5,464407E+09	5,480845E+09
2140	8,217915E+06	8,220887E+06	2,732058E+09	2,732144E+09	1,643880E+07	5,464202E+09	5,480641E+09
2141	8,224757E+06	8,222271E+06	2,732087E+09	2,731870E+09	1,644703E+07	5,463957E+09	5,480404E+09
2142	8,217914E+06	8,218862E+06	2,731822E+09	2,731952E+09	1,643678E+07	5,463774E+09	5,480211E+09
2143	8,220964E+06	8,223423E+06	2,731820E+09	2,731778E+09	1,644439E+07	5,463598E+09	5,480043E+09
2144	8,223422E+06	8,222525E+06	2,731855E+09	2,731679E+09	1,644595E+07	5,463533E+09	5,479979E+09
2145	8,218884E+06	8,218840E+06	2,731658E+09	2,731844E+09	1,643772E+07	5,463502E+09	5,479940E+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							
2146	8,224459E+06	8,224676E+06	2,731757E+09	2,731654E+09	1,644913E+07	5,463411E+09	5,479860E+09
2147	8,222214E+06	8,219906E+06	2,731731E+09	2,731746E+09	1,644212E+07	5,463478E+09	5,479920E+09
2148	8,219808E+06	8,220284E+06	2,731692E+09	2,731874E+09	1,644009E+07	5,463567E+09	5,480007E+09
2149	8,223907E+06	8,225357E+06	2,731940E+09	2,731737E+09	1,644926E+07	5,463677E+09	5,480127E+09
2150	8,219513E+06	8,218242E+06	2,731905E+09	2,731982E+09	1,643775E+07	5,463887E+09	5,480325E+09
2151	8,219052E+06	8,222851E+06	2,732001E+09	2,732029E+09	1,644190E+07	5,464030E+09	5,480472E+09
2152	8,223624E+06	8,221767E+06	2,732177E+09	2,732001E+09	1,644539E+07	5,464178E+09	5,480623E+09
2153	8,218722E+06	8,216871E+06	2,732022E+09	2,732237E+09	1,643559E+07	5,464259E+09	5,480694E+09
2154	8,220726E+06	8,223868E+06	2,732117E+09	2,732067E+09	1,644459E+07	5,464184E+09	5,480629E+09
2155	8,222774E+06	8,218894E+06	2,732151E+09	2,732045E+09	1,644167E+07	5,464196E+09	5,480637E+09
2156	8,216887E+06	8,219733E+06	2,731985E+09	2,732141E+09	1,643662E+07	5,464126E+09	5,480563E+09
2157	8,223506E+06	8,223901E+06	2,732084E+09	2,731876E+09	1,644741E+07	5,463960E+09	5,480408E+09
2158	8,220578E+06	8,218848E+06	2,731895E+09	2,731913E+09	1,643943E+07	5,463807E+09	5,480247E+09
2159	8,218401E+06	8,221707E+06	2,731729E+09	2,731836E+09	1,644011E+07	5,463565E+09	5,480005E+09
2160	8,225643E+06	8,223635E+06	2,731794E+09	2,731580E+09	1,644928E+07	5,463374E+09	5,479824E+09
2161	8,219143E+06	8,219411E+06	2,731543E+09	2,731677E+09	1,643855E+07	5,463220E+09	5,479658E+09
2162	8,222398E+06	8,224093E+06	2,731527E+09	2,731490E+09	1,644649E+07	5,463017E+09	5,479464E+09
2163	8,224831E+06	8,223073E+06	2,731567E+09	2,731397E+09	1,644790E+07	5,462964E+09	5,479412E+09
2164	8,219684E+06	8,219681E+06	2,731357E+09	2,731573E+09	1,643936E+07	5,462929E+09	5,479369E+09
2165	8,224973E+06	8,226030E+06	2,731497E+09	2,731378E+09	1,645100E+07	5,462875E+09	5,479326E+09
2166	8,222343E+06	8,221382E+06	2,731491E+09	2,731473E+09	1,644372E+07	5,462965E+09	5,479409E+09
2167	8,219572E+06	8,221359E+06	2,731462E+09	2,731613E+09	1,644093E+07	5,463075E+09	5,479516E+09
2168	8,224477E+06	8,226134E+06	2,731732E+09	2,731522E+09	1,645061E+07	5,463254E+09	5,479705E+09
2169	8,220981E+06	8,217999E+06	2,731675E+09	2,731786E+09	1,643898E+07	5,463462E+09	5,479901E+09
2170	8,220504E+06	8,223068E+06	2,731726E+09	2,731793E+09	1,644357E+07	5,463519E+09	5,479963E+09
2171	8,224987E+06	8,222159E+06	2,731908E+09	2,731741E+09	1,644715E+07	5,463649E+09	5,480096E+09
2172	8,219143E+06	8,218223E+06	2,731758E+09	2,731966E+09	1,643737E+07	5,463725E+09	5,480162E+09
2173	8,221223E+06	8,225184E+06	2,731891E+09	2,731789E+09	1,644641E+07	5,463679E+09	5,480126E+09
2174	8,223198E+06	8,220178E+06	2,731906E+09	2,731774E+09	1,644338E+07	5,463680E+09	5,480123E+09
2175	8,217236E+06	8,220378E+06	2,731689E+09	2,731862E+09	1,643761E+07	5,463551E+09	5,479989E+09
2176	8,224618E+06	8,224526E+06	2,731772E+09	2,731606E+09	1,644914E+07	5,463377E+09	5,479826E+09
2177	8,221948E+06	8,219277E+06	2,731570E+09	2,731623E+09	1,644123E+07	5,463193E+09	5,479634E+09
2178	8,219683E+06	8,222582E+06	2,731397E+09	2,731498E+09	1,644226E+07	5,462894E+09	5,479336E+09
2179	8,226630E+06	8,224640E+06	2,731502E+09	2,731248E+09	1,645127E+07	5,462751E+09	5,479202E+09
2180	8,219820E+06	8,220600E+06	2,731255E+09	2,731377E+09	1,644042E+07	5,462632E+09	5,479073E+09
2181	8,223370E+06	8,225021E+06	2,731259E+09	2,731207E+09	1,644839E+07	5,462466E+09	5,478914E+09
2182	8,225399E+06	8,224291E+06	2,731286E+09	2,731127E+09	1,644969E+07	5,462413E+09	5,478863E+09
2183	8,219966E+06	8,220602E+06	2,731064E+09	2,731299E+09	1,644057E+07	5,462363E+09	5,478804E+09
2184	8,225441E+06	8,227166E+06	2,731248E+09	2,731137E+09	1,645261E+07	5,462385E+09	5,478838E+09
2185	8,223487E+06	8,221682E+06	2,731269E+09	2,731249E+09	1,644517E+07	5,462518E+09	5,478963E+09
2186	8,220870E+06	8,221681E+06	2,731223E+09	2,731377E+09	1,644255E+07	5,462600E+09	5,479042E+09
2187	8,225807E+06	8,226175E+06	2,731496E+09	2,731293E+09	1,645198E+07	5,462789E+09	5,479241E+09
2188	8,221937E+06	8,218649E+06	2,731416E+09	2,731555E+09	1,644059E+07	5,462971E+09	5,479412E+09
2189	8,221042E+06	8,224187E+06	2,731486E+09	2,731537E+09	1,644523E+07	5,463024E+09	5,479469E+09
2190	8,224966E+06	8,223662E+06	2,731670E+09	2,731470E+09	1,644863E+07	5,463140E+09	5,479588E+09
2191	8,218848E+06	8,219447E+06	2,731503E+09	2,731686E+09	1,643830E+07	5,463189E+09	5,479628E+09
2192	8,221886E+06	8,225945E+06	2,731627E+09	2,731540E+09	1,644783E+07	5,463168E+09	5,479615E+09
2193	8,224726E+06	8,220307E+06	2,731607E+09	2,731513E+09	1,644503E+07	5,463120E+09	5,479565E+09
2194	8,218816E+06	8,220796E+06	2,731352E+09	2,731550E+09	1,643961E+07	5,462902E+09	5,479341E+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	8,225939E+06	8,225254E+06	2,731455E+09	2,731277E+09	1,645119E+07	5,462731E+09	5,479183E+09
2196	8,222427E+06	8,220806E+06	2,731276E+09	2,731302E+09	1,644323E+07	5,462578E+09	5,479021E+09
2197	8,220372E+06	8,223908E+06	2,731151E+09	2,731191E+09	1,644428E+07	5,462342E+09	5,478786E+09
2198	8,226942E+06	8,226047E+06	2,731240E+09	2,730971E+09	1,645299E+07	5,462211E+09	5,478664E+09
2199	8,220326E+06	8,221331E+06	2,730956E+09	2,731107E+09	1,644166E+07	5,462063E+09	5,478505E+09
2200	8,224454E+06	8,225628E+06	2,730951E+09	2,730962E+09	1,645008E+07	5,461913E+09	5,478363E+09
2201	8,226728E+06	8,224692E+06	2,730980E+09	2,730867E+09	1,645142E+07	5,461847E+09	5,478298E+09
2202	8,221127E+06	8,221190E+06	2,730772E+09	2,730999E+09	1,644232E+07	5,461771E+09	5,478214E+09
2203	8,226303E+06	8,227669E+06	2,731004E+09	2,730855E+09	1,645397E+07	5,461859E+09	5,478313E+09
2204	8,224245E+06	8,222456E+06	2,731035E+09	2,731004E+09	1,644670E+07	5,462039E+09	5,478486E+09
2205	8,221773E+06	8,222527E+06	2,731010E+09	2,731139E+09	1,644430E+07	5,462150E+09	5,478594E+09
2206	8,226028E+06	8,227384E+06	2,731265E+09	2,731066E+09	1,645341E+07	5,462331E+09	5,478784E+09
2207	8,221990E+06	8,219854E+06	2,731172E+09	2,731312E+09	1,644184E+07	5,462484E+09	5,478925E+09
2208	8,221201E+06	8,225222E+06	2,731254E+09	2,731316E+09	1,644642E+07	5,462570E+09	5,479017E+09
2209	8,226024E+06	8,223939E+06	2,731431E+09	2,731242E+09	1,644996E+07	5,462673E+09	5,479123E+09
2210	8,220112E+06	8,219788E+06	2,731219E+09	2,731413E+09	1,643990E+07	5,462633E+09	5,479072E+09
2211	8,223319E+06	8,225922E+06	2,731331E+09	2,731255E+09	1,644924E+07	5,462586E+09	5,479035E+09
2212	8,225780E+06	8,221264E+06	2,731294E+09	2,731214E+09	1,644704E+07	5,462508E+09	5,478955E+09
2213	8,219672E+06	8,222083E+06	2,731067E+09	2,731222E+09	1,644176E+07	5,462288E+09	5,478730E+09
2214	8,225911E+06	8,226938E+06	2,731183E+09	2,730956E+09	1,645285E+07	5,462140E+09	5,478592E+09
2215	8,222407E+06	8,222127E+06	2,730994E+09	2,730993E+09	1,644453E+07	5,461987E+09	5,478432E+09
2216	8,221260E+06	8,224553E+06	2,730859E+09	2,730936E+09	1,644581E+07	5,461795E+09	5,478241E+09
2217	8,228523E+06	8,226273E+06	2,730921E+09	2,730715E+09	1,645480E+07	5,461636E+09	5,478091E+09
2218	8,222013E+06	8,221742E+06	2,730608E+09	2,730803E+09	1,644375E+07	5,461412E+09	5,477855E+09
2219	8,225796E+06	8,226214E+06	2,730641E+09	2,730651E+09	1,645201E+07	5,461292E+09	5,477744E+09
2220	8,227315E+06	8,226058E+06	2,730712E+09	2,730572E+09	1,645337E+07	5,461284E+09	5,477737E+09
2221	8,221867E+06	8,222344E+06	2,730566E+09	2,730722E+09	1,644421E+07	5,461288E+09	5,477732E+09
2222	8,226218E+06	8,228982E+06	2,730798E+09	2,730621E+09	1,645520E+07	5,461419E+09	5,477875E+09
2223	8,224489E+06	8,223208E+06	2,730805E+09	2,730783E+09	1,644770E+07	5,461587E+09	5,478035E+09
2224	8,222361E+06	8,223301E+06	2,730770E+09	2,730948E+09	1,644566E+07	5,461718E+09	5,478164E+09
2225	8,226972E+06	8,227811E+06	2,731011E+09	2,730848E+09	1,645478E+07	5,461859E+09	5,478314E+09
2226	8,222939E+06	8,220413E+06	2,730906E+09	2,731040E+09	1,644335E+07	5,461947E+09	5,478390E+09
2227	8,222147E+06	8,225388E+06	2,731001E+09	2,731043E+09	1,644754E+07	5,462043E+09	5,478491E+09
2228	8,227063E+06	8,224461E+06	2,731156E+09	2,730977E+09	1,645152E+07	5,462133E+09	5,478585E+09
2229	8,221309E+06	8,220614E+06	2,730957E+09	2,731122E+09	1,644192E+07	5,462079E+09	5,478521E+09
2230	8,223662E+06	8,227195E+06	2,731050E+09	2,730962E+09	1,645086E+07	5,462013E+09	5,478464E+09
2231	8,225933E+06	8,222781E+06	2,731013E+09	2,730909E+09	1,644871E+07	5,461922E+09	5,478371E+09
2232	8,220108E+06	8,223335E+06	2,730804E+09	2,730957E+09	1,644344E+07	5,461761E+09	5,478205E+09
2233	8,227087E+06	8,227422E+06	2,730908E+09	2,730701E+09	1,645451E+07	5,461609E+09	5,478063E+09
2234	8,223889E+06	8,222515E+06	2,730674E+09	2,730704E+09	1,644640E+07	5,461379E+09	5,477825E+09
2235	8,223012E+06	8,224493E+06	2,730527E+09	2,730640E+09	1,644750E+07	5,461166E+09	5,477614E+09
2236	8,229628E+06	8,227305E+06	2,730580E+09	2,730407E+09	1,645693E+07	5,460987E+09	5,477444E+09
2237	8,222912E+06	8,223154E+06	2,730321E+09	2,730463E+09	1,644607E+07	5,460784E+09	5,477230E+09
2238	8,225547E+06	8,227947E+06	2,730391E+09	2,730339E+09	1,645349E+07	5,460730E+09	5,477183E+09
2239	8,227201E+06	8,227405E+06	2,730478E+09	2,730296E+09	1,645461E+07	5,460774E+09	5,477228E+09
2240	8,222560E+06	8,222989E+06	2,730338E+09	2,730517E+09	1,644555E+07	5,460854E+09	5,477300E+09
2241	8,227423E+06	8,229155E+06	2,730552E+09	2,730430E+09	1,645658E+07	5,460981E+09	5,477438E+09
2242	8,225937E+06	8,223438E+06	2,730529E+09	2,730545E+09	1,644938E+07	5,461074E+09	5,477523E+09
2243	8,223447E+06	8,223553E+06	2,730516E+09	2,730699E+09	1,644700E+07	5,461215E+09	5,477662E+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	8,227655E+06	8,228626E+06	2,730770E+09	2,730600E+09	1,645628E+07	5,461370E+09	5,477826E+09
2245	8,223919E+06	8,221321E+06	2,730690E+09	2,730770E+09	1,644524E+07	5,461460E+09	5,477905E+09
2246	8,222336E+06	8,226438E+06	2,730762E+09	2,730788E+09	1,644877E+07	5,461550E+09	5,477999E+09
