

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-3000	2,514097E+22	2,513959E+22	3,018092E+21	3,018547E+21	5,028055E+22	6,036640E+21	5,631719E+22
-2999	2,513889E+22	2,514008E+22	3,018711E+21	3,018355E+21	5,027897E+22	6,037066E+21	5,631604E+22
-2998	2,513897E+22	2,513927E+22	3,018722E+21	3,018958E+21	5,027824E+22	6,037680E+21	5,631592E+22
-2997	2,513897E+22	2,513788E+22	3,018622E+21	3,018803E+21	5,027685E+22	6,037425E+21	5,631427E+22
-2996	2,513696E+22	2,513793E+22	3,019267E+21	3,018831E+21	5,027489E+22	6,038098E+21	5,631299E+22
-2995	2,513763E+22	2,513672E+22	3,018916E+21	3,019369E+21	5,027436E+22	6,038285E+21	5,631264E+22
-2994	2,513677E+22	2,513647E+22	3,019071E+21	3,019046E+21	5,027324E+22	6,038117E+21	5,631136E+22
-2993	2,513589E+22	2,513683E+22	3,019411E+21	3,019281E+21	5,027272E+22	6,038692E+21	5,631141E+22
-2992	2,513729E+22	2,513593E+22	3,018888E+21	3,019402E+21	5,027322E+22	6,038290E+21	5,631151E+22
-2991	2,513615E+22	2,513679E+22	3,019272E+21	3,018884E+21	5,027295E+22	6,038156E+21	5,631110E+22
-2990	2,513676E+22	2,513726E+22	3,019227E+21	3,019189E+21	5,027401E+22	6,038415E+21	5,631243E+22
-2989	2,513792E+22	2,513690E+22	3,018735E+21	3,018954E+21	5,027482E+22	6,037690E+21	5,631251E+22
-2988	2,513671E+22	2,513814E+22	3,019099E+21	3,018655E+21	5,027485E+22	6,037754E+21	5,631261E+22
-2987	2,513824E+22	2,513811E+22	3,018659E+21	3,019052E+21	5,027635E+22	6,037711E+21	5,631407E+22
-2986	2,513882E+22	2,513834E+22	3,018477E+21	3,018569E+21	5,027716E+22	6,037045E+21	5,631421E+22
-2985	2,513848E+22	2,513932E+22	3,018822E+21	3,018517E+21	5,027780E+22	6,037339E+21	5,631514E+22
-2984	2,514016E+22	2,513876E+22	3,018290E+21	3,018742E+21	5,027893E+22	6,037032E+21	5,631596E+22
-2983	2,513911E+22	2,513926E+22	3,018571E+21	3,018336E+21	5,027837E+22	6,036907E+21	5,631528E+22
-2982	2,513864E+22	2,513957E+22	3,018825E+21	3,018741E+21	5,027821E+22	6,037566E+21	5,631578E+22
-2981	2,513936E+22	2,513834E+22	3,018436E+21	3,018872E+21	5,027770E+22	6,037309E+21	5,631501E+22
-2980	2,513742E+22	2,513834E+22	3,019032E+21	3,018669E+21	5,027576E+22	6,037701E+21	5,631347E+22
-2979	2,513760E+22	2,513752E+22	3,019019E+21	3,019236E+21	5,027512E+22	6,038254E+21	5,631338E+22
-2978	2,513754E+22	2,513638E+22	3,018913E+21	3,019117E+21	5,027392E+22	6,038030E+21	5,631195E+22
-2977	2,513568E+22	2,513656E+22	3,019503E+21	3,019148E+21	5,027224E+22	6,038651E+21	5,631089E+22
-2976	2,513637E+22	2,513552E+22	3,019142E+21	3,019661E+21	5,027188E+22	6,038803E+21	5,631068E+22
-2975	2,513540E+22	2,513521E+22	3,019349E+21	3,019335E+21	5,027061E+22	6,038684E+21	5,630929E+22
-2974	2,513465E+22	2,513579E+22	3,019706E+21	3,019488E+21	5,027044E+22	6,039194E+21	5,630963E+22
-2973	2,513614E+22	2,513489E+22	3,019205E+21	3,019608E+21	5,027103E+22	6,038813E+21	5,630985E+22
-2972	2,513499E+22	2,513546E+22	3,019523E+21	3,019115E+21	5,027045E+22	6,038638E+21	5,630909E+22
-2971	2,513547E+22	2,513604E+22	3,019418E+21	3,019436E+21	5,027151E+22	6,038854E+21	5,631036E+22
-2970	2,513668E+22	2,513585E+22	3,018917E+21	3,019238E+21	5,027253E+22	6,038155E+21	5,631068E+22
-2969	2,513587E+22	2,513701E+22	3,019252E+21	3,018881E+21	5,027287E+22	6,038133E+21	5,631101E+22
-2968	2,513755E+22	2,513710E+22	3,018835E+21	3,019195E+21	5,027465E+22	6,038029E+21	5,631268E+22
-2967	2,513797E+22	2,513724E+22	3,018721E+21	3,018730E+21	5,027521E+22	6,037451E+21	5,631266E+22
-2966	2,513737E+22	2,513849E+22	3,019089E+21	3,018690E+21	5,027586E+22	6,037779E+21	5,631364E+22
-2965	2,513880E+22	2,513790E+22	3,018588E+21	3,019012E+21	5,027670E+22	6,037599E+21	5,631430E+22
-2964	2,513766E+22	2,513787E+22	3,018844E+21	3,018674E+21	5,027552E+22	6,037517E+21	5,631304E+22
-2963	2,513716E+22	2,513808E+22	3,019096E+21	3,019058E+21	5,027524E+22	6,038154E+21	5,631339E+22
-2962	2,513796E+22	2,513687E+22	3,018736E+21	3,019186E+21	5,027483E+22	6,037922E+21	5,631275E+22
-2961	2,513631E+22	2,513673E+22	3,019311E+21	3,018953E+21	5,027305E+22	6,038264E+21	5,631131E+22
-2960	2,513636E+22	2,513609E+22	3,019285E+21	3,019502E+21	5,027244E+22	6,038787E+21	5,631123E+22
-2959	2,513594E+22	2,513493E+22	3,019212E+21	3,019455E+21	5,027087E+22	6,038667E+21	5,630954E+22
-2958	2,513410E+22	2,513536E+22	3,019801E+21	3,019461E+21	5,026946E+22	6,039262E+21	5,630872E+22
-2957	2,513496E+22	2,513432E+22	3,019473E+21	3,019960E+21	5,026928E+22	6,039433E+21	5,630871E+22
-2956	2,513420E+22	2,513371E+22	3,019640E+21	3,019592E+21	5,026790E+22	6,039233E+21	5,630714E+22
-2955	2,513353E+22	2,513444E+22	3,019960E+21	3,019687E+21	5,026798E+22	6,039647E+21	5,630762E+22
-2954	2,513492E+22	2,513382E+22	3,019438E+21	3,019831E+21	5,026874E+22	6,039268E+21	5,630801E+22
-2953	2,513396E+22	2,513439E+22	3,019689E+21	3,019357E+21	5,026835E+22	6,039046E+21	5,630739E+22
-2952	2,513445E+22	2,513504E+22	3,019570E+21	3,019637E+21	5,026950E+22	6,039207E+21	5,630870E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2951	2,513555E+22	2,513478E+22	3,019130E+21	3,019457E+21	5,027033E+22	6,038586E+21	5,630892E+22
-2950	2,513494E+22	2,513612E+22	3,019484E+21	3,019039E+21	5,027106E+22	6,038523E+21	5,630958E+22
-2949	2,513665E+22	2,513616E+22	3,019120E+21	3,019380E+21	5,027282E+22	6,038500E+21	5,631132E+22
-2948	2,513688E+22	2,513600E+22	3,018966E+21	3,018979E+21	5,027288E+22	6,037945E+21	5,631082E+22
-2947	2,513604E+22	2,513727E+22	3,019312E+21	3,018972E+21	5,027332E+22	6,038284E+21	5,631160E+22
-2946	2,513736E+22	2,513672E+22	3,018838E+21	3,019335E+21	5,027409E+22	6,038173E+21	5,631226E+22
-2945	2,513652E+22	2,513647E+22	3,019081E+21	3,018979E+21	5,027299E+22	6,038059E+21	5,631104E+22
-2944	2,513604E+22	2,513668E+22	3,019352E+21	3,019283E+21	5,027272E+22	6,038636E+21	5,631135E+22
-2943	2,513661E+22	2,513539E+22	3,019055E+21	3,019457E+21	5,027200E+22	6,038512E+21	5,631051E+22
-2942	2,513484E+22	2,513547E+22	3,019622E+21	3,019223E+21	5,027031E+22	6,038845E+21	5,630916E+22
-2941	2,513480E+22	2,513483E+22	3,019621E+21	3,019842E+21	5,026963E+22	6,039463E+21	5,630910E+22
-2940	2,513442E+22	2,513335E+22	3,019512E+21	3,019818E+21	5,026776E+22	6,039330E+21	5,630709E+22
-2939	2,513268E+22	2,513388E+22	3,020085E+21	3,019759E+21	5,026656E+22	6,039844E+21	5,630640E+22
-2938	2,513371E+22	2,513303E+22	3,019781E+21	3,020217E+21	5,026674E+22	6,039998E+21	5,630674E+22
-2937	2,513323E+22	2,513236E+22	3,019896E+21	3,019814E+21	5,026559E+22	6,039709E+21	5,630530E+22
-2936	2,513236E+22	2,513332E+22	3,020175E+21	3,019871E+21	5,026569E+22	6,040046E+21	5,630573E+22
-2935	2,513346E+22	2,513270E+22	3,019670E+21	3,020090E+21	5,026616E+22	6,039760E+21	5,630592E+22
-2934	2,513262E+22	2,513341E+22	3,019911E+21	3,019582E+21	5,026603E+22	6,039494E+21	5,630552E+22
-2933	2,513337E+22	2,513404E+22	3,019828E+21	3,019860E+21	5,026742E+22	6,039688E+21	5,630710E+22
-2932	2,513465E+22	2,513348E+22	3,019357E+21	3,019663E+21	5,026813E+22	6,039020E+21	5,630715E+22
-2931	2,513406E+22	2,513498E+22	3,019683E+21	3,019229E+21	5,026904E+22	6,038913E+21	5,630796E+22
-2930	2,513561E+22	2,513526E+22	3,019331E+21	3,019614E+21	5,027086E+22	6,038945E+21	5,630981E+22
-2929	2,513590E+22	2,513496E+22	3,019136E+21	3,019260E+21	5,027086E+22	6,038396E+21	5,630925E+22
-2928	2,513493E+22	2,513621E+22	3,019505E+21	3,019211E+21	5,027114E+22	6,038716E+21	5,630986E+22
-2927	2,513601E+22	2,513549E+22	3,019119E+21	3,019602E+21	5,027150E+22	6,038721E+21	5,631022E+22
-2926	2,513525E+22	2,513525E+22	3,019402E+21	3,019205E+21	5,027050E+22	6,038607E+21	5,630911E+22
-2925	2,513474E+22	2,513534E+22	3,019720E+21	3,019554E+21	5,027008E+22	6,039274E+21	5,630935E+22
-2924	2,513506E+22	2,513375E+22	3,019375E+21	3,019802E+21	5,026881E+22	6,039178E+21	5,630799E+22
-2923	2,513324E+22	2,513390E+22	3,019898E+21	3,019588E+21	5,026714E+22	6,039486E+21	5,630663E+22
-2922	2,513325E+22	2,513339E+22	3,019919E+21	3,020192E+21	5,026664E+22	6,040111E+21	5,630675E+22
-2921	2,513327E+22	2,513186E+22	3,019779E+21	3,020121E+21	5,026513E+22	6,039900E+21	5,630503E+22
-2920	2,513161E+22	2,513254E+22	3,020347E+21	3,019949E+21	5,026415E+22	6,040296E+21	5,630444E+22
-2919	2,513233E+22	2,513179E+22	3,020089E+21	3,020436E+21	5,026412E+22	6,040524E+21	5,630464E+22
-2918	2,513178E+22	2,513139E+22	3,020168E+21	3,020036E+21	5,026317E+22	6,040204E+21	5,630337E+22
-2917	2,513093E+22	2,513228E+22	3,020447E+21	3,020149E+21	5,026321E+22	6,040595E+21	5,630380E+22
-2916	2,513210E+22	2,513134E+22	3,019891E+21	3,020386E+21	5,026344E+22	6,040278E+21	5,630372E+22
-2915	2,513156E+22	2,513212E+22	3,020098E+21	3,019822E+21	5,026368E+22	6,039920E+21	5,630360E+22
-2914	2,513255E+22	2,513293E+22	3,020047E+21	3,020062E+21	5,026548E+22	6,040109E+21	5,630559E+22
-2913	2,513404E+22	2,513240E+22	3,019536E+21	3,019866E+21	5,026644E+22	6,039402E+21	5,630585E+22
-2912	2,513318E+22	2,513409E+22	3,019845E+21	3,019407E+21	5,026727E+22	6,039252E+21	5,630652E+22
-2911	2,513429E+22	2,513434E+22	3,019563E+21	3,019862E+21	5,026863E+22	6,039424E+21	5,630806E+22
-2910	2,513459E+22	2,513404E+22	3,019398E+21	3,019488E+21	5,026863E+22	6,038886E+21	5,630751E+22
-2909	2,513369E+22	2,513508E+22	3,019833E+21	3,019457E+21	5,026877E+22	6,039290E+21	5,630806E+22
-2908	2,513470E+22	2,513395E+22	3,019435E+21	3,019865E+21	5,026865E+22	6,039300E+21	5,630795E+22
-2907	2,513389E+22	2,513371E+22	3,019690E+21	3,019485E+21	5,026761E+22	6,039175E+21	5,630678E+22
-2906	2,513328E+22	2,513395E+22	3,020012E+21	3,019887E+21	5,026723E+22	6,039899E+21	5,630713E+22
-2905	2,513375E+22	2,513224E+22	3,019620E+21	3,020169E+21	5,026600E+22	6,039789E+21	5,630579E+22
-2904	2,513190E+22	2,513251E+22	3,020139E+21	3,019884E+21	5,026441E+22	6,040024E+21	5,630444E+22
-2903	2,513180E+22	2,513205E+22	3,020239E+21	3,020479E+21	5,026385E+22	6,040717E+21	5,630456E+22

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Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2902	2,513193E+22	2,513066E+22	3,020123E+21	3,020342E+21	5,026259E+22	6,040465E+21	5,630306E+22
-2901	2,513024E+22	2,513133E+22	3,020706E+21	3,020204E+21	5,026156E+22	6,040910E+21	5,630247E+22
-2900	2,513069E+22	2,513032E+22	3,020377E+21	3,020741E+21	5,026102E+22	6,041118E+21	5,630213E+22
-2899	2,513022E+22	2,512996E+22	3,020392E+21	3,020354E+21	5,026018E+22	6,040746E+21	5,630093E+22
-2898	2,512967E+22	2,513097E+22	3,020666E+21	3,020438E+21	5,026063E+22	6,041104E+21	5,630174E+22
-2897	2,513135E+22	2,513004E+22	3,020064E+21	3,020622E+21	5,026139E+22	6,040686E+21	5,630207E+22
-2896	2,513097E+22	2,513108E+22	3,020250E+21	3,019952E+21	5,026205E+22	6,040202E+21	5,630225E+22
-2895	2,513165E+22	2,513210E+22	3,020258E+21	3,020224E+21	5,026375E+22	6,040482E+21	5,630423E+22
-2894	2,513298E+22	2,513181E+22	3,019759E+21	3,020034E+21	5,026479E+22	6,039792E+21	5,630458E+22
-2893	2,513201E+22	2,513332E+22	3,020110E+21	3,019647E+21	5,026532E+22	6,039757E+21	5,630508E+22
-2892	2,513287E+22	2,513313E+22	3,019826E+21	3,020128E+21	5,026600E+22	6,039954E+21	5,630596E+22
-2891	2,513331E+22	2,513269E+22	3,019661E+21	3,019756E+21	5,026600E+22	6,039417E+21	5,630542E+22
-2890	2,513252E+22	2,513362E+22	3,020131E+21	3,019722E+21	5,026614E+22	6,039853E+21	5,630600E+22
-2889	2,513361E+22	2,513242E+22	3,019685E+21	3,020176E+21	5,026603E+22	6,039860E+21	5,630589E+22
-2888	2,513262E+22	2,513230E+22	3,019899E+21	3,019783E+21	5,026492E+22	6,039683E+21	5,630460E+22
-2887	2,513168E+22	2,513258E+22	3,020286E+21	3,020232E+21	5,026427E+22	6,040519E+21	5,630479E+22
-2886	2,513228E+22	2,513105E+22	3,019937E+21	3,020459E+21	5,026332E+22	6,040396E+21	5,630372E+22
-2885	2,513058E+22	2,513121E+22	3,020510E+21	3,020164E+21	5,026179E+22	6,040673E+21	5,630247E+22
-2884	2,513030E+22	2,513049E+22	3,020593E+21	3,020745E+21	5,026080E+22	6,041338E+21	5,630214E+22
-2883	2,513041E+22	2,512919E+22	3,020427E+21	3,020630E+21	5,025960E+22	6,041057E+21	5,630066E+22
-2882	2,512869E+22	2,512994E+22	3,020982E+21	3,020525E+21	5,025863E+22	6,041507E+21	5,630013E+22
-2881	2,512941E+22	2,512887E+22	3,020577E+21	3,021072E+21	5,025828E+22	6,041649E+21	5,629993E+22
-2880	2,512914E+22	2,512867E+22	3,020555E+21	3,020589E+21	5,025781E+22	6,041144E+21	5,629895E+22
-2879	2,512866E+22	2,512985E+22	3,020892E+21	3,020641E+21	5,025852E+22	6,041534E+21	5,630005E+22
-2878	2,513053E+22	2,512921E+22	3,020324E+21	3,020751E+21	5,025975E+22	6,041075E+21	5,630082E+22
-2877	2,513007E+22	2,513032E+22	3,020525E+21	3,020134E+21	5,026040E+22	6,040659E+21	5,630106E+22
-2876	2,513032E+22	2,513110E+22	3,020497E+21	3,020458E+21	5,026143E+22	6,040955E+21	5,630238E+22
-2875	2,513158E+22	2,513072E+22	3,019974E+21	3,020298E+21	5,026230E+22	6,040273E+21	5,630257E+22
-2874	2,513075E+22	2,513210E+22	3,020357E+21	3,019922E+21	5,026286E+22	6,040279E+21	5,630313E+22
-2873	2,513191E+22	2,513170E+22	3,020042E+21	3,020384E+21	5,026360E+22	6,040425E+21	5,630403E+22
-2872	2,513235E+22	2,513133E+22	3,019859E+21	3,019964E+21	5,026368E+22	6,039823E+21	5,630350E+22
-2871	2,513129E+22	2,513239E+22	3,020373E+21	3,019994E+21	5,026369E+22	6,040368E+21	5,630406E+22
-2870	2,513228E+22	2,513136E+22	3,019953E+21	3,020450E+21	5,026364E+22	6,040403E+21	5,630404E+22
-2869	2,513127E+22	2,513115E+22	3,020206E+21	3,020112E+21	5,026242E+22	6,040318E+21	5,630274E+22
-2868	2,513011E+22	2,513112E+22	3,020605E+21	3,020549E+21	5,026123E+22	6,041154E+21	5,630238E+22
-2867	2,513082E+22	2,512954E+22	3,020274E+21	3,020754E+21	5,026036E+22	6,041028E+21	5,630139E+22
-2866	2,512920E+22	2,512968E+22	3,020876E+21	3,020462E+21	5,025888E+22	6,041338E+21	5,630022E+22
-2865	2,512892E+22	2,512891E+22	3,020880E+21	3,021065E+21	5,025783E+22	6,041945E+21	5,629978E+22
-2864	2,512893E+22	2,512773E+22	3,020647E+21	3,020930E+21	5,025666E+22	6,041577E+21	5,629824E+22
-2863	2,512716E+22	2,512856E+22	3,021221E+21	3,020836E+21	5,025572E+22	6,042058E+21	5,629778E+22
-2862	2,512821E+22	2,512774E+22	3,020838E+21	3,021293E+21	5,025595E+22	6,042132E+21	5,629808E+22
-2861	2,512825E+22	2,512763E+22	3,020835E+21	3,020785E+21	5,025587E+22	6,041620E+21	5,629749E+22
-2860	2,512759E+22	2,512872E+22	3,021151E+21	3,020820E+21	5,025631E+22	6,041972E+21	5,629828E+22
-2859	2,512940E+22	2,512827E+22	3,020556E+21	3,020960E+21	5,025767E+22	6,041516E+21	5,629919E+22
-2858	2,512888E+22	2,512935E+22	3,020747E+21	3,020393E+21	5,025822E+22	6,041140E+21	5,629936E+22
-2857	2,512919E+22	2,512994E+22	3,020666E+21	3,020731E+21	5,025913E+22	6,041397E+21	5,630053E+22
-2856	2,513055E+22	2,512953E+22	3,020124E+21	3,020517E+21	5,026008E+22	6,040641E+21	5,630072E+22
-2855	2,512971E+22	2,513087E+22	3,020581E+21	3,020145E+21	5,026058E+22	6,040726E+21	5,630130E+22
-2854	2,513095E+22	2,513063E+22	3,020313E+21	3,020570E+21	5,026158E+22	6,040883E+21	5,630246E+22

1	14	15	16	17	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	2,513127E+22	2,513025E+22	3,020149E+21	3,020227E+21	5,026152E+22	6,040376E+21	5,630190E+22
-2852	2,512975E+22	2,513106E+22	3,020645E+21	3,020308E+21	5,026081E+22	6,040953E+21	5,630176E+22
-2851	2,513074E+22	2,512998E+22	3,020245E+21	3,020779E+21	5,026073E+22	6,041024E+21	5,630175E+22
-2850	2,512987E+22	2,512968E+22	3,020540E+21	3,020440E+21	5,025955E+22	6,040981E+21	5,630053E+22
-2849	2,512887E+22	2,512952E+22	3,020912E+21	3,020841E+21	5,025839E+22	6,041752E+21	5,630014E+22
-2848	2,512952E+22	2,512803E+22	3,020556E+21	3,021004E+21	5,025755E+22	6,041561E+21	5,629911E+22
-2847	2,512764E+22	2,512830E+22	3,021179E+21	3,020772E+21	5,025594E+22	6,041951E+21	5,629789E+22
-2846	2,512735E+22	2,512769E+22	3,021177E+21	3,021350E+21	5,025505E+22	6,042527E+21	5,629757E+22
-2845	2,512750E+22	2,512649E+22	3,020944E+21	3,021246E+21	5,025399E+22	6,042190E+21	5,629618E+22
-2844	2,512573E+22	2,512713E+22	3,021490E+21	3,021115E+21	5,025286E+22	6,042605E+21	5,629546E+22
-2843	2,512706E+22	2,512642E+22	3,021116E+21	3,021519E+21	5,025348E+22	6,042635E+21	5,629611E+22
-2842	2,512726E+22	2,512645E+22	3,021116E+21	3,021017E+21	5,025371E+22	6,042133E+21	5,629584E+22
-2841	2,512658E+22	2,512756E+22	3,021344E+21	3,021063E+21	5,025415E+22	6,042407E+21	5,629655E+22
-2840	2,512823E+22	2,512722E+22	3,020701E+21	3,021179E+21	5,025545E+22	6,041880E+21	5,629733E+22
-2839	2,512767E+22	2,512831E+22	3,020929E+21	3,020642E+21	5,025598E+22	6,041572E+21	5,629755E+22
-2838	2,512818E+22	2,512899E+22	3,020891E+21	3,020896E+21	5,025716E+22	6,041787E+21	5,629895E+22
-2837	2,512971E+22	2,512852E+22	3,020384E+21	3,020700E+21	5,025823E+22	6,041084E+21	5,629931E+22
-2836	2,512859E+22	2,512963E+22	3,020829E+21	3,020355E+21	5,025822E+22	6,041184E+21	5,629940E+22
-2835	2,512969E+22	2,512947E+22	3,020571E+21	3,020831E+21	5,025916E+22	6,041402E+21	5,630056E+22
-2834	2,512996E+22	2,512903E+22	3,020424E+21	3,020559E+21	5,025899E+22	6,040983E+21	5,629997E+22
-2833	2,512846E+22	2,512963E+22	3,020885E+21	3,020643E+21	5,025810E+22	6,041527E+21	5,629963E+22
-2832	2,512947E+22	2,512856E+22	3,020499E+21	3,021051E+21	5,025803E+22	6,041550E+21	5,629958E+22
-2831	2,512855E+22	2,512824E+22	3,020867E+21	3,020728E+21	5,025680E+22	6,041595E+21	5,629839E+22
-2830	2,512751E+22	2,512823E+22	3,021269E+21	3,021087E+21	5,025574E+22	6,042356E+21	5,629809E+22
-2829	2,512801E+22	2,512673E+22	3,020900E+21	3,021329E+21	5,025474E+22	6,042229E+21	5,629697E+22
-2828	2,512577E+22	2,512669E+22	3,021479E+21	3,021125E+21	5,025246E+22	6,042603E+21	5,629506E+22
-2827	2,512570E+22	2,512613E+22	3,021476E+21	3,021681E+21	5,025183E+22	6,043156E+21	5,629499E+22
-2826	2,512622E+22	2,512496E+22	3,021248E+21	3,021546E+21	5,025118E+22	6,042794E+21	5,629397E+22
-2825	2,512473E+22	2,512565E+22	3,021723E+21	3,021359E+21	5,025038E+22	6,043082E+21	5,629346E+22
-2824	2,512611E+22	2,512524E+22	3,021315E+21	3,021707E+21	5,025135E+22	6,043022E+21	5,629437E+22
-2823	2,512612E+22	2,512551E+22	3,021319E+21	3,021247E+21	5,025163E+22	6,042567E+21	5,629420E+22
-2822	2,512545E+22	2,512679E+22	3,021555E+21	3,021248E+21	5,025224E+22	6,042803E+21	5,629504E+22
-2821	2,512715E+22	2,512637E+22	3,020928E+21	3,021388E+21	5,025353E+22	6,042316E+21	5,629584E+22
-2820	2,512643E+22	2,512713E+22	3,021163E+21	3,020845E+21	5,025356E+22	6,042008E+21	5,629557E+22
-2819	2,512712E+22	2,512779E+22	3,021164E+21	3,021086E+21	5,025491E+22	6,042250E+21	5,629716E+22
-2818	2,512868E+22	2,512732E+22	3,020672E+21	3,020955E+21	5,025600E+22	6,041628E+21	5,629763E+22
-2817	2,512745E+22	2,512834E+22	3,021032E+21	3,020658E+21	5,025579E+22	6,041689E+21	5,629748E+22
-2816	2,512842E+22	2,512819E+22	3,020761E+21	3,021118E+21	5,025662E+22	6,041879E+21	5,629850E+22
-2815	2,512865E+22	2,512778E+22	3,020673E+21	3,020874E+21	5,025643E+22	6,041547E+21	5,629798E+22
-2814	2,512729E+22	2,512845E+22	3,021195E+21	3,020868E+21	5,025574E+22	6,042063E+21	5,629780E+22
-2813	2,512828E+22	2,512735E+22	3,020851E+21	3,021295E+21	5,025562E+22	6,042146E+21	5,629777E+22
-2812	2,512695E+22	2,512678E+22	3,021210E+21	3,021023E+21	5,025373E+22	6,042233E+21	5,629597E+22
-2811	2,512577E+22	2,512676E+22	3,021604E+21	3,021410E+21	5,025252E+22	6,043015E+21	5,629554E+22
-2810	2,512632E+22	2,512518E+22	3,021227E+21	3,021715E+21	5,025150E+22	6,042941E+21	5,629444E+22
-2809	2,512433E+22	2,512497E+22	3,021716E+21	3,021484E+21	5,024930E+22	6,043200E+21	5,629250E+22
-2808	2,512449E+22	2,512455E+22	3,021706E+21	3,021939E+21	5,024904E+22	6,043645E+21	5,629268E+22
-2807	2,512517E+22	2,512366E+22	3,021520E+21	3,021789E+21	5,024883E+22	6,043309E+21	5,629214E+22
-2806	2,512375E+22	2,512467E+22	3,021998E+21	3,021535E+21	5,024843E+22	6,043533E+21	5,629196E+22
-2805	2,512495E+22	2,512442E+22	3,021576E+21	3,021925E+21	5,024937E+22	6,043501E+21	5,629287E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,512461E+22	2,512443E+22	3,021551E+21	3,021495E+21	5,024904E+22	6,043046E+21	5,629209E+22
-2803	2,512408E+22	2,512567E+22	3,021803E+21	3,021469E+21	5,024975E+22	6,043272E+21	5,629302E+22