2247	8,227606E+06	8,225408E+06	2,730884E+09	2,730710E+09	1,645301E+07	5,461594E+09	5,478047E+09
2248	8,221958E+06	8,221715E+06	2,730678E+09	2,730872E+09	1,644367E+07	5,461551E+09	5,477994E+09
2249	8,224483E+06	8,227950E+06	2,730769E+09	2,730690E+09	1,645243E+07	5,461459E+09	5,477912E+09
2250	8,226779E+06	8,223615E+06	2,730717E+09	2,730595E+09	1,645039E+07	5,461312E+09	5,477762E+09
2251	8,221274E+06	8,223638E+06	2,730511E+09	2,730652E+09	1,644491E+07	5,461164E+09	5,477609E+09
2252	8,228362E+06	8,228149E+06	2,730586E+09	2,730407E+09	1,645651E+07	5,460993E+09	5,477449E+09
2253	8,225321E+06	8,223699E+06	2,730363E+09	2,730378E+09	1,644902E+07	5,460741E+09	5,477190E+09
2254	8,223494E+06	8,226036E+06	2,730215E+09	2,730318E+09	1,644953E+07	5,460533E+09	5,476983E+09
2255	8,229681E+06	8,228978E+06	2,730289E+09	2,730087E+09	1,645866E+07	5,460376E+09	5,476834E+09
2256	8,223327E+06	8,224350E+06	2,730078E+09	2,730203E+09	1,644768E+07	5,460281E+09	5,476729E+09
2257	8,226455E+06	8,228389E+06	2,730153E+09	2,730109E+09	1,645484E+07	5,460262E+09	5,476716E+09
2258	8,228497E+06	8,227459E+06	2,730212E+09	2,730059E+09	1,645596E+07	5,460271E+09	5,476727E+09
2259	8,224312E+06	8,222789E+06	2,730072E+09	2,730287E+09	1,644710E+07	5,460359E+09	5,476806E+09
2260	8,228505E+06	8,229828E+06	2,730271E+09	2,730194E+09	1,645833E+07	5,460465E+09	5,476923E+09
2261	8,226951E+06	8,224503E+06	2,730291E+09	2,730265E+09	1,645145E+07	5,460556E+09	5,477008E+09
2262	8,223236E+06	8,224920E+06	2,730291E+09	2,730429E+09	1,644816E+07	5,460720E+09	5,477168E+09
2263	8,227678E+06	8,229605E+06	2,730536E+09	2,730342E+09	1,645728E+07	5,460878E+09	5,477335E+09
2264	8,224552E+06	8,222123E+06	2,730453E+09	2,730552E+09	1,644668E+07	5,461005E+09	5,477451E+09
2265	8,223393E+06	8,226937E+06	2,730500E+09	2,730560E+09	1,645033E+07	5,461060E+09	5,477511E+09
2266	8,228824E+06	8,226043E+06	2,730594E+09	2,730433E+09	1,645487E+07	5,461027E+09	5,477482E+09
2267	8,223067E+06	8,222347E+06	2,730409E+09	2,730584E+09	1,644541E+07	5,460993E+09	5,477438E+09
2268	8,225323E+06	8,228829E+06	2,730497E+09	2,730411E+09	1,645415E+07	5,460908E+09	5,477362E+09
2269	8,227894E+06	8,224747E+06	2,730453E+09	2,730289E+09	1,645264E+07	5,460742E+09	5,477195E+09
2270	8,221728E+06	8,224705E+06	2,730216E+09	2,730360E+09	1,644643E+07	5,460576E+09	5,477023E+09
2271	8,229117E+06	8,229227E+06	2,730260E+09	2,730102E+09	1,645834E+07	5,460361E+09	5,476820E+09
2272	8,226090E+06	8,225041E+06	2,730044E+09	2,730085E+09	1,645113E+07	5,460129E+09	5,476580E+09
2273	8,224436E+06	8,226873E+06	2,729916E+09	2,730018E+09	1,645131E+07	5,459934E+09	5,476385E+09
2274	8,230553E+06	8,229623E+06	2,729993E+09	2,729774E+09	1,646018E+07	5,459767E+09	5,476227E+09
2275	8,224753E+06	8,224327E+06	2,729805E+09	2,729926E+09	1,644908E+07	5,459731E+09	5,476180E+09
2276	8,227763E+06	8,228786E+06	2,729872E+09	2,729867E+09	1,645655E+07	5,459738E+09	5,476195E+09
2277	8,229917E+06	8,228339E+06	2,729949E+09	2,729790E+09	1,645826E+07	5,459739E+09	5,476198E+09
2278	8,224709E+06	8,224211E+06	2,729821E+09	2,730028E+09	1,644892E+07	5,459848E+09	5,476297E+09
2279	8,228417E+06	8,231345E+06	2,730035E+09	2,729934E+09	1,645976E+07	5,459970E+09	5,476430E+09
2280	8,227199E+06	8,225669E+06	2,730087E+09	2,730048E+09	1,645287E+07	5,460135E+09	5,476588E+09
2281	8,223797E+06	8,225510E+06	2,730075E+09	2,730223E+09	1,644931E+07	5,460298E+09	5,476747E+09
2282	8,228669E+06	8,229655E+06	2,730275E+09	2,730109E+09	1,645832E+07	5,460384E+09	5,476842E+09
2283	8,226011E+06	8,222230E+06	2,730187E+09	2,730303E+09	1,644824E+07	5,460491E+09	5,476939E+09
2284	8,224364E+06	8,227800E+06	2,730218E+09	2,730295E+09	1,645216E+07	5,460513E+09	5,476965E+09
2285	8,229719E+06	8,227328E+06	2,730342E+09	2,730119E+09	1,645705E+07	5,460462E+09	5,476919E+09
2286	8,223101E+06	8,223792E+06	2,730157E+09	2,730284E+09	1,644689E+07	5,460441E+09	5,476888E+09
2287	8,225783E+06	8,229702E+06	2,730211E+09	2,730121E+09	1,645548E+07	5,460332E+09	5,476788E+09
2288	8,228839E+06	8,225719E+06	2,730153E+09	2,730031E+09	1,645456E+07	5,460184E+09	5,476639E+09
2289	8,223036E+06	8,225379E+06	2,729890E+09	2,730080E+09	1,644841E+07	5,459971E+09	5,476419E+09
2290	8,230360E+06	8,229808E+06	2,729915E+09	2,729780E+09	1,646017E+07	5,459695E+09	5,476155E+09
2291	8,227345E+06	8,225709E+06	2,729744E+09	2,729763E+09	1,645305E+07	5,459507E+09	5,475960E+09
2292	8,225583E+06	8,227556E+06	2,729630E+09	2,729725E+09	1,645314E+07	5,459356E+09	5,475809E+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	8,231716E+06	8,230584E+06	2,729734E+09	2,729480E+09	1,646230E+07	5,459214E+09	5,475676E+09
2294	8,225439E+06	8,225299E+06	2,729543E+09	2,729664E+09	1,645074E+07	5,459207E+09	5,475657E+09
2295	8,228277E+06	8,229913E+06	2,729596E+09	2,729611E+09	1,645819E+07	5,459208E+09	5,475666E+09
2296	8,230261E+06	8,229718E+06	2,729699E+09	2,729559E+09	1,645998E+07	5,459258E+09	5,475718E+09
2297	8,225094E+06	8,225234E+06	2,729590E+09	2,729789E+09	1,645033E+07	5,459379E+09	5,475829E+09
2298	8,228786E+06	8,231670E+06	2,729790E+09	2,729682E+09	1,646046E+07	5,459472E+09	5,475933E+09
2299	8,228441E+06	8,225582E+06	2,729847E+09	2,729811E+09	1,645402E+07	5,459658E+09	5,476112E+09
2300	8,225062E+06	8,225826E+06	2,729814E+09	2,729997E+09	1,645089E+07	5,459811E+09	5,476262E+09
2301	8,230000E+06	8,230476E+06	2,730021E+09	2,729839E+09	1,646048E+07	5,459859E+09	5,476320E+09
2302	8,226450E+06	8,223569E+06	2,729941E+09	2,730031E+09	1,645002E+07	5,459972E+09	5,476422E+09
2303	8,224537E+06	8,229115E+06	2,729976E+09	2,730022E+09	1,645365E+07	5,459998E+09	5,476451E+09
2304	8,230113E+06	8,228408E+06	2,730105E+09	2,729877E+09	1,645852E+07	5,459982E+09	5,476441E+09
2305	8,223917E+06	8,224467E+06	2,729890E+09	2,730039E+09	1,644838E+07	5,459929E+09	5,476377E+09
2306	8,227132E+06	8,229656E+06	2,729881E+09	2,729841E+09	1,645679E+07	5,459722E+09	5,476179E+09
2307	8,230503E+06	8,226137E+06	2,729809E+09	2,729726E+09	1,645664E+07	5,459535E+09	5,475992E+09
2308	8,224344E+06	8,226288E+06	2,729549E+09	2,729754E+09	1,645063E+07	5,459303E+09	5,475754E+09
2309	8,231315E+06	8,231155E+06	2,729613E+09	2,729414E+09	1,646247E+07	5,459028E+09	5,475490E+09
2310	8,227492E+06	8,227160E+06	2,729472E+09	2,729432E+09	1,645465E+07	5,458904E+09	5,475359E+09
2311	8,226048E+06	8,228632E+06	2,729356E+09	2,729434E+09	1,645468E+07	5,458790E+09	5,475245E+09
2312	8,232230E+06	8,231800E+06	2,729471E+09	2,729244E+09	1,646403E+07	5,458716E+09	5,475180E+09
2313	8,226380E+06	8,226316E+06	2,729280E+09	2,729431E+09	1,645270E+07	5,458711E+09	5,475163E+09
2314	8,228985E+06	8,230428E+06	2,729320E+09	2,729357E+09	1,645941E+07	5,458677E+09	5,475136E+09
2315	8,231233E+06	8,230150E+06	2,729455E+09	2,729314E+09	1,646138E+07	5,458769E+09	5,475230E+09
2316	8,226136E+06	8,225601E+06	2,729350E+09	2,729558E+09	1,645174E+07	5,458908E+09	5,475360E+09
2317	8,229831E+06	8,232080E+06	2,729554E+09	2,729433E+09	1,646191E+07	5,458987E+09	5,475448E+09
2318	8,229272E+06	8,226250E+06	2,729608E+09	2,729571E+09	1,645552E+07	5,459179E+09	5,475634E+09
2319	8,225681E+06	8,226894E+06	2,729557E+09	2,729744E+09	1,645257E+07	5,459301E+09	5,475754E+09
2320	8,230273E+06	8,231747E+06	2,729786E+09	2,729601E+09	1,646202E+07	5,459388E+09	5,475850E+09
2321	8,226859E+06	8,224761E+06	2,729713E+09	2,729779E+09	1,645162E+07	5,459492E+09	5,475943E+09
2322	8,225000E+06	8,229219E+06	2,729704E+09	2,729755E+09	1,645422E+07	5,459459E+09	5,475913E+09
2323	8,231433E+06	8,228458E+06	2,729813E+09	2,729616E+09	1,645989E+07	5,459429E+09	5,475889E+09
2324	8,225440E+06	8,224964E+06	2,729562E+09	2,729760E+09	1,645040E+07	5,459322E+09	5,475773E+09
2325	8,228681E+06	8,230605E+06	2,729552E+09	2,729506E+09	1,645929E+07	5,459058E+09	5,475518E+09
2326	8,231033E+06	8,227858E+06	2,729507E+09	2,729382E+09	1,645889E+07	5,458888E+09	5,475347E+09
2327	8,224683E+06	8,227809E+06	2,729270E+09	2,729422E+09	1,645249E+07	5,458692E+09	5,475144E+09
2328	8,231460E+06	8,232458E+06	2,729364E+09	2,729141E+09	1,646392E+07	5,458504E+09	5,474968E+09
2329	8,228131E+06	8,228060E+06	2,729216E+09	2,729182E+09	1,645619E+07	5,458398E+09	5,474854E+09
2330	8,227128E+06	8,228626E+06	2,729055E+09	2,729180E+09	1,645575E+07	5,458236E+09	5,474691E+09
2331	8,233551E+06	8,232292E+06	2,729167E+09	2,728991E+09	1,646584E+07	5,458158E+09	5,474624E+09
2332	8,227722E+06	8,226993E+06	2,728988E+09	2,729165E+09	1,645472E+07	5,458153E+09	5,474608E+09
2333	8,229951E+06	8,231216E+06	2,729057E+09	2,729058E+09	1,646117E+07	5,458115E+09	5,474576E+09
2334	8,231680E+06	8,230928E+06	2,729209E+09	2,729040E+09	1,646261E+07	5,458250E+09	5,474712E+09
2335	8,226812E+06	8,226303E+06	2,729104E+09	2,729307E+09	1,645312E+07	5,458411E+09	5,474864E+09
2336	8,230251E+06	8,233028E+06	2,729320E+09	2,729215E+09	1,646328E+07	5,458535E+09	5,474999E+09
2337	8,229992E+06	8,227415E+06	2,729383E+09	2,729344E+09	1,645741E+07	5,458727E+09	5,475184E+09
2338	8,226124E+06	8,227593E+06	2,729318E+09	2,729496E+09	1,645372E+07	5,458814E+09	5,475268E+09
2339	8,231033E+06	8,232266E+06	2,729552E+09	2,729363E+09	1,646330E+07	5,458916E+09	5,475379E+09
2340	8,228000E+06	8,225269E+06	2,729460E+09	2,729540E+09	1,645327E+07	5,459000E+09	5,475453E+09
2341	8,226202E+06	8,229566E+06	2,729419E+09	2,729474E+09	1,645577E+07	5,458893E+09	5,475349E+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	8,232369E+06	8,229314E+06	2,729509E+09	2,729320E+09	1,646168E+07	5,458829E+09	5,475291E+09
2343	8,226108E+06	8,226439E+06	2,729247E+09	2,729436E+09	1,645255E+07	5,458683E+09	5,475135E+09
2344	8,228912E+06	8,232136E+06	2,729270E+09	2,729193E+09	1,646105E+07	5,458463E+09	5,474924E+09
2345	8,231272E+06	8,229404E+06	2,729247E+09	2,729071E+09	1,646068E+07	5,458317E+09	5,474778E+09
2346	8,225346E+06	8,227996E+06	2,728979E+09	2,729125E+09	1,645334E+07	5,458103E+09	5,474557E+09
2347	8,232720E+06	8,232640E+06	2,729059E+09	2,728882E+09	1,646536E+07	5,457942E+09	5,474407E+09
2348	8,229888E+06	8,228473E+06	2,728897E+09	2,728924E+09	1,645836E+07	5,457821E+09	5,474279E+09
2349	8,228765E+06	8,229292E+06	2,728741E+09	2,728882E+09	1,645806E+07	5,457624E+09	5,474082E+09
2350	8,234234E+06	8,233606E+06	2,728890E+09	2,728696E+09	1,646784E+07	5,457585E+09	5,474053E+09
2351	8,228303E+06	8,228191E+06	2,728734E+09	2,728877E+09	1,645649E+07	5,457612E+09	5,474068E+09
2352	8,230125E+06	8,232201E+06	2,728835E+09	2,728822E+09	1,646233E+07	5,457658E+09	5,474120E+09
2353	8,232254E+06	8,231827E+06	2,728990E+09	2,728821E+09	1,646408E+07	5,457811E+09	5,474275E+09
2354	8,227599E+06	8,226425E+06	2,728851E+09	2,729079E+09	1,645402E+07	5,457930E+09	5,474384E+09
2355	8,231031E+06	8,233673E+06	2,729070E+09	2,728994E+09	1,646470E+07	5,458065E+09	5,474529E+09
2356	8,231088E+06	8,228147E+06	2,729143E+09	2,729102E+09	1,645924E+07	5,458245E+09	5,474705E+09
2357	8,226885E+06	8,228307E+06	2,729080E+09	2,729218E+09	1,645519E+07	5,458297E+09	5,474753E+09
2358	8,231610E+06	8,232890E+06	2,729303E+09	2,729095E+09	1,646450E+07	5,458398E+09	5,474862E+09
2359	8,228812E+06	8,226220E+06	2,729182E+09	2,729266E+09	1,645503E+07	5,458448E+09	5,474903E+09
2360	8,226763E+06	8,230592E+06	2,729139E+09	2,729210E+09	1,645735E+07	5,458349E+09	5,474806E+09
2361	8,233078E+06	8,230804E+06	2,729230E+09	2,729032E+09	1,646388E+07	5,458262E+09	5,474726E+09
2362	8,226634E+06	8,227228E+06	2,728957E+09	2,729125E+09	1,645386E+07	5,458082E+09	5,474536E+09
2363	8,229734E+06	8,232730E+06	2,728987E+09	2,728908E+09	1,646246E+07	5,457895E+09	5,474357E+09
2364	8,232642E+06	8,229857E+06	2,728955E+09	2,728798E+09	1,646250E+07	5,457753E+09	5,474216E+09
2365	8,227019E+06	8,228281E+06	2,728665E+09	2,728827E+09	1,645530E+07	5,457492E+09	5,473947E+09
2366	8,233938E+06	8,233472E+06	2,728734E+09	2,728584E+09	1,646741E+07	5,457318E+09	5,473786E+09
2367	8,230844E+06	8,230011E+06	2,728579E+09	2,728612E+09	1,646086E+07	5,457191E+09	5,473652E+09
2368	8,229048E+06	8,230808E+06	2,728472E+09	2,728584E+09	1,645986E+07	5,457057E+09	5,473516E+09
2369	8,234216E+06	8,235125E+06	2,728650E+09	2,728412E+09	1,646934E+07	5,457062E+09	5,473531E+09
2370	8,228726E+06	8,228430E+06	2,728481E+09	2,728612E+09	1,645716E+07	5,457093E+09	5,473551E+09
2371	8,230947E+06	8,232573E+06	2,728577E+09	2,728602E+09	1,646352E+07	5,457179E+09	5,473642E+09
2372	8,233770E+06	8,232300E+06	2,728738E+09	2,728602E+09	1,646607E+07	5,457340E+09	5,473806E+09
2373	8,228953E+06	8,227205E+06	2,728606E+09	2,728822E+09	1,645616E+07	5,457428E+09	5,473885E+09
2374	8,231539E+06	8,234734E+06	2,728850E+09	2,728744E+09	1,646627E+07	5,457594E+09	5,474060E+09
2375	8,231647E+06	8,229209E+06	2,728926E+09	2,728855E+09	1,646086E+07	5,457781E+09	5,474241E+09
2376	8,227042E+06	8,229078E+06	2,728862E+09	2,728994E+09	1,645612E+07	5,457857E+09	5,474313E+09
2377	8,232205E+06	8,233652E+06	2,729057E+09	2,728861E+09	1,646586E+07	5,457918E+09	5,474384E+09
2378	8,229667E+06	8,226625E+06	2,728883E+09	2,728995E+09	1,645629E+07	5,457878E+09	5,474334E+09
2379	8,227700E+06	8,231425E+06	2,728830E+09	2,728934E+09	1,645913E+07	5,457764E+09	5,474223E+09
2380	8,234423E+06	8,231704E+06	2,728935E+09	2,728730E+09	1,646613E+07	5,457665E+09	5,474131E+09
2381	8,227763E+06	8,227864E+06	2,728661E+09	2,728791E+09	1,645563E+07	5,457452E+09	5,473908E+09
2382	8,230722E+06	8,233250E+06	2,728688E+09	2,728599E+09	1,646397E+07	5,457286E+09	5,473750E+09
2383	8,233653E+06	8,231004E+06	2,728638E+09	2,728492E+09	1,646466E+07	5,457129E+09	5,473594E+09
2384	8,227762E+06	8,229554E+06	2,728368E+09	2,728537E+09	1,645732E+07	5,456905E+09	5,473362E+09
2385	8,234454E+06	8,235330E+06	2,728455E+09	2,728290E+09	1,646978E+07	5,456745E+09	5,473215E+09
2386	8,231292E+06	8,230998E+06	2,728301E+09	2,728312E+09	1,646229E+07	5,456613E+09	5,473075E+09
2387	8,229750E+06	8,231501E+06	2,728207E+09	2,728333E+09	1,646125E+07	5,456540E+09	5,473001E+09
2388	8,235491E+06	8,235355E+06	2,728387E+09	2,728176E+09	1,647085E+07	5,456564E+09	5,473035E+09
2389	8,230292E+06	8,228466E+06	2,728212E+09	2,728355E+09	1,645876E+07	5,456568E+09	5,473027E+09
2390	8,231957E+06	8,233241E+06	2,728317E+09	2,728352E+09	1,646520E+07	5,456670E+09	5,473135E+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	8,234529E+06	8,233607E+06	2,728494E+09	2,728345E+09	1,646814E+07	5,456839E+09	5,473307E+09
2392	8,229122E+06	8,228531E+06	2,728408E+09	2,728577E+09	1,645765E+07	5,456985E+09	5,473442E+09
2393	8,231523E+06	8,235927E+06	2,728648E+09	2,728509E+09	1,646745E+07	5,457158E+09	5,473625E+09
2394	8,232174E+06	8,229316E+06	2,728675E+09	2,728618E+09	1,646149E+07	5,457293E+09	5,473754E+09
2395	8,227874E+06	8,229510E+06	2,728577E+09	2,728774E+09	1,645738E+07	5,457350E+09	5,473808E+09
2396	8,233832E+06	8,234048E+06	2,728760E+09	2,728609E+09	1,646788E+07	5,457369E+09	5,473837E+09
2397	8,231037E+06	8,227584E+06	2,728589E+09	2,728680E+09	1,645862E+07	5,457269E+09	5,473727E+09
2398	8,228516E+06	8,232492E+06	2,728556E+09	2,728613E+09	1,646101E+07	5,457169E+09	5,473631E+09
2399	8,235135E+06	8,233057E+06	2,728663E+09	2,728421E+09	1,646819E+07	5,457084E+09	5,473553E+09
2400	8,228205E+06	8,228981E+06	2,728400E+09	2,728506E+09	1,645719E+07	5,456907E+09	5,473364E+09
2401	8,231290E+06	8,234398E+06	2,728404E+09	2,728321E+09	1,646569E+07	5,456726E+09	5,473191E+09
2402	8,234323E+06	8,231900E+06	2,728316E+09	2,728197E+09	1,646622E+07	5,456513E+09	5,472979E+09
2403	8,228602E+06	8,230686E+06	2,728046E+09	2,728255E+09	1,645929E+07	5,456301E+09	5,472760E+09
2404	8,235720E+06	8,236061E+06	2,728160E+09	2,727995E+09	1,647178E+07	5,456156E+09	5,472628E+09
2405	8,232553E+06	8,231436E+06	2,728007E+09	2,727998E+09	1,646399E+07	5,456005E+09	5,472469E+09
2406	8,230941E+06	8,231763E+06	2,727925E+09	2,728051E+09	1,646270E+07	5,455976E+09	5,472438E+09
2407	8,236477E+06	8,236263E+06	2,728110E+09	2,727916E+09	1,647274E+07	5,456026E+09	5,472498E+09
2408	8,231042E+06	8,229591E+06	2,727982E+09	2,728111E+09	1,646063E+07	5,456094E+09	5,472554E+09
2409	8,232078E+06	8,234948E+06	2,728115E+09	2,728118E+09	1,646703E+07	5,456233E+09	5,472700E+09
2410	8,234690E+06	8,234334E+06	2,728282E+09	2,728112E+09	1,646902E+07	5,456394E+09	5,472864E+09
2411	8,229601E+06	8,229184E+06	2,728185E+09	2,728384E+09	1,645879E+07	5,456569E+09	5,473028E+09
2412	8,232797E+06	8,235844E+06	2,728401E+09	2,728308E+09	1,646864E+07	5,456708E+09	5,473177E+09
2413	8,233736E+06	8,229341E+06	2,728384E+09	2,728360E+09	1,646308E+07	5,456744E+09	5,473207E+09
2414	8,229012E+06	8,230228E+06	2,728283E+09	2,728491E+09	1,645924E+07	5,456773E+09	5,473233E+09
2415	8,234594E+06	8,235490E+06	2,728473E+09	2,728299E+09	1,647008E+07	5,456772E+09	5,473242E+09
2416	8,231174E+06	8,229128E+06	2,728353E+09	2,728366E+09	1,646030E+07	5,456719E+09	5,473180E+09
2417	8,228575E+06	8,233861E+06	2,728319E+09	2,728320E+09	1,646244E+07	5,456639E+09	5,473102E+09
2418	8,235589E+06	8,233508E+06	2,728372E+09	2,728139E+09	1,646910E+07	5,456512E+09	5,472981E+09
2419	8,229185E+06	8,229771E+06	2,728082E+09	2,728255E+09	1,645896E+07	5,456337E+09	5,472795E+09
2420	8,233159E+06	8,234838E+06	2,728076E+09	2,728047E+09	1,646800E+07	5,456123E+09	5,472591E+09
2421	8,235834E+06	8,232815E+06	2,727987E+09	2,727873E+09	1,646865E+07	5,455860E+09	5,472329E+09
2422	8,229805E+06	8,231461E+06	2,727747E+09	2,727933E+09	1,646127E+07	5,455681E+09	5,472142E+09
2423	8,236573E+06	8,237024E+06	2,727870E+09	2,727694E+09	1,647360E+07	5,455565E+09	5,472038E+09
2424	8,233174E+06	8,232320E+06	2,727757E+09	2,727720E+09	1,646549E+07	5,455476E+09	5,471942E+09
2425	8,231426E+06	8,232957E+06	2,727678E+09	2,727794E+09	1,646438E+07	5,455473E+09	5,471937E+09
2426	8,236756E+06	8,237208E+06	2,727847E+09	2,727666E+09	1,647396E+07	5,455512E+09	5,471986E+09
2427	8,231576E+06	8,230847E+06	2,727740E+09	2,727891E+09	1,646242E+07	5,455631E+09	5,472093E+09
2428	8,232952E+06	8,235415E+06	2,727890E+09	2,727895E+09	1,646837E+07	5,455785E+09	5,472253E+09
2429	8,235747E+06	8,234385E+06	2,728033E+09	2,727865E+09	1,647013E+07	5,455898E+09	5,472368E+09
2430	8,230710E+06	8,229346E+06	2,727919E+09	2,728135E+09	1,646006E+07	5,456054E+09	5,472514E+09
2431	8,233711E+06	8,236555E+06	2,728118E+09	2,728052E+09	1,647027E+07	5,456170E+09	5,472640E+09
2432	8,234435E+06	8,230703E+06	2,728142E+09	2,728083E+09	1,646514E+07	5,456225E+09	5,472690E+09
2433	8,229091E+06	8,232075E+06	2,728060E+09	2,728209E+09	1,646117E+07	5,456270E+09	5,472731E+09
2434	8,234675E+06	8,236342E+06	2,728234E+09	2,728025E+09	1,647102E+07	5,456259E+09	5,472730E+09
2435	8,231729E+06	8,229945E+06	2,728094E+09	2,728134E+09	1,646167E+07	5,456228E+09	5,472690E+09
2436	8,230140E+06	8,233686E+06	2,728032E+09	2,728081E+09	1,646383E+07	5,456113E+09	5,472577E+09
2437	8,237242E+06	8,233653E+06	2,728033E+09	2,727849E+09	1,647089E+07	5,455882E+09	5,472353E+09
2438	8,230677E+06	8,230595E+06	2,727739E+09	2,727936E+09	1,646127E+07	5,455676E+09	5,472137E+09
2439	8,234233E+06	8,236143E+06	2,727747E+09	2,727711E+09	1,647038E+07	5,455458E+09	5,471929E+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	8,236253E+06	8,234392E+06	2,727713E+09	2,727533E+09	1,647064E+07	5,455245E+09	5,471716E+09
2441	8,230062E+06	8,232764E+06	2,727484E+09	2,727623E+09	1,646283E+07	5,455107E+09	5,471570E+09
2442	8,236820E+06	8,237605E+06	2,727580E+09	2,727413E+09	1,647443E+07	5,454993E+09	5,471468E+09
2443	8,233876E+06	8,233307E+06	2,727477E+09	2,727490E+09	1,646718E+07	5,454967E+09	5,471434E+09
2444	8,232883E+06	8,233543E+06	2,727425E+09	2,727564E+09	1,646643E+07	5,454989E+09	5,471455E+09
2445	8,237758E+06	8,237897E+06	2,727592E+09	2,727409E+09	1,647565E+07	5,455001E+09	5,471477E+09
2446	8,232736E+06	8,231364E+06	2,727510E+09	2,727646E+09	1,646410E+07	5,455156E+09	5,471620E+09
2447	8,233666E+06	8,235911E+06	2,727645E+09	2,727663E+09	1,646958E+07	5,455307E+09	5,471777E+09
2448	8,236377E+06	8,234901E+06	2,727803E+09	2,727625E+09	1,647128E+07	5,455428E+09	5,471899E+09
2449	8,231069E+06	8,230528E+06	2,727681E+09	2,727888E+09	1,646160E+07	5,455569E+09	5,472030E+09
2450	8,233851E+06	8,237395E+06	2,727850E+09	2,727789E+09	1,647125E+07	5,455639E+09	5,472110E+09
2451	8,234877E+06	8,232056E+06	2,727896E+09	2,727837E+09	1,646693E+07	5,455734E+09	5,472200E+09
2452	8,230199E+06	8,232522E+06	2,727822E+09	2,727954E+09	1,646272E+07	5,455776E+09	5,472239E+09
2453	8,235836E+06	8,236293E+06	2,727946E+09	2,727749E+09	1,647213E+07	5,455695E+09	5,472167E+09
2454	8,233174E+06	8,230250E+06	2,727787E+09	2,727851E+09	1,646342E+07	5,455638E+09	5,472101E+09
2455	8,231368E+06	8,234430E+06	2,727699E+09	2,727787E+09	1,646580E+07	5,455486E+09	5,471951E+09
2456	8,238003E+06	8,235294E+06	2,727738E+09	2,727522E+09	1,647330E+07	5,455261E+09	5,471734E+09
2457	8,230880E+06	8,232719E+06	2,727468E+09	2,727603E+09	1,646360E+07	5,455072E+09	5,471535E+09
2458	8,234388E+06	8,237204E+06	2,727460E+09	2,727398E+09	1,647159E+07	5,454858E+09	5,471329E+09
2459	8,236680E+06	8,235572E+06	2,727429E+09	2,727272E+09	1,647225E+07	5,454701E+09	5,471173E+09
2460	8,231600E+06	8,232713E+06	2,727201E+09	2,727370E+09	1,646431E+07	5,454571E+09	5,471036E+09
2461	8,238098E+06	8,237784E+06	2,727268E+09	2,727142E+09	1,647588E+07	5,454410E+09	5,470886E+09