-2802	2,512605E+22	2,512518E+22	3,021194E+21	3,021619E+21	5,025123E+22	6,042813E+21	5,629404E+22
-2801	2,512552E+22	2,512578E+22	3,021357E+21	3,021070E+21	5,025130E+22	6,042427E+21	5,629373E+22
-2800	2,512620E+22	2,512659E+22	3,021342E+21	3,021298E+21	5,025278E+22	6,042640E+21	5,629542E+22
-2799	2,512758E+22	2,512630E+22	3,020871E+21	3,021237E+21	5,025388E+22	6,042108E+21	5,629599E+22
-2798	2,512637E+22	2,512741E+22	3,021253E+21	3,020909E+21	5,025378E+22	6,042162E+21	5,629594E+22
-2797	2,512731E+22	2,512722E+22	3,021026E+21	3,021377E+21	5,025453E+22	6,042404E+21	5,629693E+22
-2796	2,512723E+22	2,512643E+22	3,020982E+21	3,021132E+21	5,025366E+22	6,042114E+21	5,629578E+22
-2795	2,512589E+22	2,512705E+22	3,021566E+21	3,021120E+21	5,025293E+22	6,042686E+21	5,629562E+22
-2794	2,512675E+22	2,512586E+22	3,021232E+21	3,021622E+21	5,025261E+22	6,042854E+21	5,629546E+22
-2793	2,512527E+22	2,512506E+22	3,021493E+21	3,021403E+21	5,025033E+22	6,042896E+21	5,629323E+22
-2792	2,512414E+22	2,512503E+22	3,021852E+21	3,021760E+21	5,024917E+22	6,043613E+21	5,629278E+22
-2791	2,512486E+22	2,512359E+22	3,021504E+21	3,022052E+21	5,024845E+22	6,043556E+21	5,629201E+22
-2790	2,512323E+22	2,512364E+22	3,022003E+21	3,021710E+21	5,024687E+22	6,043713E+21	5,629059E+22
-2789	2,512349E+22	2,512344E+22	3,022011E+21	3,022143E+21	5,024693E+22	6,044153E+21	5,629109E+22
-2788	2,512376E+22	2,512254E+22	3,021813E+21	3,022021E+21	5,024630E+22	6,043834E+21	5,629013E+22
-2787	2,512228E+22	2,512366E+22	3,022285E+21	3,021778E+21	5,024594E+22	6,044063E+21	5,629000E+22
-2786	2,512351E+22	2,512332E+22	3,021856E+21	3,022213E+21	5,024683E+22	6,044068E+21	5,629090E+22
-2785	2,512334E+22	2,512309E+22	3,021742E+21	3,021773E+21	5,024643E+22	6,043515E+21	5,628995E+22
-2784	2,512308E+22	2,512429E+22	3,021981E+21	3,021674E+21	5,024738E+22	6,043655E+21	5,629103E+22
-2783	2,512518E+22	2,512403E+22	3,021407E+21	3,021843E+21	5,024920E+22	6,043250E+21	5,629245E+22
-2782	2,512475E+22	2,512485E+22	3,021558E+21	3,021268E+21	5,024960E+22	6,042827E+21	5,629242E+22
-2781	2,512521E+22	2,512576E+22	3,021549E+21	3,021534E+21	5,025097E+22	6,043082E+21	5,629405E+22
-2780	2,512622E+22	2,512523E+22	3,021108E+21	3,021504E+21	5,025145E+22	6,042612E+21	5,629406E+22
-2779	2,512508E+22	2,512624E+22	3,021549E+21	3,021141E+21	5,025132E+22	6,042690E+21	5,629401E+22
-2778	2,512604E+22	2,512594E+22	3,021376E+21	3,021628E+21	5,025197E+22	6,043004E+21	5,629498E+22
-2777	2,512594E+22	2,512490E+22	3,021270E+21	3,021419E+21	5,025084E+22	6,042689E+21	5,629353E+22
-2776	2,512444E+22	2,512548E+22	3,021836E+21	3,021418E+21	5,024992E+22	6,043254E+21	5,629317E+22
-2775	2,512516E+22	2,512442E+22	3,021510E+21	3,021988E+21	5,024957E+22	6,043498E+21	5,629307E+22
-2774	2,512386E+22	2,512364E+22	3,021764E+21	3,021729E+21	5,024750E+22	6,043493E+21	5,629099E+22
-2773	2,512284E+22	2,512366E+22	3,022140E+21	3,022054E+21	5,024651E+22	6,044193E+21	5,629070E+22
-2772	2,512342E+22	2,512212E+22	3,021833E+21	3,022323E+21	5,024554E+22	6,044156E+21	5,628970E+22
-2771	2,512191E+22	2,512233E+22	3,022363E+21	3,021954E+21	5,024424E+22	6,044317E+21	5,628856E+22
-2770	2,512207E+22	2,512225E+22	3,022361E+21	3,022440E+21	5,024432E+22	6,044801E+21	5,628912E+22
-2769	2,512221E+22	2,512119E+22	3,022049E+21	3,022349E+21	5,024340E+22	6,044398E+21	5,628779E+22
-2768	2,512087E+22	2,512224E+22	3,022482E+21	3,022061E+21	5,024311E+22	6,044543E+21	5,628765E+22
-2767	2,512230E+22	2,512205E+22	3,022066E+21	3,022465E+21	5,024435E+22	6,044530E+21	5,628888E+22
-2766	2,512255E+22	2,512196E+22	3,021945E+21	3,021944E+21	5,024451E+22	6,043889E+21	5,628840E+22
-2765	2,512240E+22	2,512336E+22	3,022185E+21	3,021838E+21	5,024576E+22	6,044023E+21	5,628978E+22
-2764	2,512405E+22	2,512307E+22	3,021628E+21	3,022046E+21	5,024711E+22	6,043674E+21	5,629079E+22
-2763	2,512358E+22	2,512398E+22	3,021800E+21	3,021493E+21	5,024756E+22	6,043293E+21	5,629085E+22
-2762	2,512400E+22	2,512477E+22	3,021821E+21	3,021801E+21	5,024877E+22	6,043622E+21	5,629240E+22
-2761	2,512495E+22	2,512393E+22	3,021341E+21	3,021772E+21	5,024887E+22	6,043113E+21	5,629198E+22
-2760	2,512392E+22	2,512478E+22	3,021811E+21	3,021380E+21	5,024870E+22	6,043191E+21	5,629189E+22
-2759	2,512477E+22	2,512458E+22	3,021683E+21	3,021900E+21	5,024934E+22	6,043583E+21	5,629293E+22
-2758	2,512463E+22	2,512360E+22	3,021558E+21	3,021718E+21	5,024823E+22	6,043276E+21	5,629151E+22
-2757	2,512298E+22	2,512414E+22	3,022105E+21	3,021752E+21	5,024712E+22	6,043858E+21	5,629098E+22
-2756	2,512339E+22	2,512286E+22	3,021813E+21	3,022338E+21	5,024625E+22	6,044151E+21	5,629040E+22

1	14	15	16	17	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	2,512237E+22	2,512213E+22	3,022106E+21	3,022026E+21	5,024450E+22	6,044132E+21	5,628863E+22
-2754	2,512151E+22	2,512221E+22	3,022508E+21	3,022347E+21	5,024372E+22	6,044855E+21	5,628858E+22
-2753	2,512205E+22	2,512063E+22	3,022137E+21	3,022624E+21	5,024268E+22	6,044761E+21	5,628744E+22
-2752	2,512052E+22	2,512091E+22	3,022625E+21	3,022249E+21	5,024143E+22	6,044874E+21	5,628631E+22
-2751	2,512059E+22	2,512105E+22	3,022612E+21	3,022750E+21	5,024164E+22	6,045362E+21	5,628700E+22
-2750	2,512101E+22	2,512003E+22	3,022263E+21	3,022614E+21	5,024103E+22	6,044877E+21	5,628591E+22
-2749	2,511982E+22	2,512110E+22	3,022686E+21	3,022265E+21	5,024092E+22	6,044951E+21	5,628587E+22
-2748	2,512116E+22	2,512084E+22	3,022316E+21	3,022648E+21	5,024200E+22	6,044964E+21	5,628697E+22
-2747	2,512158E+22	2,512091E+22	3,022219E+21	3,022113E+21	5,024249E+22	6,044332E+21	5,628682E+22
-2746	2,512130E+22	2,512242E+22	3,022450E+21	3,022080E+21	5,024373E+22	6,044530E+21	5,628826E+22
-2745	2,512279E+22	2,512195E+22	3,021821E+21	3,022327E+21	5,024474E+22	6,044148E+21	5,628889E+22
-2744	2,512242E+22	2,512271E+22	3,021987E+21	3,021751E+21	5,024513E+22	6,043738E+21	5,628887E+22
-2743	2,512288E+22	2,512362E+22	3,022054E+21	3,022034E+21	5,024650E+22	6,044088E+21	5,629059E+22
-2742	2,512403E+22	2,512276E+22	3,021589E+21	3,021976E+21	5,024679E+22	6,043565E+21	5,629036E+22
-2741	2,512287E+22	2,512362E+22	3,022071E+21	3,021613E+21	5,024649E+22	6,043684E+21	5,629017E+22
-2740	2,512316E+22	2,512329E+22	3,021979E+21	3,022200E+21	5,024645E+22	6,044179E+21	5,629063E+22
-2739	2,512303E+22	2,512226E+22	3,021878E+21	3,022051E+21	5,024529E+22	6,043929E+21	5,628922E+22
-2738	2,512144E+22	2,512268E+22	3,022434E+21	3,022122E+21	5,024412E+22	6,044556E+21	5,628868E+22
-2737	2,512189E+22	2,512116E+22	3,022107E+21	3,022679E+21	5,024305E+22	6,044786E+21	5,628784E+22
-2736	2,512112E+22	2,512041E+22	3,022411E+21	3,022324E+21	5,024153E+22	6,044736E+21	5,628627E+22
-2735	2,512020E+22	2,512081E+22	3,022831E+21	3,022641E+21	5,024101E+22	6,045472E+21	5,628649E+22
-2734	2,512072E+22	2,511940E+22	3,022424E+21	3,022919E+21	5,024012E+22	6,045343E+21	5,628546E+22
-2733	2,511913E+22	2,511972E+22	3,022877E+21	3,022538E+21	5,023885E+22	6,045414E+21	5,628426E+22
-2732	2,511895E+22	2,511970E+22	3,022890E+21	3,023003E+21	5,023865E+22	6,045893E+21	5,628454E+22
-2731	2,511969E+22	2,511877E+22	3,022562E+21	3,022811E+21	5,023845E+22	6,045374E+21	5,628383E+22
-2730	2,511877E+22	2,511989E+22	3,022974E+21	3,022477E+21	5,023866E+22	6,045451E+21	5,628411E+22
-2729	2,512002E+22	2,511959E+22	3,022539E+21	3,022876E+21	5,023961E+22	6,045415E+21	5,628503E+22
-2728	2,512053E+22	2,511976E+22	3,022400E+21	3,022362E+21	5,024029E+22	6,044762E+21	5,628505E+22
-2727	2,512021E+22	2,512147E+22	3,022633E+21	3,022339E+21	5,024168E+22	6,044973E+21	5,628665E+22
-2726	2,512186E+22	2,512100E+22	3,022003E+21	3,022554E+21	5,024287E+22	6,044557E+21	5,628743E+22
-2725	2,512155E+22	2,512170E+22	3,022186E+21	3,021948E+21	5,024325E+22	6,044133E+21	5,628738E+22
-2724	2,512165E+22	2,512243E+22	3,022339E+21	3,022231E+21	5,024408E+22	6,044571E+21	5,628865E+22
-2723	2,512276E+22	2,512162E+22	3,021917E+21	3,022214E+21	5,024438E+22	6,044131E+21	5,628851E+22
-2722	2,512141E+22	2,512236E+22	3,022390E+21	3,021954E+21	5,024376E+22	6,044344E+21	5,628811E+22
-2721	2,512150E+22	2,512170E+22	3,022250E+21	3,022573E+21	5,024320E+22	6,044822E+21	5,628802E+22
-2720	2,512160E+22	2,512051E+22	3,022144E+21	3,022399E+21	5,024211E+22	6,044543E+21	5,628666E+22
-2719	2,512015E+22	2,512114E+22	3,022727E+21	3,022423E+21	5,024129E+22	6,045150E+21	5,628644E+22
-2718	2,512085E+22	2,511976E+22	3,022409E+21	3,022944E+21	5,024061E+22	6,045352E+21	5,628596E+22
-2717	2,511992E+22	2,511917E+22	3,022701E+21	3,022585E+21	5,023909E+22	6,045285E+21	5,628437E+22
-2716	2,511848E+22	2,511958E+22	3,023156E+21	3,022926E+21	5,023806E+22	6,046082E+21	5,628414E+22
-2715	2,511907E+22	2,511817E+22	3,022762E+21	3,023204E+21	5,023724E+22	6,045966E+21	5,628320E+22
-2714	2,511757E+22	2,511837E+22	3,023196E+21	3,022846E+21	5,023593E+22	6,046042E+21	5,628198E+22
-2713	2,511749E+22	2,511813E+22	3,023154E+21	3,023269E+21	5,023562E+22	6,046422E+21	5,628204E+22
-2712	2,511861E+22	2,511720E+22	3,022805E+21	3,023053E+21	5,023582E+22	6,045858E+21	5,628168E+22
-2711	2,511775E+22	2,511872E+22	3,023188E+21	3,022725E+21	5,023648E+22	6,045913E+21	5,628239E+22
-2710	2,511910E+22	2,511862E+22	3,022713E+21	3,023131E+21	5,023773E+22	6,045844E+21	5,628357E+22
-2709	2,511958E+22	2,511885E+22	3,022550E+21	3,022595E+21	5,023843E+22	6,045145E+21	5,628357E+22
-2708	2,511900E+22	2,512046E+22	3,022855E+21	3,022534E+21	5,023946E+22	6,045389E+21	5,628485E+22
-2707	2,512080E+22	2,512003E+22	3,022289E+21	3,022707E+21	5,024083E+22	6,044997E+21	5,628583E+22

1	14	15	16	17	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	2,512049E+22	2,512063E+22	3,022493E+21	3,022171E+21	5,024112E+22	6,044664E+21	5,628578E+22
-2705	2,512025E+22	2,512111E+22	3,022609E+21	3,022498E+21	5,024136E+22	6,045107E+21	5,628647E+22
-2704	2,512138E+22	2,512017E+22	3,022168E+21	3,022545E+21	5,024154E+22	6,044713E+21	5,628626E+22
-2703	2,512003E+22	2,512096E+22	3,022634E+21	3,022301E+21	5,024099E+22	6,044935E+21	5,628593E+22
-2702	2,512031E+22	2,512027E+22	3,022500E+21	3,022884E+21	5,024058E+22	6,045383E+21	5,628596E+22
-2701	2,512052E+22	2,511912E+22	3,022413E+21	3,022660E+21	5,023964E+22	6,045073E+21	5,628471E+22
-2700	2,511874E+22	2,511971E+22	3,023085E+21	3,022667E+21	5,023845E+22	6,045751E+21	5,628420E+22
-2699	2,511930E+22	2,511853E+22	3,022810E+21	3,023209E+21	5,023783E+22	6,046019E+21	5,628385E+22
-2698	2,511820E+22	2,511789E+22	3,023070E+21	3,022952E+21	5,023609E+22	6,046022E+21	5,628211E+22
-2697	2,511655E+22	2,511795E+22	3,023460E+21	3,023283E+21	5,023450E+22	6,046744E+21	5,628124E+22
-2696	2,511752E+22	2,511641E+22	3,023036E+21	3,023529E+21	5,023393E+22	6,046565E+21	5,628049E+22
-2695	2,511634E+22	2,511682E+22	3,023445E+21	3,023111E+21	5,023315E+22	6,046556E+21	5,627971E+22
-2694	2,511661E+22	2,511679E+22	3,023374E+21	3,023497E+21	5,023340E+22	6,046870E+21	5,628027E+22
-2693	2,511775E+22	2,511618E+22	3,022980E+21	3,023265E+21	5,023394E+22	6,046246E+21	5,628018E+22
-2692	2,511655E+22	2,511783E+22	3,023396E+21	3,022947E+21	5,023437E+22	6,046343E+21	5,628072E+22
-2691	2,511798E+22	2,511787E+22	3,022965E+21	3,023330E+21	5,023584E+22	6,046294E+21	5,628214E+22
-2690	2,511849E+22	2,511798E+22	3,022805E+21	3,022824E+21	5,023647E+22	6,045629E+21	5,628210E+22
-2689	2,511779E+22	2,511923E+22	3,023107E+21	3,022731E+21	5,023702E+22	6,045838E+21	5,628286E+22
-2688	2,511974E+22	2,511865E+22	3,022554E+21	3,022929E+21	5,023840E+22	6,045482E+21	5,628388E+22
-2687	2,511929E+22	2,511940E+22	3,022743E+21	3,022451E+21	5,023869E+22	6,045194E+21	5,628388E+22
-2686	2,511907E+22	2,511985E+22	3,022830E+21	3,022819E+21	5,023892E+22	6,045649E+21	5,628457E+22
-2685	2,512016E+22	2,511884E+22	3,022373E+21	3,022844E+21	5,023900E+22	6,045217E+21	5,628422E+22
-2684	2,511861E+22	2,511957E+22	3,022913E+21	3,022571E+21	5,023819E+22	6,045484E+21	5,628367E+22
-2683	2,511906E+22	2,511899E+22	3,022855E+21	3,023107E+21	5,023805E+22	6,045962E+21	5,628401E+22
-2682	2,511917E+22	2,511784E+22	3,022788E+21	3,022956E+21	5,023701E+22	6,045743E+21	5,628275E+22
-2681	2,511700E+22	2,511823E+22	3,023428E+21	3,022994E+21	5,023523E+22	6,046423E+21	5,628165E+22
-2680	2,511759E+22	2,511692E+22	3,023132E+21	3,023579E+21	5,023450E+22	6,046711E+21	5,628121E+22
-2679	2,511654E+22	2,511634E+22	3,023359E+21	3,023325E+21	5,023287E+22	6,046684E+21	5,627956E+22
-2678	2,511522E+22	2,511635E+22	3,023708E+21	3,023601E+21	5,023157E+22	6,047309E+21	5,627888E+22
-2677	2,511643E+22	2,511491E+22	3,023262E+21	3,023769E+21	5,023134E+22	6,047031E+21	5,627837E+22
-2676	2,511515E+22	2,511550E+22	3,023716E+21	3,023329E+21	5,023065E+22	6,047044E+21	5,627770E+22
-2675	2,511547E+22	2,511583E+22	3,023670E+21	3,023705E+21	5,023130E+22	6,047375E+21	5,627867E+22
-2674	2,511652E+22	2,511533E+22	3,023253E+21	3,023542E+21	5,023185E+22	6,046795E+21	5,627864E+22
-2673	2,511515E+22	2,511667E+22	3,023632E+21	3,023190E+21	5,023183E+22	6,046822E+21	5,627865E+22
-2672	2,511685E+22	2,511660E+22	3,023207E+21	3,023540E+21	5,023345E+22	6,046747E+21	5,628020E+22
-2671	2,511748E+22	2,511684E+22	3,023038E+21	3,023026E+21	5,023432E+22	6,046064E+21	5,628038E+22
-2670	2,511686E+22	2,511806E+22	3,023319E+21	3,022946E+21	5,023492E+22	6,046265E+21	5,628119E+22
-2669	2,511868E+22	2,511759E+22	3,022736E+21	3,023167E+21	5,023627E+22	6,045903E+21	5,628218E+22
-2668	2,511792E+22	2,511824E+22	3,022971E+21	3,022731E+21	5,023617E+22	6,045702E+21	5,628187E+22
-2667	2,511776E+22	2,511873E+22	3,023118E+21	3,023081E+21	5,023649E+22	6,046198E+21	5,628269E+22
-2666	2,511890E+22	2,511765E+22	3,022682E+21	3,023147E+21	5,023655E+22	6,045829E+21	5,628238E+22
-2665	2,511720E+22	2,511802E+22	3,023233E+21	3,022845E+21	5,023522E+22	6,046078E+21	5,628130E+22
-2664	2,511771E+22	2,511740E+22	3,023200E+21	3,023409E+21	5,023511E+22	6,046609E+21	5,628172E+22
-2663	2,511760E+22	2,511643E+22	3,023112E+21	3,023317E+21	5,023403E+22	6,046429E+21	5,628046E+22
-2662	2,511543E+22	2,511669E+22	3,023711E+21	3,023377E+21	5,023212E+22	6,047088E+21	5,627921E+22
-2661	2,511608E+22	2,511535E+22	3,023382E+21	3,023901E+21	5,023143E+22	6,047283E+21	5,627871E+22
-2660	2,511501E+22	2,511475E+22	3,023656E+21	3,023599E+21	5,022976E+22	6,047256E+21	5,627701E+22
-2659	2,511400E+22	2,511500E+22	3,024044E+21	3,023807E+21	5,022899E+22	6,047851E+21	5,627684E+22
-2658	2,511523E+22	2,511378E+22	3,023582E+21	3,024028E+21	5,022900E+22	6,047610E+21	5,627661E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2657	2,511372E+22	2,511428E+22	3,023982E+21	3,023598E+21	5,022800E+22	6,047580E+21	5,627558E+22
-2656	2,511420E+22	2,511462E+22	3,023919E+21	3,023989E+21	5,022882E+22	6,047908E+21	5,627672E+22
-2655	2,511527E+22	2,511428E+22	3,023477E+21	3,023810E+21	5,022955E+22	6,047287E+21	5,627684E+22
-2654	2,511420E+22	2,511551E+22	3,023826E+21	3,023418E+21	5,022971E+22	6,047244E+21	5,627695E+22
-2653	2,511596E+22	2,511543E+22	3,023392E+21	3,023696E+21	5,023139E+22	6,047088E+21	5,627848E+22
-2652	2,511634E+22	2,511572E+22	3,023278E+21	3,023225E+21	5,023206E+22	6,046502E+21	5,627856E+22
-2651	2,511569E+22	2,511710E+22	3,023582E+21	3,023179E+21	5,023278E+22	6,046761E+21	5,627954E+22
-2650	2,511735E+22	2,511657E+22	3,022995E+21	3,023487E+21	5,023392E+22	6,046482E+21	5,628041E+22
-2649	2,511648E+22	2,511683E+22	3,023217E+21	3,023030E+21	5,023331E+22	6,046247E+21	5,627956E+22
-2648	2,511660E+22	2,511719E+22	3,023396E+21	3,023350E+21	5,023379E+22	6,046746E+21	5,628054E+22
-2647	2,511773E+22	2,511628E+22	3,022982E+21	3,023415E+21	5,023402E+22	6,046397E+21	5,628041E+22
-2646	2,511603E+22	2,511663E+22	3,023519E+21	3,023146E+21	5,023266E+22	6,046665E+21	5,627932E+22
-2645	2,511628E+22	2,511608E+22	3,023465E+21	3,023706E+21	5,023236E+22	6,047171E+21	5,627953E+22
-2644	2,511588E+22	2,511504E+22	3,023427E+21	3,023661E+21	5,023092E+22	6,047087E+21	5,627801E+22
-2643	2,511383E+22	2,511530E+22	3,024060E+21	3,023679E+21	5,022913E+22	6,047738E+21	5,627687E+22
-2642	2,511456E+22	2,511393E+22	3,023734E+21	3,024213E+21	5,022849E+22	6,047946E+21	5,627644E+22
-2641	2,511350E+22	2,511304E+22	3,023991E+21	3,023873E+21	5,022654E+22	6,047865E+21	5,627441E+22
-2640	2,511269E+22	2,511343E+22	3,024364E+21	3,024098E+21	5,022611E+22	6,048462E+21	5,627457E+22
-2639	2,511384E+22	2,511257E+22	3,023861E+21	3,024355E+21	5,022641E+22	6,048216E+21	5,627462E+22
-2638	2,511247E+22	2,511303E+22	3,024191E+21	3,023917E+21	5,022550E+22	6,048108E+21	5,627361E+22
-2637	2,511306E+22	2,511345E+22	3,024095E+21	3,024208E+21	5,022651E+22	6,048302E+21	5,627481E+22
-2636	2,511414E+22	2,511315E+22	3,023700E+21	3,023989E+21	5,022729E+22	6,047689E+21	5,627498E+22
-2635	2,511322E+22	2,511451E+22	3,024090E+21	3,023557E+21	5,022774E+22	6,047646E+21	5,627538E+22
-2634	2,511485E+22	2,511457E+22	3,023648E+21	3,023912E+21	5,022942E+22	6,047560E+21	5,627698E+22
-2633	2,511497E+22	2,511454E+22	3,023504E+21	3,023487E+21	5,022951E+22	6,046991E+21	5,627650E+22
-2632	2,511449E+22	2,511581E+22	3,023806E+21	3,023479E+21	5,023030E+22	6,047285E+21	5,627758E+22
-2631	2,511617E+22	2,511538E+22	3,023228E+21	3,023785E+21	5,023155E+22	6,047013E+21	5,627856E+22
-2630	2,511553E+22	2,511546E+22	3,023438E+21	3,023305E+21	5,023099E+22	6,046743E+21	5,627773E+22
-2629	2,511563E+22	2,511586E+22	3,023636E+21	3,023557E+21	5,023148E+22	6,047193E+21	5,627868E+22
-2628	2,511637E+22	2,511504E+22	3,023299E+21	3,023682E+21	5,023141E+22	6,046982E+21	5,627839E+22
-2627	2,511450E+22	2,511546E+22	3,023876E+21	3,023452E+21	5,022995E+22	6,047328E+21	5,627728E+22
-2626	2,511452E+22	2,511480E+22	3,023818E+21	3,024068E+21	5,022932E+22	6,047887E+21	5,627721E+22
-2625	2,511403E+22	2,511329E+22	3,023769E+21	3,024009E+21	5,022732E+22	6,047778E+21	5,627510E+22
-2624	2,511236E+22	2,511345E+22	3,024394E+21	3,023998E+21	5,022581E+22	6,048392E+21	5,627420E+22
-2623	2,511316E+22	2,511233E+22	3,024058E+21	3,024520E+21	5,022549E+22	6,048578E+21	5,627407E+22
-2622	2,511228E+22	2,511155E+22	3,024247E+21	3,024202E+21	5,022383E+22	6,048449E+21	5,627228E+22
-2621	2,511144E+22	2,511214E+22	3,024569E+21	3,024371E+21	5,022358E+22	6,048940E+21	5,627252E+22
-2620	2,511243E+22	2,511146E+22	3,024111E+21	3,024631E+21	5,022389E+22	6,048742E+21	5,627263E+22
-2619	2,511129E+22	2,511205E+22	3,024455E+21	3,024132E+21	5,022334E+22	6,048588E+21	5,627192E+22
-2618	2,511191E+22	2,511247E+22	3,024365E+21	3,024399E+21	5,022437E+22	6,048763E+21	5,627314E+22
-2617	2,511289E+22	2,511185E+22	3,023967E+21	3,024177E+21	5,022474E+22	6,048144E+21	5,627288E+22
-2616	2,511211E+22	2,511321E+22	3,024340E+21	3,023797E+21	5,022532E+22	6,048136E+21	5,627346E+22
-2615	2,511357E+22	2,511347E+22	3,023878E+21	3,024207E+21	5,022704E+22	6,048084E+21	5,627513E+22
-2614	2,511389E+22	2,511327E+22	3,023682E+21	3,023801E+21	5,022716E+22	6,047483E+21	5,627464E+22
-2613	2,511354E+22	2,511454E+22	3,023971E+21	3,023697E+21	5,022808E+22	6,047668E+21	5,627575E+22
-2612	2,511513E+22	2,511423E+22	3,023485E+21	3,023986E+21	5,022935E+22	6,047471E+21	5,627683E+22
-2611	2,511451E+22	2,511443E+22	3,023749E+21	3,023501E+21	5,022894E+22	6,047250E+21	5,627619E+22
-2610	2,511424E+22	2,511489E+22	3,023968E+21	3,023826E+21	5,022914E+22	6,047794E+21	5,627693E+22
-2609	2,511458E+22	2,511364E+22	3,023633E+21	3,024020E+21	5,022823E+22	6,047652E+21	5,627588E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2608	2,511282E+22	2,511381E+22	3,024210E+21	3,023835E+21	5,022663E+22	6,048045E+21	5,627468E+22
-2607	2,511286E+22	2,511319E+22	3,024148E+21	3,024440E+21	5,022605E+22	6,048588E+21	5,627464E+22
-2606	2,511269E+22	2,511143E+22	3,024054E+21	3,024354E+21	5,022413E+22	6,048408E+21	5,627254E+22
-2605	2,511116E+22	2,511174E+22	3,024647E+21	3,024265E+21	5,022291E+22	6,048911E+21	5,627182E+22
-2604	2,511177E+22	2,511097E+22	3,024357E+21	3,024819E+21	5,022274E+22	6,049176E+21	5,627191E+22
-2603	2,511090E+22	2,511043E+22	3,024547E+21	3,024494E+21	5,022134E+22	6,049041E+21	5,627038E+22
-2602	2,511001E+22	2,511113E+22	3,024858E+21	3,024651E+21	5,022113E+22	6,049509E+21	5,627064E+22
-2601	2,511094E+22	2,511010E+22	3,024402E+21	3,024861E+21	5,022104E+22	6,049262E+21	5,627031E+22
-2600	2,511014E+22	2,511064E+22	3,024736E+21	3,024339E+21	5,022078E+22	6,049075E+21	5,626986E+22
-2599	2,511071E+22	2,511129E+22	3,024630E+21	3,024611E+21	5,022200E+22	6,049241E+21	5,627124E+22
-2598	2,511180E+22	2,511061E+22	3,024156E+21	3,024447E+21	5,022241E+22	6,048604E+21	5,627102E+22
-2597	2,511108E+22	2,511205E+22	3,024474E+21	3,024041E+21	5,022313E+22	6,048515E+21	5,627165E+22
-2596	2,511245E+22	2,511244E+22	3,024078E+21	3,024465E+21	5,022490E+22	6,048542E+21	5,627344E+22
-2595	2,511298E+22	2,511233E+22	3,023919E+21	3,024013E+21	5,022531E+22	6,047932E+21	5,627324E+22
-2594	2,511257E+22	2,511359E+22	3,024245E+21	3,023889E+21	5,022616E+22	6,048134E+21	5,627429E+22
-2593	2,511383E+22	2,511295E+22	3,023806E+21	3,024208E+21	5,022677E+22	6,048015E+21	5,627479E+22
-2592	2,511313E+22	2,511307E+22	3,024074E+21	3,023820E+21	5,022620E+22	6,047894E+21	5,627409E+22
-2591	2,511250E+22	2,511355E+22	3,024292E+21	3,024196E+21	5,022604E+22	6,048488E+21	5,627453E+22
-2590	2,511301E+22	2,511194E+22	3,023908E+21	3,024421E+21	5,022495E+22	6,048328E+21	5,627328E+22
-2589	2,511147E+22	2,511198E+22	3,024452E+21	3,024134E+21	5,022345E+22	6,048586E+21	5,627204E+22
-2588	2,511149E+22	2,511154E+22	3,024462E+21	3,024713E+21	5,022303E+22	6,049175E+21	5,627220E+22
-2587	2,511148E+22	2,511008E+22	3,024383E+21	3,024612E+21	5,022156E+22	6,048995E+21	5,627056E+22
-2586	2,510975E+22	2,511062E+22	3,024962E+21	3,024551E+21	5,022037E+22	6,049513E+21	5,626988E+22
-2585	2,511007E+22	2,510964E+22	3,024688E+21	3,025131E+21	5,021971E+22	6,049819E+21	5,626953E+22
-2584	2,510941E+22	2,510906E+22	3,024864E+21	3,024814E+21	5,021847E+22	6,049678E+21	5,626815E+22
-2583	2,510851E+22	2,510985E+22	3,025166E+21	3,024920E+21	5,021835E+22	6,050086E+21	5,626844E+22
-2582	2,510977E+22	2,510860E+22	3,024653E+21	3,025113E+21	5,021836E+22	6,049766E+21	5,626813E+22
-2581	2,510910E+22	2,510921E+22	3,024933E+21	3,024539E+21	5,021831E+22	6,049472E+21	5,626778E+22
-2580	2,510949E+22	2,511018E+22	3,024855E+21	3,024860E+21	5,021967E+22	6,049715E+21	5,626938E+22
-2579	2,511070E+22	2,510969E+22	3,024371E+21	3,024706E+21	5,022039E+22	6,049076E+21	5,626946E+22
-2578	2,511002E+22	2,511118E+22	3,024681E+21	3,024284E+21	5,022120E+22	6,048964E+21	5,627016E+22
-2577	2,511131E+22	2,511125E+22	3,024333E+21	3,024669E+21	5,022256E+22	6,049002E+21	5,627157E+22
-2576	2,511201E+22	2,511112E+22	3,024195E+21	3,024220E+21	5,022313E+22	6,048415E+21	5,627154E+22
-2575	2,511135E+22	2,511252E+22	3,024545E+21	3,024126E+21	5,022387E+22	6,048671E+21	5,627254E+22
-2574	2,511250E+22	2,511160E+22	3,024062E+21	3,024518E+21	5,022410E+22	6,048580E+21	5,627268E+22
-2573	2,511172E+22	2,511161E+22	3,024297E+21	3,024134E+21	5,022333E+22	6,048431E+21	5,627176E+22
-2572	2,511098E+22	2,511212E+22	3,024574E+21	3,024528E+21	5,022310E+22	6,049102E+21	5,627220E+22
-2571	2,511169E+22	2,511051E+22	3,024216E+21	3,024712E+21	5,022220E+22	6,048927E+21	5,627113E+22
-2570	2,511021E+22	2,511057E+22	3,024771E+21	3,024397E+21	5,022078E+22	6,049168E+21	5,626995E+22
-2569	2,510997E+22	2,510994E+22	3,024828E+21	3,024995E+21	5,021990E+22	6,049822E+21	5,626973E+22
-2568	2,510993E+22	2,510862E+22	3,024739E+21	3,024961E+21	5,021855E+22	6,049700E+21	5,626825E+22
-2567	2,510800E+22	2,510930E+22	3,025307E+21	3,024916E+21	5,021731E+22	6,050223E+21	5,626753E+22
-2566	2,510853E+22	2,510805E+22	3,024978E+21	3,025482E+21	5,021658E+22	6,050460E+21	5,626704E+22
-2565	2,510813E+22	2,510748E+22	3,025100E+21	3,025064E+21	5,021560E+22	6,050164E+21	5,626577E+22
-2564	2,510725E+22	2,510850E+22	3,025433E+21	3,025140E+21	5,021574E+22	6,050573E+21	5,626631E+22
-2563	2,510867E+22	2,510751E+22	3,024904E+21	3,025326E+21	5,021617E+22	6,050230E+21	5,626640E+22
-2562	2,510795E+22	2,510828E+22	3,025143E+21	3,024775E+21	5,021623E+22	6,049919E+21	5,626615E+22
-2561	2,510817E+22	2,510904E+22	3,025096E+21	3,025118E+21	5,021720E+22	6,050214E+21	5,626742E+22
-2560	2,510962E+22	2,510861E+22	3,024611E+21	3,024970E+21	5,021823E+22	6,049581E+21	5,626781E+22

1	14	15	16	17	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	2,510893E+22	2,511014E+22	3,024936E+21	3,024503E+21	5,021907E+22	6,049439E+21	5,626851E+22
-2558	2,511037E+22	2,510996E+22	3,024575E+21	3,024885E+21	5,022032E+22	6,049459E+21	5,626978E+22
-2557	2,511101E+22	2,510981E+22	3,024409E+21	3,024431E+21	5,022082E+22	6,048840E+21	5,626966E+22
-2556	2,510994E+22	2,511137E+22	3,024812E+21	3,024407E+21	5,022131E+22	6,049220E+21	5,627053E+22
-2555	2,511108E+22	2,511046E+22	3,024339E+21	3,024824E+21	5,022154E+22	6,049163E+21	5,627071E+22
-2554	2,511032E+22	2,511032E+22	3,024579E+21	3,024428E+21	5,022064E+22	6,049007E+21	5,626965E+22
-2553	2,510946E+22	2,511047E+22	3,024917E+21	3,024801E+21	5,021993E+22	6,049718E+21	5,626965E+22
-2552	2,511033E+22	2,510893E+22	3,024572E+21	3,025004E+21	5,021926E+22	6,049576E+21	5,626884E+22
-2551	2,510866E+22	2,510917E+22	3,025124E+21	3,024724E+21	5,021783E+22	6,049848E+21	5,626767E+22
-2550	2,510840E+22	2,510838E+22	3,025132E+21	3,025374E+21	5,021678E+22	6,050506E+21	5,626729E+22
-2549	2,510841E+22	2,510707E+22	3,025002E+21	3,025314E+21	5,021547E+22	6,050316E+21	5,626579E+22
-2548	2,510645E+22	2,510792E+22	3,025608E+21	3,025242E+21	5,021437E+22	6,050850E+21	5,626522E+22
-2547	2,510725E+22	2,510674E+22	3,025278E+21	3,025731E+21	5,021399E+22	6,051009E+21	5,626499E+22
-2546	2,510695E+22	2,510623E+22	3,025381E+21	3,025279E+21	5,021317E+22	6,050660E+21	5,626383E+22
-2545	2,510585E+22	2,510711E+22	3,025731E+21	3,025378E+21	5,021295E+22	6,051110E+21	5,626406E+22
-2544	2,510729E+22	2,510632E+22	3,025172E+21	3,025616E+21	5,021361E+22	6,050788E+21	5,626440E+22
-2543	2,510661E+22	2,510722E+22	3,025387E+21	3,025073E+21	5,021383E+22	6,050460E+21	5,626429E+22
-2542	2,510712E+22	2,510770E+22	3,025301E+21	3,025378E+21	5,021482E+22	6,050678E+21	5,626550E+22
-2541	2,510878E+22	2,510732E+22	3,024793E+21	3,025140E+21	5,021610E+22	6,049933E+21	5,626603E+22
-2540	2,510800E+22	2,510912E+22	3,025168E+21	3,024677E+21	5,021712E+22	6,049845E+21	5,626696E+22
-2539	2,510934E+22	2,510908E+22	3,024820E+21	3,025074E+21	5,021842E+22	6,049894E+21	5,626831E+22
-2538	2,510975E+22	2,510892E+22	3,024644E+21	3,024684E+21	5,021867E+22	6,049328E+21	5,626800E+22
-2537	2,510836E+22	2,511005E+22	3,025108E+21	3,024712E+21	5,021841E+22	6,049821E+21	5,626823E+22
-2536	2,510960E+22	2,510907E+22	3,024653E+21	3,025150E+21	5,021867E+22	6,049802E+21	5,626847E+22
-2535	2,510889E+22	2,510884E+22	3,024909E+21	3,024743E+21	5,021773E+22	6,049652E+21	5,626738E+22
-2534	2,510818E+22	2,510868E+22	3,025226E+21	3,025122E+21	5,021686E+22	6,050348E+21	5,626721E+22
-2533	2,510899E+22	2,510727E+22	3,024853E+21	3,025330E+21	5,021627E+22	6,050183E+21	5,626645E+22
-2532	2,510705E+22	2,510779E+22	3,025431E+21	3,025098E+21	5,021484E+22	6,050530E+21	5,626537E+22
-2531	2,510688E+22	2,510708E+22	3,025445E+21	3,025719E+21	5,021396E+22	6,051164E+21	5,626512E+22
-2530	2,510697E+22	2,510574E+22	3,025306E+21	3,025602E+21	5,021272E+22	6,050908E+21	5,626363E+22
-2529	2,510491E+22	2,510633E+22	3,025960E+21	3,025488E+21	5,021124E+22	6,051447E+21	5,626269E+22
-2528	2,510585E+22	2,510533E+22	3,025618E+21	3,025973E+21	5,021119E+22	6,051592E+21	5,626278E+22
-2527	2,510546E+22	2,510496E+22	3,025685E+21	3,025553E+21	5,021042E+22	6,051238E+21	5,626166E+22
-2526	2,510448E+22	2,510568E+22	3,025963E+21	3,025688E+21	5,021016E+22	6,051651E+21	5,626181E+22
-2525	2,510615E+22	2,510500E+22	3,025355E+21	3,025891E+21	5,021115E+22	6,051246E+21	5,626240E+22
-2524	2,510554E+22	2,510615E+22	3,025593E+21	3,025313E+21	5,021168E+22	6,050906E+21	5,626259E+22
-2523	2,510632E+22	2,510675E+22	3,025520E+21	3,025544E+21	5,021307E+22	6,051064E+21	5,626414E+22
-2522	2,510793E+22	2,510644E+22	3,025020E+21	3,025287E+21	5,021437E+22	6,050307E+21	5,626467E+22
-2521	2,510670E+22	2,510801E+22	3,025451E+21	3,024897E+21	5,021471E+22	6,050348E+21	5,626506E+22
-2520	2,510784E+22	2,510803E+22	3,025105E+21	3,025364E+21	5,021587E+22	6,050470E+21	5,626634E+22
-2519	2,510817E+22	2,510770E+22	3,024934E+21	3,025028E+21	5,021588E+22	6,049962E+21	5,626584E+22
-2518	2,510704E+22	2,510836E+22	3,025368E+21	3,025045E+21	5,021540E+22	6,050414E+21	5,626581E+22
-2517	2,510847E+22	2,510737E+22	3,024900E+21	3,025426E+21	5,021583E+22	6,050326E+21	5,626616E+22
-2516	2,510769E+22	2,510740E+22	3,025192E+21	3,025032E+21	5,021510E+22	6,050225E+21	5,626532E+22
-2515	2,510695E+22	2,510743E+22	3,025511E+21	3,025414E+21	5,021438E+22	6,050926E+21	5,626531E+22
-2514	2,510756E+22	2,510613E+22	3,025144E+21	3,025645E+21	5,021369E+22	6,050789E+21	5,626448E+22
-2513	2,510535E+22	2,510635E+22	3,025791E+21	3,025441E+21	5,021170E+22	6,051233E+21	5,626293E+22
-2512	2,510519E+22	2,510568E+22	3,025820E+21	3,026020E+21	5,021087E+22	6,051840E+21	5,626271E+22
-2511	2,510538E+22	2,510426E+22	3,025682E+21	3,025898E+21	5,020965E+22	6,051580E+21	5,626123E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2510	2,510350E+22	2,510450E+22	3,026273E+21	3,025781E+21	5,020800E+22	6,052054E+21	5,626006E+22
-2509	2,510443E+22	2,510370E+22	3,025868E+21	3,026267E+21	5,020813E+22	6,052135E+21	5,626026E+22
-2508	2,510403E+22	2,510369E+22	3,025914E+21	3,025880E+21	5,020772E+22	6,051794E+21	5,625951E+22
-2507	2,510339E+22	2,510454E+22	3,026168E+21	3,025959E+21	5,020792E+22	6,052127E+21	5,626005E+22
-2506	2,510522E+22	2,510402E+22	3,025560E+21	3,026080E+21	5,020924E+22	6,051640E+21	5,626088E+22
-2505	2,510451E+22	2,510502E+22	3,025855E+21	3,025481E+21	5,020953E+22	6,051336E+21	5,626087E+22
-2504	2,510521E+22	2,510584E+22	3,025797E+21	3,025712E+21	5,021104E+22	6,051509E+21	5,626255E+22
-2503	2,510659E+22	2,510553E+22	3,025290E+21	3,025539E+21	5,021212E+22	6,050829E+21	5,626295E+22
-2502	2,510534E+22	2,510663E+22	3,025679E+21	3,025216E+21	5,021198E+22	6,050895E+21	5,626287E+22
-2501	2,510655E+22	2,510659E+22	3,025315E+21	3,025673E+21	5,021314E+22	6,050987E+21	5,626412E+22
-2500	2,510696E+22	2,510635E+22	3,025174E+21	3,025329E+21	5,021332E+22	6,050502E+21	5,626382E+22
-2499	2,510611E+22	2,510700E+22	3,025621E+21	3,025294E+21	5,021311E+22	6,050914E+21	5,626402E+22
-2498	2,510744E+22	2,510612E+22	3,025178E+21	3,025659E+21	5,021356E+22	6,050838E+21	5,626440E+22
-2497	2,510617E+22	2,510604E+22	3,025535E+21	3,025340E+21	5,021221E+22	6,050875E+21	5,626309E+22
-2496	2,510522E+22	2,510622E+22	3,025877E+21	3,025750E+21	5,021144E+22	6,051627E+21	5,626306E+22
-2495	2,510576E+22	2,510473E+22	3,025531E+21	3,026005E+21	5,021049E+22	6,051537E+21	5,626203E+22
-2494	2,510371E+22	2,510448E+22	3,026144E+21	3,025781E+21	5,020819E+22	6,051925E+21	5,626011E+22
-2493	2,510371E+22	2,510385E+22	3,026130E+21	3,026304E+21	5,020757E+22	6,052434E+21	5,626000E+22
-2492	2,510389E+22	2,510271E+22	3,025980E+21	3,026204E+21	5,020660E+22	6,052185E+21	5,625878E+22
-2491	2,510219E+22	2,510314E+22	3,026511E+21	3,026087E+21	5,020533E+22	6,052597E+21	5,625793E+22
-2490	2,510318E+22	2,510254E+22	3,026085E+21	3,026549E+21	5,020571E+22	6,052633E+21	5,625835E+22
-2489	2,510272E+22	2,510246E+22	3,026175E+21	3,026159E+21	5,020517E+22	6,052334E+21	5,625750E+22
-2488	2,510223E+22	2,510354E+22	3,026441E+21	3,026163E+21	5,020577E+22	6,052604E+21	5,625838E+22
-2487	2,510413E+22	2,510302E+22	3,025856E+21	3,026276E+21	5,020716E+22	6,052132E+21	5,625929E+22
-2486	2,510343E+22	2,510370E+22	3,026105E+21	3,025710E+21	5,020713E+22	6,051816E+21	5,625895E+22
-2485	2,510395E+22	2,510460E+22	3,026004E+21	3,025961E+21	5,020854E+22	6,051966E+21	5,626051E+22
-2484	2,510523E+22	2,510441E+22	3,025502E+21	3,025849E+21	5,020964E+22	6,051351E+21	5,626099E+22
-2483	2,510430E+22	2,510538E+22	3,025876E+21	3,025496E+21	5,020968E+22	6,051371E+21	5,626105E+22
-2482	2,510561E+22	2,510537E+22	3,025536E+21	3,025881E+21	5,021098E+22	6,051417E+21	5,626240E+22
-2481	2,510587E+22	2,510501E+22	3,025472E+21	3,025554E+21	5,021088E+22	6,051026E+21	5,626190E+22
-2480	2,510482E+22	2,510588E+22	3,025944E+21	3,025520E+21	5,021070E+22	6,051464E+21	5,626216E+22
-2479	2,510586E+22	2,510501E+22	3,025531E+21	3,025979E+21	5,021088E+22	6,051510E+21	5,626239E+22
-2478	2,510453E+22	2,510443E+22	3,025858E+21	3,025726E+21	5,020896E+22	6,051583E+21	5,626055E+22
-2477	2,510353E+22	2,510454E+22	3,026188E+21	3,026105E+21	5,020807E+22	6,052293E+21	5,626036E+22
-2476	2,510416E+22	2,510313E+22	3,025859E+21	3,026353E+21	5,020729E+22	6,052212E+21	5,625950E+22
-2475	2,510244E+22	2,510277E+22	3,026447E+21	3,026081E+21	5,020522E+22	6,052528E+21	5,625774E+22
-2474	2,510239E+22	2,510234E+22	3,026414E+21	3,026571E+21	5,020473E+22	6,052985E+21	5,625772E+22
-2473	2,510227E+22	2,510123E+22	3,026288E+21	3,026536E+21	5,020350E+22	6,052824E+21	5,625633E+22
-2472	2,510062E+22	2,510194E+22	3,026802E+21	3,026396E+21	5,020256E+22	6,053198E+21	5,625576E+22
-2471	2,510179E+22	2,510137E+22	3,026397E+21	3,026845E+21	5,020316E+22	6,053242E+21	5,625640E+22
-2470	2,510158E+22	2,510098E+22	3,026443E+21	3,026405E+21	5,020256E+22	6,052848E+21	5,625541E+22
-2469	2,510121E+22	2,510223E+22	3,026682E+21	3,026342E+21	5,020344E+22	6,053024E+21	5,625646E+22
-2468	2,510298E+22	2,510199E+22	3,026091E+21	3,026486E+21	5,020498E+22	6,052576E+21	5,625756E+22
-2467	2,510236E+22	2,510266E+22	3,026293E+21	3,025958E+21	5,020503E+22	6,052252E+21	5,625728E+22
-2466	2,510281E+22	2,510360E+22	3,026191E+21	3,026195E+21	5,020642E+22	6,052385E+21	5,625880E+22
-2465	2,510393E+22	2,510322E+22	3,025756E+21	3,026113E+21	5,020716E+22	6,051869E+21	5,625902E+22
-2464	2,510316E+22	2,510429E+22	3,026152E+21	3,025710E+21	5,020745E+22	6,051862E+21	5,625931E+22
-2463	2,510449E+22	2,510417E+22	3,025867E+21	3,026116E+21	5,020866E+22	6,051983E+21	5,626064E+22
-2462	2,510458E+22	2,510347E+22	3,025773E+21	3,025851E+21	5,020806E+22	6,051623E+21	5,625968E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,510331E+22	2,510443E+22	3,026220E+21	3,025854E+21	5,020774E+22	6,052074E+21	5,625981E+22
-2460	2,510419E+22	2,510363E+22	3,025833E+21	3,026357E+21	5,020782E+22	6,052190E+21	5,626000E+22
-2459	2,510314E+22	2,510286E+22	3,026144E+21	3,026084E+21	5,020600E+22	6,052228E+21	5,625823E+22
-2458	2,510220E+22	2,510298E+22	3,026484E+21	3,026368E+21	5,020518E+22	6,052852E+21	5,625803E+22
-2457	2,510265E+22	2,510149E+22	3,026212E+21	3,026641E+21	5,020414E+22	6,052853E+21	5,625699E+22
-2456	2,510088E+22	2,510140E+22	3,026782E+21	3,026361E+21	5,020228E+22	6,053143E+21	5,625543E+22
-2455	2,510076E+22	2,510102E+22	3,026757E+21	3,026909E+21	5,020178E+22	6,053666E+21	5,625545E+22
-2454	2,510074E+22	2,509964E+22	3,026580E+21	3,026897E+21	5,020038E+22	6,053477E+21	5,625386E+22
-2453	2,509928E+22	2,510048E+22	3,027058E+21	3,026690E+21	5,019976E+22	6,053748E+21	5,625351E+22
-2452	2,510061E+22	2,510015E+22	3,026673E+21	3,027093E+21	5,020075E+22	6,053766E+21	5,625452E+22
-2451	2,510072E+22	2,509975E+22	3,026677E+21	3,026617E+21	5,020047E+22	6,053294E+21	5,625376E+22
-2450	2,510016E+22	2,510119E+22	3,026894E+21	3,026515E+21	5,020135E+22	6,053409E+21	5,625476E+22
-2449	2,510156E+22	2,510094E+22	3,026339E+21	3,026744E+21	5,020251E+22	6,053083E+21	5,625559E+22
-2448	2,510098E+22	2,510165E+22	3,026538E+21	3,026205E+21	5,020263E+22	6,052743E+21	5,625537E+22
-2447	2,510156E+22	2,510248E+22	3,026476E+21	3,026453E+21	5,020404E+22	6,052930E+21	5,625697E+22
-2446	2,510286E+22	2,510172E+22	3,026013E+21	3,026367E+21	5,020458E+22	6,052380E+21	5,625696E+22
-2445	2,510211E+22	2,510288E+22	3,026388E+21	3,025944E+21	5,020498E+22	6,052333E+21	5,625731E+22
-2444	2,510324E+22	2,510301E+22	3,026125E+21	3,026399E+21	5,020625E+22	6,052524E+21	5,625878E+22
-2443	2,510339E+22	2,510221E+22	3,026003E+21	3,026182E+21	5,020560E+22	6,052185E+21	5,625778E+22
-2442	2,510195E+22	2,510316E+22	3,026474E+21	3,026148E+21	5,020511E+22	6,052622E+21	5,625773E+22
-2441	2,510259E+22	2,510219E+22	3,026173E+21	3,026675E+21	5,020478E+22	6,052848E+21	5,625763E+22
-2440	2,510162E+22	2,510144E+22	3,026513E+21	3,026355E+21	5,020307E+22	6,052868E+21	5,625594E+22
-2439	2,510069E+22	2,510146E+22	3,026889E+21	3,026668E+21	5,020214E+22	6,053557E+21	5,625570E+22
-2438	2,510099E+22	2,509968E+22	3,026563E+21	3,027000E+21	5,020066E+22	6,053563E+21	5,625423E+22
-2437	2,509919E+22	2,509973E+22	3,027074E+21	3,026734E+21	5,019892E+22	6,053807E+21	5,625273E+22
-2436	2,509917E+22	2,509955E+22	3,027056E+21	3,027273E+21	5,019872E+22	6,054329E+21	5,625305E+22
-2435	2,509959E+22	2,509818E+22	3,026839E+21	3,027205E+21	5,019777E+22	6,054044E+21	5,625181E+22
-2434	2,509827E+22	2,509924E+22	3,027304E+21	3,026875E+21	5,019751E+22	6,054179E+21	5,625169E+22
-2433	2,509934E+22	2,509898E+22	3,026973E+21	3,027287E+21	5,019833E+22	6,054259E+21	5,625258E+22
-2432	2,509935E+22	2,509887E+22	3,026949E+21	3,026817E+21	5,019822E+22	6,053767E+21	5,625199E+22
-2431	2,509874E+22	2,510020E+22	3,027170E+21	3,026783E+21	5,019894E+22	6,053952E+21	5,625289E+22
-2430	2,510014E+22	2,509955E+22	3,026572E+21	3,027047E+21	5,019970E+22	6,053619E+21	5,625331E+22
-2429	2,509983E+22	2,510028E+22	3,026737E+21	3,026473E+21	5,020011E+22	6,053210E+21	5,625332E+22
-2428	2,510059E+22	2,510121E+22	3,026712E+21	3,026691E+21	5,020181E+22	6,053404E+21	5,625521E+22
-2427	2,510212E+22	2,510045E+22	3,026226E+21	3,026609E+21	5,020256E+22	6,052835E+21	5,625540E+22
-2426	2,510110E+22	2,510179E+22	3,026595E+21	3,026166E+21	5,020289E+22	6,052761E+21	5,625565E+22
-2425	2,510174E+22	2,510189E+22	3,026412E+21	3,026699E+21	5,020363E+22	6,053111E+21	5,625674E+22
-2424	2,510184E+22	2,510110E+22	3,026322E+21	3,026475E+21	5,020294E+22	6,052798E+21	5,625573E+22
-2423	2,510044E+22	2,510179E+22	3,026855E+21	3,026452E+21	5,020223E+22	6,053306E+21	5,625554E+22
-2422	2,510105E+22	2,510040E+22	3,026538E+21	3,026982E+21	5,020145E+22	6,053520E+21	5,625497E+22
-2421	2,510009E+22	2,509968E+22	3,026841E+21	3,026671E+21	5,019978E+22	6,053512E+21	5,625329E+22
-2420	2,509904E+22	2,509989E+22	3,027213E+21	3,027030E+21	5,019893E+22	6,054243E+21	5,625317E+22
-2419	2,509955E+22	2,509809E+22	3,026830E+21	3,027396E+21	5,019764E+22	6,054226E+21	5,625187E+22
-2418	2,509781E+22	2,509830E+22	3,027320E+21	3,027048E+21	5,019611E+22	6,054368E+21	5,625048E+22
-2417	2,509773E+22	2,509822E+22	3,027374E+21	3,027566E+21	5,019595E+22	6,054939E+21	5,625089E+22
-2416	2,509831E+22	2,509702E+22	3,027170E+21	3,027410E+21	5,019533E+22	6,054580E+21	5,624991E+22
-2415	2,509697E+22	2,509807E+22	3,027652E+21	3,027101E+21	5,019504E+22	6,054753E+21	5,624980E+22
-2414	2,509781E+22	2,509759E+22	3,027253E+21	3,027566E+21	5,019540E+22	6,054819E+21	5,625022E+22
-2413	2,509783E+22	2,509749E+22	3,027168E+21	3,027126E+21	5,019532E+22	6,054293E+21	5,624961E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,509741E+22	2,509890E+22	3,027391E+21	3,027086E+21	5,019631E+22	6,054476E+21	5,625079E+22
-2411	2,509930E+22	2,509820E+22	3,026755E+21	3,027306E+21	5,019750E+22	6,054061E+21	5,625156E+22
-2410	2,509914E+22	2,509911E+22	3,026909E+21	3,026630E+21	5,019825E+22	6,053538E+21	5,625179E+22
-2409	2,509960E+22	2,510020E+22	3,026963E+21	3,026882E+21	5,019980E+22	6,053845E+21	5,625365E+22
-2408	2,510089E+22	2,509967E+22	3,026497E+21	3,026814E+21	5,020056E+22	6,053312E+21	5,625387E+22
-2407	2,509970E+22	2,510084E+22	3,026917E+21	3,026458E+21	5,020054E+22	6,053375E+21	5,625391E+22
-2406	2,510010E+22	2,510045E+22	3,026735E+21	3,027023E+21	5,020055E+22	6,053757E+21	5,625431E+22
-2405	2,510029E+22	2,509952E+22	3,026639E+21	3,026804E+21	5,019981E+22	6,053444E+21	5,625326E+22
-2404	2,509899E+22	2,510013E+22	3,027203E+21	3,026777E+21	5,019912E+22	6,053980E+21	5,625310E+22