2462	8,235283E+06	8,234028E+06	2,727190E+09	2,727210E+09	1,646931E+07	5,454399E+09	5,470869E+09
2463	8,233727E+06	8,234545E+06	2,727164E+09	2,727292E+09	1,646827E+07	5,454456E+09	5,470924E+09
2464	8,238122E+06	8,239047E+06	2,727378E+09	2,727141E+09	1,647717E+07	5,454519E+09	5,470996E+09
2465	8,233065E+06	8,232359E+06	2,727290E+09	2,727400E+09	1,646542E+07	5,454689E+09	5,471155E+09
2466	8,233875E+06	8,236220E+06	2,727382E+09	2,727432E+09	1,647009E+07	5,454814E+09	5,471284E+09
2467	8,237071E+06	8,235803E+06	2,727541E+09	2,727418E+09	1,647287E+07	5,454960E+09	5,471432E+09
2468	8,232405E+06	8,231104E+06	2,727445E+09	2,727656E+09	1,646351E+07	5,455101E+09	5,471565E+09
2469	8,234684E+06	8,237867E+06	2,727601E+09	2,727525E+09	1,647255E+07	5,455127E+09	5,471599E+09
2470	8,236120E+06	8,232593E+06	2,727659E+09	2,727572E+09	1,646871E+07	5,455231E+09	5,471700E+09
2471	8,231098E+06	8,233064E+06	2,727558E+09	2,727698E+09	1,646416E+07	5,455256E+09	5,471720E+09
2472	8,236646E+06	8,237058E+06	2,727679E+09	2,727471E+09	1,647370E+07	5,455150E+09	5,471623E+09
2473	8,233654E+06	8,231913E+06	2,727499E+09	2,727556E+09	1,646557E+07	5,455055E+09	5,471521E+09
2474	8,231585E+06	8,235614E+06	2,727380E+09	2,727474E+09	1,646720E+07	5,454854E+09	5,471321E+09
2475	8,238299E+06	8,236961E+06	2,727442E+09	2,727229E+09	1,647526E+07	5,454671E+09	5,471146E+09
2476	8,232087E+06	8,233240E+06	2,727189E+09	2,727303E+09	1,646533E+07	5,454492E+09	5,470957E+09
2477	8,235624E+06	8,237062E+06	2,727132E+09	2,727089E+09	1,647269E+07	5,454222E+09	5,470694E+09
2478	8,238289E+06	8,235878E+06	2,727109E+09	2,726974E+09	1,647417E+07	5,454083E+09	5,470557E+09
2479	8,233079E+06	8,233424E+06	2,726888E+09	2,727085E+09	1,646650E+07	5,453973E+09	5,470440E+09
2480	8,238804E+06	8,239273E+06	2,727011E+09	2,726851E+09	1,647808E+07	5,453862E+09	5,470340E+09
2481	8,235612E+06	8,235772E+06	2,726971E+09	2,726938E+09	1,647138E+07	5,453908E+09	5,470380E+09
2482	8,233860E+06	8,235255E+06	2,726924E+09	2,727049E+09	1,646911E+07	5,453972E+09	5,470441E+09
2483	8,238449E+06	8,239851E+06	2,727137E+09	2,726946E+09	1,647830E+07	5,454083E+09	5,470561E+09
2484	8,234510E+06	8,232297E+06	2,727045E+09	2,727187E+09	1,646681E+07	5,454232E+09	5,470699E+09
2485	8,234872E+06	8,236393E+06	2,727093E+09	2,727186E+09	1,647127E+07	5,454279E+09	5,470751E+09
2486	8,238348E+06	8,236639E+06	2,727283E+09	2,727149E+09	1,647499E+07	5,454432E+09	5,470907E+09
2487	8,233125E+06	8,232211E+06	2,727209E+09	2,727383E+09	1,646534E+07	5,454592E+09	5,471058E+09
2488	8,234943E+06	8,238977E+06	2,727392E+09	2,727247E+09	1,647392E+07	5,454639E+09	5,471113E+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							
2489	8,236399E+06	8,233835E+06	2,727429E+09	2,727306E+09	1,647023E+07	5,454734E+09	5,471205E+09
2490	8,231288E+06	8,233730E+06	2,727271E+09	2,727437E+09	1,646502E+07	5,454708E+09	5,471173E+09
2491	8,237292E+06	8,238350E+06	2,727384E+09	2,727226E+09	1,647564E+07	5,454610E+09	5,471086E+09
2492	8,235023E+06	8,232867E+06	2,727216E+09	2,727274E+09	1,646789E+07	5,454490E+09	5,470958E+09
2493	8,232727E+06	8,235995E+06	2,727066E+09	2,727165E+09	1,646872E+07	5,454231E+09	5,470700E+09
2494	8,239869E+06	8,237458E+06	2,727135E+09	2,726914E+09	1,647733E+07	5,454050E+09	5,470527E+09
2495	8,233408E+06	8,233572E+06	2,726874E+09	2,727000E+09	1,646698E+07	5,453874E+09	5,470341E+09
2496	8,236646E+06	8,237801E+06	2,726838E+09	2,726779E+09	1,647445E+07	5,453617E+09	5,470091E+09
2497	8,238858E+06	8,237517E+06	2,726822E+09	2,726671E+09	1,647637E+07	5,453493E+09	5,469969E+09
2498	8,233423E+06	8,234707E+06	2,726604E+09	2,726795E+09	1,646813E+07	5,453399E+09	5,469867E+09
2499	8,238965E+06	8,240928E+06	2,726762E+09	2,726607E+09	1,647989E+07	5,453369E+09	5,469849E+09
2500	8,236788E+06	8,236158E+06	2,726737E+09	2,726701E+09	1,647295E+07	5,453437E+09	5,469910E+09
2501	8,234862E+06	8,234991E+06	2,726637E+09	2,726807E+09	1,646985E+07	5,453444E+09	5,469914E+09
2502	8,239845E+06	8,240003E+06	2,726856E+09	2,726699E+09	1,647985E+07	5,453555E+09	5,470035E+09
2503	8,235691E+06	8,233009E+06	2,726783E+09	2,726934E+09	1,646870E+07	5,453716E+09	5,470185E+09
2504	8,235311E+06	8,237928E+06	2,726883E+09	2,726912E+09	1,647324E+07	5,453795E+09	5,470269E+09
2505	8,238562E+06	8,238355E+06	2,727099E+09	2,726892E+09	1,647692E+07	5,453991E+09	5,470468E+09
2506	8,233225E+06	8,233091E+06	2,726993E+09	2,727149E+09	1,646632E+07	5,454142E+09	5,470608E+09
2507	8,235257E+06	8,239699E+06	2,727154E+09	2,727053E+09	1,647496E+07	5,454207E+09	5,470682E+09
2508	8,237898E+06	8,233921E+06	2,727165E+09	2,727081E+09	1,647182E+07	5,454246E+09	5,470718E+09
2509	8,232404E+06	8,233836E+06	2,726936E+09	2,727159E+09	1,646624E+07	5,454095E+09	5,470561E+09
2510	8,238869E+06	8,239007E+06	2,727065E+09	2,726910E+09	1,647788E+07	5,453975E+09	5,470453E+09
2511	8,236176E+06	8,233940E+06	2,726911E+09	2,726942E+09	1,647012E+07	5,453853E+09	5,470323E+09
2512	8,233617E+06	8,236951E+06	2,726777E+09	2,726822E+09	1,647057E+07	5,453598E+09	5,470069E+09
2513	8,240525E+06	8,238780E+06	2,726840E+09	2,726593E+09	1,647930E+07	5,453433E+09	5,469912E+09
2514	8,233931E+06	8,234519E+06	2,726554E+09	2,726696E+09	1,646845E+07	5,453251E+09	5,469719E+09
2515	8,237110E+06	8,239393E+06	2,726548E+09	2,726518E+09	1,647650E+07	5,453066E+09	5,469543E+09
2516	8,239877E+06	8,238730E+06	2,726571E+09	2,726404E+09	1,647861E+07	5,452975E+09	5,469454E+09
2517	8,234316E+06	8,235167E+06	2,726328E+09	2,726528E+09	1,646948E+07	5,452856E+09	5,469326E+09
2518	8,240240E+06	8,241330E+06	2,726496E+09	2,726353E+09	1,648157E+07	5,452849E+09	5,469330E+09
2519	8,238094E+06	8,236373E+06	2,726462E+09	2,726455E+09	1,647447E+07	5,452918E+09	5,469392E+09
2520	8,235759E+06	8,235724E+06	2,726377E+09	2,726541E+09	1,647148E+07	5,452918E+09	5,469389E+09
2521	8,240203E+06	8,241489E+06	2,726611E+09	2,726433E+09	1,648169E+07	5,453044E+09	5,469526E+09
2522	8,235798E+06	8,234247E+06	2,726555E+09	2,726674E+09	1,647004E+07	5,453228E+09	5,469698E+09
2523	8,235257E+06	8,239386E+06	2,726690E+09	2,726698E+09	1,647464E+07	5,453388E+09	5,469863E+09
2524	8,239620E+06	8,238548E+06	2,726894E+09	2,726680E+09	1,647817E+07	5,453574E+09	5,470052E+09
2525	8,234292E+06	8,232763E+06	2,726710E+09	2,726924E+09	1,646705E+07	5,453634E+09	5,470101E+09
2526	8,236942E+06	8,239738E+06	2,726850E+09	2,726801E+09	1,647668E+07	5,453652E+09	5,470129E+09
2527	8,239339E+06	8,234678E+06	2,726858E+09	2,726799E+09	1,647402E+07	5,453658E+09	5,470132E+09
2528	8,233191E+06	8,235300E+06	2,726661E+09	2,726835E+09	1,646849E+07	5,453497E+09	5,469965E+09
2529	8,239413E+06	8,240568E+06	2,726800E+09	2,726589E+09	1,647998E+07	5,453389E+09	5,469869E+09
2530	8,236455E+06	8,235072E+06	2,726627E+09	2,726634E+09	1,647153E+07	5,453261E+09	5,469733E+09
2531	8,234092E+06	8,238008E+06	2,726493E+09	2,726556E+09	1,647210E+07	5,453049E+09	5,469521E+09
2532	8,241718E+06	8,239470E+06	2,726549E+09	2,726321E+09	1,648119E+07	5,452869E+09	5,469350E+09
2533	8,234877E+06	8,235068E+06	2,726223E+09	2,726404E+09	1,646995E+07	5,452627E+09	5,469097E+09
2534	8,238439E+06	8,240220E+06	2,726251E+09	2,726218E+09	1,647866E+07	5,452469E+09	5,468948E+09
2535	8,240931E+06	8,239604E+06	2,726292E+09	2,726115E+09	1,648053E+07	5,452407E+09	5,468888E+09
2536	8,235311E+06	8,235904E+06	2,726059E+09	2,726233E+09	1,647121E+07	5,452292E+09	5,468764E+09
2537	8,240868E+06	8,242212E+06	2,726222E+09	2,726081E+09	1,648308E+07	5,452302E+09	5,468785E+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	8,238641E+06	8,237233E+06	2,726183E+09	2,726193E+09	1,647587E+07	5,452376E+09	5,468852E+09
2539	8,236072E+06	8,237181E+06	2,726143E+09	2,726317E+09	1,647325E+07	5,452459E+09	5,468933E+09
2540	8,241017E+06	8,242393E+06	2,726417E+09	2,726213E+09	1,648341E+07	5,452630E+09	5,469113E+09
2541	8,236652E+06	8,234407E+06	2,726325E+09	2,726451E+09	1,647106E+07	5,452775E+09	5,469246E+09
2542	8,236492E+06	8,239449E+06	2,726454E+09	2,726482E+09	1,647594E+07	5,452936E+09	5,469412E+09
2543	8,240971E+06	8,238512E+06	2,726631E+09	2,726455E+09	1,647948E+07	5,453086E+09	5,469565E+09
2544	8,235301E+06	8,233611E+06	2,726429E+09	2,726647E+09	1,646891E+07	5,453077E+09	5,469545E+09
2545	8,237466E+06	8,241154E+06	2,726567E+09	2,726504E+09	1,647862E+07	5,453071E+09	5,469550E+09
2546	8,239484E+06	8,236342E+06	2,726579E+09	2,726484E+09	1,647583E+07	5,453063E+09	5,469539E+09
2547	8,233210E+06	8,236947E+06	2,726412E+09	2,726551E+09	1,647016E+07	5,452963E+09	5,469433E+09
2548	8,240306E+06	8,241145E+06	2,726538E+09	2,726310E+09	1,648145E+07	5,452848E+09	5,469330E+09
2549	8,237312E+06	8,235179E+06	2,726302E+09	2,726346E+09	1,647249E+07	5,452648E+09	5,469120E+09
2550	8,235690E+06	8,238382E+06	2,726170E+09	2,726265E+09	1,647407E+07	5,452436E+09	5,468910E+09
2551	8,243006E+06	8,240421E+06	2,726238E+09	2,726027E+09	1,648343E+07	5,452264E+09	5,468748E+09
2552	8,235946E+06	8,236479E+06	2,725946E+09	2,726087E+09	1,647242E+07	5,452033E+09	5,468505E+09
2553	8,239232E+06	8,241402E+06	2,725982E+09	2,725925E+09	1,648063E+07	5,451907E+09	5,468388E+09
2554	8,241426E+06	8,240486E+06	2,726007E+09	2,725844E+09	1,648191E+07	5,451851E+09	5,468333E+09
2555	8,235948E+06	8,236697E+06	2,725793E+09	2,725998E+09	1,647265E+07	5,451791E+09	5,468264E+09
2556	8,241827E+06	8,242691E+06	2,725955E+09	2,725838E+09	1,648452E+07	5,451793E+09	5,468277E+09
2557	8,239409E+06	8,237652E+06	2,725902E+09	2,725935E+09	1,647706E+07	5,451837E+09	5,468314E+09
2558	8,237169E+06	8,237964E+06	2,725910E+09	2,726062E+09	1,647513E+07	5,451972E+09	5,468447E+09
2559	8,241894E+06	8,242867E+06	2,726194E+09	2,725978E+09	1,648476E+07	5,452172E+09	5,468657E+09
2560	8,237702E+06	8,235015E+06	2,726096E+09	2,726202E+09	1,647272E+07	5,452298E+09	5,468771E+09
2561	8,237076E+06	8,240109E+06	2,726199E+09	2,726238E+09	1,647719E+07	5,452437E+09	5,468914E+09
2562	8,241346E+06	8,239500E+06	2,726357E+09	2,726197E+09	1,648085E+07	5,452554E+09	5,469034E+09
2563	8,235396E+06	8,235392E+06	2,726190E+09	2,726395E+09	1,647079E+07	5,452585E+09	5,469056E+09
2564	8,238061E+06	8,242177E+06	2,726338E+09	2,726243E+09	1,648024E+07	5,452581E+09	5,469062E+09
2565	8,240154E+06	8,236799E+06	2,726304E+09	2,726211E+09	1,647695E+07	5,452515E+09	5,468992E+09
2566	8,234609E+06	8,237132E+06	2,726128E+09	2,726279E+09	1,647174E+07	5,452407E+09	5,468879E+09
2567	8,241744E+06	8,241148E+06	2,726226E+09	2,726036E+09	1,648289E+07	5,452262E+09	5,468745E+09
2568	8,238586E+06	8,236134E+06	2,725979E+09	2,726026E+09	1,647472E+07	5,452006E+09	5,468480E+09
2569	8,236548E+06	8,239629E+06	2,725859E+09	2,725942E+09	1,647618E+07	5,451801E+09	5,468278E+09