-2403	2,509974E+22	2,509866E+22	3,026839E+21	3,027335E+21	5,019840E+22	6,054174E+21	5,625257E+22
-2402	2,509866E+22	2,509811E+22	3,027097E+21	3,027005E+21	5,019677E+22	6,054102E+21	5,625087E+22
-2401	2,509733E+22	2,509838E+22	3,027523E+21	3,027401E+21	5,019571E+22	6,054924E+21	5,625063E+22
-2400	2,509797E+22	2,509681E+22	3,027166E+21	3,027706E+21	5,019478E+22	6,054873E+21	5,624965E+22
-2399	2,509645E+22	2,509697E+22	3,027687E+21	3,027334E+21	5,019342E+22	6,055021E+21	5,624844E+22
-2398	2,509627E+22	2,509665E+22	3,027718E+21	3,027815E+21	5,019292E+22	6,055533E+21	5,624846E+22
-2397	2,509688E+22	2,509562E+22	3,027458E+21	3,027671E+21	5,019250E+22	6,055129E+21	5,624763E+22
-2396	2,509549E+22	2,509678E+22	3,027915E+21	3,027395E+21	5,019227E+22	6,055310E+21	5,624758E+22
-2395	2,509655E+22	2,509624E+22	3,027445E+21	3,027880E+21	5,019279E+22	6,055325E+21	5,624811E+22
-2394	2,509676E+22	2,509626E+22	3,027324E+21	3,027363E+21	5,019302E+22	6,054687E+21	5,624770E+22
-2393	2,509637E+22	2,509776E+22	3,027615E+21	3,027306E+21	5,019413E+22	6,054921E+21	5,624905E+22
-2392	2,509843E+22	2,509729E+22	3,027020E+21	3,027460E+21	5,019572E+22	6,054480E+21	5,625020E+22
-2391	2,509819E+22	2,509820E+22	3,027203E+21	3,026836E+21	5,019639E+22	6,054039E+21	5,625043E+22
-2390	2,509819E+22	2,509904E+22	3,027238E+21	3,027149E+21	5,019723E+22	6,054387E+21	5,625161E+22
-2389	2,509936E+22	2,509841E+22	3,026758E+21	3,027134E+21	5,019777E+22	6,053892E+21	5,625167E+22
-2388	2,509821E+22	2,509943E+22	3,027218E+21	3,026800E+21	5,019763E+22	6,054018E+21	5,625165E+22
-2387	2,509887E+22	2,509883E+22	3,027008E+21	3,027345E+21	5,019771E+22	6,054353E+21	5,625206E+22
-2386	2,509910E+22	2,509792E+22	3,026897E+21	3,027064E+21	5,019702E+22	6,053962E+21	5,625098E+22
-2385	2,509753E+22	2,509863E+22	3,027513E+21	3,027090E+21	5,019617E+22	6,054603E+21	5,625077E+22
-2384	2,509818E+22	2,509736E+22	3,027161E+21	3,027645E+21	5,019554E+22	6,054806E+21	5,625035E+22
-2383	2,509708E+22	2,509675E+22	3,027446E+21	3,027365E+21	5,019383E+22	6,054811E+21	5,624864E+22
-2382	2,509564E+22	2,509677E+22	3,027863E+21	3,027747E+21	5,019241E+22	6,055609E+21	5,624802E+22
-2381	2,509644E+22	2,509523E+22	3,027508E+21	3,028015E+21	5,019168E+22	6,055523E+21	5,624720E+22
-2380	2,509506E+22	2,509544E+22	3,028046E+21	3,027625E+21	5,019049E+22	6,055672E+21	5,624617E+22
-2379	2,509496E+22	2,509512E+22	3,028001E+21	3,028109E+21	5,019008E+22	6,056110E+21	5,624619E+22
-2378	2,509545E+22	2,509426E+22	3,027670E+21	3,027945E+21	5,018971E+22	6,055615E+21	5,624532E+22
-2377	2,509398E+22	2,509548E+22	3,028153E+21	3,027698E+21	5,018946E+22	6,055850E+21	5,624531E+22
-2376	2,509531E+22	2,509514E+22	3,027699E+21	3,028102E+21	5,019045E+22	6,055802E+21	5,624625E+22
-2375	2,509583E+22	2,509519E+22	3,027599E+21	3,027570E+21	5,019102E+22	6,055169E+21	5,624619E+22
-2374	2,509532E+22	2,509653E+22	3,027876E+21	3,027498E+21	5,019185E+22	6,055373E+21	5,624722E+22
-2373	2,509728E+22	2,509624E+22	3,027268E+21	3,027687E+21	5,019352E+22	6,054955E+21	5,624848E+22
-2372	2,509691E+22	2,509715E+22	3,027454E+21	3,027131E+21	5,019406E+22	6,054586E+21	5,624864E+22
-2371	2,509693E+22	2,509777E+22	3,027452E+21	3,027467E+21	5,019470E+22	6,054919E+21	5,624962E+22
-2370	2,509815E+22	2,509710E+22	3,026961E+21	3,027406E+21	5,019525E+22	6,054367E+21	5,624962E+22
-2369	2,509694E+22	2,509799E+22	3,027503E+21	3,027076E+21	5,019492E+22	6,054579E+21	5,624950E+22
-2368	2,509762E+22	2,509752E+22	3,027341E+21	3,027574E+21	5,019514E+22	6,054915E+21	5,625006E+22
-2367	2,509777E+22	2,509657E+22	3,027244E+21	3,027373E+21	5,019434E+22	6,054618E+21	5,624896E+22
-2366	2,509577E+22	2,509702E+22	3,027833E+21	3,027450E+21	5,019279E+22	6,055283E+21	5,624807E+22
-2365	2,509644E+22	2,509578E+22	3,027487E+21	3,028026E+21	5,019222E+22	6,055513E+21	5,624773E+22
-2364	2,509552E+22	2,509512E+22	3,027801E+21	3,027732E+21	5,019065E+22	6,055533E+21	5,624618E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2363	2,509433E+22	2,509508E+22	3,028178E+21	3,028057E+21	5,018941E+22	6,056235E+21	5,624564E+22
-2362	2,509516E+22	2,509371E+22	3,027791E+21	3,028258E+21	5,018887E+22	6,056049E+21	5,624492E+22
-2361	2,509352E+22	2,509408E+22	3,028348E+21	3,027917E+21	5,018760E+22	6,056265E+21	5,624386E+22
-2360	2,509339E+22	2,509399E+22	3,028291E+21	3,028375E+21	5,018738E+22	6,056666E+21	5,624404E+22
-2359	2,509403E+22	2,509307E+22	3,027955E+21	3,028250E+21	5,018710E+22	6,056204E+21	5,624331E+22
-2358	2,509257E+22	2,509406E+22	3,028406E+21	3,027976E+21	5,018663E+22	6,056382E+21	5,624302E+22
-2357	2,509421E+22	2,509384E+22	3,027959E+21	3,028337E+21	5,018804E+22	6,056297E+21	5,624434E+22
-2356	2,509488E+22	2,509398E+22	3,027872E+21	3,027807E+21	5,018887E+22	6,055679E+21	5,624455E+22
-2355	2,509437E+22	2,509535E+22	3,028080E+21	3,027753E+21	5,018972E+22	6,055833E+21	5,624555E+22
-2354	2,509610E+22	2,509515E+22	3,027440E+21	3,027924E+21	5,019124E+22	6,055364E+21	5,624661E+22
-2353	2,509556E+22	2,509602E+22	3,027686E+21	3,027421E+21	5,019158E+22	6,055107E+21	5,624668E+22
-2352	2,509569E+22	2,509665E+22	3,027731E+21	3,027679E+21	5,019234E+22	6,055411E+21	5,624776E+22
-2351	2,509702E+22	2,509584E+22	3,027283E+21	3,027639E+21	5,019286E+22	6,054922E+21	5,624778E+22
-2350	2,509555E+22	2,509646E+22	3,027816E+21	3,027335E+21	5,019201E+22	6,055151E+21	5,624716E+22
-2349	2,509610E+22	2,509606E+22	3,027658E+21	3,027884E+21	5,019217E+22	6,055542E+21	5,624771E+22
-2348	2,509617E+22	2,509509E+22	3,027573E+21	3,027756E+21	5,019126E+22	6,055329E+21	5,624659E+22
-2347	2,509427E+22	2,509538E+22	3,028113E+21	3,027838E+21	5,018965E+22	6,055951E+21	5,624560E+22
-2346	2,509499E+22	2,509421E+22	3,027769E+21	3,028342E+21	5,018920E+22	6,056111E+21	5,624531E+22
-2345	2,509409E+22	2,509360E+22	3,028149E+21	3,028048E+21	5,018768E+22	6,056196E+21	5,624388E+22
-2344	2,509290E+22	2,509374E+22	3,028547E+21	3,028299E+21	5,018664E+22	6,056846E+21	5,624349E+22
-2343	2,509363E+22	2,509241E+22	3,028146E+21	3,028566E+21	5,018604E+22	6,056711E+21	5,624275E+22
-2342	2,509167E+22	2,509251E+22	3,028648E+21	3,028260E+21	5,018418E+22	6,056907E+21	5,624109E+22
-2341	2,509174E+22	2,509248E+22	3,028578E+21	3,028705E+21	5,018422E+22	6,057283E+21	5,624150E+22
-2340	2,509277E+22	2,509161E+22	3,028241E+21	3,028554E+21	5,018438E+22	6,056796E+21	5,624117E+22
-2339	2,509167E+22	2,509262E+22	3,028620E+21	3,028216E+21	5,018429E+22	6,056836E+21	5,624113E+22
-2338	2,509337E+22	2,509269E+22	3,028150E+21	3,028514E+21	5,018606E+22	6,056664E+21	5,624272E+22
-2337	2,509381E+22	2,509304E+22	3,028084E+21	3,028030E+21	5,018685E+22	6,056114E+21	5,624296E+22
-2336	2,509317E+22	2,509455E+22	3,028314E+21	3,027944E+21	5,018772E+22	6,056257E+21	5,624398E+22
-2335	2,509490E+22	2,509423E+22	3,027700E+21	3,028165E+21	5,018913E+22	6,055864E+21	5,624500E+22
-2334	2,509414E+22	2,509468E+22	3,027959E+21	3,027675E+21	5,018882E+22	6,055634E+21	5,624446E+22
-2333	2,509440E+22	2,509526E+22	3,028044E+21	3,027927E+21	5,018966E+22	6,055971E+21	5,624563E+22
-2332	2,509576E+22	2,509438E+22	3,027619E+21	3,027944E+21	5,019014E+22	6,055563E+21	5,624570E+22
-2331	2,509421E+22	2,509488E+22	3,028070E+21	3,027689E+21	5,018909E+22	6,055759E+21	5,624485E+22
-2330	2,509462E+22	2,509454E+22	3,027896E+21	3,028228E+21	5,018916E+22	6,056124E+21	5,624529E+22
-2329	2,509462E+22	2,509360E+22	3,027869E+21	3,028130E+21	5,018822E+22	6,055999E+21	5,624422E+22
-2328	2,509288E+22	2,509402E+22	3,028460E+21	3,028113E+21	5,018690E+22	6,056573E+21	5,624347E+22
-2327	2,509366E+22	2,509283E+22	3,028153E+21	3,028615E+21	5,018650E+22	6,056768E+21	5,624326E+22
-2326	2,509240E+22	2,509202E+22	3,028518E+21	3,028352E+21	5,018442E+22	6,056870E+21	5,624129E+22
-2325	2,509111E+22	2,509225E+22	3,028895E+21	3,028628E+21	5,018336E+22	6,057524E+21	5,624088E+22
-2324	2,509189E+22	2,509087E+22	3,028477E+21	3,028947E+21	5,018276E+22	6,057424E+21	5,624018E+22
-2323	2,509025E+22	2,509084E+22	3,028883E+21	3,028618E+21	5,018108E+22	6,057501E+21	5,623859E+22
-2322	2,509058E+22	2,509094E+22	3,028795E+21	3,028953E+21	5,018152E+22	6,057748E+21	5,623927E+22
-2321	2,509176E+22	2,509035E+22	3,028501E+21	3,028783E+21	5,018211E+22	6,057284E+21	5,623940E+22
-2320	2,509077E+22	2,509168E+22	3,028884E+21	3,028374E+21	5,018244E+22	6,057258E+21	5,623970E+22
-2319	2,509224E+22	2,509187E+22	3,028416E+21	3,028722E+21	5,018411E+22	6,057138E+21	5,624125E+22
-2318	2,509227E+22	2,509195E+22	3,028331E+21	3,028292E+21	5,018423E+22	6,056623E+21	5,624085E+22
-2317	2,509171E+22	2,509336E+22	3,028586E+21	3,028199E+21	5,018507E+22	6,056785E+21	5,624186E+22
-2316	2,509361E+22	2,509291E+22	3,028001E+21	3,028434E+21	5,018652E+22	6,056435E+21	5,624296E+22
-2315	2,509308E+22	2,509314E+22	3,028197E+21	3,027946E+21	5,018621E+22	6,056142E+21	5,624236E+22

1	14	15	16	17	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							
-2314	2,509327E+22	2,509382E+22	3,028270E+21	3,028182E+21	5,018709E+22	6,056452E+21	5,624354E+22
-2313	2,509441E+22	2,509311E+22	3,027873E+21	3,028279E+21	5,018752E+22	6,056152E+21	5,624368E+22
-2312	2,509286E+22	2,509369E+22	3,028341E+21	3,027993E+21	5,018655E+22	6,056334E+21	5,624289E+22
-2311	2,509327E+22	2,509332E+22	3,028214E+21	3,028545E+21	5,018658E+22	6,056759E+21	5,624334E+22
-2310	2,509302E+22	2,509207E+22	3,028222E+21	3,028444E+21	5,018508E+22	6,056666E+21	5,624175E+22
-2309	2,509133E+22	2,509247E+22	3,028863E+21	3,028405E+21	5,018380E+22	6,057268E+21	5,624106E+22
-2308	2,509204E+22	2,509126E+22	3,028567E+21	3,028959E+21	5,018330E+22	6,057526E+21	5,624083E+22
-2307	2,509067E+22	2,509026E+22	3,028822E+21	3,028738E+21	5,018094E+22	6,057561E+21	5,623850E+22
-2306	2,508943E+22	2,509053E+22	3,029153E+21	3,028981E+21	5,017995E+22	6,058134E+21	5,623809E+22
-2305	2,509039E+22	2,508928E+22	3,028751E+21	3,029287E+21	5,017967E+22	6,058038E+21	5,623771E+22
-2304	2,508913E+22	2,508950E+22	3,029154E+21	3,028834E+21	5,017863E+22	6,057988E+21	5,623662E+22
-2303	2,508966E+22	2,508985E+22	3,029081E+21	3,029143E+21	5,017951E+22	6,058224E+21	5,623773E+22
-2302	2,509046E+22	2,508925E+22	3,028777E+21	3,028995E+21	5,017971E+22	6,057773E+21	5,623748E+22
-2301	2,508937E+22	2,509071E+22	3,029159E+21	3,028609E+21	5,018008E+22	6,057768E+21	5,623785E+22
-2300	2,509081E+22	2,509080E+22	3,028697E+21	3,029009E+21	5,018162E+22	6,057707E+21	5,623932E+22
-2299	2,509098E+22	2,509059E+22	3,028533E+21	3,028592E+21	5,018157E+22	6,057125E+21	5,623869E+22
-2298	2,509061E+22	2,509193E+22	3,028787E+21	3,028439E+21	5,018254E+22	6,057226E+21	5,623976E+22
-2297	2,509257E+22	2,509159E+22	3,028249E+21	3,028694E+21	5,018415E+22	6,056944E+21	5,624110E+22
-2296	2,509210E+22	2,509198E+22	3,028446E+21	3,028182E+21	5,018408E+22	6,056628E+21	5,624071E+22
-2295	2,509208E+22	2,509272E+22	3,028535E+21	3,028469E+21	5,018480E+22	6,057004E+21	5,624180E+22
-2294	2,509279E+22	2,509177E+22	3,028168E+21	3,028613E+21	5,018456E+22	6,056781E+21	5,624134E+22
-2293	2,509132E+22	2,509230E+22	3,028689E+21	3,028305E+21	5,018362E+22	6,056995E+21	5,624061E+22
-2292	2,509177E+22	2,509182E+22	3,028616E+21	3,028855E+21	5,018359E+22	6,057471E+21	5,624107E+22
-2291	2,509158E+22	2,509036E+22	3,028563E+21	3,028770E+21	5,018194E+22	6,057333E+21	5,623927E+22
-2290	2,508976E+22	2,509076E+22	3,029178E+21	3,028716E+21	5,018052E+22	6,057893E+21	5,623841E+22
-2289	2,509026E+22	2,508972E+22	3,028883E+21	3,029330E+21	5,017998E+22	6,058213E+21	5,623819E+22
-2288	2,508912E+22	2,508878E+22	3,029112E+21	3,029072E+21	5,017790E+22	6,058184E+21	5,623608E+22
-2287	2,508803E+22	2,508910E+22	3,029447E+21	3,029283E+21	5,017713E+22	6,058731E+21	5,623586E+22
-2286	2,508893E+22	2,508780E+22	3,029068E+21	3,029563E+21	5,017673E+22	6,058630E+21	5,623536E+22
-2285	2,508790E+22	2,508821E+22	3,029488E+21	3,029067E+21	5,017611E+22	6,058556E+21	5,623466E+22
-2284	2,508836E+22	2,508870E+22	3,029413E+21	3,029414E+21	5,017706E+22	6,058827E+21	5,623589E+22
-2283	2,508905E+22	2,508798E+22	3,028998E+21	3,029304E+21	5,017704E+22	6,058302E+21	5,623534E+22
-2282	2,508800E+22	2,508938E+22	3,029348E+21	3,028889E+21	5,017738E+22	6,058237E+21	5,623562E+22
-2281	2,508956E+22	2,508956E+22	3,028915E+21	3,029275E+21	5,017912E+22	6,058191E+21	5,623731E+22
-2280	2,509008E+22	2,508941E+22	3,028754E+21	3,028784E+21	5,017949E+22	6,057537E+21	5,623703E+22
-2279	2,508979E+22	2,509085E+22	3,029028E+21	3,028632E+21	5,018063E+22	6,057660E+21	5,623829E+22
-2278	2,509129E+22	2,509044E+22	3,028513E+21	3,028943E+21	5,018173E+22	6,057456E+21	5,623919E+22
-2277	2,509073E+22	2,509089E+22	3,028731E+21	3,028464E+21	5,018162E+22	6,057195E+21	5,623881E+22
-2276	2,509065E+22	2,509151E+22	3,028858E+21	3,028802E+21	5,018217E+22	6,057660E+21	5,623983E+22
-2275	2,509134E+22	2,509024E+22	3,028452E+21	3,028947E+21	5,018158E+22	6,057399E+21	5,623898E+22
-2274	2,508996E+22	2,509065E+22	3,029002E+21	3,028599E+21	5,018061E+22	6,057601E+21	5,623821E+22
-2273	2,509032E+22	2,509026E+22	3,028972E+21	3,029164E+21	5,018058E+22	6,058136E+21	5,623872E+22
-2272	2,509007E+22	2,508887E+22	3,028897E+21	3,029090E+21	5,017895E+22	6,057986E+21	5,623693E+22
-2271	2,508811E+22	2,508929E+22	3,029488E+21	3,029075E+21	5,017740E+22	6,058563E+21	5,623596E+22
-2270	2,508834E+22	2,508803E+22	3,029208E+21	3,029704E+21	5,017637E+22	6,058912E+21	5,623528E+22
-2269	2,508751E+22	2,508718E+22	3,029456E+21	3,029391E+21	5,017469E+22	6,058847E+21	5,623354E+22
-2268	2,508669E+22	2,508760E+22	3,029808E+21	3,029579E+21	5,017429E+22	6,059386E+21	5,623368E+22
-2267	2,508766E+22	2,508631E+22	3,029355E+21	3,029847E+21	5,017396E+22	6,059202E+21	5,623316E+22
-2266	2,508663E+22	2,508688E+22	3,029729E+21	3,029336E+21	5,017350E+22	6,059066E+21	5,623257E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2265	2,508696E+22	2,508758E+22	3,029649E+21	3,029698E+21	5,017454E+22	6,059348E+21	5,623389E+22
-2264	2,508786E+22	2,508691E+22	3,029207E+21	3,029552E+21	5,017477E+22	6,058759E+21	5,623353E+22
-2263	2,508696E+22	2,508827E+22	3,029562E+21	3,029104E+21	5,017522E+22	6,058665E+21	5,623389E+22
-2262	2,508832E+22	2,508833E+22	3,029182E+21	3,029481E+21	5,017665E+22	6,058663E+21	5,623531E+22
-2261	2,508902E+22	2,508826E+22	3,029055E+21	3,028989E+21	5,017728E+22	6,058044E+21	5,623533E+22
-2260	2,508857E+22	2,508973E+22	3,029334E+21	3,028910E+21	5,017830E+22	6,058244E+21	5,623655E+22
-2259	2,508988E+22	2,508913E+22	3,028755E+21	3,029275E+21	5,017901E+22	6,058030E+21	5,623704E+22
-2258	2,508938E+22	2,508940E+22	3,028968E+21	3,028779E+21	5,017878E+22	6,057748E+21	5,623652E+22
-2257	2,508927E+22	2,509011E+22	3,029147E+21	3,029094E+21	5,017938E+22	6,058241E+21	5,623762E+22
-2256	2,509018E+22	2,508886E+22	3,028755E+21	3,029203E+21	5,017904E+22	6,057958E+21	5,623700E+22
-2255	2,508868E+22	2,508926E+22	3,029325E+21	3,028875E+21	5,017794E+22	6,058200E+21	5,623614E+22
-2254	2,508847E+22	2,508879E+22	3,029321E+21	3,029499E+21	5,017726E+22	6,058820E+21	5,623608E+22
-2253	2,508825E+22	2,508737E+22	3,029256E+21	3,029456E+21	5,017562E+22	6,058712E+21	5,623433E+22
-2252	2,508639E+22	2,508766E+22	3,029845E+21	3,029471E+21	5,017405E+22	6,059316E+21	5,623337E+22
-2251	2,508677E+22	2,508623E+22	3,029509E+21	3,030068E+21	5,017300E+22	6,059577E+21	5,623258E+22
-2250	2,508626E+22	2,508544E+22	3,029749E+21	3,029690E+21	5,017169E+22	6,059438E+21	5,623113E+22
-2249	2,508546E+22	2,508621E+22	3,030114E+21	3,029856E+21	5,017167E+22	6,059970E+21	5,623164E+22
-2248	2,508644E+22	2,508516E+22	3,029623E+21	3,030112E+21	5,017160E+22	6,059735E+21	5,623134E+22
-2247	2,508531E+22	2,508580E+22	3,029968E+21	3,029608E+21	5,017110E+22	6,059576E+21	5,623068E+22
-2246	2,508536E+22	2,508635E+22	3,029916E+21	3,029954E+21	5,017171E+22	6,059870E+21	5,623158E+22
-2245	2,508656E+22	2,508571E+22	3,029498E+21	3,029762E+21	5,017226E+22	6,059260E+21	5,623152E+22
-2244	2,508590E+22	2,508704E+22	3,029860E+21	3,029330E+21	5,017294E+22	6,059189E+21	5,623213E+22
-2243	2,508720E+22	2,508698E+22	3,029421E+21	3,029722E+21	5,017417E+22	6,059143E+21	5,623332E+22
-2242	2,508787E+22	2,508699E+22	3,029262E+21	3,029261E+21	5,017486E+22	6,058523E+21	5,623338E+22
-2241	2,508733E+22	2,508859E+22	3,029549E+21	3,029211E+21	5,017592E+22	6,058760E+21	5,623468E+22
-2240	2,508874E+22	2,508797E+22	3,028979E+21	3,029552E+21	5,017671E+22	6,058532E+21	5,623524E+22
-2239	2,508827E+22	2,508819E+22	3,029219E+21	3,029041E+21	5,017646E+22	6,058260E+21	5,623472E+22
-2238	2,508781E+22	2,508870E+22	3,029487E+21	3,029347E+21	5,017651E+22	6,058834E+21	5,623535E+22
-2237	2,508869E+22	2,508748E+22	3,029141E+21	3,029485E+21	5,017617E+22	6,058627E+21	5,623479E+22
-2236	2,508701E+22	2,508776E+22	3,029705E+21	3,029255E+21	5,017477E+22	6,058960E+21	5,623373E+22
-2235	2,508658E+22	2,508699E+22	3,029635E+21	3,029913E+21	5,017357E+22	6,059548E+21	5,623312E+22
-2234	2,508661E+22	2,508545E+22	3,029555E+21	3,029845E+21	5,017206E+22	6,059400E+21	5,623146E+22
-2233	2,508496E+22	2,508595E+22	3,030154E+21	3,029801E+21	5,017091E+22	6,059955E+21	5,623087E+22
-2232	2,508566E+22	2,508475E+22	3,029820E+21	3,030336E+21	5,017040E+22	6,060155E+21	5,623056E+22
-2231	2,508510E+22	2,508419E+22	3,030042E+21	3,029942E+21	5,016929E+22	6,059983E+21	5,622927E+22
-2230	2,508379E+22	2,508504E+22	3,030432E+21	3,030125E+21	5,016883E+22	6,060558E+21	5,622939E+22
-2229	2,508484E+22	2,508405E+22	3,029951E+21	3,030385E+21	5,016889E+22	6,060336E+21	5,622923E+22
-2228	2,508380E+22	2,508454E+22	3,030281E+21	3,029906E+21	5,016834E+22	6,060188E+21	5,622852E+22
-2227	2,508394E+22	2,508485E+22	3,030172E+21	3,030219E+21	5,016879E+22	6,060392E+21	5,622918E+22
-2226	2,508550E+22	2,508416E+22	3,029736E+21	3,030002E+21	5,016966E+22	6,059739E+21	5,622940E+22
-2225	2,508486E+22	2,508578E+22	3,030084E+21	3,029579E+21	5,017064E+22	6,059663E+21	5,623031E+22
-2224	2,508622E+22	2,508592E+22	3,029613E+21	3,029990E+21	5,017213E+22	6,059603E+21	5,623174E+22
-2223	2,508680E+22	2,508594E+22	3,029442E+21	3,029530E+21	5,017275E+22	6,058973E+21	5,623172E+22
-2222	2,508594E+22	2,508743E+22	3,029808E+21	3,029460E+21	5,017336E+22	6,059269E+21	5,623263E+22
-2221	2,508749E+22	2,508681E+22	3,029311E+21	3,029763E+21	5,017430E+22	6,059073E+21	5,623337E+22
-2220	2,508701E+22	2,508689E+22	3,029585E+21	3,029314E+21	5,017390E+22	6,058899E+21	5,623280E+22
-2219	2,508623E+22	2,508716E+22	3,029813E+21	3,029660E+21	5,017339E+22	6,059472E+21	5,623286E+22
-2218	2,508706E+22	2,508581E+22	3,029443E+21	3,029856E+21	5,017287E+22	6,059299E+21	5,623217E+22
-2217	2,508536E+22	2,508613E+22	3,029996E+21	3,029646E+21	5,017150E+22	6,059642E+21	5,623114E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,508518E+22	2,508535E+22	3,029919E+21	3,030266E+21	5,017054E+22	6,060185E+21	5,623072E+22
-2215	2,508536E+22	2,508390E+22	3,029847E+21	3,030147E+21	5,016927E+22	6,059994E+21	5,622926E+22
-2214	2,508349E+22	2,508446E+22	3,030518E+21	3,030074E+21	5,016794E+22	6,060592E+21	5,622854E+22
-2213	2,508415E+22	2,508350E+22	3,030223E+21	3,030605E+21	5,016765E+22	6,060827E+21	5,622847E+22
-2212	2,508345E+22	2,508296E+22	3,030412E+21	3,030296E+21	5,016641E+22	6,060708E+21	5,622711E+22
-2211	2,508195E+22	2,508348E+22	3,030725E+21	3,030465E+21	5,016543E+22	6,061189E+21	5,622662E+22
-2210	2,508330E+22	2,508238E+22	3,030212E+21	3,030693E+21	5,016568E+22	6,060904E+21	5,622659E+22
-2209	2,508259E+22	2,508303E+22	3,030517E+21	3,030166E+21	5,016562E+22	6,060682E+21	5,622630E+22
-2208	2,508306E+22	2,508351E+22	3,030387E+21	3,030437E+21	5,016657E+22	6,060824E+21	5,622740E+22
-2207	2,508463E+22	2,508312E+22	3,029919E+21	3,030217E+21	5,016775E+22	6,060137E+21	5,622788E+22
-2206	2,508361E+22	2,508481E+22	3,030302E+21	3,029818E+21	5,016842E+22	6,060120E+21	5,622854E+22
-2205	2,508499E+22	2,508504E+22	3,029887E+21	3,030218E+21	5,017003E+22	6,060105E+21	5,623013E+22
-2204	2,508559E+22	2,508492E+22	3,029736E+21	3,029804E+21	5,017051E+22	6,059540E+21	5,623005E+22
-2203	2,508457E+22	2,508602E+22	3,030101E+21	3,029708E+21	5,017059E+22	6,059809E+21	5,623039E+22
-2202	2,508624E+22	2,508525E+22	3,029628E+21	3,030030E+21	5,017149E+22	6,059658E+21	5,623114E+22
-2201	2,508559E+22	2,508542E+22	3,029897E+21	3,029640E+21	5,017101E+22	6,059536E+21	5,623055E+22
-2200	2,508476E+22	2,508567E+22	3,030095E+21	3,030027E+21	5,017042E+22	6,060122E+21	5,623055E+22
-2199	2,508555E+22	2,508426E+22	3,029706E+21	3,030220E+21	5,016982E+22	6,059925E+21	5,622974E+22
-2198	2,508369E+22	2,508451E+22	3,030317E+21	3,029979E+21	5,016820E+22	6,060296E+21	5,622849E+22
-2197	2,508377E+22	2,508389E+22	3,030309E+21	3,030540E+21	5,016765E+22	6,060849E+21	5,622850E+22
-2196	2,508394E+22	2,508249E+22	3,030251E+21	3,030461E+21	5,016643E+22	6,060712E+21	5,622714E+22
-2195	2,508174E+22	2,508293E+22	3,030873E+21	3,030401E+21	5,016467E+22	6,061274E+21	5,622595E+22
-2194	2,508245E+22	2,508191E+22	3,030545E+21	3,030959E+21	5,016436E+22	6,061503E+21	5,622586E+22
-2193	2,508178E+22	2,508145E+22	3,030693E+21	3,030650E+21	5,016322E+22	6,061343E+21	5,622457E+22
-2192	2,508063E+22	2,508198E+22	3,030957E+21	3,030767E+21	5,016261E+22	6,061724E+21	5,622433E+22
-2191	2,508224E+22	2,508097E+22	3,030421E+21	3,030921E+21	5,016321E+22	6,061342E+21	5,622455E+22
-2190	2,508145E+22	2,508175E+22	3,030772E+21	3,030373E+21	5,016320E+22	6,061145E+21	5,622434E+22
-2189	2,508199E+22	2,508255E+22	3,030678E+21	3,030640E+21	5,016454E+22	6,061318E+21	5,622585E+22
-2188	2,508340E+22	2,508223E+22	3,030196E+21	3,030503E+21	5,016563E+22	6,060699E+21	5,622633E+22
-2187	2,508219E+22	2,508360E+22	3,030544E+21	3,030093E+21	5,016579E+22	6,060637E+21	5,622643E+22
-2186	2,508377E+22	2,508366E+22	3,030148E+21	3,030467E+21	5,016743E+22	6,060615E+21	5,622805E+22
-2185	2,508445E+22	2,508361E+22	3,030004E+21	3,030048E+21	5,016806E+22	6,060052E+21	5,622811E+22
-2184	2,508350E+22	2,508467E+22	3,030363E+21	3,029965E+21	5,016817E+22	6,060328E+21	5,622850E+22
-2183	2,508495E+22	2,508399E+22	3,029871E+21	3,030316E+21	5,016894E+22	6,060187E+21	5,622912E+22
-2182	2,508395E+22	2,508406E+22	3,030186E+21	3,029982E+21	5,016800E+22	6,060167E+21	5,622817E+22
-2181	2,508318E+22	2,508429E+22	3,030440E+21	3,030351E+21	5,016747E+22	6,060791E+21	5,622826E+22
-2180	2,508404E+22	2,508282E+22	3,030069E+21	3,030584E+21	5,016687E+22	6,060653E+21	5,622752E+22
-2179	2,508212E+22	2,508273E+22	3,030669E+21	3,030300E+21	5,016485E+22	6,060969E+21	5,622582E+22
-2178	2,508230E+22	2,508213E+22	3,030682E+21	3,030863E+21	5,016443E+22	6,061545E+21	5,622597E+22
-2177	2,508233E+22	2,508098E+22	3,030595E+21	3,030828E+21	5,016331E+22	6,061422E+21	5,622473E+22
-2176	2,508013E+22	2,508138E+22	3,031164E+21	3,030777E+21	5,016151E+22	6,061941E+21	5,622345E+22
-2175	2,508088E+22	2,508039E+22	3,030799E+21	3,031276E+21	5,016127E+22	6,062075E+21	5,622335E+22
-2174	2,508022E+22	2,507991E+22	3,030983E+21	3,030921E+21	5,016013E+22	6,061903E+21	5,622203E+22
-2173	2,507941E+22	2,508065E+22	3,031284E+21	3,030963E+21	5,016006E+22	6,062247E+21	5,622231E+22
-2172	2,508109E+22	2,507985E+22	3,030736E+21	3,031166E+21	5,016094E+22	6,061901E+21	5,622285E+22
-2171	2,508008E+22	2,508053E+22	3,031024E+21	3,030630E+21	5,016062E+22	6,061655E+21	5,622227E+22
-2170	2,508073E+22	2,508134E+22	3,030922E+21	3,030923E+21	5,016208E+22	6,061845E+21	5,622392E+22
-2169	2,508215E+22	2,508113E+22	3,030425E+21	3,030785E+21	5,016327E+22	6,061210E+21	5,622448E+22
-2168	2,508115E+22	2,508238E+22	3,030757E+21	3,030351E+21	5,016354E+22	6,061108E+21	5,622465E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,508277E+22	2,508243E+22	3,030368E+21	3,030667E+21	5,016520E+22	6,061035E+21	5,622624E+22
-2166	2,508316E+22	2,508236E+22	3,030292E+21	3,030292E+21	5,016553E+22	6,060585E+21	5,622611E+22
-2165	2,508214E+22	2,508353E+22	3,030690E+21	3,030245E+21	5,016566E+22	6,060935E+21	5,622660E+22
-2164	2,508338E+22	2,508273E+22	3,030194E+21	3,030686E+21	5,016611E+22	6,060880E+21	5,622699E+22
-2163	2,508223E+22	2,508237E+22	3,030485E+21	3,030342E+21	5,016460E+22	6,060827E+21	5,622542E+22
-2162	2,508177E+22	2,508248E+22	3,030764E+21	3,030681E+21	5,016425E+22	6,061445E+21	5,622569E+22
-2161	2,508267E+22	2,508119E+22	3,030409E+21	3,030898E+21	5,016386E+22	6,061307E+21	5,622517E+22
-2160	2,508082E+22	2,508118E+22	3,030987E+21	3,030630E+21	5,016199E+22	6,061617E+21	5,622361E+22
-2159	2,508078E+22	2,508072E+22	3,030973E+21	3,031174E+21	5,016150E+22	6,062148E+21	5,622365E+22
-2158	2,508051E+22	2,507956E+22	3,030922E+21	3,031176E+21	5,016008E+22	6,062098E+21	5,622218E+22
-2157	2,507847E+22	2,508000E+22	3,031517E+21	3,031080E+21	5,015847E+22	6,062597E+21	5,622107E+22
-2156	2,507934E+22	2,507899E+22	3,031143E+21	3,031584E+21	5,015832E+22	6,062727E+21	5,622105E+22
-2155	2,507874E+22	2,507825E+22	3,031295E+21	3,031189E+21	5,015699E+22	6,062484E+21	5,621947E+22
-2154	2,507820E+22	2,507909E+22	3,031585E+21	3,031237E+21	5,015729E+22	6,062822E+21	5,622011E+22
-2153	2,507979E+22	2,507866E+22	3,030997E+21	3,031475E+21	5,015845E+22	6,062473E+21	5,622093E+22
-2152	2,507892E+22	2,507933E+22	3,031218E+21	3,030949E+21	5,015825E+22	6,062168E+21	5,622042E+22
-2151	2,507962E+22	2,508019E+22	3,031096E+21	3,031158E+21	5,015981E+22	6,062254E+21	5,622206E+22
-2150	2,508098E+22	2,507999E+22	3,030662E+21	3,030993E+21	5,016097E+22	6,061656E+21	5,622262E+22
-2149	2,508011E+22	2,508131E+22	3,031057E+21	3,030519E+21	5,016142E+22	6,061576E+21	5,622300E+22
-2148	2,508153E+22	2,508143E+22	3,030680E+21	3,030913E+21	5,016295E+22	6,061594E+21	5,622455E+22
-2147	2,508160E+22	2,508099E+22	3,030572E+21	3,030596E+21	5,016259E+22	6,061168E+21	5,622376E+22
-2146	2,508066E+22	2,508196E+22	3,030974E+21	3,030593E+21	5,016262E+22	6,061567E+21	5,622419E+22
-2145	2,508191E+22	2,508124E+22	3,030480E+21	3,031044E+21	5,016315E+22	6,061524E+21	5,622467E+22
-2144	2,508101E+22	2,508072E+22	3,030753E+21	3,030677E+21	5,016173E+22	6,061430E+21	5,622316E+22
-2143	2,508057E+22	2,508092E+22	3,031049E+21	3,030942E+21	5,016149E+22	6,061991E+21	5,622348E+22
-2142	2,508115E+22	2,507977E+22	3,030773E+21	3,031201E+21	5,016092E+22	6,061974E+21	5,622289E+22
-2141	2,507914E+22	2,507989E+22	3,031385E+21	3,030959E+21	5,015903E+22	6,062344E+21	5,622137E+22
-2140	2,507889E+22	2,507937E+22	3,031358E+21	3,031556E+21	5,015827E+22	6,062914E+21	5,622118E+22
-2139	2,507856E+22	2,507776E+22	3,031272E+21	3,031536E+21	5,015632E+22	6,062808E+21	5,621913E+22
-2138	2,507695E+22	2,507811E+22	3,031852E+21	3,031401E+21	5,015505E+22	6,063253E+21	5,621831E+22
-2137	2,507796E+22	2,507737E+22	3,031456E+21	3,031880E+21	5,015533E+22	6,063336E+21	5,621867E+22
-2136	2,507760E+22	2,507679E+22	3,031535E+21	3,031498E+21	5,015439E+22	6,063033E+21	5,621742E+22
-2135	2,507705E+22	2,507790E+22	3,031773E+21	3,031500E+21	5,015496E+22	6,063273E+21	5,621823E+22
-2134	2,507847E+22	2,507763E+22	3,031233E+21	3,031743E+21	5,015610E+22	6,062976E+21	5,621907E+22
-2133	2,507779E+22	2,507841E+22	3,031483E+21	3,031166E+21	5,015621E+22	6,062649E+21	5,621886E+22
-2132	2,507848E+22	2,507922E+22	3,031375E+21	3,031357E+21	5,015770E+22	6,062733E+21	5,622043E+22
-2131	2,507967E+22	2,507864E+22	3,030946E+21	3,031196E+21	5,015832E+22	6,062142E+21	5,622046E+22
-2130	2,507892E+22	2,507988E+22	3,031343E+21	3,030786E+21	5,015881E+22	6,062129E+21	5,622094E+22
-2129	2,508006E+22	2,508015E+22	3,030952E+21	3,031243E+21	5,016020E+22	6,062195E+21	5,622240E+22
-2128	2,508027E+22	2,507951E+22	3,030794E+21	3,030967E+21	5,015978E+22	6,061761E+21	5,622154E+22
-2127	2,507945E+22	2,508044E+22	3,031183E+21	3,030880E+21	5,015989E+22	6,062064E+21	5,622195E+22
-2126	2,508061E+22	2,507981E+22	3,030783E+21	3,031312E+21	5,016042E+22	6,062095E+21	5,622252E+22
-2125	2,507980E+22	2,507945E+22	3,031115E+21	3,030925E+21	5,015925E+22	6,062040E+21	5,622129E+22
-2124	2,507903E+22	2,507974E+22	3,031429E+21	3,031251E+21	5,015877E+22	6,062680E+21	5,622145E+22
-2123	2,507920E+22	2,507823E+22	3,031144E+21	3,031569E+21	5,015743E+22	6,062713E+21	5,622014E+22
-2122	2,507732E+22	2,507811E+22	3,031751E+21	3,031365E+21	5,015543E+22	6,063116E+21	5,621855E+22
-2121	2,507708E+22	2,507766E+22	3,031704E+21	3,031941E+21	5,015474E+22	6,063645E+21	5,621839E+22
-2120	2,507715E+22	2,507589E+22	3,031559E+21	3,031896E+21	5,015303E+22	6,063454E+21	5,621649E+22
-2119	2,507576E+22	2,507640E+22	3,032098E+21	3,031669E+21	5,015216E+22	6,063768E+21	5,621592E+22

1	14	15	16	17	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	2,507665E+22	2,507604E+22	3,031748E+21	3,032168E+21	5,015270E+22	6,063916E+21	5,621661E+22
-2117	2,507632E+22	2,507574E+22	3,031826E+21	3,031768E+21	5,015206E+22	6,063594E+21	5,621566E+22
-2116	2,507568E+22	2,507696E+22	3,032054E+21	3,031769E+21	5,015264E+22	6,063823E+21	5,621646E+22
-2115	2,507703E+22	2,507632E+22	3,031512E+21	3,031969E+21	5,015335E+22	6,063480E+21	5,621683E+22
-2114	2,507664E+22	2,507700E+22	3,031768E+21	3,031377E+21	5,015363E+22	6,063144E+21	5,621678E+22
-2113	2,507724E+22	2,507800E+22	3,031657E+21	3,031576E+21	5,015524E+22	6,063233E+21	5,621847E+22
-2112	2,507850E+22	2,507733E+22	3,031164E+21	3,031484E+21	5,015583E+22	6,062648E+21	5,621848E+22
-2111	2,507772E+22	2,507859E+22	3,031518E+21	3,031065E+21	5,015631E+22	6,062583E+21	5,621889E+22
-2110	2,507872E+22	2,507891E+22	3,031197E+21	3,031550E+21	5,015763E+22	6,062747E+21	5,622037E+22
-2109	2,507910E+22	2,507832E+22	3,031079E+21	3,031239E+21	5,015742E+22	6,062318E+21	5,621974E+22
-2108	2,507823E+22	2,507925E+22	3,031505E+21	3,031140E+21	5,015748E+22	6,062645E+21	5,622013E+22
-2107	2,507912E+22	2,507828E+22	3,031149E+21	3,031588E+21	5,015740E+22	6,062738E+21	5,622013E+22
-2106	2,507826E+22	2,507787E+22	3,031495E+21	3,031285E+21	5,015613E+22	6,062780E+21	5,621891E+22
-2105	2,507712E+22	2,507824E+22	3,031797E+21	3,031655E+21	5,015536E+22	6,063452E+21	5,621881E+22
-2104	2,507744E+22	2,507641E+22	3,031454E+21	3,032005E+21	5,015386E+22	6,063458E+21	5,621732E+22
-2103	2,507581E+22	2,507621E+22	3,032019E+21	3,031700E+21	5,015203E+22	6,063719E+21	5,621574E+22
-2102	2,507561E+22	2,507595E+22	3,032031E+21	3,032229E+21	5,015156E+22	6,064260E+21	5,621582E+22
-2101	2,507591E+22	2,507450E+22	3,031898E+21	3,032150E+21	5,015042E+22	6,064048E+21	5,621446E+22
-2100	2,507441E+22	2,507527E+22	3,032408E+21	3,031941E+21	5,014968E+22	6,064349E+21	5,621403E+22
-2099	2,507501E+22	2,507475E+22	3,032060E+21	3,032459E+21	5,014976E+22	6,064518E+21	5,621428E+22
-2098	2,507492E+22	2,507443E+22	3,032119E+21	3,032073E+21	5,014935E+22	6,064192E+21	5,621354E+22
-2097	2,507426E+22	2,507573E+22	3,032338E+21	3,032025E+21	5,014999E+22	6,064363E+21	5,621435E+22
-2096	2,507589E+22	2,507490E+22	3,031748E+21	3,032216E+21	5,015079E+22	6,063964E+21	5,621475E+22
-2095	2,507563E+22	2,507559E+22	3,031968E+21	3,031582E+21	5,015122E+22	6,063550E+21	5,621477E+22
-2094	2,507597E+22	2,507685E+22	3,031903E+21	3,031839E+21	5,015281E+22	6,063742E+21	5,621655E+22
-2093	2,507727E+22	2,507631E+22	3,031413E+21	3,031773E+21	5,015357E+22	6,063187E+21	5,621676E+22
-2092	2,507646E+22	2,507751E+22	3,031761E+21	3,031360E+21	5,015397E+22	6,063120E+21	5,621709E+22
-2091	2,507735E+22	2,507747E+22	3,031491E+21	3,031815E+21	5,015482E+22	6,063306E+21	5,621813E+22
-2090	2,507794E+22	2,507682E+22	3,031403E+21	3,031507E+21	5,015477E+22	6,062910E+21	5,621768E+22
-2089	2,507682E+22	2,507791E+22	3,031857E+21	3,031428E+21	5,015473E+22	6,063286E+21	5,621802E+22
-2088	2,507761E+22	2,507676E+22	3,031462E+21	3,031951E+21	5,015437E+22	6,063413E+21	5,621778E+22
-2087	2,507664E+22	2,507626E+22	3,031775E+21	3,031647E+21	5,015290E+22	6,063421E+21	5,621632E+22
-2086	2,507538E+22	2,507667E+22	3,032131E+21	3,032027E+21	5,015205E+22	6,064157E+21	5,621621E+22
-2085	2,507592E+22	2,507484E+22	3,031803E+21	3,032322E+21	5,015076E+22	6,064124E+21	5,621489E+22
-2084	2,507438E+22	2,507467E+22	3,032365E+21	3,031983E+21	5,014905E+22	6,064348E+21	5,621340E+22
-2083	2,507404E+22	2,507424E+22	3,032406E+21	3,032515E+21	5,014828E+22	6,064922E+21	5,621320E+22
-2082	2,507437E+22	2,507299E+22	3,032256E+21	3,032491E+21	5,014736E+22	6,064746E+21	5,621210E+22
-2081	2,507269E+22	2,507399E+22	3,032736E+21	3,032295E+21	5,014669E+22	6,065031E+21	5,621172E+22
-2080	2,507354E+22	2,507324E+22	3,032327E+21	3,032799E+21	5,014678E+22	6,065126E+21	5,621191E+22
-2079	2,507370E+22	2,507294E+22	3,032333E+21	3,032312E+21	5,014664E+22	6,064645E+21	5,621129E+22
-2078	2,507307E+22	2,507445E+22	3,032594E+21	3,032233E+21	5,014752E+22	6,064827E+21	5,621235E+22
-2077	2,507481E+22	2,507385E+22	3,032004E+21	3,032417E+21	5,014866E+22	6,064421E+21	5,621308E+22
-2076	2,507445E+22	2,507466E+22	3,032196E+21	3,031828E+21	5,014911E+22	6,064024E+21	5,621313E+22
-2075	2,507455E+22	2,507560E+22	3,032164E+21	3,032120E+21	5,015015E+22	6,064284E+21	5,621443E+22
-2074	2,507605E+22	2,507504E+22	3,031684E+21	3,032079E+21	5,015108E+22	6,063763E+21	5,621485E+22
-2073	2,507521E+22	2,507628E+22	3,032043E+21	3,031636E+21	5,015149E+22	6,063678E+21	5,621517E+22
-2072	2,507625E+22	2,507598E+22	3,031767E+21	3,032092E+21	5,015223E+22	6,063859E+21	5,621609E+22
-2071	2,507680E+22	2,507535E+22	3,031669E+21	3,031776E+21	5,015215E+22	6,063445E+21	5,621560E+22
-2070	2,507525E+22	2,507658E+22	3,032185E+21	3,031756E+21	5,015183E+22	6,063941E+21	5,621577E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2069	2,507596E+22	2,507545E+22	3,031805E+21	3,032299E+21	5,015141E+22	6,064104E+21	5,621551E+22
-2068	2,507500E+22	2,507476E+22	3,032110E+21	3,031991E+21	5,014976E+22	6,064101E+21	5,621386E+22
-2067	2,507361E+22	2,507479E+22	3,032510E+21	3,032339E+21	5,014840E+22	6,064849E+21	5,621325E+22
-2066	2,507441E+22	2,507306E+22	3,032184E+21	3,032643E+21	5,014747E+22	6,064827E+21	5,621230E+22
-2065	2,507276E+22	2,507313E+22	3,032725E+21	3,032319E+21	5,014589E+22	6,065044E+21	5,621094E+22
-2064	2,507247E+22	2,507265E+22	3,032708E+21	3,032895E+21	5,014512E+22	6,065603E+21	5,621072E+22
-2063	2,507290E+22	2,507148E+22	3,032506E+21	3,032833E+21	5,014438E+22	6,065339E+21	5,620972E+22
-2062	2,507120E+22	2,507268E+22	3,033017E+21	3,032606E+21	5,014388E+22	6,065623E+21	5,620950E+22
-2061	2,507232E+22	2,507204E+22	3,032610E+21	3,033030E+21	5,014436E+22	6,065641E+21	5,621000E+22
-2060	2,507258E+22	2,507177E+22	3,032599E+21	3,032512E+21	5,014435E+22	6,065112E+21	5,620946E+22
-2059	2,507171E+22	2,507310E+22	3,032890E+21	3,032460E+21	5,014481E+22	6,065350E+21	5,621016E+22
-2058	2,507346E+22	2,507264E+22	3,032282E+21	3,032710E+21	5,014610E+22	6,064991E+21	5,621110E+22
-2057	2,507302E+22	2,507351E+22	3,032454E+21	3,032147E+21	5,014654E+22	6,064601E+21	5,621114E+22
-2056	2,507339E+22	2,507416E+22	3,032391E+21	3,032427E+21	5,014755E+22	6,064819E+21	5,621237E+22
-2055	2,507506E+22	2,507360E+22	3,031900E+21	3,032301E+21	5,014867E+22	6,064201E+21	5,621287E+22
-2054	2,507414E+22	2,507507E+22	3,032325E+21	3,031859E+21	5,014921E+22	6,064184E+21	5,621339E+22
-2053	2,507505E+22	2,507490E+22	3,032076E+21	3,032320E+21	5,014996E+22	6,064396E+21	5,621435E+22
-2052	2,507529E+22	2,507426E+22	3,031973E+21	3,032074E+21	5,014955E+22	6,064048E+21	5,621360E+22
-2051	2,507340E+22	2,507505E+22	3,032543E+21	3,032110E+21	5,014845E+22	6,064653E+21	5,621310E+22
-2050	2,507419E+22	2,507381E+22	3,032173E+21	3,032673E+21	5,014800E+22	6,064847E+21	5,621285E+22
-2049	2,507329E+22	2,507306E+22	3,032479E+21	3,032353E+21	5,014635E+22	6,064832E+21	5,621119E+22
-2048	2,507217E+22	2,507281E+22	3,032846E+21	3,032697E+21	5,014498E+22	6,065543E+21	5,621052E+22
-2047	2,507300E+22	2,507128E+22	3,032484E+21	3,032986E+21	5,014427E+22	6,065470E+21	5,620974E+22
-2046	2,507115E+22	2,507170E+22	3,033038E+21	3,032696E+21	5,014286E+22	6,065734E+21	5,620859E+22
-2045	2,507095E+22	2,507137E+22	3,033017E+21	3,033232E+21	5,014233E+22	6,066249E+21	5,620858E+22
-2044	2,507149E+22	2,507023E+22	3,032797E+21	3,033113E+21	5,014172E+22	6,065910E+21	5,620763E+22
-2043	2,506973E+22	2,507116E+22	3,033347E+21	3,032836E+21	5,014089E+22	6,066183E+21	5,620707E+22
-2042	2,507099E+22	2,507070E+22	3,032938E+21	3,033252E+21	5,014169E+22	6,066190E+21	5,620788E+22
-2041	2,507116E+22	2,507058E+22	3,032892E+21	3,032777E+21	5,014174E+22	6,065669E+21	5,620741E+22
-2040	2,507039E+22	2,507171E+22	3,033117E+21	3,032775E+21	5,014210E+22	6,065893E+21	5,620800E+22
-2039	2,507231E+22	2,507132E+22	3,032469E+21	3,033004E+21	5,014364E+22	6,065473E+21	5,620911E+22
-2038	2,507191E+22	2,507235E+22	3,032670E+21	3,032414E+21	5,014427E+22	6,065085E+21	5,620935E+22
-2037	2,507247E+22	2,507309E+22	3,032637E+21	3,032626E+21	5,014557E+22	6,065263E+21	5,621083E+22
-2036	2,507410E+22	2,507255E+22	3,032165E+21	3,032491E+21	5,014665E+22	6,064656E+21	5,621131E+22
-2035	2,507267E+22	2,507376E+22	3,032661E+21	3,032121E+21	5,014642E+22	6,064782E+21	5,621121E+22
-2034	2,507335E+22	2,507364E+22	3,032423E+21	3,032659E+21	5,014700E+22	6,065082E+21	5,621208E+22
-2033	2,507345E+22	2,507281E+22	3,032319E+21	3,032472E+21	5,014626E+22	6,064791E+21	5,621106E+22
-2032	2,507179E+22	2,507311E+22	3,032854E+21	3,032505E+21	5,014490E+22	6,065359E+21	5,621026E+22
-2031	2,507281E+22	2,507186E+22	3,032464E+21	3,033001E+21	5,014467E+22	6,065466E+21	5,621014E+22
-2030	2,507190E+22	2,507139E+22	3,032798E+21	3,032679E+21	5,014329E+22	6,065477E+21	5,620877E+22
-2029	2,507080E+22	2,507141E+22	3,033165E+21	3,033013E+21	5,014221E+22	6,066178E+21	5,620839E+22
-2028	2,507148E+22	2,507004E+22	3,032797E+21	3,033313E+21	5,014152E+22	6,066111E+21	5,620763E+22
-2027	2,506940E+22	2,507023E+22	3,033403E+21	3,033039E+21	5,013963E+22	6,066442E+21	5,620608E+22
-2026	2,506930E+22	2,506998E+22	3,033386E+21	3,033531E+21	5,013929E+22	6,066917E+21	5,620620E+22
-2025	2,506991E+22	2,506882E+22	3,033155E+21	3,033397E+21	5,013874E+22	6,066552E+21	5,620529E+22
-2024	2,506839E+22	2,506944E+22	3,033647E+21	3,033120E+21	5,013784E+22	6,066768E+21	5,620460E+22
-2023	2,506966E+22	2,506916E+22	3,033181E+21	3,033528E+21	5,013882E+22	6,066709E+21	5,620553E+22
-2022	2,506977E+22	2,506937E+22	3,033122E+21	3,033097E+21	5,013914E+22	6,066219E+21	5,620536E+22
-2021	2,506928E+22	2,507056E+22	3,033329E+21	3,033051E+21	5,013985E+22	6,066380E+21	5,620622E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2020	2,507130E+22	2,507026E+22	3,032686E+21	3,033214E+21	5,014157E+22	6,065900E+21	5,620747E+22
-2019	2,507081E+22	2,507111E+22	3,032948E+21	3,032612E+21	5,014192E+22	6,065560E+21	5,620748E+22
-2018	2,507128E+22	2,507201E+22	3,032947E+21	3,032825E+21	5,014329E+22	6,065771E+21	5,620906E+22
-2017	2,507261E+22	2,507150E+22	3,032479E+21	3,032777E+21	5,014411E+22	6,065256E+21	5,620937E+22
-2016	2,507113E+22	2,507222E+22	3,032944E+21	3,032488E+21	5,014336E+22	6,065431E+21	5,620879E+22
-2015	2,507182E+22	2,507201E+22	3,032687E+21	3,033017E+21	5,014382E+22	6,065704E+21	5,620953E+22
-2014	2,507198E+22	2,507123E+22	3,032609E+21	3,032831E+21	5,014321E+22	6,065441E+21	5,620865E+22
-2013	2,507059E+22	2,507150E+22	3,033152E+21	3,032803E+21	5,014209E+22	6,065956E+21	5,620805E+22
-2012	2,507158E+22	2,507038E+22	3,032783E+21	3,033279E+21	5,014196E+22	6,066063E+21	5,620802E+22
-2011	2,507026E+22	2,506983E+22	3,033173E+21	3,033017E+21	5,014010E+22	6,066190E+21	5,620629E+22
-2010	2,506899E+22	2,507006E+22	3,033552E+21	3,033374E+21	5,013906E+22	6,066926E+21	5,620598E+22
-2009	2,506962E+22	2,506862E+22	3,033191E+21	3,033695E+21	5,013824E+22	6,066886E+21	5,620513E+22
-2008	2,506777E+22	2,506839E+22	3,033750E+21	3,033390E+21	5,013616E+22	6,067140E+21	5,620330E+22
-2007	2,506787E+22	2,506823E+22	3,033688E+21	3,033803E+21	5,013610E+22	6,067491E+21	5,620359E+22
-2006	2,506850E+22	2,506733E+22	3,033441E+21	3,033677E+21	5,013583E+22	6,067118E+21	5,620295E+22
-2005	2,506712E+22	2,506815E+22	3,033882E+21	3,033398E+21	5,013527E+22	6,067280E+21	5,620255E+22