2570	8,243288E+06	8,242087E+06	2,725941E+09	2,725705E+09	1,648537E+07	5,451646E+09	5,468132E+09
2571	8,236331E+06	8,237944E+06	2,725679E+09	2,725804E+09	1,647428E+07	5,451483E+09	5,467957E+09
2572	8,240282E+06	8,241830E+06	2,725703E+09	2,725660E+09	1,648211E+07	5,451363E+09	5,467845E+09
2573	8,242306E+06	8,240679E+06	2,725679E+09	2,725569E+09	1,648299E+07	5,451248E+09	5,467731E+09
2574	8,237368E+06	8,237170E+06	2,725498E+09	2,725726E+09	1,647454E+07	5,451224E+09	5,467698E+09
2575	8,242731E+06	8,243528E+06	2,725700E+09	2,725579E+09	1,648626E+07	5,451279E+09	5,467765E+09
2576	8,240326E+06	8,238884E+06	2,725688E+09	2,725662E+09	1,647921E+07	5,451350E+09	5,467829E+09
2577	8,237724E+06	8,238993E+06	2,725709E+09	2,725823E+09	1,647672E+07	5,451532E+09	5,468009E+09
2578	8,242102E+06	8,243692E+06	2,725967E+09	2,725759E+09	1,648579E+07	5,451725E+09	5,468211E+09
2579	8,238129E+06	8,235957E+06	2,725874E+09	2,725999E+09	1,647409E+07	5,451873E+09	5,468347E+09
2580	8,237629E+06	8,240678E+06	2,725952E+09	2,726014E+09	1,647831E+07	5,451966E+09	5,468444E+09
2581	8,241836E+06	8,239978E+06	2,726073E+09	2,725934E+09	1,648181E+07	5,452007E+09	5,468489E+09
2582	8,236368E+06	8,236187E+06	2,725935E+09	2,726116E+09	1,647255E+07	5,452051E+09	5,468524E+09
2583	8,239181E+06	8,242357E+06	2,726069E+09	2,725971E+09	1,648154E+07	5,452040E+09	5,468522E+09
2584	8,241531E+06	8,237418E+06	2,726015E+09	2,725908E+09	1,647895E+07	5,451923E+09	5,468402E+09
2585	8,235744E+06	8,237830E+06	2,725820E+09	2,725978E+09	1,647357E+07	5,451798E+09	5,468272E+09
2586	8,242296E+06	8,242383E+06	2,725907E+09	2,725733E+09	1,648468E+07	5,451640E+09	5,468125E+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	8,238975E+06	8,238046E+06	2,725712E+09	2,725737E+09	1,647702E+07	5,451449E+09	5,467926E+09
2588	8,237319E+06	8,240677E+06	2,725595E+09	2,725657E+09	1,647800E+07	5,451252E+09	5,467730E+09
2589	8,243906E+06	8,242638E+06	2,725633E+09	2,725421E+09	1,648654E+07	5,451054E+09	5,467541E+09
2590	8,237799E+06	8,238300E+06	2,725376E+09	2,725526E+09	1,647610E+07	5,450903E+09	5,467379E+09
2591	8,241725E+06	8,241868E+06	2,725385E+09	2,725388E+09	1,648359E+07	5,450773E+09	5,467257E+09
2592	8,243507E+06	8,241735E+06	2,725377E+09	2,725262E+09	1,648524E+07	5,450640E+09	5,467125E+09
2593	8,238152E+06	8,238354E+06	2,725242E+09	2,725430E+09	1,647651E+07	5,450672E+09	5,467149E+09
2594	8,242630E+06	8,245017E+06	2,725476E+09	2,725313E+09	1,648765E+07	5,450789E+09	5,467277E+09
2595	8,240578E+06	8,240070E+06	2,725503E+09	2,725442E+09	1,648065E+07	5,450946E+09	5,467426E+09
2596	8,238356E+06	8,239337E+06	2,725496E+09	2,725624E+09	1,647769E+07	5,451119E+09	5,467597E+09
2597	8,242694E+06	8,243709E+06	2,725690E+09	2,725544E+09	1,648640E+07	5,451234E+09	5,467720E+09
2598	8,239421E+06	8,236514E+06	2,725608E+09	2,725764E+09	1,647594E+07	5,451372E+09	5,467848E+09
2599	8,238633E+06	8,241154E+06	2,725693E+09	2,725769E+09	1,647979E+07	5,451462E+09	5,467941E+09
2600	8,243057E+06	8,240941E+06	2,725822E+09	2,725647E+09	1,648400E+07	5,451469E+09	5,467953E+09
2601	8,237302E+06	8,236973E+06	2,725685E+09	2,725835E+09	1,647427E+07	5,451520E+09	5,467994E+09
2602	8,239628E+06	8,243150E+06	2,725793E+09	2,725695E+09	1,648278E+07	5,451488E+09	5,467971E+09
2603	8,242102E+06	8,238680E+06	2,725745E+09	2,725635E+09	1,648078E+07	5,451380E+09	5,467861E+09
2604	8,236373E+06	8,238935E+06	2,725533E+09	2,725694E+09	1,647531E+07	5,451227E+09	5,467702E+09
2605	8,242691E+06	8,243420E+06	2,725589E+09	2,725423E+09	1,648611E+07	5,451012E+09	5,467498E+09
2606	8,239960E+06	8,239252E+06	2,725420E+09	2,725429E+09	1,647921E+07	5,450849E+09	5,467328E+09
2607	8,238670E+06	8,240869E+06	2,725288E+09	2,725369E+09	1,647954E+07	5,450657E+09	5,467136E+09
2608	8,245347E+06	8,243284E+06	2,725304E+09	2,725102E+09	1,648863E+07	5,450406E+09	5,466895E+09
2609	8,239071E+06	8,238975E+06	2,725061E+09	2,725211E+09	1,647805E+07	5,450272E+09	5,466750E+09
2610	8,242136E+06	8,243261E+06	2,725092E+09	2,725088E+09	1,648540E+07	5,450181E+09	5,466666E+09
2611	8,243760E+06	8,243563E+06	2,725165E+09	2,724998E+09	1,648732E+07	5,450163E+09	5,466650E+09
2612	8,238710E+06	8,239397E+06	2,725050E+09	2,725203E+09	1,647811E+07	5,450252E+09	5,466731E+09
2613	8,242942E+06	8,245365E+06	2,725239E+09	2,725106E+09	1,648831E+07	5,450345E+09	5,466833E+09
2614	8,241920E+06	8,240142E+06	2,725263E+09	2,725245E+09	1,648206E+07	5,450509E+09	5,466991E+09
2615	8,239683E+06	8,239087E+06	2,725223E+09	2,725416E+09	1,647877E+07	5,450639E+09	5,467118E+09
2616	8,243891E+06	8,244382E+06	2,725406E+09	2,725274E+09	1,648827E+07	5,450680E+09	5,467168E+09
2617	8,240279E+06	8,237598E+06	2,725359E+09	2,725472E+09	1,647788E+07	5,450831E+09	5,467308E+09
2618	8,238669E+06	8,242524E+06	2,725450E+09	2,725485E+09	1,648119E+07	5,450935E+09	5,467417E+09
2619	8,243547E+06	8,242222E+06	2,725607E+09	2,725387E+09	1,648577E+07	5,450994E+09	5,467479E+09
2620	8,237939E+06	8,237765E+06	2,725435E+09	2,725579E+09	1,647570E+07	5,451014E+09	5,467490E+09
2621	8,240058E+06	8,243585E+06	2,725486E+09	2,725425E+09	1,648364E+07	5,450911E+09	5,467394E+09
2622	8,243161E+06	8,239810E+06	2,725456E+09	2,725356E+09	1,648297E+07	5,450812E+09	5,467295E+09
2623	8,237516E+06	8,239552E+06	2,725243E+09	2,725412E+09	1,647707E+07	5,450655E+09	5,467132E+09
2624	8,244123E+06	8,244359E+06	2,725289E+09	2,725109E+09	1,648848E+07	5,450398E+09	5,466886E+09
2625	8,241340E+06	8,240032E+06	2,725117E+09	2,725116E+09	1,648137E+07	5,450233E+09	5,466714E+09
2626	8,239553E+06	8,241626E+06	2,724965E+09	2,725066E+09	1,648118E+07	5,450031E+09	5,466512E+09
2627	8,246058E+06	8,244561E+06	2,725013E+09	2,724805E+09	1,649062E+07	5,449819E+09	5,466309E+09
2628	8,239654E+06	8,240164E+06	2,724786E+09	2,724920E+09	1,647982E+07	5,449706E+09	5,466186E+09
2629	8,242196E+06	8,244260E+06	2,724822E+09	2,724806E+09	1,648646E+07	5,449629E+09	5,466115E+09
2630	8,244566E+06	8,244533E+06	2,724932E+09	2,724752E+09	1,648910E+07	5,449685E+09	5,466174E+09
2631	8,240113E+06	8,239338E+06	2,724803E+09	2,724988E+09	1,647945E+07	5,449791E+09	5,466271E+09
2632	8,244322E+06	8,245746E+06	2,724958E+09	2,724862E+09	1,649007E+07	5,449821E+09	5,466311E+09
2633	8,243229E+06	8,240612E+06	2,724991E+09	2,724988E+09	1,648384E+07	5,449979E+09	5,466463E+09
2634	8,239948E+06	8,240448E+06	2,724964E+09	2,725154E+09	1,648040E+07	5,450118E+09	5,466599E+09
2635	8,244049E+06	8,245972E+06	2,725207E+09	2,725015E+09	1,649002E+07	5,450222E+09	5,466712E+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	8,240551E+06	8,238837E+06	2,725167E+09	2,725228E+09	1,647939E+07	5,450395E+09	5,466874E+09
2637	8,238805E+06	8,243118E+06	2,725207E+09	2,725247E+09	1,648192E+07	5,450455E+09	5,466937E+09
2638	8,244694E+06	8,242693E+06	2,725349E+09	2,725157E+09	1,648739E+07	5,450506E+09	5,466994E+09
2639	8,239342E+06	8,237860E+06	2,725143E+09	2,725336E+09	1,647720E+07	5,450479E+09	5,466957E+09
2640	8,241424E+06	8,244304E+06	2,725167E+09	2,725121E+09	1,648573E+07	5,450288E+09	5,466774E+09
2641	8,244266E+06	8,240889E+06	2,725164E+09	2,725030E+09	1,648516E+07	5,450194E+09	5,466679E+09
2642	8,238014E+06	8,240801E+06	2,724944E+09	2,725095E+09	1,647882E+07	5,450039E+09	5,466518E+09
2643	8,244984E+06	8,245449E+06	2,725007E+09	2,724805E+09	1,649043E+07	5,449812E+09	5,466303E+09
2644	8,242111E+06	8,241101E+06	2,724815E+09	2,724816E+09	1,648321E+07	5,449631E+09	5,466114E+09
2645	8,240109E+06	8,242347E+06	2,724633E+09	2,724762E+09	1,648246E+07	5,449395E+09	5,465878E+09
2646	8,246923E+06	8,245873E+06	2,724727E+09	2,724524E+09	1,649280E+07	5,449252E+09	5,465744E+09
2647	8,240894E+06	8,240713E+06	2,724531E+09	2,724661E+09	1,648161E+07	5,449192E+09	5,465674E+09
2648	8,243412E+06	8,244956E+06	2,724564E+09	2,724543E+09	1,648837E+07	5,449107E+09	5,465596E+09
2649	8,245832E+06	8,244962E+06	2,724684E+09	2,724505E+09	1,649079E+07	5,449189E+09	5,465680E+09
2650	8,240875E+06	8,240017E+06	2,724533E+09	2,724749E+09	1,648089E+07	5,449282E+09	5,465763E+09
2651	8,244824E+06	8,246831E+06	2,724715E+09	2,724617E+09	1,649165E+07	5,449332E+09	5,465824E+09
2652	8,243514E+06	8,241952E+06	2,724756E+09	2,724730E+09	1,648547E+07	5,449486E+09	5,465971E+09
2653	8,239676E+06	8,241501E+06	2,724727E+09	2,724892E+09	1,648118E+07	5,449619E+09	5,466100E+09
2654	8,244646E+06	8,246778E+06	2,724991E+09	2,724787E+09	1,649142E+07	5,449779E+09	5,466270E+09
2655	8,241969E+06	8,238658E+06	2,724924E+09	2,725011E+09	1,648063E+07	5,449935E+09	5,466416E+09
2656	8,240295E+06	8,243325E+06	2,724918E+09	2,724991E+09	1,648362E+07	5,449909E+09	5,466393E+09
2657	8,246135E+06	8,243192E+06	2,725060E+09	2,724876E+09	1,648933E+07	5,449936E+09	5,466426E+09
2658	8,239894E+06	8,239305E+06	2,724856E+09	2,725045E+09	1,647920E+07	5,449902E+09	5,466381E+09
2659	8,242027E+06	8,245725E+06	2,724921E+09	2,724826E+09	1,648775E+07	5,449746E+09	5,466234E+09
2660	8,244747E+06	8,242356E+06	2,724902E+09	2,724741E+09	1,648710E+07	5,449644E+09	5,466131E+09
2661	8,238378E+06	8,241498E+06	2,724633E+09	2,724803E+09	1,647988E+07	5,449436E+09	5,465916E+09
2662	8,246116E+06	8,246153E+06	2,724688E+09	2,724524E+09	1,649227E+07	5,449212E+09	5,465705E+09
2663	8,243479E+06	8,241534E+06	2,724488E+09	2,724525E+09	1,648501E+07	5,449013E+09	5,465498E+09
2664	8,241365E+06	8,243281E+06	2,724312E+09	2,724433E+09	1,648465E+07	5,448745E+09	5,465230E+09
2665	8,247794E+06	8,246942E+06	2,724456E+09	2,724209E+09	1,649474E+07	5,448666E+09	5,465161E+09
2666	8,241531E+06	8,241844E+06	2,724272E+09	2,724386E+09	1,648337E+07	5,448658E+09	5,465142E+09
2667	8,244179E+06	8,245820E+06	2,724325E+09	2,724289E+09	1,649000E+07	5,448614E+09	5,465104E+09
2668	8,246346E+06	8,245939E+06	2,724428E+09	2,724264E+09	1,649228E+07	5,448692E+09	5,465184E+09
2669	8,241105E+06	8,240840E+06	2,724258E+09	2,724501E+09	1,648195E+07	5,448759E+09	5,465241E+09
2670	8,245304E+06	8,247855E+06	2,724475E+09	2,724391E+09	1,649316E+07	5,448865E+09	5,465358E+09
2671	8,244713E+06	8,242214E+06	2,724539E+09	2,724511E+09	1,648693E+07	5,449051E+09	5,465538E+09
2672	8,240943E+06	8,241880E+06	2,724487E+09	2,724653E+09	1,648282E+07	5,449140E+09	5,465623E+09
2673	8,245990E+06	8,246810E+06	2,724752E+09	2,724550E+09	1,649280E+07	5,449301E+09	5,465794E+09
2674	8,242914E+06	8,239320E+06	2,724658E+09	2,724767E+09	1,648223E+07	5,449425E+09	5,465907E+09
2675	8,240943E+06	8,244372E+06	2,724665E+09	2,724722E+09	1,648531E+07	5,449387E+09	5,465872E+09
2676	8,246254E+06	8,244764E+06	2,724805E+09	2,724590E+09	1,649102E+07	5,449395E+09	5,465886E+09