-2004	2,506843E+22	2,506805E+22	3,033390E+21	3,033797E+21	5,013649E+22	6,067187E+21	5,620367E+22
-2003	2,506845E+22	2,506812E+22	3,033376E+21	3,033374E+21	5,013657E+22	6,066750E+21	5,620332E+22
-2002	2,506812E+22	2,506951E+22	3,033599E+21	3,033273E+21	5,013763E+22	6,066871E+21	5,620450E+22
-2001	2,507018E+22	2,506919E+22	3,032986E+21	3,033430E+21	5,013937E+22	6,066415E+21	5,620578E+22
-2000	2,506969E+22	2,506968E+22	3,033221E+21	3,032870E+21	5,013937E+22	6,066091E+21	5,620546E+22
-1999	2,506995E+22	2,507066E+22	3,033196E+21	3,033105E+21	5,014060E+22	6,066301E+21	5,620690E+22
-1998	2,507107E+22	2,507022E+22	3,032742E+21	3,033130E+21	5,014129E+22	6,065871E+21	5,620716E+22
-1997	2,506982E+22	2,507077E+22	3,033204E+21	3,032822E+21	5,014059E+22	6,066026E+21	5,620661E+22
-1996	2,507057E+22	2,507053E+22	3,032967E+21	3,033285E+21	5,014110E+22	6,066252E+21	5,620735E+22
-1995	2,507058E+22	2,506959E+22	3,032964E+21	3,033112E+21	5,014017E+22	6,066075E+21	5,620624E+22
-1994	2,506911E+22	2,507010E+22	3,033525E+21	3,033086E+21	5,013921E+22	6,066611E+21	5,620582E+22
-1993	2,506982E+22	2,506907E+22	3,033177E+21	3,033644E+21	5,013889E+22	6,066820E+21	5,620571E+22
-1992	2,506851E+22	2,506812E+22	3,033528E+21	3,033442E+21	5,013663E+22	6,066970E+21	5,620360E+22
-1991	2,506725E+22	2,506833E+22	3,033882E+21	3,033744E+21	5,013558E+22	6,067627E+21	5,620321E+22
-1990	2,506797E+22	2,506701E+22	3,033527E+21	3,034044E+21	5,013498E+22	6,067571E+21	5,620255E+22
-1989	2,506649E+22	2,506671E+22	3,034052E+21	3,033677E+21	5,013320E+22	6,067730E+21	5,620093E+22
-1988	2,506655E+22	2,506676E+22	3,033968E+21	3,034047E+21	5,013330E+22	6,068016E+21	5,620132E+22
-1987	2,506692E+22	2,506592E+22	3,033738E+21	3,033987E+21	5,013284E+22	6,067725E+21	5,620057E+22
-1986	2,506562E+22	2,506697E+22	3,034157E+21	3,033697E+21	5,013260E+22	6,067855E+21	5,620045E+22
-1985	2,506707E+22	2,506691E+22	3,033683E+21	3,034092E+21	5,013398E+22	6,067774E+21	5,620176E+22
-1984	2,506737E+22	2,506665E+22	3,033628E+21	3,033629E+21	5,013402E+22	6,067257E+21	5,620128E+22
-1983	2,506713E+22	2,506817E+22	3,033835E+21	3,033460E+21	5,013531E+22	6,067295E+21	5,620260E+22
-1982	2,506902E+22	2,506812E+22	3,033236E+21	3,033653E+21	5,013715E+22	6,066890E+21	5,620403E+22
-1981	2,506854E+22	2,506857E+22	3,033445E+21	3,033141E+21	5,013711E+22	6,066586E+21	5,620369E+22
-1980	2,506863E+22	2,506954E+22	3,033429E+21	3,033376E+21	5,013816E+22	6,066805E+21	5,620497E+22
-1979	2,506955E+22	2,506883E+22	3,033044E+21	3,033447E+21	5,013838E+22	6,066492E+21	5,620487E+22
-1978	2,506841E+22	2,506941E+22	3,033530E+21	3,033103E+21	5,013782E+22	6,066632E+21	5,620445E+22
-1977	2,506919E+22	2,506907E+22	3,033344E+21	3,033586E+21	5,013826E+22	6,066930E+21	5,620519E+22
-1976	2,506912E+22	2,506781E+22	3,033314E+21	3,033466E+21	5,013693E+22	6,066780E+21	5,620371E+22
-1975	2,506746E+22	2,506846E+22	3,033847E+21	3,033465E+21	5,013592E+22	6,067313E+21	5,620323E+22
-1974	2,506802E+22	2,506753E+22	3,033517E+21	3,034056E+21	5,013555E+22	6,067573E+21	5,620312E+22
-1973	2,506696E+22	2,506645E+22	3,033847E+21	3,033823E+21	5,013340E+22	6,067670E+21	5,620107E+22
-1972	2,506580E+22	2,506672E+22	3,034193E+21	3,034020E+21	5,013252E+22	6,068213E+21	5,620073E+22

1	14	15	16	17	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							
-1971	2,506639E+22	2,506532E+22	3,033889E+21	3,034324E+21	5,013171E+22	6,068212E+21	5,619992E+22
-1970	2,506491E+22	2,506533E+22	3,034391E+21	3,033945E+21	5,013025E+22	6,068337E+21	5,619858E+22
-1969	2,506493E+22	2,506547E+22	3,034304E+21	3,034369E+21	5,013040E+22	6,068673E+21	5,619907E+22
-1968	2,506544E+22	2,506436E+22	3,034016E+21	3,034337E+21	5,012980E+22	6,068352E+21	5,619816E+22
-1967	2,506436E+22	2,506557E+22	3,034392E+21	3,033984E+21	5,012993E+22	6,068376E+21	5,619831E+22
-1966	2,506594E+22	2,506571E+22	3,033937E+21	3,034336E+21	5,013165E+22	6,068273E+21	5,619992E+22
-1965	2,506654E+22	2,506544E+22	3,033860E+21	3,033839E+21	5,013198E+22	6,067699E+21	5,619968E+22
-1964	2,506610E+22	2,506712E+22	3,034064E+21	3,033639E+21	5,013322E+22	6,067703E+21	5,620092E+22
-1963	2,506752E+22	2,506701E+22	3,033520E+21	3,033930E+21	5,013452E+22	6,067450E+21	5,620197E+22
-1962	2,506699E+22	2,506746E+22	3,033737E+21	3,033439E+21	5,013445E+22	6,067176E+21	5,620163E+22
-1961	2,506713E+22	2,506823E+22	3,033762E+21	3,033696E+21	5,013536E+22	6,067458E+21	5,620282E+22
-1960	2,506824E+22	2,506709E+22	3,033352E+21	3,033770E+21	5,013533E+22	6,067122E+21	5,620246E+22
-1959	2,506717E+22	2,506772E+22	3,033814E+21	3,033390E+21	5,013489E+22	6,067204E+21	5,620209E+22
-1958	2,506774E+22	2,506765E+22	3,033655E+21	3,033916E+21	5,013539E+22	6,067571E+21	5,620296E+22
-1957	2,506774E+22	2,506634E+22	3,033597E+21	3,033840E+21	5,013407E+22	6,067436E+21	5,620151E+22
-1956	2,506590E+22	2,506702E+22	3,034146E+21	3,033796E+21	5,013292E+22	6,067942E+21	5,620086E+22
-1955	2,506625E+22	2,506597E+22	3,033892E+21	3,034404E+21	5,013222E+22	6,068296E+21	5,620052E+22
-1954	2,506531E+22	2,506494E+22	3,034234E+21	3,034116E+21	5,013025E+22	6,068351E+21	5,619860E+22
-1953	2,506419E+22	2,506514E+22	3,034603E+21	3,034325E+21	5,012934E+22	6,068928E+21	5,619826E+22
-1952	2,506473E+22	2,506350E+22	3,034237E+21	3,034677E+21	5,012824E+22	6,068914E+21	5,619715E+22
-1951	2,506327E+22	2,506368E+22	3,034668E+21	3,034306E+21	5,012695E+22	6,068974E+21	5,619593E+22
-1950	2,506339E+22	2,506404E+22	3,034583E+21	3,034725E+21	5,012744E+22	6,069308E+21	5,619675E+22
-1949	2,506435E+22	2,506296E+22	3,034251E+21	3,034633E+21	5,012731E+22	6,068884E+21	5,619620E+22
-1948	2,506343E+22	2,506437E+22	3,034615E+21	3,034159E+21	5,012779E+22	6,068774E+21	5,619657E+22
-1947	2,506476E+22	2,506459E+22	3,034227E+21	3,034523E+21	5,012935E+22	6,068750E+21	5,619810E+22
-1946	2,506521E+22	2,506457E+22	3,034140E+21	3,034046E+21	5,012978E+22	6,068186E+21	5,619796E+22
-1945	2,506462E+22	2,506614E+22	3,034365E+21	3,033932E+21	5,013076E+22	6,068296E+21	5,619905E+22
-1944	2,506599E+22	2,506554E+22	3,033790E+21	3,034267E+21	5,013153E+22	6,068057E+21	5,619958E+22
-1943	2,506567E+22	2,506593E+22	3,033980E+21	3,033755E+21	5,013160E+22	6,067735E+21	5,619933E+22
-1942	2,506594E+22	2,506672E+22	3,034041E+21	3,033986E+21	5,013267E+22	6,068027E+21	5,620069E+22
-1941	2,506725E+22	2,506554E+22	3,033618E+21	3,034060E+21	5,013279E+22	6,067678E+21	5,620047E+22
-1940	2,506595E+22	2,506638E+22	3,034073E+21	3,033663E+21	5,013233E+22	6,067736E+21	5,620007E+22
-1939	2,506603E+22	2,506629E+22	3,033997E+21	3,034266E+21	5,013232E+22	6,068263E+21	5,620058E+22
-1938	2,506596E+22	2,506503E+22	3,033970E+21	3,034185E+21	5,013099E+22	6,068155E+21	5,619915E+22
-1937	2,506417E+22	2,506550E+22	3,034570E+21	3,034142E+21	5,012967E+22	6,068712E+21	5,619838E+22
-1936	2,506454E+22	2,506404E+22	3,034290E+21	3,034737E+21	5,012858E+22	6,069027E+21	5,619761E+22
-1935	2,506369E+22	2,506308E+22	3,034584E+21	3,034442E+21	5,012677E+22	6,069026E+21	5,619580E+22
-1934	2,506248E+22	2,506351E+22	3,034935E+21	3,034685E+21	5,012599E+22	6,069619E+21	5,619561E+22
-1933	2,506326E+22	2,506192E+22	3,034504E+21	3,035064E+21	5,012518E+22	6,069568E+21	5,619475E+22
-1932	2,506193E+22	2,506228E+22	3,034897E+21	3,034611E+21	5,012422E+22	6,069508E+21	5,619373E+22
-1931	2,506202E+22	2,506275E+22	3,034880E+21	3,035007E+21	5,012477E+22	6,069887E+21	5,619466E+22
-1930	2,506317E+22	2,506190E+22	3,034560E+21	3,034834E+21	5,012506E+22	6,069394E+21	5,619446E+22
-1929	2,506223E+22	2,506329E+22	3,034951E+21	3,034377E+21	5,012552E+22	6,069328E+21	5,619485E+22
-1928	2,506333E+22	2,506327E+22	3,034515E+21	3,034795E+21	5,012660E+22	6,069310E+21	5,619591E+22
-1927	2,506372E+22	2,506322E+22	3,034374E+21	3,034359E+21	5,012693E+22	6,068733E+21	5,619567E+22
-1926	2,506317E+22	2,506477E+22	3,034613E+21	3,034259E+21	5,012794E+22	6,068872E+21	5,619682E+22
-1925	2,506497E+22	2,506404E+22	3,034005E+21	3,034567E+21	5,012902E+22	6,068572E+21	5,619759E+22
-1924	2,506477E+22	2,506453E+22	3,034188E+21	3,033958E+21	5,012930E+22	6,068145E+21	5,619744E+22
-1923	2,506475E+22	2,506545E+22	3,034339E+21	3,034226E+21	5,013020E+22	6,068564E+21	5,619877E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1922	2,506583E+22	2,506452E+22	3,033941E+21	3,034321E+21	5,013035E+22	6,068262E+21	5,619861E+22
-1921	2,506433E+22	2,506521E+22	3,034446E+21	3,034011E+21	5,012954E+22	6,068458E+21	5,619800E+22
-1920	2,506420E+22	2,506466E+22	3,034370E+21	3,034643E+21	5,012887E+22	6,069013E+21	5,619788E+22
-1919	2,506423E+22	2,506328E+22	3,034325E+21	3,034557E+21	5,012751E+22	6,068883E+21	5,619639E+22
-1918	2,506254E+22	2,506368E+22	3,034947E+21	3,034499E+21	5,012623E+22	6,069447E+21	5,619567E+22
-1917	2,506310E+22	2,506216E+22	3,034615E+21	3,035101E+21	5,012527E+22	6,069717E+21	5,619498E+22
-1916	2,506216E+22	2,506142E+22	3,034857E+21	3,034781E+21	5,012358E+22	6,069637E+21	5,619322E+22
-1915	2,506074E+22	2,506198E+22	3,035251E+21	3,035064E+21	5,012271E+22	6,070315E+21	5,619303E+22
-1914	2,506168E+22	2,506065E+22	3,034833E+21	3,035383E+21	5,012233E+22	6,070216E+21	5,619254E+22
-1913	2,506063E+22	2,506102E+22	3,035246E+21	3,034898E+21	5,012164E+22	6,070144E+21	5,619179E+22
-1912	2,506070E+22	2,506124E+22	3,035205E+21	3,035240E+21	5,012194E+22	6,070445E+21	5,619239E+22
-1911	2,506186E+22	2,506057E+22	3,034838E+21	3,035068E+21	5,012243E+22	6,069906E+21	5,619234E+22
-1910	2,506081E+22	2,506206E+22	3,035213E+21	3,034653E+21	5,012287E+22	6,069867E+21	5,619274E+22
-1909	2,506202E+22	2,506194E+22	3,034721E+21	3,035103E+21	5,012396E+22	6,069824E+21	5,619378E+22
-1908	2,506254E+22	2,506195E+22	3,034549E+21	3,034616E+21	5,012449E+22	6,069166E+21	5,619366E+22
-1907	2,506199E+22	2,506349E+22	3,034866E+21	3,034515E+21	5,012547E+22	6,069381E+21	5,619486E+22
-1906	2,506391E+22	2,506294E+22	3,034304E+21	3,034768E+21	5,012685E+22	6,069072E+21	5,619592E+22
-1905	2,506365E+22	2,506339E+22	3,034524E+21	3,034214E+21	5,012704E+22	6,068738E+21	5,619578E+22
-1904	2,506318E+22	2,506405E+22	3,034665E+21	3,034545E+21	5,012723E+22	6,069209E+21	5,619644E+22
-1903	2,506411E+22	2,506306E+22	3,034258E+21	3,034697E+21	5,012717E+22	6,068955E+21	5,619613E+22
-1902	2,506260E+22	2,506359E+22	3,034801E+21	3,034408E+21	5,012619E+22	6,069208E+21	5,619540E+22
-1901	2,506273E+22	2,506285E+22	3,034693E+21	3,035009E+21	5,012558E+22	6,069702E+21	5,619529E+22
-1900	2,506284E+22	2,506151E+22	3,034623E+21	3,034853E+21	5,012435E+22	6,069477E+21	5,619382E+22
-1899	2,506092E+22	2,506202E+22	3,035295E+21	3,034838E+21	5,012294E+22	6,070133E+21	5,619307E+22
-1898	2,506141E+22	2,506079E+22	3,034964E+21	3,035434E+21	5,012220E+22	6,070398E+21	5,619260E+22
-1897	2,506052E+22	2,506002E+22	3,035217E+21	3,035153E+21	5,012054E+22	6,070370E+21	5,619091E+22
-1896	2,505908E+22	2,506036E+22	3,035591E+21	3,035412E+21	5,011944E+22	6,071003E+21	5,619044E+22
-1895	2,506025E+22	2,505911E+22	3,035155E+21	3,035679E+21	5,011936E+22	6,070834E+21	5,619020E+22
-1894	2,505930E+22	2,505956E+22	3,035577E+21	3,035165E+21	5,011886E+22	6,070742E+21	5,618960E+22
-1893	2,505951E+22	2,505982E+22	3,035466E+21	3,035506E+21	5,011933E+22	6,070972E+21	5,619030E+22
-1892	2,506052E+22	2,505931E+22	3,035036E+21	3,035319E+21	5,011983E+22	6,070355E+21	5,619018E+22
-1891	2,505931E+22	2,506081E+22	3,035454E+21	3,034957E+21	5,012013E+22	6,070411E+21	5,619054E+22
-1890	2,506071E+22	2,506083E+22	3,034986E+21	3,035345E+21	5,012155E+22	6,070330E+21	5,619188E+22
-1889	2,506149E+22	2,506078E+22	3,034841E+21	3,034856E+21	5,012227E+22	6,069697E+21	5,619197E+22
-1888	2,506084E+22	2,506208E+22	3,035151E+21	3,034745E+21	5,012293E+22	6,069896E+21	5,619282E+22
-1887	2,506265E+22	2,506168E+22	3,034585E+21	3,035035E+21	5,012433E+22	6,069619E+21	5,619395E+22
-1886	2,506219E+22	2,506214E+22	3,034819E+21	3,034555E+21	5,012433E+22	6,069374E+21	5,619371E+22
-1885	2,506173E+22	2,506258E+22	3,034930E+21	3,034912E+21	5,012432E+22	6,069842E+21	5,619416E+22
-1884	2,506267E+22	2,506155E+22	3,034517E+21	3,035022E+21	5,012422E+22	6,069539E+21	5,619376E+22
-1883	2,506108E+22	2,506196E+22	3,035144E+21	3,034744E+21	5,012305E+22	6,069889E+21	5,619294E+22
-1882	2,506124E+22	2,506135E+22	3,035076E+21	3,035286E+21	5,012259E+22	6,070362E+21	5,619295E+22
-1881	2,506132E+22	2,505998E+22	3,035020E+21	3,035200E+21	5,012130E+22	6,070220E+21	5,619152E+22
-1880	2,505904E+22	2,506024E+22	3,035653E+21	3,035221E+21	5,011928E+22	6,070874E+21	5,619015E+22
-1879	2,505957E+22	2,505910E+22	3,035313E+21	3,035831E+21	5,011867E+22	6,071144E+21	5,618981E+22
-1878	2,505891E+22	2,505834E+22	3,035572E+21	3,035526E+21	5,011726E+22	6,071098E+21	5,618835E+22
-1877	2,505778E+22	2,505866E+22	3,035895E+21	3,035713E+21	5,011644E+22	6,071608E+21	5,618804E+22
-1876	2,505903E+22	2,505766E+22	3,035421E+21	3,035897E+21	5,011669E+22	6,071318E+21	5,618801E+22
-1875	2,505785E+22	2,505829E+22	3,035868E+21	3,035429E+21	5,011614E+22	6,071297E+21	5,618744E+22
-1874	2,505796E+22	2,505880E+22	3,035749E+21	3,035751E+21	5,011676E+22	6,071500E+21	5,618826E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1873	2,505910E+22	2,505820E+22	3,035318E+21	3,035620E+21	5,011730E+22	6,070938E+21	5,618824E+22
-1872	2,505790E+22	2,505937E+22	3,035710E+21	3,035246E+21	5,011727E+22	6,070956E+21	5,618823E+22
-1871	2,505957E+22	2,505946E+22	3,035250E+21	3,035602E+21	5,011903E+22	6,070852E+21	5,618988E+22
-1870	2,506048E+22	2,505943E+22	3,035126E+21	3,035116E+21	5,011991E+22	6,070242E+21	5,619015E+22
-1869	2,505981E+22	2,506074E+22	3,035383E+21	3,035029E+21	5,012055E+22	6,070412E+21	5,619097E+22
-1868	2,506136E+22	2,506046E+22	3,034795E+21	3,035316E+21	5,012181E+22	6,070111E+21	5,619193E+22
-1867	2,506066E+22	2,506084E+22	3,035105E+21	3,034905E+21	5,012151E+22	6,070009E+21	5,619152E+22
-1866	2,506025E+22	2,506131E+22	3,035268E+21	3,035190E+21	5,012157E+22	6,070458E+21	5,619202E+22
-1865	2,506129E+22	2,506009E+22	3,034897E+21	3,035311E+21	5,012138E+22	6,070208E+21	5,619159E+22
-1864	2,505949E+22	2,506019E+22	3,035518E+21	3,035048E+21	5,011968E+22	6,070566E+21	5,619024E+22
-1863	2,505953E+22	2,505966E+22	3,035440E+21	3,035629E+21	5,011919E+22	6,071068E+21	5,619026E+22
-1862	2,505950E+22	2,505830E+22	3,035382E+21	3,035608E+21	5,011781E+22	6,070990E+21	5,618880E+22
-1861	2,505742E+22	2,505848E+22	3,035947E+21	3,035634E+21	5,011590E+22	6,071582E+21	5,618748E+22
-1860	2,505808E+22	2,505746E+22	3,035594E+21	3,036160E+21	5,011555E+22	6,071754E+21	5,618730E+22
-1859	2,505747E+22	2,505683E+22	3,035910E+21	3,035842E+21	5,011430E+22	6,071752E+21	5,618605E+22
-1858	2,505641E+22	2,505738E+22	3,036248E+21	3,035937E+21	5,011379E+22	6,072185E+21	5,618598E+22
-1857	2,505758E+22	2,505645E+22	3,035763E+21	3,036178E+21	5,011403E+22	6,071941E+21	5,618597E+22
-1856	2,505610E+22	2,505682E+22	3,036159E+21	3,035754E+21	5,011292E+22	6,071913E+21	5,618483E+22
-1855	2,505635E+22	2,505735E+22	3,036025E+21	3,036074E+21	5,011370E+22	6,072099E+21	5,618579E+22
-1854	2,505780E+22	2,505675E+22	3,035597E+21	3,035928E+21	5,011455E+22	6,071525E+21	5,618608E+22
-1853	2,505700E+22	2,505787E+22	3,035920E+21	3,035500E+21	5,011487E+22	6,071420E+21	5,618629E+22
-1852	2,505870E+22	2,505821E+22	3,035450E+21	3,035795E+21	5,011691E+22	6,071245E+21	5,618816E+22
-1851	2,505934E+22	2,505839E+22	3,035369E+21	3,035373E+21	5,011773E+22	6,070742E+21	5,618847E+22
-1850	2,505848E+22	2,505984E+22	3,035662E+21	3,035261E+21	5,011832E+22	6,070923E+21	5,618924E+22
-1849	2,505998E+22	2,505940E+22	3,035117E+21	3,035606E+21	5,011938E+22	6,070723E+21	5,619010E+22
-1848	2,505905E+22	2,505931E+22	3,035442E+21	3,035213E+21	5,011835E+22	6,070655E+21	5,618901E+22
-1847	2,505868E+22	2,505969E+22	3,035640E+21	3,035489E+21	5,011837E+22	6,071129E+21	5,618950E+22
-1846	2,505976E+22	2,505838E+22	3,035285E+21	3,035661E+21	5,011813E+22	6,070946E+21	5,618908E+22
-1845	2,505792E+22	2,505834E+22	3,035821E+21	3,035442E+21	5,011626E+22	6,071262E+21	5,618753E+22
-1844	2,505785E+22	2,505794E+22	3,035716E+21	3,036012E+21	5,011579E+22	6,071728E+21	5,618752E+22
-1843	2,505780E+22	2,505666E+22	3,035710E+21	3,036019E+21	5,011446E+22	6,071729E+21	5,618619E+22
-1842	2,505592E+22	2,505703E+22	3,036305E+21	3,035934E+21	5,011295E+22	6,072240E+21	5,618519E+22
-1841	2,505673E+22	2,505607E+22	3,035982E+21	3,036438E+21	5,011280E+22	6,072420E+21	5,618522E+22
-1840	2,505583E+22	2,505526E+22	3,036274E+21	3,036129E+21	5,011109E+22	6,072403E+21	5,618350E+22
-1839	2,505469E+22	2,505597E+22	3,036585E+21	3,036241E+21	5,011066E+22	6,072826E+21	5,618348E+22
-1838	2,505588E+22	2,505500E+22	3,036079E+21	3,036530E+21	5,011088E+22	6,072609E+21	5,618349E+22
-1837	2,505472E+22	2,505521E+22	3,036379E+21	3,036098E+21	5,010993E+22	6,072477E+21	5,618241E+22
-1836	2,505524E+22	2,505589E+22	3,036224E+21	3,036325E+21	5,011112E+22	6,072549E+21	5,618367E+22
-1835	2,505682E+22	2,505551E+22	3,035846E+21	3,036171E+21	5,011232E+22	6,072016E+21	5,618434E+22
-1834	2,505611E+22	2,505692E+22	3,036185E+21	3,035675E+21	5,011303E+22	6,071861E+21	5,618489E+22
-1833	2,505759E+22	2,505733E+22	3,035737E+21	3,036021E+21	5,011491E+22	6,071758E+21	5,618667E+22
-1832	2,505774E+22	2,505720E+22	3,035654E+21	3,035667E+21	5,011494E+22	6,071322E+21	5,618626E+22
-1831	2,505689E+22	2,505850E+22	3,035979E+21	3,035563E+21	5,011538E+22	6,071542E+21	5,618693E+22
-1830	2,505844E+22	2,505787E+22	3,035470E+21	3,035922E+21	5,011631E+22	6,071392E+21	5,618770E+22
-1829	2,505773E+22	2,505753E+22	3,035732E+21	3,035537E+21	5,011527E+22	6,071268E+21	5,618654E+22
-1828	2,505731E+22	2,505799E+22	3,035916E+21	3,035790E+21	5,011531E+22	6,071707E+21	5,618701E+22
-1827	2,505815E+22	2,505686E+22	3,035592E+21	3,036045E+21	5,011501E+22	6,071637E+21	5,618664E+22
-1826	2,505634E+22	2,505695E+22	3,036134E+21	3,035792E+21	5,011329E+22	6,071927E+21	5,618521E+22
-1825	2,505631E+22	2,505653E+22	3,036070E+21	3,036372E+21	5,011284E+22	6,072442E+21	5,618528E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1824	2,505609E+22	2,505501E+22	3,036086E+21	3,036365E+21	5,011110E+22	6,072451E+21	5,618355E+22
-1823	2,505433E+22	2,505541E+22	3,036713E+21	3,036234E+21	5,010973E+22	6,072947E+21	5,618268E+22
-1822	2,505510E+22	2,505447E+22	3,036397E+21	3,036766E+21	5,010958E+22	6,073163E+21	5,618274E+22
-1821	2,505417E+22	2,505356E+22	3,036571E+21	3,036498E+21	5,010774E+22	6,073070E+21	5,618081E+22
-1820	2,505303E+22	2,505434E+22	3,036831E+21	3,036580E+21	5,010738E+22	6,073411E+21	5,618079E+22
-1819	2,505439E+22	2,505351E+22	3,036344E+21	3,036871E+21	5,010790E+22	6,073215E+21	5,618112E+22
-1818	2,505362E+22	2,505394E+22	3,036640E+21	3,036313E+21	5,010756E+22	6,072953E+21	5,618052E+22
-1817	2,505436E+22	2,505480E+22	3,036512E+21	3,036513E+21	5,010916E+22	6,073025E+21	5,618218E+22
-1816	2,505558E+22	2,505436E+22	3,036130E+21	3,036379E+21	5,010994E+22	6,072509E+21	5,618245E+22
-1815	2,505469E+22	2,505589E+22	3,036475E+21	3,035919E+21	5,011058E+22	6,072394E+21	5,618298E+22
-1814	2,505606E+22	2,505619E+22	3,036044E+21	3,036330E+21	5,011225E+22	6,072374E+21	5,618463E+22
-1813	2,505632E+22	2,505572E+22	3,035893E+21	3,036007E+21	5,011203E+22	6,071900E+21	5,618393E+22
-1812	2,505558E+22	2,505693E+22	3,036223E+21	3,035852E+21	5,011251E+22	6,072074E+21	5,618458E+22
-1811	2,505716E+22	2,505635E+22	3,035769E+21	3,036232E+21	5,011351E+22	6,072001E+21	5,618551E+22
-1810	2,505651E+22	2,505613E+22	3,036037E+21	3,035818E+21	5,011264E+22	6,071855E+21	5,618450E+22
-1809	2,505590E+22	2,505665E+22	3,036238E+21	3,036128E+21	5,011255E+22	6,072367E+21	5,618492E+22
-1808	2,505631E+22	2,505528E+22	3,035935E+21	3,036433E+21	5,011158E+22	6,072367E+21	5,618395E+22
-1807	2,505461E+22	2,505535E+22	3,036517E+21	3,036156E+21	5,010996E+22	6,072673E+21	5,618264E+22
-1806	2,505469E+22	2,505487E+22	3,036496E+21	3,036715E+21	5,010956E+22	6,073210E+21	5,618277E+22
-1805	2,505459E+22	2,505320E+22	3,036442E+21	3,036704E+21	5,010779E+22	6,073146E+21	5,618094E+22
-1804	2,505275E+22	2,505372E+22	3,037033E+21	3,036546E+21	5,010647E+22	6,073579E+21	5,618004E+22
-1803	2,505332E+22	2,505298E+22	3,036716E+21	3,037127E+21	5,010631E+22	6,073843E+21	5,618015E+22
-1802	2,505261E+22	2,505218E+22	3,036858E+21	3,036821E+21	5,010479E+22	6,073679E+21	5,617847E+22
-1801	2,505168E+22	2,505298E+22	3,037119E+21	3,036873E+21	5,010466E+22	6,073991E+21	5,617865E+22
-1800	2,505297E+22	2,505208E+22	3,036645E+21	3,037138E+21	5,010504E+22	6,073783E+21	5,617883E+22
-1799	2,505248E+22	2,505266E+22	3,036950E+21	3,036538E+21	5,010514E+22	6,073488E+21	5,617863E+22
-1798	2,505313E+22	2,505362E+22	3,036833E+21	3,036770E+21	5,010675E+22	6,073603E+21	5,618035E+22
-1797	2,505422E+22	2,505309E+22	3,036353E+21	3,036690E+21	5,010731E+22	6,073043E+21	5,618035E+22
-1796	2,505330E+22	2,505454E+22	3,036681E+21	3,036220E+21	5,010784E+22	6,072901E+21	5,618074E+22
-1795	2,505466E+22	2,505487E+22	3,036297E+21	3,036633E+21	5,010953E+22	6,072931E+21	5,618246E+22
-1794	2,505523E+22	2,505441E+22	3,036158E+21	3,036244E+21	5,010963E+22	6,072401E+21	5,618203E+22
-1793	2,505454E+22	2,505561E+22	3,036520E+21	3,036092E+21	5,011015E+22	6,072612E+21	5,618276E+22
-1792	2,505565E+22	2,505493E+22	3,036092E+21	3,036529E+21	5,011058E+22	6,072621E+21	5,618320E+22
-1791	2,505489E+22	2,505475E+22	3,036375E+21	3,036152E+21	5,010964E+22	6,072527E+21	5,618217E+22
-1790	2,505421E+22	2,505516E+22	3,036615E+21	3,036511E+21	5,010937E+22	6,073126E+21	5,618250E+22
-1789	2,505468E+22	2,505354E+22	3,036263E+21	3,036825E+21	5,010822E+22	6,073088E+21	5,618131E+22
-1788	2,505309E+22	2,505358E+22	3,036859E+21	3,036497E+21	5,010666E+22	6,073356E+21	5,618002E+22
-1787	2,505312E+22	2,505324E+22	3,036880E+21	3,037054E+21	5,010636E+22	6,073935E+21	5,618030E+22
-1786	2,505303E+22	2,505168E+22	3,036800E+21	3,037024E+21	5,010472E+22	6,073824E+21	5,617854E+22
-1785	2,505106E+22	2,505224E+22	3,037365E+21	3,036899E+21	5,010331E+22	6,074265E+21	5,617757E+22
-1784	2,505137E+22	2,505131E+22	3,037046E+21	3,037494E+21	5,010269E+22	6,074539E+21	5,617723E+22
-1783	2,505098E+22	2,505059E+22	3,037190E+21	3,037133E+21	5,010157E+22	6,074323E+21	5,617589E+22
-1782	2,505038E+22	2,505149E+22	3,037458E+21	3,037156E+21	5,010187E+22	6,074614E+21	5,617649E+22
-1781	2,505182E+22	2,505060E+22	3,036908E+21	3,037405E+21	5,010242E+22	6,074313E+21	5,617673E+22
-1780	2,505131E+22	2,505139E+22	3,037171E+21	3,036789E+21	5,010270E+22	6,073960E+21	5,617666E+22
-1779	2,505179E+22	2,505255E+22	3,037065E+21	3,037049E+21	5,010434E+22	6,074114E+21	5,617846E+22
-1778	2,505301E+22	2,505204E+22	3,036573E+21	3,036942E+21	5,010505E+22	6,073515E+21	5,617856E+22
-1777	2,505218E+22	2,505340E+22	3,036925E+21	3,036464E+21	5,010558E+22	6,073390E+21	5,617897E+22
-1776	2,505328E+22	2,505352E+22	3,036596E+21	3,036875E+21	5,010679E+22	6,073471E+21	5,618027E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1775	2,505397E+22	2,505306E+22	3,036496E+21	3,036494E+21	5,010704E+22	6,072991E+21	5,618003E+22
-1774	2,505315E+22	2,505423E+22	3,036873E+21	3,036416E+21	5,010738E+22	6,073288E+21	5,618067E+22
-1773	2,505404E+22	2,505336E+22	3,036380E+21	3,036920E+21	5,010740E+22	6,073300E+21	5,618070E+22
-1772	2,505332E+22	2,505307E+22	3,036658E+21	3,036537E+21	5,010639E+22	6,073195E+21	5,617958E+22
-1771	2,505263E+22	2,505356E+22	3,036950E+21	3,036869E+21	5,010619E+22	6,073819E+21	5,618001E+22
-1770	2,505334E+22	2,505201E+22	3,036614E+21	3,037124E+21	5,010536E+22	6,073738E+21	5,617909E+22
-1769	2,505170E+22	2,505204E+22	3,037227E+21	3,036795E+21	5,010375E+22	6,074022E+21	5,617777E+22
-1768	2,505115E+22	2,505166E+22	3,037264E+21	3,037393E+21	5,010281E+22	6,074657E+21	5,617746E+22
-1767	2,505110E+22	2,505012E+22	3,037173E+21	3,037394E+21	5,010123E+22	6,074567E+21	5,617579E+22
-1766	2,504926E+22	2,505056E+22	3,037728E+21	3,037292E+21	5,009982E+22	6,075020E+21	5,617484E+22
-1765	2,504980E+22	2,504951E+22	3,037335E+21	3,037856E+21	5,009931E+22	6,075191E+21	5,617450E+22
-1764	2,504978E+22	2,504889E+22	3,037457E+21	3,037421E+21	5,009867E+22	6,074878E+21	5,617355E+22
-1763	2,504926E+22	2,505014E+22	3,037741E+21	3,037415E+21	5,009940E+22	6,075156E+21	5,617455E+22
-1762	2,505072E+22	2,504954E+22	3,037162E+21	3,037643E+21	5,010026E+22	6,074805E+21	5,617507E+22
-1761	2,505007E+22	2,505038E+22	3,037408E+21	3,037050E+21	5,010045E+22	6,074458E+21	5,617491E+22
-1760	2,505018E+22	2,505136E+22	3,037343E+21	3,037312E+21	5,010153E+22	6,074655E+21	5,617619E+22
-1759	2,505162E+22	2,505079E+22	3,036881E+21	3,037176E+21	5,010242E+22	6,074057E+21	5,617647E+22
-1758	2,505097E+22	2,505203E+22	3,037259E+21	3,036721E+21	5,010300E+22	6,073979E+21	5,617698E+22
-1757	2,505201E+22	2,505200E+22	3,036875E+21	3,037160E+21	5,010401E+22	6,074035E+21	5,617804E+22
-1756	2,505264E+22	2,505160E+22	3,036748E+21	3,036817E+21	5,010423E+22	6,073565E+21	5,617780E+22
-1755	2,505168E+22	2,505289E+22	3,037140E+21	3,036779E+21	5,010456E+22	6,073919E+21	5,617848E+22
-1754	2,505269E+22	2,505198E+22	3,036660E+21	3,037254E+21	5,010467E+22	6,073914E+21	5,617859E+22
-1753	2,505200E+22	2,505165E+22	3,036969E+21	3,036855E+21	5,010365E+22	6,073823E+21	5,617747E+22
-1752	2,505099E+22	2,505196E+22	3,037335E+21	3,037166E+21	5,010295E+22	6,074501E+21	5,617745E+22
-1751	2,505168E+22	2,505044E+22	3,037041E+21	3,037430E+21	5,010212E+22	6,074472E+21	5,617660E+22
-1750	2,504988E+22	2,505042E+22	3,037644E+21	3,037188E+21	5,010029E+22	6,074832E+21	5,617513E+22
-1749	2,504915E+22	2,504978E+22	3,037597E+21	3,037819E+21	5,009893E+22	6,075416E+21	5,617435E+22
-1748	2,504936E+22	2,504818E+22	3,037475E+21	3,037796E+21	5,009754E+22	6,075270E+21	5,617281E+22
-1747	2,504780E+22	2,504883E+22	3,038027E+21	3,037630E+21	5,009663E+22	6,075657E+21	5,617229E+22
-1746	2,504873E+22	2,504804E+22	3,037627E+21	3,038110E+21	5,009677E+22	6,075737E+21	5,617251E+22
-1745	2,504875E+22	2,504770E+22	3,037731E+21	3,037649E+21	5,009645E+22	6,075381E+21	5,617184E+22
-1744	2,504771E+22	2,504904E+22	3,038038E+21	3,037657E+21	5,009676E+22	6,075695E+21	5,617245E+22
-1743	2,504918E+22	2,504852E+22	3,037474E+21	3,037897E+21	5,009770E+22	6,075371E+21	5,617307E+22
-1742	2,504860E+22	2,504918E+22	3,037718E+21	3,037351E+21	5,009777E+22	6,075070E+21	5,617284E+22
-1741	2,504874E+22	2,504987E+22	3,037602E+21	3,037600E+21	5,009861E+22	6,075202E+21	5,617381E+22
-1740	2,505049E+22	2,504923E+22	3,037134E+21	3,037451E+21	5,009972E+22	6,074585E+21	5,617430E+22
-1739	2,504985E+22	2,505062E+22	3,037515E+21	3,037006E+21	5,010047E+22	6,074521E+21	5,617499E+22
-1738	2,505089E+22	2,505076E+22	3,037116E+21	3,037462E+21	5,010165E+22	6,074578E+21	5,617622E+22
-1737	2,505139E+22	2,505033E+22	3,036983E+21	3,037136E+21	5,010172E+22	6,074119E+21	5,617584E+22
-1736	2,505003E+22	2,505147E+22	3,037452E+21	3,037089E+21	5,010150E+22	6,074541E+21	5,617604E+22
-1735	2,505119E+22	2,505059E+22	3,037042E+21	3,037528E+21	5,010178E+22	6,074570E+21	5,617635E+22
-1734	2,505052E+22	2,505010E+22	3,037389E+21	3,037174E+21	5,010062E+22	6,074564E+21	5,617519E+22
-1733	2,504923E+22	2,505022E+22	3,037710E+21	3,037512E+21	5,009945E+22	6,075223E+21	5,617467E+22
-1732	2,504988E+22	2,504864E+22	3,037384E+21	3,037824E+21	5,009851E+22	6,075208E+21	5,617372E+22
-1731	2,504805E+22	2,504866E+22	3,037969E+21	3,037600E+21	5,009671E+22	6,075569E+21	5,617227E+22
-1730	2,504762E+22	2,504807E+22	3,037901E+21	3,038185E+21	5,009569E+22	6,076086E+21	5,617178E+22
-1729	2,504804E+22	2,504660E+22	3,037771E+21	3,038106E+21	5,009464E+22	6,075877E+21	5,617051E+22
-1728	2,504634E+22	2,504734E+22	3,038376E+21	3,037899E+21	5,009368E+22	6,076274E+21	5,616995E+22
-1727	2,504733E+22	2,504682E+22	3,038009E+21	3,038359E+21	5,009415E+22	6,076368E+21	5,617052E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1726	2,504721E+22	2,504654E+22	3,038085E+21	3,037977E+21	5,009375E+22	6,076062E+21	5,616981E+22
-1725	2,504599E+22	2,504762E+22	3,038314E+21	3,037988E+21	5,009360E+22	6,076302E+21	5,616990E+22
-1724	2,504769E+22	2,504696E+22	3,037725E+21	3,038205E+21	5,009466E+22	6,075931E+21	5,617059E+22
-1723	2,504739E+22	2,504772E+22	3,037962E+21	3,037625E+21	5,009510E+22	6,075587E+21	5,617069E+22
-1722	2,504783E+22	2,504850E+22	3,037836E+21	3,037824E+21	5,009633E+22	6,075660E+21	5,617199E+22
-1721	2,504953E+22	2,504807E+22	3,037352E+21	3,037683E+21	5,009760E+22	6,075035E+21	5,617263E+22
-1720	2,504846E+22	2,504949E+22	3,037766E+21	3,037277E+21	5,009795E+22	6,075044E+21	5,617299E+22
-1719	2,504946E+22	2,504965E+22	3,037429E+21	3,037736E+21	5,009911E+22	6,075165E+21	5,617428E+22
-1718	2,504996E+22	2,504908E+22	3,037326E+21	3,037466E+21	5,009904E+22	6,074792E+21	5,617383E+22
-1717	2,504847E+22	2,504986E+22	3,037788E+21	3,037398E+21	5,009833E+22	6,075186E+21	5,617352E+22
-1716	2,504973E+22	2,504884E+22	3,037405E+21	3,037846E+21	5,009858E+22	6,075250E+21	5,617383E+22
-1715	2,504893E+22	2,504844E+22	3,037752E+21	3,037541E+21	5,009737E+22	6,075293E+21	5,617267E+22
-1714	2,504756E+22	2,504857E+22	3,038036E+21	3,037907E+21	5,009613E+22	6,075943E+21	5,617207E+22
-1713	2,504817E+22	2,504696E+22	3,037685E+21	3,038220E+21	5,009513E+22	6,075904E+21	5,617104E+22
-1712	2,504622E+22	2,504688E+22	3,038308E+21	3,037962E+21	5,009311E+22	6,076270E+21	5,616938E+22
-1711	2,504611E+22	2,504649E+22	3,038295E+21	3,038475E+21	5,009260E+22	6,076770E+21	5,616937E+22
-1710	2,504664E+22	2,504514E+22	3,038170E+21	3,038421E+21	5,009179E+22	6,076591E+21	5,616838E+22
-1709	2,504471E+22	2,504585E+22	3,038711E+21	3,038214E+21	5,009056E+22	6,076926E+21	5,616748E+22
-1708	2,504575E+22	2,504536E+22	3,038313E+21	3,038697E+21	5,009111E+22	6,077009E+21	5,616812E+22
-1707	2,504563E+22	2,504515E+22	3,038353E+21	3,038312E+21	5,009078E+22	6,076665E+21	5,616744E+22
-1706	2,504471E+22	2,504621E+22	3,038544E+21	3,038274E+21	5,009093E+22	6,076818E+21	5,616774E+22
-1705	2,504664E+22	2,504561E+22	3,037937E+21	3,038429E+21	5,009225E+22	6,076366E+21	5,616862E+22
-1704	2,504619E+22	2,504638E+22	3,038228E+21	3,037836E+21	5,009257E+22	6,076064E+21	5,616864E+22
-1703	2,504668E+22	2,504743E+22	3,038147E+21	3,038043E+21	5,009411E+22	6,076190E+21	5,617030E+22
-1702	2,504818E+22	2,504702E+22	3,037661E+21	3,037999E+21	5,009520E+22	6,075660E+21	5,617086E+22
-1701	2,504688E+22	2,504811E+22	3,038041E+21	3,037605E+21	5,009498E+22	6,075646E+21	5,617063E+22
-1700	2,504805E+22	2,504810E+22	3,037731E+21	3,038046E+21	5,009615E+22	6,075777E+21	5,617193E+22
-1699	2,504860E+22	2,504755E+22	3,037646E+21	3,037768E+21	5,009616E+22	6,075415E+21	5,617157E+22
-1698	2,504721E+22	2,504831E+22	3,038111E+21	3,037698E+21	5,009551E+22	6,075809E+21	5,617132E+22
-1697	2,504823E+22	2,504738E+22	3,037711E+21	3,038165E+21	5,009560E+22	6,075876E+21	5,617148E+22
-1696	2,504702E+22	2,504688E+22	3,038095E+21	3,037921E+21	5,009390E+22	6,076015E+21	5,616992E+22
-1695	2,504575E+22	2,504699E+22	3,038422E+21	3,038273E+21	5,009275E+22	6,076695E+21	5,616944E+22
-1694	2,504647E+22	2,504534E+22	3,038077E+21	3,038623E+21	5,009181E+22	6,076700E+21	5,616851E+22
-1693	2,504458E+22	2,504503E+22	3,038664E+21	3,038316E+21	5,008961E+22	6,076980E+21	5,616659E+22
-1692	2,504468E+22	2,504471E+22	3,038665E+21	3,038803E+21	5,008939E+22	6,077468E+21	5,616686E+22
-1691	2,504513E+22	2,504368E+22	3,038511E+21	3,038768E+21	5,008881E+22	6,077278E+21	5,616609E+22
-1690	2,504321E+22	2,504441E+22	3,038990E+21	3,038558E+21	5,008763E+22	6,077548E+21	5,616518E+22
-1689	2,504422E+22	2,504397E+22	3,038557E+21	3,038989E+21	5,008819E+22	6,077546E+21	5,616574E+22
-1688	2,504410E+22	2,504372E+22	3,038626E+21	3,038573E+21	5,008781E+22	6,077199E+21	5,616501E+22
-1687	2,504350E+22	2,504491E+22	3,038861E+21	3,038467E+21	5,008841E+22	6,077328E+21	5,616574E+22
-1686	2,504549E+22	2,504447E+22	3,038253E+21	3,038674E+21	5,008996E+22	6,076928E+21	5,616689E+22
-1685	2,504484E+22	2,504510E+22	3,038483E+21	3,038105E+21	5,008994E+22	6,076588E+21	5,616653E+22
-1684	2,504537E+22	2,504612E+22	3,038405E+21	3,038349E+21	5,009149E+22	6,076754E+21	5,616825E+22
-1683	2,504683E+22	2,504578E+22	3,037917E+21	3,038321E+21	5,009261E+22	6,076238E+21	5,616885E+22
-1682	2,504569E+22	2,504674E+22	3,038289E+21	3,037910E+21	5,009243E+22	6,076200E+21	5,616863E+22
-1681	2,504687E+22	2,504671E+22	3,038000E+21	3,038297E+21	5,009358E+22	6,076297E+21	5,616988E+22
-1680	2,504713E+22	2,504609E+22	3,037988E+21	3,038059E+21	5,009322E+22	6,076047E+21	5,616927E+22
-1679	2,504561E+22	2,504692E+22	3,038500E+21	3,038020E+21	5,009254E+22	6,076520E+21	5,616906E+22
-1678	2,504641E+22	2,504591E+22	3,038092E+21	3,038587E+21	5,009232E+22	6,076679E+21	5,616900E+22

1	14	15	16	17	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							
-1677	2,504506E+22	2,504499E+22	3,038438E+21	3,038340E+21	5,009005E+22	6,076778E+21	5,616683E+22
-1676	2,504415E+22	2,504501E+22	3,038782E+21	3,038656E+21	5,008916E+22	6,077438E+21	5,616660E+22
-1675	2,504500E+22	2,504355E+22	3,038444E+21	3,038963E+21	5,008855E+22	6,077407E+21	5,616596E+22
-1674	2,504325E+22	2,504340E+22	3,038998E+21	3,038643E+21	5,008666E+22	6,077641E+21	5,616430E+22
-1673	2,504320E+22	2,504331E+22	3,038963E+21	3,039097E+21	5,008651E+22	6,078061E+21	5,616457E+22
-1672	2,504331E+22	2,504231E+22	3,038834E+21	3,039090E+21	5,008562E+22	6,077924E+21	5,616355E+22
-1671	2,504156E+22	2,504312E+22	3,039335E+21	3,038842E+21	5,008468E+22	6,078176E+21	5,616285E+22
-1670	2,504268E+22	2,504265E+22	3,038891E+21	3,039284E+21	5,008534E+22	6,078175E+21	5,616351E+22
-1669	2,504264E+22	2,504212E+22	3,038920E+21	3,038839E+21	5,008476E+22	6,077759E+21	5,616252E+22
-1668	2,504234E+22	2,504337E+22	3,039153E+21	3,038740E+21	5,008571E+22	6,077893E+21	5,616361E+22
-1667	2,504422E+22	2,504323E+22	3,038517E+21	3,038984E+21	5,008745E+22	6,077501E+21	5,616495E+22
-1666	2,504366E+22	2,504386E+22	3,038686E+21	3,038438E+21	5,008752E+22	6,077125E+21	5,616464E+22
-1665	2,504417E+22	2,504488E+22	3,038601E+21	3,038616E+21	5,008905E+22	6,077217E+21	5,616627E+22
-1664	2,504551E+22	2,504451E+22	3,038189E+21	3,038572E+21	5,009002E+22	6,076761E+21	5,616678E+22
-1663	2,504450E+22	2,504550E+22	3,038638E+21	3,038128E+21	5,009000E+22	6,076766E+21	5,616677E+22
-1662	2,504544E+22	2,504551E+22	3,038373E+21	3,038589E+21	5,009094E+22	6,076962E+21	5,616791E+22
-1661	2,504535E+22	2,504454E+22	3,038326E+21	3,038419E+21	5,008990E+22	6,076744E+21	5,616664E+22
-1660	2,504390E+22	2,504515E+22	3,038842E+21	3,038420E+21	5,008905E+22	6,077263E+21	5,616631E+22
-1659	2,504469E+22	2,504419E+22	3,038430E+21	3,038994E+21	5,008888E+22	6,077425E+21	5,616630E+22
-1658	2,504366E+22	2,504314E+22	3,038741E+21	3,038716E+21	5,008680E+22	6,077457E+21	5,616426E+22
-1657	2,504280E+22	2,504329E+22	3,039092E+21	3,038947E+21	5,008610E+22	6,078038E+21	5,616413E+22
-1656	2,504342E+22	2,504204E+22	3,038822E+21	3,039278E+21	5,008546E+22	6,078100E+21	5,616356E+22
-1655	2,504158E+22	2,504209E+22	3,039400E+21	3,038966E+21	5,008366E+22	6,078366E+21	5,616203E+22
-1654	2,504131E+22	2,504201E+22	3,039346E+21	3,039470E+21	5,008332E+22	6,078815E+21	5,616213E+22
-1653	2,504138E+22	2,504059E+22	3,039166E+21	3,039443E+21	5,008197E+22	6,078610E+21	5,616058E+22
-1652	2,504007E+22	2,504128E+22	3,039652E+21	3,039155E+21	5,008135E+22	6,078806E+21	5,616016E+22
-1651	2,504137E+22	2,504109E+22	3,039187E+21	3,039564E+21	5,008246E+22	6,078751E+21	5,616121E+22
-1650	2,504157E+22	2,504069E+22	3,039145E+21	3,039129E+21	5,008227E+22	6,078274E+21	5,616054E+22
-1649	2,504124E+22	2,504220E+22	3,039337E+21	3,038996E+21	5,008343E+22	6,078333E+21	5,616177E+22
-1648	2,504289E+22	2,504216E+22	3,038756E+21	3,039261E+21	5,008505E+22	6,078017E+21	5,616307E+22
-1647	2,504246E+22	2,504285E+22	3,038969E+21	3,038681E+21	5,008532E+22	6,077650E+21	5,616297E+22
-1646	2,504293E+22	2,504383E+22	3,038913E+21	3,038861E+21	5,008675E+22	6,077774E+21	5,616453E+22
-1645	2,504408E+22	2,504305E+22	3,038513E+21	3,038822E+21	5,008713E+22	6,077335E+21	5,616446E+22
-1644	2,504316E+22	2,504391E+22	3,038987E+21	3,038440E+21	5,008707E+22	6,077428E+21	5,616450E+22
-1643	2,504377E+22	2,504401E+22	3,038710E+21	3,038957E+21	5,008777E+22	6,077667E+21	5,616544E+22
-1642	2,504374E+22	2,504283E+22	3,038610E+21	3,038838E+21	5,008657E+22	6,077449E+21	5,616402E+22
-1641	2,504240E+22	2,504338E+22	3,039105E+21	3,038769E+21	5,008577E+22	6,077873E+21	5,616365E+22
-1640	2,504313E+22	2,504248E+22	3,038778E+21	3,039317E+21	5,008561E+22	6,078095E+21	5,616370E+22
-1639	2,504227E+22	2,504166E+22	3,039141E+21	3,039001E+21	5,008392E+22	6,078142E+21	5,616206E+22
-1638	2,504118E+22	2,504198E+22	3,039501E+21	3,039274E+21	5,008316E+22	6,078775E+21	5,616193E+22
-1637	2,504142E+22	2,504046E+22	3,039206E+21	3,039651E+21	5,008188E+22	6,078857E+21	5,616074E+22
-1636	2,503974E+22	2,504034E+22	3,039771E+21	3,039370E+21	5,008008E+22	6,079141E+21	5,615922E+22
-1635	2,503949E+22	2,504033E+22	3,039684E+21	3,039841E+21	5,007982E+22	6,079525E+21	5,615934E+22
-1634	2,503999E+22	2,503881E+22	3,039434E+21	3,039788E+21	5,007880E+22	6,079223E+21	5,615802E+22
-1633	2,503895E+22	2,503964E+22	3,039879E+21	3,039402E+21	5,007859E+22	6,079281E+21	5,615787E+22
-1632	2,504015E+22	2,503979E+22	3,039464E+21	3,039827E+21	5,007993E+22	6,079291E+21	5,615922E+22
-1631	2,504038E+22	2,503970E+22	3,039425E+21	3,039389E+21	5,008008E+22	6,078815E+21	5,615890E+22
-1630	2,503990E+22	2,504127E+22	3,039615E+21	3,039278E+21	5,008117E+22	6,078893E+21	5,616007E+22
-1629	2,504144E+22	2,504087E+22	3,039039E+21	3,039519E+21	5,008231E+22	6,078558E+21	5,616087E+22

1	14	15	16	17	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							
-1628	2,504128E+22	2,504138E+22	3,039278E+21	3,038927E+21	5,008265E+22	6,078205E+21	5,616086E+22
-1627	2,504160E+22	2,504249E+22	3,039236E+21	3,039106E+21	5,008408E+22	6,078342E+21	5,616243E+22
-1626	2,504279E+22	2,504157E+22	3,038779E+21	3,039139E+21	5,008436E+22	6,077918E+21	5,616228E+22
-1625	2,504172E+22	2,504240E+22	3,039219E+21	3,038759E+21	5,008412E+22	6,077978E+21	5,616210E+22
-1624	2,504212E+22	2,504253E+22	3,039007E+21	3,039318E+21	5,008466E+22	6,078325E+21	5,616298E+22
-1623	2,504227E+22	2,504139E+22	3,038947E+21	3,039170E+21	5,008366E+22	6,078117E+21	5,616177E+22
-1622	2,504094E+22	2,504194E+22	3,039467E+21	3,039093E+21	5,008287E+22	6,078560E+21	5,616143E+22
-1621	2,504148E+22	2,504075E+22	3,039177E+21	3,039642E+21	5,008224E+22	6,078819E+21	5,616105E+22
-1620	2,504065E+22	2,503992E+22	3,039554E+21	3,039385E+21	5,008057E+22	6,078939E+21	5,615950E+22
-1619	2,503922E+22	2,504040E+22	3,039890E+21	3,039684E+21	5,007962E+22	6,079574E+21	5,615920E+22
-1618	2,503960E+22	2,503863E+22	3,039524E+21	3,040084E+21	5,007823E+22	6,079609E+21	5,615784E+22
-1617	2,503815E+22	2,503846E+22	3,040041E+21	3,039704E+21	5,007662E+22	6,079745E+21	5,615636E+22
-1616	2,503800E+22	2,503864E+22	3,040003E+21	3,040124E+21	5,007664E+22	6,080127E+21	5,615677E+22
-1615	2,503878E+22	2,503745E+22	3,039765E+21	3,040027E+21	5,007623E+22	6,079792E+21	5,615602E+22
-1614	2,503768E+22	2,503858E+22	3,040180E+21	3,039666E+21	5,007626E+22	6,079845E+21	5,615611E+22
-1613	2,503860E+22	2,503855E+22	3,039763E+21	3,040109E+21	5,007715E+22	6,079871E+21	5,615702E+22
-1612	2,503905E+22	2,503843E+22	3,039719E+21	3,039691E+21	5,007747E+22	6,079410E+21	5,615688E+22
-1611	2,503851E+22	2,504004E+22	3,039903E+21	3,039539E+21	5,007855E+22	6,079442E+21	5,615799E+22
-1610	2,504024E+22	2,503943E+22	3,039290E+21	3,039780E+21	5,007967E+22	6,079070E+21	5,615874E+22
-1609	2,504018E+22	2,503991E+22	3,039508E+21	3,039160E+21	5,008009E+22	6,078668E+21	5,615876E+22
-1608	2,504018E+22	2,504117E+22	3,039527E+21	3,039399E+21	5,008135E+22	6,078926E+21	5,616027E+22
-1607	2,504132E+22	2,504037E+22	3,039082E+21	3,039472E+21	5,008169E+22	6,078554E+21	5,616024E+22
-1606	2,504020E+22	2,504109E+22	3,039515E+21	3,039115E+21	5,008129E+22	6,078630E+21	5,615992E+22