2677	8,239682E+06	8,240681E+06	2,724581E+09	2,724746E+09	1,648036E+07	5,449328E+09	5,465808E+09
2678	8,242784E+06	8,246581E+06	2,724640E+09	2,724558E+09	1,648937E+07	5,449199E+09	5,465688E+09
2679	8,246260E+06	8,242573E+06	2,724590E+09	2,724468E+09	1,648883E+07	5,449058E+09	5,465547E+09
2680	8,239995E+06	8,241843E+06	2,724283E+09	2,724484E+09	1,648184E+07	5,448767E+09	5,465249E+09
2681	8,247498E+06	8,246813E+06	2,724364E+09	2,724195E+09	1,649431E+07	5,448559E+09	5,465053E+09
2682	8,244064E+06	8,243018E+06	2,724194E+09	2,724205E+09	1,648708E+07	5,448398E+09	5,464886E+09
2683	8,242080E+06	8,244582E+06	2,724078E+09	2,724137E+09	1,648666E+07	5,448215E+09	5,464701E+09
2684	8,248083E+06	8,248366E+06	2,724216E+09	2,723950E+09	1,649645E+07	5,448166E+09	5,464662E+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	8,241978E+06	8,242449E+06	2,723996E+09	2,724141E+09	1,648443E+07	5,448137E+09	5,464622E+09
2686	8,245143E+06	8,246276E+06	2,724044E+09	2,724073E+09	1,649142E+07	5,448118E+09	5,464609E+09
2687	8,247705E+06	8,246074E+06	2,724141E+09	2,724031E+09	1,649378E+07	5,448172E+09	5,464666E+09
2688	8,242240E+06	8,241404E+06	2,723979E+09	2,724221E+09	1,648364E+07	5,448200E+09	5,464684E+09
2689	8,246115E+06	8,248401E+06	2,724240E+09	2,724117E+09	1,649452E+07	5,448357E+09	5,464851E+09
2690	8,245422E+06	8,243076E+06	2,724311E+09	2,724263E+09	1,648850E+07	5,448574E+09	5,465063E+09
2691	8,241721E+06	8,242774E+06	2,724275E+09	2,724409E+09	1,648450E+07	5,448684E+09	5,465169E+09
2692	8,246229E+06	8,247992E+06	2,724513E+09	2,724309E+09	1,649422E+07	5,448823E+09	5,465317E+09
2693	8,242931E+06	8,240595E+06	2,724397E+09	2,724509E+09	1,648353E+07	5,448906E+09	5,465389E+09
2694	8,241204E+06	8,245554E+06	2,724419E+09	2,724482E+09	1,648676E+07	5,448901E+09	5,465388E+09
2695	8,247319E+06	8,245209E+06	2,724551E+09	2,724344E+09	1,649253E+07	5,448895E+09	5,465388E+09
2696	8,240973E+06	8,241191E+06	2,724283E+09	2,724460E+09	1,648216E+07	5,448743E+09	5,465225E+09
2697	8,244365E+06	8,246567E+06	2,724326E+09	2,724260E+09	1,649093E+07	5,448586E+09	5,465077E+09
2698	8,247399E+06	8,243493E+06	2,724258E+09	2,724158E+09	1,649089E+07	5,448416E+09	5,464906E+09
2699	8,241009E+06	8,243019E+06	2,723983E+09	2,724146E+09	1,648403E+07	5,448128E+09	5,464613E+09
2700	8,247511E+06	8,248504E+06	2,724086E+09	2,723870E+09	1,649602E+07	5,447956E+09	5,464452E+09
2701	8,244009E+06	8,244373E+06	2,723922E+09	2,723901E+09	1,648838E+07	5,447824E+09	5,464312E+09
2702	8,242923E+06	8,245249E+06	2,723807E+09	2,723897E+09	1,648817E+07	5,447704E+09	5,464192E+09
2703	8,249577E+06	8,248461E+06	2,723923E+09	2,723721E+09	1,649804E+07	5,447644E+09	5,464142E+09
2704	8,243673E+06	8,242687E+06	2,723673E+09	2,723869E+09	1,648636E+07	5,447542E+09	5,464028E+09
2705	8,246444E+06	8,246695E+06	2,723755E+09	2,723793E+09	1,649314E+07	5,447548E+09	5,464041E+09
2706	8,248301E+06	8,247314E+06	2,723892E+09	2,723759E+09	1,649562E+07	5,447651E+09	5,464146E+09
2707	8,242879E+06	8,242532E+06	2,723790E+09	2,723958E+09	1,648541E+07	5,447748E+09	5,464233E+09
2708	8,245989E+06	8,249659E+06	2,724047E+09	2,723890E+09	1,649565E+07	5,447937E+09	5,464433E+09
2709	8,245644E+06	8,243843E+06	2,724087E+09	2,724043E+09	1,648949E+07	5,448130E+09	5,464619E+09
2710	8,242290E+06	8,243541E+06	2,724036E+09	2,724214E+09	1,648583E+07	5,448250E+09	5,464736E+09
2711	8,247262E+06	8,248352E+06	2,724254E+09	2,724088E+09	1,649561E+07	5,448342E+09	5,464838E+09
2712	8,243923E+06	8,241261E+06	2,724118E+09	2,724228E+09	1,648518E+07	5,448346E+09	5,464832E+09
2713	8,242259E+06	8,245750E+06	2,724149E+09	2,724194E+09	1,648801E+07	5,448344E+09	5,464832E+09
2714	8,248411E+06	8,245837E+06	2,724253E+09	2,724056E+09	1,649425E+07	5,448309E+09	5,464803E+09
2715	8,242195E+06	8,242012E+06	2,723994E+09	2,724145E+09	1,648421E+07	5,448139E+09	5,464623E+09
2716	8,244886E+06	8,247859E+06	2,724019E+09	2,723944E+09	1,649275E+07	5,447963E+09	5,464456E+09
2717	8,247572E+06	8,245056E+06	2,723951E+09	2,723834E+09	1,649263E+07	5,447785E+09	5,464278E+09
2718	8,241570E+06	8,244326E+06	2,723713E+09	2,723870E+09	1,648590E+07	5,447583E+09	5,464069E+09
2719	8,248640E+06	8,249059E+06	2,723814E+09	2,723614E+09	1,649770E+07	5,447429E+09	5,463926E+09
2720	8,245457E+06	8,244760E+06	2,723618E+09	2,723626E+09	1,649022E+07	5,447244E+09	5,463734E+09
2721	8,244617E+06	8,245172E+06	2,723499E+09	2,723622E+09	1,648979E+07	5,447121E+09	5,463610E+09
2722	8,250590E+06	8,249394E+06	2,723605E+09	2,723440E+09	1,649998E+07	5,447046E+09	5,463546E+09
2723	8,244533E+06	8,243985E+06	2,723408E+09	2,723557E+09	1,648852E+07	5,446965E+09	5,463454E+09
2724	8,246121E+06	8,248474E+06	2,723524E+09	2,723502E+09	1,649459E+07	5,447026E+09	5,463521E+09
2725	8,248064E+06	8,248668E+06	2,723677E+09	2,723498E+09	1,649673E+07	5,447175E+09	5,463671E+09
2726	8,243418E+06	8,243275E+06	2,723584E+09	2,723763E+09	1,648669E+07	5,447347E+09	5,463834E+09
2727	8,247053E+06	8,249715E+06	2,723815E+09	2,723706E+09	1,649677E+07	5,447522E+09	5,464018E+09
2728	8,247075E+06	8,244011E+06	2,723818E+09	2,723811E+09	1,649109E+07	5,447628E+09	5,464119E+09
2729	8,243454E+06	8,243785E+06	2,723777E+09	2,723961E+09	1,648724E+07	5,447738E+09	5,464225E+09
2730	8,248087E+06	8,249196E+06	2,724000E+09	2,723830E+09	1,649728E+07	5,447830E+09	5,464327E+09
2731	8,244962E+06	8,242343E+06	2,723884E+09	2,723941E+09	1,648730E+07	5,447825E+09	5,464312E+09
2732	8,242547E+06	8,246818E+06	2,723886E+09	2,723919E+09	1,648936E+07	5,447805E+09	5,464295E+09
2733	8,248973E+06	8,246784E+06	2,723958E+09	2,723769E+09	1,649576E+07	5,447726E+09	5,464222E+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							
2734	8,242965E+06	8,243039E+06	2,723692E+09	2,723873E+09	1,648600E+07	5,447565E+09	5,464051E+09
2735	8,245867E+06	8,248524E+06	2,723718E+09	2,723656E+09	1,649439E+07	5,447375E+09	5,463869E+09
2736	8,248467E+06	8,245994E+06	2,723646E+09	2,723509E+09	1,649446E+07	5,447155E+09	5,463649E+09
2737	8,242845E+06	8,244686E+06	2,723424E+09	2,723565E+09	1,648753E+07	5,446989E+09	5,463476E+09
2738	8,249810E+06	8,249848E+06	2,723505E+09	2,723331E+09	1,649966E+07	5,446836E+09	5,463335E+09
2739	8,246837E+06	8,245796E+06	2,723322E+09	2,723319E+09	1,649263E+07	5,446641E+09	5,463134E+09
2740	8,245056E+06	8,246577E+06	2,723204E+09	2,723325E+09	1,649163E+07	5,446529E+09	5,463020E+09
2741	8,250556E+06	8,250979E+06	2,723332E+09	2,723145E+09	1,650153E+07	5,446477E+09	5,462978E+09
2742	8,244882E+06	8,245178E+06	2,723187E+09	2,723319E+09	1,649006E+07	5,446506E+09	5,462996E+09
2743	8,246908E+06	8,248936E+06	2,723312E+09	2,723296E+09	1,649584E+07	5,446608E+09	5,463104E+09
2744	8,249350E+06	8,248674E+06	2,723432E+09	2,723281E+09	1,649802E+07	5,446713E+09	5,463211E+09
2745	8,245162E+06	8,242974E+06	2,723336E+09	2,723547E+09	1,648814E+07	5,446883E+09	5,463371E+09
2746	8,248159E+06	8,250271E+06	2,723539E+09	2,723476E+09	1,649843E+07	5,447014E+09	5,463513E+09
2747	8,248084E+06	8,245047E+06	2,723576E+09	2,723527E+09	1,649313E+07	5,447103E+09	5,463596E+09
2748	8,243220E+06	8,245306E+06	2,723543E+09	2,723681E+09	1,648853E+07	5,447224E+09	5,463712E+09
2749	8,248119E+06	8,250282E+06	2,723749E+09	2,723553E+09	1,649840E+07	5,447302E+09	5,463800E+09
2750	8,245601E+06	8,243325E+06	2,723628E+09	2,723701E+09	1,648893E+07	5,447328E+09	5,463817E+09
2751	8,243709E+06	8,247268E+06	2,723596E+09	2,723667E+09	1,649098E+07	5,447263E+09	5,463754E+09
2752	8,250282E+06	8,247470E+06	2,723638E+09	2,723466E+09	1,649775E+07	5,447104E+09	5,463602E+09
2753	8,244157E+06	8,243736E+06	2,723402E+09	2,723560E+09	1,648789E+07	5,446962E+09	5,463450E+09
2754	8,246715E+06	8,249537E+06	2,723435E+09	2,723359E+09	1,649625E+07	5,446794E+09	5,463290E+09
2755	8,249490E+06	8,247255E+06	2,723384E+09	2,723198E+09	1,649674E+07	5,446582E+09	5,463079E+09
2756	8,243342E+06	8,245856E+06	2,723138E+09	2,723278E+09	1,648920E+07	5,446416E+09	5,462905E+09
2757	8,250436E+06	8,250912E+06	2,723192E+09	2,723043E+09	1,650135E+07	5,446235E+09	5,462736E+09
2758	8,247650E+06	8,247021E+06	2,723021E+09	2,723053E+09	1,649467E+07	5,446074E+09	5,462569E+09
2759	8,245970E+06	8,247276E+06	2,722921E+09	2,723055E+09	1,649325E+07	5,445976E+09	5,462469E+09
2760	8,251363E+06	8,251525E+06	2,723059E+09	2,722859E+09	1,650289E+07	5,445918E+09	5,462421E+09
2761	8,246294E+06	8,245096E+06	2,722941E+09	2,723061E+09	1,649139E+07	5,446003E+09	5,462494E+09
2762	8,248082E+06	8,249302E+06	2,723054E+09	2,723071E+09	1,649738E+07	5,446126E+09	5,462623E+09
2763	8,250741E+06	8,249433E+06	2,723190E+09	2,723027E+09	1,650017E+07	5,446217E+09	5,462717E+09
2764	8,245511E+06	8,244334E+06	2,723094E+09	2,723298E+09	1,648985E+07	5,446392E+09	5,462882E+09
2765	8,248077E+06	8,251705E+06	2,723308E+09	2,723222E+09	1,649978E+07	5,446530E+09	5,463030E+09
2766	8,248396E+06	8,246220E+06	2,723367E+09	2,723308E+09	1,649462E+07	5,446675E+09	5,463170E+09
2767	8,243848E+06	8,245856E+06	2,723315E+09	2,723466E+09	1,648970E+07	5,446782E+09	5,463271E+09
2768	8,249264E+06	8,250314E+06	2,723469E+09	2,723303E+09	1,649958E+07	5,446772E+09	5,463272E+09
2769	8,247156E+06	8,243432E+06	2,723339E+09	2,723429E+09	1,649059E+07	5,446768E+09	5,463258E+09
2770	8,244836E+06	8,248081E+06	2,723288E+09	2,723377E+09	1,649292E+07	5,446665E+09	5,463158E+09
2771	8,251254E+06	8,248863E+06	2,723363E+09	2,723128E+09	1,650012E+07	5,446491E+09	5,462991E+09
2772	8,244188E+06	8,245338E+06	2,723137E+09	2,723241E+09	1,648953E+07	5,446379E+09	5,462868E+09
2773	8,247117E+06	8,250590E+06	2,723149E+09	2,723061E+09	1,649771E+07	5,446209E+09	5,462707E+09
2774	8,250329E+06	8,248292E+06	2,723088E+09	2,722943E+09	1,649862E+07	5,446031E+09	5,462529E+09
2775	8,244694E+06	8,246414E+06	2,722818E+09	2,723013E+09	1,649111E+07	5,445832E+09	5,462323E+09
2776	8,251703E+06	8,251399E+06	2,722851E+09	2,722737E+09	1,650310E+07	5,445588E+09	5,462091E+09
2777	8,249010E+06	8,247594E+06	2,722730E+09	2,722747E+09	1,649660E+07	5,445478E+09	5,461974E+09
2778	8,247064E+06	8,248035E+06	2,722650E+09	2,722775E+09	1,649510E+07	5,445426E+09	5,461921E+09
2779	8,252390E+06	8,252465E+06	2,722822E+09	2,722582E+09	1,650485E+07	5,445404E+09	5,461909E+09
2780	8,246864E+06	8,246088E+06	2,722710E+09	2,722819E+09	1,649295E+07	5,445529E+09	5,462022E+09
2781	8,248416E+06	8,250367E+06	2,722805E+09	2,722836E+09	1,649878E+07	5,445640E+09	5,462139E+09
2782	8,251084E+06	8,250650E+06	2,722958E+09	2,722815E+09	1,650173E+07	5,445773E+09	5,462275E+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	8,245895E+06	8,245338E+06	2,722870E+09	2,723070E+09	1,649123E+07	5,445940E+09	5,462431E+09
2784	8,248485E+06	8,252043E+06	2,723062E+09	2,722971E+09	1,650053E+07	5,446033E+09	5,462534E+09
2785	8,249641E+06	8,246236E+06	2,723122E+09	2,723062E+09	1,649588E+07	5,446184E+09	5,462680E+09
2786	8,245077E+06	8,246212E+06	2,723037E+09	2,723222E+09	1,649129E+07	5,446259E+09	5,462750E+09
2787	8,250661E+06	8,251083E+06	2,723192E+09	2,723011E+09	1,650174E+07	5,446203E+09	5,462705E+09
2788	8,247585E+06	8,244928E+06	2,723069E+09	2,723129E+09	1,649251E+07	5,446199E+09	5,462691E+09
2789	8,245023E+06	8,249520E+06	2,723027E+09	2,723080E+09	1,649454E+07	5,446107E+09	5,462601E+09
2790	8,251633E+06	8,250163E+06	2,723117E+09	2,722874E+09	1,650180E+07	5,445991E+09	5,462493E+09
2791	8,245088E+06	8,246029E+06	2,722863E+09	2,722994E+09	1,649112E+07	5,445858E+09	5,462349E+09
2792	8,248589E+06	8,250484E+06	2,722817E+09	2,722785E+09	1,649907E+07	5,445602E+09	5,462101E+09
2793	8,252112E+06	8,248594E+06	2,722743E+09	2,722643E+09	1,650071E+07	5,445387E+09	5,461887E+09
2794	8,246104E+06	8,247175E+06	2,722474E+09	2,722697E+09	1,649328E+07	5,445171E+09	5,461664E+09
2795	8,252663E+06	8,252711E+06	2,722557E+09	2,722383E+09	1,650537E+07	5,444941E+09	5,461446E+09
2796	8,249107E+06	8,249068E+06	2,722475E+09	2,722431E+09	1,649817E+07	5,444906E+09	5,461404E+09
2797	8,247379E+06	8,249127E+06	2,722406E+09	2,722505E+09	1,649651E+07	5,444911E+09	5,461407E+09
2798	8,252828E+06	8,253525E+06	2,722588E+09	2,722372E+09	1,650635E+07	5,444959E+09	5,461466E+09
2799	8,247838E+06	8,246834E+06	2,722471E+09	2,722613E+09	1,649467E+07	5,445084E+09	5,461578E+09
2800	8,249083E+06	8,250753E+06	2,722546E+09	2,722602E+09	1,649984E+07	5,445148E+09	5,461647E+09
2801	8,252076E+06	8,250968E+06	2,722727E+09	2,722580E+09	1,650304E+07	5,445308E+09	5,461811E+09
2802	8,246846E+06	8,245811E+06	2,722634E+09	2,722844E+09	1,649266E+07	5,445478E+09	5,461971E+09
2803	8,249568E+06	8,252484E+06	2,722822E+09	2,722715E+09	1,650205E+07	5,445537E+09	5,462040E+09
2804	8,250415E+06	8,247020E+06	2,722872E+09	2,722808E+09	1,649743E+07	5,445680E+09	5,462177E+09
2805	8,245674E+06	8,247327E+06	2,722765E+09	2,722952E+09	1,649300E+07	5,445717E+09	5,462210E+09
2806	8,250989E+06	8,252354E+06	2,722936E+09	2,722754E+09	1,650334E+07	5,445690E+09	5,462193E+09
2807	8,248010E+06	8,246173E+06	2,722822E+09	2,722858E+09	1,649418E+07	5,445680E+09	5,462174E+09
2808	8,245624E+06	8,249760E+06	2,722739E+09	2,722791E+09	1,649538E+07	5,445530E+09	5,462026E+09
2809	8,252983E+06	8,250386E+06	2,722813E+09	2,722595E+09	1,650337E+07	5,445408E+09	5,461912E+09
2810	8,246660E+06	8,246642E+06	2,722522E+09	2,722704E+09	1,649330E+07	5,445226E+09	5,461719E+09
2811	8,250208E+06	8,251402E+06	2,722476E+09	2,722443E+09	1,650161E+07	5,444919E+09	5,461421E+09
2812	8,252604E+06	8,250377E+06	2,722437E+09	2,722300E+09	1,650298E+07	5,444736E+09	5,461239E+09
2813	8,246410E+06	8,248704E+06	2,722199E+09	2,722369E+09	1,649511E+07	5,444568E+09	5,461063E+09
2814	8,252747E+06	8,254032E+06	2,722324E+09	2,722125E+09	1,650678E+07	5,444448E+09	5,460955E+09
2815	8,249762E+06	8,249881E+06	2,722244E+09	2,722203E+09	1,649964E+07	5,444447E+09	5,460946E+09
2816	8,248426E+06	8,249059E+06	2,722135E+09	2,722277E+09	1,649748E+07	5,444413E+09	5,460910E+09
2817	8,254125E+06	8,253820E+06	2,722314E+09	2,722147E+09	1,650795E+07	5,444461E+09	5,460969E+09
2818	8,249150E+06	8,247406E+06	2,722199E+09	2,722373E+09	1,649656E+07	5,444572E+09	5,461068E+09
2819	8,249902E+06	8,251485E+06	2,722302E+09	2,722321E+09	1,650139E+07	5,444623E+09	5,461124E+09
2820	8,252394E+06	8,251822E+06	2,722498E+09	2,722317E+09	1,650422E+07	5,444814E+09	5,461319E+09
2821	8,247299E+06	8,246655E+06	2,722395E+09	2,722594E+09	1,649395E+07	5,444989E+09	5,461483E+09
2822	8,249976E+06	8,253382E+06	2,722585E+09	2,722497E+09	1,650336E+07	5,445082E+09	5,461585E+09
2823	8,251222E+06	8,248083E+06	2,722629E+09	2,722571E+09	1,649930E+07	5,445200E+09	5,461699E+09
2824	8,246299E+06	8,247960E+06	2,722503E+09	2,722685E+09	1,649426E+07	5,445188E+09	5,461682E+09
2825	8,251890E+06	8,252908E+06	2,722681E+09	2,722490E+09	1,650480E+07	5,445172E+09	5,461676E+09
2826	8,249161E+06	8,246806E+06	2,722548E+09	2,722597E+09	1,649597E+07	5,445145E+09	5,461641E+09
2827	8,246980E+06	8,250184E+06	2,722442E+09	2,722495E+09	1,649716E+07	5,444937E+09	5,461434E+09
2828	8,253919E+06	8,251323E+06	2,722496E+09	2,722290E+09	1,650524E+07	5,444786E+09	5,461291E+09
2829	8,247436E+06	8,248068E+06	2,722196E+09	2,722376E+09	1,649550E+07	5,444572E+09	5,461067E+09
2830	8,250603E+06	8,252879E+06	2,722180E+09	2,722131E+09	1,650348E+07	5,444312E+09	5,460815E+09
2831	8,252884E+06	8,251883E+06	2,722173E+09	2,721993E+09	1,650477E+07	5,444166E+09	5,460671E+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	8,247085E+06	8,248906E+06	2,721921E+09	2,722078E+09	1,649599E+07	5,443999E+09	5,460495E+09
2833	8,253886E+06	8,254193E+06	2,722043E+09	2,721879E+09	1,650808E+07	5,443922E+09	5,460430E+09
2834	8,251423E+06	8,250192E+06	2,721951E+09	2,721967E+09	1,650162E+07	5,443918E+09	5,460419E+09
2835	8,249972E+06	8,249708E+06	2,721849E+09	2,722003E+09	1,649968E+07	5,443852E+09	5,460352E+09
2836	8,254618E+06	8,255137E+06	2,722062E+09	2,721877E+09	1,650975E+07	5,443939E+09	5,460449E+09
2837	8,249556E+06	8,248708E+06	2,721972E+09	2,722109E+09	1,649826E+07	5,444081E+09	5,460579E+09
2838	8,249904E+06	8,252483E+06	2,722096E+09	2,722105E+09	1,650239E+07	5,444201E+09	5,460703E+09
2839	8,252965E+06	8,252599E+06	2,722286E+09	2,722108E+09	1,650556E+07	5,444394E+09	5,460899E+09
2840	8,248115E+06	8,246751E+06	2,722138E+09	2,722360E+09	1,649487E+07	5,444498E+09	5,460993E+09
2841	8,250878E+06	8,253887E+06	2,722321E+09	2,722260E+09	1,650476E+07	5,444581E+09	5,461086E+09
2842	8,252373E+06	8,248965E+06	2,722367E+09	2,722308E+09	1,650134E+07	5,444675E+09	5,461177E+09
2843	8,247100E+06	8,248831E+06	2,722247E+09	2,722381E+09	1,649593E+07	5,444628E+09	5,461124E+09
2844	8,252429E+06	8,253757E+06	2,722421E+09	2,722203E+09	1,650619E+07	5,444623E+09	5,461129E+09
2845	8,249951E+06	8,247907E+06	2,722255E+09	2,722308E+09	1,649786E+07	5,444563E+09	5,461061E+09
2846	8,247695E+06	8,251133E+06	2,722143E+09	2,722222E+09	1,649883E+07	5,444365E+09	5,460863E+09
2847	8,254714E+06	8,252750E+06	2,722196E+09	2,721993E+09	1,650746E+07	5,444188E+09	5,460696E+09
2848	8,248103E+06	8,248835E+06	2,721891E+09	2,722055E+09	1,649694E+07	5,443945E+09	5,460442E+09
2849	8,251501E+06	8,253514E+06	2,721896E+09	2,721841E+09	1,650502E+07	5,443737E+09	5,460242E+09
2850	8,254219E+06	8,252430E+06	2,721888E+09	2,721724E+09	1,650665E+07	5,443612E+09	5,460119E+09
2851	8,248738E+06	8,249190E+06	2,721631E+09	2,721796E+09	1,649793E+07	5,443427E+09	5,459925E+09
2852	8,254894E+06	8,255028E+06	2,721752E+09	2,721609E+09	1,650992E+07	5,443361E+09	5,459871E+09
2853	8,252274E+06	8,251526E+06	2,721666E+09	2,721690E+09	1,650380E+07	5,443357E+09	5,459860E+09
2854	8,250141E+06	8,251079E+06	2,721610E+09	2,721744E+09	1,650122E+07	5,443355E+09	5,459856E+09
2855	8,254555E+06	8,256476E+06	2,721845E+09	2,721624E+09	1,651103E+07	5,443469E+09	5,459980E+09
2856	8,249985E+06	8,248879E+06	2,721735E+09	2,721863E+09	1,649886E+07	5,443598E+09	5,460097E+09
2857	8,250747E+06	8,252784E+06	2,721844E+09	2,721891E+09	1,650353E+07	5,443734E+09	5,460238E+09
2858	8,254528E+06	8,252969E+06	2,722025E+09	2,721886E+09	1,650750E+07	5,443911E+09	5,460418E+09
2859	8,249497E+06	8,247528E+06	2,721884E+09	2,722091E+09	1,649703E+07	5,443975E+09	5,460472E+09
2860	8,251372E+06	8,254969E+06	2,722088E+09	2,721991E+09	1,650634E+07	5,444079E+09	5,460585E+09
2861	8,252905E+06	8,250192E+06	2,722139E+09	2,722042E+09	1,650310E+07	5,444181E+09	5,460684E+09
2862	8,247335E+06	8,249731E+06	2,722014E+09	2,722143E+09	1,649707E+07	5,444157E+09	5,460654E+09
2863	8,253163E+06	8,254575E+06	2,722156E+09	2,721955E+09	1,650774E+07	5,444111E+09	5,460619E+09
2864	8,250940E+06	8,248370E+06	2,721937E+09	2,722021E+09	1,649931E+07	5,443958E+09	5,460457E+09
2865	8,248855E+06	8,251877E+06	2,721810E+09	2,721927E+09	1,650073E+07	5,443737E+09	5,460238E+09
2866	8,256050E+06	8,253715E+06	2,721879E+09	2,721673E+09	1,650977E+07	5,443552E+09	5,460062E+09
2867	8,249209E+06	8,249671E+06	2,721591E+09	2,721705E+09	1,649888E+07	5,443296E+09	5,459794E+09
2868	8,252225E+06	8,254286E+06	2,721608E+09	2,721529E+09	1,650651E+07	5,443136E+09	5,459643E+09
2869	8,255026E+06	8,253686E+06	2,721595E+09	2,721433E+09	1,650871E+07	5,443027E+09	5,459536E+09
2870	8,249447E+06	8,250375E+06	2,721357E+09	2,721534E+09	1,649982E+07	5,442891E+09	5,459391E+09
2871	8,255322E+06	8,256727E+06	2,721496E+09	2,721348E+09	1,651205E+07	5,442844E+09	5,459356E+09
2872	8,252744E+06	8,252355E+06	2,721410E+09	2,721417E+09	1,650510E+07	5,442827E+09	5,459333E+09
2873	8,250758E+06	8,251689E+06	2,721367E+09	2,721515E+09	1,650245E+07	5,442882E+09	5,459384E+09
2874	8,255763E+06	8,256668E+06	2,721600E+09	2,721408E+09	1,651243E+07	5,443008E+09	5,459520E+09
2875	8,251507E+06	8,248918E+06	2,721481E+09	2,721615E+09	1,650043E+07	5,443097E+09	5,459597E+09
2876	8,251680E+06	8,253434E+06	2,721594E+09	2,721648E+09	1,650511E+07	5,443242E+09	5,459747E+09
2877	8,255368E+06	8,254235E+06	2,721779E+09	2,721627E+09	1,650960E+07	5,443406E+09	5,459916E+09
2878	8,249687E+06	8,248865E+06	2,721678E+09	2,721839E+09	1,649855E+07	5,443517E+09	5,460016E+09
2879	8,251377E+06	8,256187E+06	2,721879E+09	2,721745E+09	1,650756E+07	5,443624E+09	5,460132E+09
2880	8,253424E+06	8,250429E+06	2,721879E+09	2,721789E+09	1,650385E+07	5,443668E+09	5,460172E+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	8,248259E+06	8,250156E+06	2,721714E+09	2,721905E+09	1,649842E+07	5,443619E+09	5,460118E+09
2882	8,254949E+06	8,254981E+06	2,721833E+09	2,721685E+09	1,650993E+07	5,443517E+09	5,460027E+09
2883	8,252396E+06	8,249430E+06	2,721618E+09	2,721684E+09	1,650183E+07	5,443302E+09	5,459804E+09
2884	8,249680E+06	8,253056E+06	2,721521E+09	2,721591E+09	1,650274E+07	5,443112E+09	5,459615E+09
2885	8,256689E+06	8,255166E+06	2,721601E+09	2,721356E+09	1,651185E+07	5,442957E+09	5,459469E+09
2886	8,249687E+06	8,250727E+06	2,721336E+09	2,721426E+09	1,650041E+07	5,442762E+09	5,459262E+09
2887	8,252792E+06	8,255338E+06	2,721336E+09	2,721265E+09	1,650813E+07	5,442601E+09	5,459110E+09
2888	8,255752E+06	8,254371E+06	2,721289E+09	2,721159E+09	1,651012E+07	5,442448E+09	5,458958E+09
2889	8,250433E+06	8,251342E+06	2,721053E+09	2,721274E+09	1,650177E+07	5,442328E+09	5,458829E+09
2890	8,256496E+06	8,257376E+06	2,721216E+09	2,721078E+09	1,651387E+07	5,442293E+09	5,458807E+09
2891	8,253961E+06	8,252776E+06	2,721144E+09	2,721125E+09	1,650674E+07	5,442268E+09	5,458775E+09
2892	8,251718E+06	8,251994E+06	2,721107E+09	2,721254E+09	1,650371E+07	5,442361E+09	5,458864E+09
2893	8,256677E+06	8,257472E+06	2,721340E+09	2,721163E+09	1,651415E+07	5,442503E+09	5,459018E+09
2894	8,252236E+06	8,249962E+06	2,721259E+09	2,721380E+09	1,650220E+07	5,442639E+09	5,459141E+09
2895	8,251788E+06	8,255120E+06	2,721391E+09	2,721413E+09	1,650691E+07	5,442804E+09	5,459311E+09
2896	8,255539E+06	8,255032E+06	2,721566E+09	2,721386E+09	1,651057E+07	5,442952E+09	5,459462E+09
2897	8,250165E+06	8,249656E+06	2,721450E+09	2,721632E+09	1,649982E+07	5,443082E+09	5,459582E+09
2898	8,252684E+06	8,256201E+06	2,721620E+09	2,721529E+09	1,650889E+07	5,443148E+09	5,459657E+09
2899	8,255008E+06	8,250677E+06	2,721578E+09	2,721513E+09	1,650569E+07	5,443091E+09	5,459597E+09
2900	8,249342E+06	8,250959E+06	2,721402E+09	2,721607E+09	1,650030E+07	5,443009E+09	5,459509E+09
2901	8,255796E+06	8,256474E+06	2,721525E+09	2,721358E+09	1,651227E+07	5,442884E+09	5,459396E+09
2902	8,252542E+06	8,251051E+06	2,721360E+09	2,721354E+09	1,650359E+07	5,442714E+09	5,459218E+09
2903	8,249791E+06	8,254464E+06	2,721271E+09	2,721285E+09	1,650425E+07	5,442555E+09	5,459060E+09
2904	8,257138E+06	8,255719E+06	2,721306E+09	2,721065E+09	1,651286E+07	5,442372E+09	5,458884E+09
2905	8,250752E+06	8,251401E+06	2,721019E+09	2,721177E+09	1,650215E+07	5,442196E+09	5,458698E+09
2906	8,254667E+06	8,255726E+06	2,721017E+09	2,721004E+09	1,651039E+07	5,442021E+09	5,458531E+09
2907	8,257261E+06	8,255209E+06	2,720976E+09	2,720852E+09	1,651247E+07	5,441827E+09	5,458340E+09
2908	8,251520E+06	8,252123E+06	2,720778E+09	2,720979E+09	1,650364E+07	5,441758E+09	5,458261E+09
2909	8,257223E+06	8,258328E+06	2,720951E+09	2,720804E+09	1,651555E+07	5,441755E+09	5,458271E+09
2910	8,254568E+06	8,253541E+06	2,720917E+09	2,720876E+09	1,650811E+07	5,441793E+09	5,458301E+09
2911	8,252109E+06	8,253104E+06	2,720884E+09	2,721022E+09	1,650521E+07	5,441906E+09	5,458411E+09
2912	8,256996E+06	8,258185E+06	2,721094E+09	2,720929E+09	1,651518E+07	5,442022E+09	5,458538E+09
2913	8,252817E+06	8,251078E+06	2,721026E+09	2,721167E+09	1,650390E+07	5,442193E+09	5,458697E+09
2914	8,252638E+06	8,255650E+06	2,721170E+09	2,721189E+09	1,650829E+07	5,442359E+09	5,458867E+09
2915	8,256518E+06	8,255214E+06	2,721322E+09	2,721131E+09	1,651173E+07	5,442453E+09	5,458964E+09
2916	8,251119E+06	8,250014E+06	2,721185E+09	2,721379E+09	1,650113E+07	5,442564E+09	5,459066E+09
2917	8,253693E+06	8,256874E+06	2,721325E+09	2,721265E+09	1,651057E+07	5,442589E+09	5,459100E+09
2918	8,255815E+06	8,251975E+06	2,721311E+09	2,721224E+09	1,650779E+07	5,442535E+09	5,459043E+09
2919	8,249574E+06	8,252752E+06	2,721147E+09	2,721302E+09	1,650233E+07	5,442449E+09	5,458951E+09
2920	8,256006E+06	8,257344E+06	2,721257E+09	2,721056E+09	1,651335E+07	5,442314E+09	5,458827E+09
2921	8,253140E+06	8,251993E+06	2,721083E+09	2,721097E+09	1,650513E+07	5,442180E+09	5,458685E+09
2922	8,251431E+06	8,254373E+06	2,720973E+09	2,721031E+09	1,650580E+07	5,442004E+09	5,458510E+09
2923	8,258794E+06	8,255965E+06	2,720973E+09	2,720773E+09	1,651476E+07	5,441746E+09	5,458261E+09
2924	8,252282E+06	8,252173E+06	2,720684E+09	2,720870E+09	1,650446E+07	5,441554E+09	5,458058E+09
2925	8,255737E+06	8,256990E+06	2,720699E+09	2,720685E+09	1,651273E+07	5,441384E+09	5,457897E+09
2926	8,257580E+06	8,256756E+06	2,720718E+09	2,720533E+09	1,651434E+07	5,441251E+09	5,457766E+09
2927	8,251604E+06	8,253472E+06	2,720538E+09	2,720691E+09	1,650508E+07	5,441229E+09	5,457734E+09
2928	8,257304E+06	8,258886E+06	2,720687E+09	2,720546E+09	1,651619E+07	5,441232E+09	5,457748E+09
2929	8,255267E+06	8,254444E+06	2,720659E+09	2,720664E+09	1,650971E+07	5,441323E+09	5,457833E+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	8,253470E+06	8,253681E+06	2,720647E+09	2,720805E+09	1,650715E+07	5,441452E+09	5,457960E+09
2931	8,257944E+06	8,258892E+06	2,720859E+09	2,720681E+09	1,651684E+07	5,441540E+09	5,458057E+09
2932	8,253786E+06	8,251684E+06	2,720812E+09	2,720931E+09	1,650547E+07	5,441743E+09	5,458248E+09
2933	8,253259E+06	8,256199E+06	2,720937E+09	2,720964E+09	1,650946E+07	5,441901E+09	5,458410E+09
2934	8,257164E+06	8,255683E+06	2,721091E+09	2,720893E+09	1,651285E+07	5,441984E+09	5,458497E+09
2935	8,251542E+06	8,251184E+06	2,720933E+09	2,721126E+09	1,650273E+07	5,442059E+09	5,458562E+09
2936	8,254104E+06	8,257616E+06	2,721030E+09	2,720985E+09	1,651172E+07	5,442014E+09	5,458526E+09
2937	8,256376E+06	8,253351E+06	2,721030E+09	2,720952E+09	1,650973E+07	5,441982E+09	5,458492E+09
2938	8,250757E+06	8,253271E+06	2,720884E+09	2,721017E+09	1,650403E+07	5,441901E+09	5,458405E+09
2939	8,257171E+06	8,257432E+06	2,720956E+09	2,720754E+09	1,651460E+07	5,441710E+09	5,458225E+09
2940	8,254505E+06	8,252366E+06	2,720771E+09	2,720803E+09	1,650687E+07	5,441574E+09	5,458081E+09
2941	8,252786E+06	8,255123E+06	2,720638E+09	2,720735E+09	1,650791E+07	5,441373E+09	5,457881E+09
2942	8,259582E+06	8,257560E+06	2,720677E+09	2,720456E+09	1,651714E+07	5,441134E+09	5,457651E+09
2943	8,252537E+06	8,254242E+06	2,720419E+09	2,720552E+09	1,650678E+07	5,440971E+09	5,457478E+09
2944	8,255887E+06	8,257975E+06	2,720425E+09	2,720388E+09	1,651386E+07	5,440813E+09	5,457327E+09
2945	8,257980E+06	8,257825E+06	2,720453E+09	2,720294E+09	1,651581E+07	5,440747E+09	5,457263E+09
2946	8,253088E+06	8,253399E+06	2,720279E+09	2,720461E+09	1,650649E+07	5,440740E+09	5,457247E+09
2947	8,258479E+06	8,258998E+06	2,720404E+09	2,720297E+09	1,651748E+07	5,440702E+09	5,457219E+09
2948	8,256622E+06	8,255060E+06	2,720401E+09	2,720412E+09	1,651168E+07	5,440813E+09	5,457324E+09
2949	8,254246E+06	8,254683E+06	2,720407E+09	2,720554E+09	1,650893E+07	5,440961E+09	5,457470E+09
2950	8,258233E+06	8,259947E+06	2,720662E+09	2,720428E+09	1,651818E+07	5,441091E+09	5,457609E+09
2951	8,254017E+06	8,252755E+06	2,720600E+09	2,720690E+09	1,650677E+07	5,441289E+09	5,457796E+09
2952	8,253441E+06	8,256424E+06	2,720669E+09	2,720730E+09	1,650986E+07	5,441399E+09	5,457909E+09
2953	8,257947E+06	8,256550E+06	2,720812E+09	2,720675E+09	1,651450E+07	5,441487E+09	5,458001E+09
2954	8,252923E+06	8,251836E+06	2,720667E+09	2,720871E+09	1,650476E+07	5,441538E+09	5,458042E+09
2955	8,255072E+06	8,258201E+06	2,720755E+09	2,720691E+09	1,651327E+07	5,441446E+09	5,457959E+09
2956	8,257556E+06	8,254116E+06	2,720770E+09	2,720658E+09	1,651167E+07	5,441427E+09	5,457939E+09
2957	8,251721E+06	8,253975E+06	2,720604E+09	2,720737E+09	1,650570E+07	5,441341E+09	5,457847E+09
2958	8,257922E+06	8,258304E+06	2,720681E+09	2,720464E+09	1,651623E+07	5,441145E+09	5,457661E+09
2959	8,254966E+06	8,254058E+06	2,720479E+09	2,720504E+09	1,650902E+07	5,440983E+09	5,457492E+09
2960	8,253149E+06	8,256243E+06	2,720317E+09	2,720425E+09	1,650939E+07	5,440742E+09	5,457252E+09
2961	8,259877E+06	8,259284E+06	2,720380E+09	2,720168E+09	1,651916E+07	5,440548E+09	5,457067E+09
2962	8,253681E+06	8,254836E+06	2,720148E+09	2,720261E+09	1,650852E+07	5,440410E+09	5,456918E+09
2963	8,257008E+06	8,257965E+06	2,720121E+09	2,720097E+09	1,651497E+07	5,440218E+09	5,456733E+09
2964	8,259445E+06	8,258050E+06	2,720159E+09	2,720023E+09	1,651749E+07	5,440182E+09	5,456700E+09
2965	8,254551E+06	8,253973E+06	2,719996E+09	2,720204E+09	1,650852E+07	5,440199E+09	5,456708E+09
2966	8,259104E+06	8,260313E+06	2,720171E+09	2,720032E+09	1,651942E+07	5,440203E+09	5,456723E+09
2967	8,256892E+06	8,256709E+06	2,720204E+09	2,720162E+09	1,651360E+07	5,440366E+09	5,456879E+09
2968	8,254295E+06	8,255411E+06	2,720188E+09	2,720325E+09	1,650971E+07	5,440513E+09	5,457023E+09
2969	8,258536E+06	8,260675E+06	2,720431E+09	2,720245E+09	1,651921E+07	5,440676E+09	5,457195E+09
2970	8,255457E+06	8,252713E+06	2,720360E+09	2,720484E+09	1,650817E+07	5,440844E+09	5,457352E+09
2971	8,254552E+06	8,256469E+06	2,720374E+09	2,720480E+09	1,651102E+07	5,440854E+09	5,457365E+09
2972	8,259352E+06	8,257263E+06	2,720535E+09	2,720395E+09	1,651662E+07	5,440929E+09	5,457446E+09
2973	8,253719E+06	8,253016E+06	2,720408E+09	2,720574E+09	1,650673E+07	5,440982E+09	5,457489E+09
2974	8,255334E+06	8,259338E+06	2,720527E+09	2,720387E+09	1,651467E+07	5,440913E+09	5,457428E+09
2975	8,257742E+06	8,255549E+06	2,720526E+09	2,720370E+09	1,651329E+07	5,440896E+09	5,457409E+09
2976	8,252044E+06	8,254661E+06	2,720304E+09	2,720460E+09	1,650671E+07	5,440763E+09	5,457270E+09
2977	8,258659E+06	8,259597E+06	2,720371E+09	2,720210E+09	1,651826E+07	5,440581E+09	5,457099E+09
2978	8,256428E+06	8,255077E+06	2,720184E+09	2,720218E+09	1,651150E+07	5,440402E+09	5,456914E+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	8,254335E+06	8,256680E+06	2,720002E+09	2,720116E+09	1,651102E+07	5,440117E+09	5,456628E+09
2980	8,261290E+06	8,259819E+06	2,720082E+09	2,719865E+09	1,652111E+07	5,439947E+09	5,456468E+09
2981	8,255012E+06	8,255170E+06	2,719847E+09	2,719973E+09	1,651018E+07	5,439819E+09	5,456329E+09
2982	8,257957E+06	8,258638E+06	2,719846E+09	2,719808E+09	1,651659E+07	5,439655E+09	5,456171E+09
2983	8,260009E+06	8,259623E+06	2,719894E+09	2,719743E+09	1,651963E+07	5,439636E+09	5,456156E+09
2984	8,254910E+06	8,255136E+06	2,719732E+09	2,719935E+09	1,651005E+07	5,439667E+09	5,456177E+09
2985	8,259119E+06	8,261960E+06	2,719945E+09	2,719809E+09	1,652108E+07	5,439755E+09	5,456276E+09
2986	8,257906E+06	8,257088E+06	2,719993E+09	2,719940E+09	1,651499E+07	5,439934E+09	5,456449E+09
2987	8,255103E+06	8,255210E+06	2,719924E+09	2,720097E+09	1,651031E+07	5,440021E+09	5,456531E+09
2988	8,259873E+06	8,260761E+06	2,720158E+09	2,720007E+09	1,652063E+07	5,440165E+09	5,456685E+09
2989	8,256690E+06	8,253470E+06	2,720091E+09	2,720227E+09	1,651016E+07	5,440318E+09	5,456828E+09
2990	8,255020E+06	8,257985E+06	2,720148E+09	2,720193E+09	1,651301E+07	5,440341E+09	5,456854E+09
2991	8,259571E+06	8,259108E+06	2,720331E+09	2,720116E+09	1,651868E+07	5,440447E+09	5,456966E+09
2992	8,253803E+06	8,253992E+06	2,720175E+09	2,720316E+09	1,650780E+07	5,440491E+09	5,456999E+09
2993	8,255682E+06	8,260169E+06	2,720273E+09	2,720172E+09	1,651585E+07	5,440445E+09	5,456961E+09
2994	8,259192E+06	8,255773E+06	2,720250E+09	2,720131E+09	1,651496E+07	5,440381E+09	5,456896E+09
2995	8,253309E+06	8,254822E+06	2,719962E+09	2,720176E+09	1,650813E+07	5,440138E+09	5,456646E+09
2996	8,260319E+06	8,260270E+06	2,720040E+09	2,719893E+09	1,652059E+07	5,439934E+09	5,456454E+09
2997	8,257686E+06	8,256193E+06	2,719874E+09	2,719885E+09	1,651388E+07	5,439759E+09	5,456273E+09
2998	8,255223E+06	8,257619E+06	2,719712E+09	2,719774E+09	1,651284E+07	5,439486E+09	5,455999E+09
2999	8,261797E+06	8,261128E+06	2,719794E+09	2,719552E+09	1,652293E+07	5,439345E+09	5,455868E+09