-1605	2,504049E+22	2,504082E+22	3,039346E+21	3,039650E+21	5,008131E+22	6,078996E+21	5,616031E+22
-1604	2,504091E+22	2,503963E+22	3,039318E+21	3,039499E+21	5,008054E+22	6,078817E+21	5,615936E+22
-1603	2,503938E+22	2,504037E+22	3,039859E+21	3,039419E+21	5,007974E+22	6,079278E+21	5,615902E+22
-1602	2,503986E+22	2,503910E+22	3,039527E+21	3,040028E+21	5,007897E+22	6,079555E+21	5,615852E+22
-1601	2,503893E+22	2,503823E+22	3,039861E+21	3,039763E+21	5,007716E+22	6,079624E+21	5,615678E+22
-1600	2,503735E+22	2,503877E+22	3,040242E+21	3,040064E+21	5,007612E+22	6,080306E+21	5,615643E+22
-1599	2,503799E+22	2,503707E+22	3,039880E+21	3,040410E+21	5,007507E+22	6,080290E+21	5,615536E+22
-1598	2,503670E+22	2,503695E+22	3,040381E+21	3,039995E+21	5,007365E+22	6,080376E+21	5,615402E+22
-1597	2,503649E+22	2,503698E+22	3,040365E+21	3,040404E+21	5,007347E+22	6,080769E+21	5,615424E+22
-1596	2,503739E+22	2,503598E+22	3,040109E+21	3,040346E+21	5,007337E+22	6,080455E+21	5,615382E+22
-1595	2,503608E+22	2,503735E+22	3,040487E+21	3,039997E+21	5,007344E+22	6,080484E+21	5,615392E+22
-1594	2,503721E+22	2,503713E+22	3,040008E+21	3,040442E+21	5,007434E+22	6,080450E+21	5,615479E+22
-1593	2,503785E+22	2,503696E+22	3,039923E+21	3,039933E+21	5,007481E+22	6,079856E+21	5,615467E+22
-1592	2,503729E+22	2,503875E+22	3,040167E+21	3,039757E+21	5,007604E+22	6,079923E+21	5,615597E+22
-1591	2,503910E+22	2,503832E+22	3,039576E+21	3,039991E+21	5,007742E+22	6,079567E+21	5,615698E+22
-1590	2,503886E+22	2,503886E+22	3,039781E+21	3,039437E+21	5,007772E+22	6,079218E+21	5,615694E+22
-1589	2,503855E+22	2,503976E+22	3,039833E+21	3,039725E+21	5,007831E+22	6,079557E+21	5,615787E+22
-1588	2,503986E+22	2,503884E+22	3,039403E+21	3,039834E+21	5,007870E+22	6,079238E+21	5,615794E+22
-1587	2,503871E+22	2,503958E+22	3,039842E+21	3,039452E+21	5,007829E+22	6,079294E+21	5,615758E+22
-1586	2,503918E+22	2,503907E+22	3,039664E+21	3,039982E+21	5,007826E+22	6,079646E+21	5,615790E+22
-1585	2,503959E+22	2,503793E+22	3,039634E+21	3,039810E+21	5,007752E+22	6,079443E+21	5,615697E+22
-1584	2,503766E+22	2,503888E+22	3,040235E+21	3,039782E+21	5,007654E+22	6,080017E+21	5,615656E+22
-1583	2,503803E+22	2,503769E+22	3,039916E+21	3,040406E+21	5,007572E+22	6,080322E+21	5,615604E+22
-1582	2,503710E+22	2,503669E+22	3,040233E+21	3,040146E+21	5,007379E+22	6,080379E+21	5,615417E+22
-1581	2,503545E+22	2,503684E+22	3,040639E+21	3,040400E+21	5,007229E+22	6,081039E+21	5,615333E+22
-1580	2,503644E+22	2,503523E+22	3,040273E+21	3,040735E+21	5,007167E+22	6,081008E+21	5,615268E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1579	2,503513E+22	2,503537E+22	3,040734E+21	3,040311E+21	5,007050E+22	6,081045E+21	5,615155E+22
-1578	2,503499E+22	2,503542E+22	3,040652E+21	3,040757E+21	5,007041E+22	6,081409E+21	5,615182E+22
-1577	2,503599E+22	2,503457E+22	3,040336E+21	3,040667E+21	5,007056E+22	6,081003E+21	5,615156E+22
-1576	2,503467E+22	2,503611E+22	3,040746E+21	3,040293E+21	5,007078E+22	6,081039E+21	5,615182E+22
-1575	2,503602E+22	2,503601E+22	3,040281E+21	3,040665E+21	5,007203E+22	6,080946E+21	5,615298E+22
-1574	2,503675E+22	2,503585E+22	3,040190E+21	3,040139E+21	5,007259E+22	6,080330E+21	5,615292E+22
-1573	2,503593E+22	2,503737E+22	3,040479E+21	3,039992E+21	5,007330E+22	6,080470E+21	5,615377E+22
-1572	2,503770E+22	2,503703E+22	3,039885E+21	3,040303E+21	5,007473E+22	6,080188E+21	5,615492E+22
-1571	2,503728E+22	2,503756E+22	3,040072E+21	3,039791E+21	5,007484E+22	6,079863E+21	5,615470E+22
-1570	2,503718E+22	2,503812E+22	3,040098E+21	3,040088E+21	5,007529E+22	6,080186E+21	5,615548E+22
-1569	2,503866E+22	2,503717E+22	3,039658E+21	3,040123E+21	5,007583E+22	6,079781E+21	5,615561E+22
-1568	2,503742E+22	2,503811E+22	3,040168E+21	3,039735E+21	5,007554E+22	6,079903E+21	5,615544E+22
-1567	2,503782E+22	2,503781E+22	3,040027E+21	3,040263E+21	5,007563E+22	6,080291E+21	5,615592E+22
-1566	2,503792E+22	2,503669E+22	3,039994E+21	3,040154E+21	5,007461E+22	6,080148E+21	5,615476E+22
-1565	2,503564E+22	2,503722E+22	3,040641E+21	3,040174E+21	5,007286E+22	6,080815E+21	5,615367E+22
-1564	2,503612E+22	2,503590E+22	3,040324E+21	3,040805E+21	5,007203E+22	6,081129E+21	5,615316E+22
-1563	2,503523E+22	2,503487E+22	3,040622E+21	3,040524E+21	5,007010E+22	6,081147E+21	5,615125E+22
-1562	2,503394E+22	2,503479E+22	3,040976E+21	3,040768E+21	5,006873E+22	6,081743E+21	5,615047E+22
-1561	2,503504E+22	2,503340E+22	3,040568E+21	3,041067E+21	5,006844E+22	6,081635E+21	5,615007E+22
-1560	2,503359E+22	2,503396E+22	3,041031E+21	3,040669E+21	5,006756E+22	6,081699E+21	5,614926E+22
-1559	2,503356E+22	2,503422E+22	3,040943E+21	3,041075E+21	5,006778E+22	6,082018E+21	5,614980E+22
-1558	2,503463E+22	2,503342E+22	3,040610E+21	3,040937E+21	5,006805E+22	6,081547E+21	5,614960E+22
-1557	2,503325E+22	2,503467E+22	3,041063E+21	3,040517E+21	5,006793E+22	6,081580E+21	5,614951E+22
-1556	2,503475E+22	2,503468E+22	3,040611E+21	3,040877E+21	5,006943E+22	6,081488E+21	5,615092E+22
-1555	2,503533E+22	2,503465E+22	3,040498E+21	3,040401E+21	5,006998E+22	6,080898E+21	5,615088E+22
-1554	2,503454E+22	2,503592E+22	3,040729E+21	3,040323E+21	5,007046E+22	6,081052E+21	5,615151E+22
-1553	2,503638E+22	2,503558E+22	3,040105E+21	3,040629E+21	5,007195E+22	6,080734E+21	5,615269E+22
-1552	2,503597E+22	2,503622E+22	3,040323E+21	3,040115E+21	5,007219E+22	6,080438E+21	5,615263E+22
-1551	2,503604E+22	2,503685E+22	3,040387E+21	3,040350E+21	5,007289E+22	6,080737E+21	5,615362E+22
-1550	2,503750E+22	2,503593E+22	3,039978E+21	3,040381E+21	5,007343E+22	6,080359E+21	5,615379E+22
-1549	2,503581E+22	2,503659E+22	3,040565E+21	3,040046E+21	5,007240E+22	6,080610E+21	5,615301E+22
-1548	2,503596E+22	2,503635E+22	3,040441E+21	3,040641E+21	5,007231E+22	6,081082E+21	5,615339E+22
-1547	2,503588E+22	2,503507E+22	3,040389E+21	3,040589E+21	5,007095E+22	6,080978E+21	5,615193E+22
-1546	2,503379E+22	2,503511E+22	3,040991E+21	3,040605E+21	5,006890E+22	6,081596E+21	5,615050E+22
-1545	2,503454E+22	2,503383E+22	3,040638E+21	3,041160E+21	5,006837E+22	6,081798E+21	5,615017E+22
-1544	2,503374E+22	2,503308E+22	3,040954E+21	3,040860E+21	5,006682E+22	6,081814E+21	5,614863E+22
-1543	2,503255E+22	2,503335E+22	3,041302E+21	3,041077E+21	5,006590E+22	6,082379E+21	5,614828E+22
-1542	2,503356E+22	2,503220E+22	3,040876E+21	3,041385E+21	5,006576E+22	6,082261E+21	5,614802E+22
-1541	2,503191E+22	2,503256E+22	3,041375E+21	3,040994E+21	5,006447E+22	6,082368E+21	5,614683E+22
-1540	2,503202E+22	2,503291E+22	3,041290E+21	3,041357E+21	5,006493E+22	6,082647E+21	5,614758E+22
-1539	2,503314E+22	2,503211E+22	3,040939E+21	3,041200E+21	5,006524E+22	6,082138E+21	5,614738E+22
-1538	2,503199E+22	2,503304E+22	3,041347E+21	3,040791E+21	5,006503E+22	6,082138E+21	5,614717E+22
-1537	2,503348E+22	2,503320E+22	3,040852E+21	3,041149E+21	5,006668E+22	6,082001E+21	5,614868E+22
-1536	2,503392E+22	2,503341E+22	3,040738E+21	3,040736E+21	5,006733E+22	6,081475E+21	5,614880E+22
-1535	2,503333E+22	2,503471E+22	3,040966E+21	3,040639E+21	5,006804E+22	6,081605E+21	5,614964E+22
-1534	2,503522E+22	2,503437E+22	3,040355E+21	3,040896E+21	5,006959E+22	6,081251E+21	5,615084E+22
-1533	2,503471E+22	2,503477E+22	3,040642E+21	3,040367E+21	5,006948E+22	6,081009E+21	5,615049E+22
-1532	2,503473E+22	2,503551E+22	3,040748E+21	3,040595E+21	5,007024E+22	6,081343E+21	5,615159E+22
-1531	2,503582E+22	2,503465E+22	3,040352E+21	3,040704E+21	5,007047E+22	6,081055E+21	5,615152E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1530	2,503406E+22	2,503488E+22	3,040904E+21	3,040460E+21	5,006894E+22	6,081364E+21	5,615031E+22
-1529	2,503417E+22	2,503452E+22	3,040759E+21	3,041040E+21	5,006869E+22	6,081799E+21	5,615049E+22
-1528	2,503414E+22	2,503329E+22	3,040725E+21	3,040992E+21	5,006743E+22	6,081717E+21	5,614915E+22
-1527	2,503238E+22	2,503333E+22	3,041325E+21	3,040939E+21	5,006571E+22	6,082264E+21	5,614797E+22
-1526	2,503317E+22	2,503220E+22	3,040983E+21	3,041459E+21	5,006537E+22	6,082442E+21	5,614781E+22
-1525	2,503208E+22	2,503144E+22	3,041342E+21	3,041201E+21	5,006351E+22	6,082544E+21	5,614606E+22
-1524	2,503078E+22	2,503197E+22	3,041690E+21	3,041432E+21	5,006275E+22	6,083122E+21	5,614587E+22
-1523	2,503171E+22	2,503084E+22	3,041257E+21	3,041755E+21	5,006256E+22	6,083012E+21	5,614557E+22
-1522	2,503034E+22	2,503080E+22	3,041697E+21	3,041337E+21	5,006114E+22	6,083034E+21	5,614417E+22
-1521	2,503066E+22	2,503124E+22	3,041571E+21	3,041613E+21	5,006190E+22	6,083184E+21	5,614508E+22
-1520	2,503181E+22	2,503071E+22	3,041211E+21	3,041466E+21	5,006252E+22	6,082677E+21	5,614519E+22
-1519	2,503078E+22	2,503181E+22	3,041586E+21	3,041060E+21	5,006260E+22	6,082647E+21	5,614524E+22
-1518	2,503223E+22	2,503213E+22	3,041076E+21	3,041428E+21	5,006436E+22	6,082504E+21	5,614686E+22
-1517	2,503253E+22	2,503209E+22	3,041012E+21	3,041034E+21	5,006463E+22	6,082046E+21	5,614668E+22
-1516	2,503206E+22	2,503351E+22	3,041263E+21	3,040896E+21	5,006557E+22	6,082159E+21	5,614773E+22
-1515	2,503396E+22	2,503313E+22	3,040682E+21	3,041152E+21	5,006709E+22	6,081834E+21	5,614893E+22
-1514	2,503346E+22	2,503313E+22	3,040955E+21	3,040667E+21	5,006660E+22	6,081622E+21	5,614822E+22
-1513	2,503325E+22	2,503399E+22	3,041048E+21	3,040913E+21	5,006724E+22	6,081961E+21	5,614920E+22
-1512	2,503408E+22	2,503320E+22	3,040667E+21	3,041101E+21	5,006728E+22	6,081768E+21	5,614904E+22
-1511	2,503247E+22	2,503325E+22	3,041223E+21	3,040848E+21	5,006572E+22	6,082071E+21	5,614779E+22
-1510	2,503264E+22	2,503285E+22	3,041087E+21	3,041365E+21	5,006549E+22	6,082452E+21	5,614795E+22
-1509	2,503252E+22	2,503142E+22	3,041117E+21	3,041315E+21	5,006394E+22	6,082431E+21	5,614637E+22
-1508	2,503078E+22	2,503173E+22	3,041727E+21	3,041249E+21	5,006250E+22	6,082976E+21	5,614548E+22
-1507	2,503136E+22	2,503076E+22	3,041389E+21	3,041830E+21	5,006212E+22	6,083220E+21	5,614534E+22
-1506	2,503030E+22	2,502970E+22	3,041695E+21	3,041626E+21	5,006000E+22	6,083321E+21	5,614332E+22
-1505	2,502908E+22	2,503028E+22	3,042004E+21	3,041800E+21	5,005937E+22	6,083804E+21	5,614317E+22
-1504	2,503011E+22	2,502932E+22	3,041570E+21	3,042096E+21	5,005944E+22	6,083666E+21	5,614310E+22
-1503	2,502912E+22	2,502928E+22	3,041982E+21	3,041615E+21	5,005840E+22	6,083597E+21	5,614200E+22
-1502	2,502943E+22	2,502988E+22	3,041844E+21	3,041837E+21	5,005931E+22	6,083681E+21	5,614299E+22
-1501	2,503032E+22	2,502935E+22	3,041511E+21	3,041756E+21	5,005967E+22	6,083268E+21	5,614294E+22
-1500	2,502933E+22	2,503063E+22	3,041867E+21	3,041357E+21	5,005995E+22	6,083224E+21	5,614318E+22
-1499	2,503078E+22	2,503091E+22	3,041377E+21	3,041735E+21	5,006169E+22	6,083113E+21	5,614480E+22
-1498	2,503136E+22	2,503052E+22	3,041275E+21	3,041324E+21	5,006188E+22	6,082599E+21	5,614448E+22
-1497	2,503098E+22	2,503201E+22	3,041522E+21	3,041120E+21	5,006299E+22	6,082642E+21	5,614563E+22
-1496	2,503268E+22	2,503189E+22	3,040974E+21	3,041413E+21	5,006457E+22	6,082387E+21	5,614696E+22
-1495	2,503214E+22	2,503188E+22	3,041238E+21	3,040980E+21	5,006402E+22	6,082218E+21	5,614624E+22
-1494	2,503168E+22	2,503269E+22	3,041345E+21	3,041232E+21	5,006438E+22	6,082576E+21	5,614695E+22
-1493	2,503228E+22	2,503159E+22	3,041032E+21	3,041471E+21	5,006388E+22	6,082503E+21	5,614638E+22
-1492	2,503079E+22	2,503162E+22	3,041602E+21	3,041184E+21	5,006241E+22	6,082786E+21	5,614520E+22
-1491	2,503099E+22	2,503116E+22	3,041503E+21	3,041712E+21	5,006215E+22	6,083215E+21	5,614537E+22
-1490	2,503092E+22	2,502943E+22	3,041497E+21	3,041707E+21	5,006036E+22	6,083204E+21	5,614356E+22
-1489	2,502907E+22	2,502995E+22	3,042068E+21	3,041650E+21	5,005902E+22	6,083718E+21	5,614274E+22
-1488	2,502952E+22	2,502920E+22	3,041737E+21	3,042263E+21	5,005873E+22	6,084001E+21	5,614273E+22
-1487	2,502875E+22	2,502808E+22	3,042014E+21	3,042011E+21	5,005682E+22	6,084025E+21	5,614085E+22
-1486	2,502767E+22	2,502876E+22	3,042309E+21	3,042067E+21	5,005643E+22	6,084376E+21	5,614081E+22
-1485	2,502862E+22	2,502771E+22	3,041921E+21	3,042346E+21	5,005633E+22	6,084267E+21	5,614060E+22
-1484	2,502763E+22	2,502795E+22	3,042317E+21	3,041852E+21	5,005558E+22	6,084168E+21	5,613975E+22
-1483	2,502785E+22	2,502867E+22	3,042169E+21	3,042137E+21	5,005653E+22	6,084305E+21	5,614083E+22
-1482	2,502884E+22	2,502783E+22	3,041778E+21	3,042102E+21	5,005667E+22	6,083880E+21	5,614055E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1481	2,502807E+22	2,502920E+22	3,042092E+21	3,041655E+21	5,005727E+22	6,083747E+21	5,614101E+22
-1480	2,502963E+22	2,502966E+22	3,041628E+21	3,042003E+21	5,005928E+22	6,083630E+21	5,614291E+22
-1479	2,503046E+22	2,502924E+22	3,041521E+21	3,041562E+21	5,005970E+22	6,083083E+21	5,614278E+22
-1478	2,502988E+22	2,503086E+22	3,041786E+21	3,041330E+21	5,006074E+22	6,083117E+21	5,614386E+22
-1477	2,503106E+22	2,503063E+22	3,041308E+21	3,041722E+21	5,006169E+22	6,083029E+21	5,614472E+22
-1476	2,503040E+22	2,503059E+22	3,041589E+21	3,041330E+21	5,006099E+22	6,082919E+21	5,614391E+22
-1475	2,502991E+22	2,503116E+22	3,041729E+21	3,041611E+21	5,006107E+22	6,083340E+21	5,614441E+22
-1474	2,503069E+22	2,502959E+22	3,041387E+21	3,041855E+21	5,006027E+22	6,083242E+21	5,614351E+22
-1473	2,502934E+22	2,502967E+22	3,041927E+21	3,041526E+21	5,005902E+22	6,083454E+21	5,614247E+22
-1472	2,502940E+22	2,502950E+22	3,041852E+21	3,042085E+21	5,005890E+22	6,083936E+21	5,614284E+22
-1471	2,502941E+22	2,502786E+22	3,041818E+21	3,042111E+21	5,005728E+22	6,083929E+21	5,614121E+22
-1470	2,502744E+22	2,502846E+22	3,042391E+21	3,041997E+21	5,005590E+22	6,084389E+21	5,614029E+22
-1469	2,502770E+22	2,502762E+22	3,042131E+21	3,042613E+21	5,005533E+22	6,084743E+21	5,614007E+22
-1468	2,502709E+22	2,502658E+22	3,042401E+21	3,042299E+21	5,005368E+22	6,084700E+21	5,613838E+22
-1467	2,502604E+22	2,502722E+22	3,042709E+21	3,042350E+21	5,005326E+22	6,085059E+21	5,613831E+22
-1466	2,502702E+22	2,502595E+22	3,042257E+21	3,042674E+21	5,005297E+22	6,084932E+21	5,613790E+22
-1465	2,502607E+22	2,502637E+22	3,042580E+21	3,042192E+21	5,005243E+22	6,084772E+21	5,613721E+22
-1464	2,502634E+22	2,502729E+22	3,042434E+21	3,042490E+21	5,005363E+22	6,084924E+21	5,613856E+22
-1463	2,502775E+22	2,502645E+22	3,042007E+21	3,042409E+21	5,005420E+22	6,084415E+21	5,613862E+22
-1462	2,502711E+22	2,502797E+22	3,042314E+21	3,041848E+21	5,005508E+22	6,084162E+21	5,613924E+22
-1461	2,502844E+22	2,502846E+22	3,041933E+21	3,042205E+21	5,005690E+22	6,084138E+21	5,614104E+22
-1460	2,502910E+22	2,502824E+22	3,041835E+21	3,041789E+21	5,005734E+22	6,083624E+21	5,614097E+22
-1459	2,502825E+22	2,502975E+22	3,042133E+21	3,041653E+21	5,005800E+22	6,083785E+21	5,614179E+22
-1458	2,502934E+22	2,502901E+22	3,041628E+21	3,042107E+21	5,005835E+22	6,083735E+21	5,614208E+22
-1457	2,502883E+22	2,502885E+22	3,041884E+21	3,041706E+21	5,005768E+22	6,083590E+21	5,614127E+22
-1456	2,502845E+22	2,502944E+22	3,042056E+21	3,041968E+21	5,005789E+22	6,084024E+21	5,614191E+22
-1455	2,502948E+22	2,502781E+22	3,041702E+21	3,042199E+21	5,005729E+22	6,083902E+21	5,614119E+22
-1454	2,502798E+22	2,502813E+22	3,042235E+21	3,041839E+21	5,005611E+22	6,084073E+21	5,614018E+22
-1453	2,502759E+22	2,502798E+22	3,042235E+21	3,042461E+21	5,005557E+22	6,084697E+21	5,614027E+22
-1452	2,502750E+22	2,502645E+22	3,042224E+21	3,042480E+21	5,005395E+22	6,084704E+21	5,613865E+22
-1451	2,502559E+22	2,502690E+22	3,042824E+21	3,042363E+21	5,005249E+22	6,085187E+21	5,613768E+22
-1450	2,502595E+22	2,502566E+22	3,042527E+21	3,042948E+21	5,005161E+22	6,085475E+21	5,613708E+22
-1449	2,502549E+22	2,502474E+22	3,042741E+21	3,042612E+21	5,005024E+22	6,085353E+21	5,613559E+22
-1448	2,502440E+22	2,502564E+22	3,043026E+21	3,042688E+21	5,005003E+22	6,085714E+21	5,613575E+22
-1447	2,502559E+22	2,502446E+22	3,042507E+21	3,043040E+21	5,005005E+22	6,085547E+21	5,613560E+22
-1446	2,502479E+22	2,502505E+22	3,042789E+21	3,042486E+21	5,004984E+22	6,085275E+21	5,613512E+22
-1445	2,502503E+22	2,502602E+22	3,042715E+21	3,042767E+21	5,005104E+22	6,085482E+21	5,613653E+22
-1444	2,502659E+22	2,502540E+22	3,042306E+21	3,042615E+21	5,005199E+22	6,084921E+21	5,613691E+22
-1443	2,502594E+22	2,502685E+22	3,042651E+21	3,042076E+21	5,005279E+22	6,084727E+21	5,613752E+22
-1442	2,502700E+22	2,502706E+22	3,042245E+21	3,042492E+21	5,005406E+22	6,084738E+21	5,613880E+22
-1441	2,502753E+22	2,502683E+22	3,042105E+21	3,042140E+21	5,005436E+22	6,084245E+21	5,613861E+22
-1440	2,502662E+22	2,502826E+22	3,042428E+21	3,042034E+21	5,005488E+22	6,084462E+21	5,613934E+22
-1439	2,502806E+22	2,502734E+22	3,041900E+21	3,042468E+21	5,005540E+22	6,084368E+21	5,613977E+22
-1438	2,502768E+22	2,502720E+22	3,042149E+21	3,041965E+21	5,005488E+22	6,084114E+21	5,613899E+22
-1437	2,502702E+22	2,502786E+22	3,042417E+21	3,042254E+21	5,005488E+22	6,084671E+21	5,613955E+22
-1436	2,502786E+22	2,502653E+22	3,042083E+21	3,042506E+21	5,005439E+22	6,084589E+21	5,613897E+22
-1435	2,502613E+22	2,502675E+22	3,042653E+21	3,042226E+21	5,005289E+22	6,084880E+21	5,613777E+22
-1434	2,502560E+22	2,502621E+22	3,042642E+21	3,042875E+21	5,005181E+22	6,085517E+21	5,613732E+22
-1433	2,502566E+22	2,502461E+22	3,042597E+21	3,042876E+21	5,005027E+22	6,085474E+21	5,613574E+22

1	14	15	16	17	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	2,502386E+22	2,502505E+22	3,043206E+21	3,042730E+21	5,004891E+22	6,085935E+21	5,613485E+22
-1431	2,502450E+22	2,502380E+22	3,042854E+21	3,043301E+21	5,004830E+22	6,086154E+21	5,613445E+22
-1430	2,502401E+22	2,502312E+22	3,043008E+21	3,042928E+21	5,004713E+22	6,085937E+21	5,613307E+22
-1429	2,502272E+22	2,502416E+22	3,043334E+21	3,043049E+21	5,004688E+22	6,086383E+21	5,613326E+22
-1428	2,502407E+22	2,502324E+22	3,042818E+21	3,043348E+21	5,004731E+22	6,086165E+21	5,613347E+22
-1427	2,502352E+22	2,502382E+22	3,043113E+21	3,042767E+21	5,004734E+22	6,085880E+21	5,613322E+22
-1426	2,502380E+22	2,502454E+22	3,043021E+21	3,043001E+21	5,004834E+22	6,086022E+21	5,613437E+22
-1425	2,502537E+22	2,502409E+22	3,042581E+21	3,042849E+21	5,004946E+22	6,085430E+21	5,613489E+22
-1424	2,502454E+22	2,502565E+22	3,042932E+21	3,042368E+21	5,005019E+22	6,085300E+21	5,613549E+22
-1423	2,502562E+22	2,502571E+22	3,042489E+21	3,042821E+21	5,005134E+22	6,085310E+21	5,613665E+22
-1422	2,502620E+22	2,502546E+22	3,042328E+21	3,042435E+21	5,005166E+22	6,084763E+21	5,613642E+22
-1421	2,502523E+22	2,502676E+22	3,042729E+21	3,042339E+21	5,005199E+22	6,085068E+21	5,613706E+22
-1420	2,502672E+22	2,502598E+22	3,042246E+21	3,042724E+21	5,005269E+22	6,084970E+21	5,613766E+22
-1419	2,502632E+22	2,502579E+22	3,042530E+21	3,042276E+21	5,005211E+22	6,084806E+21	5,613691E+22
-1418	2,502529E+22	2,502620E+22	3,042789E+21	3,042623E+21	5,005149E+22	6,085412E+21	5,613690E+22
-1417	2,502598E+22	2,502489E+22	3,042445E+21	3,042931E+21	5,005086E+22	6,085376E+21	5,613624E+22
-1416	2,502424E+22	2,502500E+22	3,043043E+21	3,042669E+21	5,004924E+22	6,085711E+21	5,613495E+22
-1415	2,502397E+22	2,502429E+22	3,042993E+21	3,043269E+21	5,004826E+22	6,086262E+21	5,613453E+22
-1414	2,502418E+22	2,502277E+22	3,042912E+21	3,043182E+21	5,004695E+22	6,086094E+21	5,613305E+22
-1413	2,502220E+22	2,502332E+22	3,043566E+21	3,043059E+21	5,004552E+22	6,086624E+21	5,613214E+22
-1412	2,502277E+22	2,502242E+22	3,043207E+21	3,043617E+21	5,004519E+22	6,086824E+21	5,613202E+22
-1411	2,502237E+22	2,502176E+22	3,043357E+21	3,043291E+21	5,004413E+22	6,086648E+21	5,613078E+22
-1410	2,502112E+22	2,502256E+22	3,043656E+21	3,043392E+21	5,004368E+22	6,087048E+21	5,613073E+22
-1409	2,502273E+22	2,502178E+22	3,043117E+21	3,043643E+21	5,004451E+22	6,086760E+21	5,613127E+22
-1408	2,502230E+22	2,502243E+22	3,043423E+21	3,043026E+21	5,004473E+22	6,086449E+21	5,613118E+22
-1407	2,502271E+22	2,502318E+22	3,043283E+21	3,043254E+21	5,004590E+22	6,086537E+21	5,613243E+22
-1406	2,502409E+22	2,502286E+22	3,042795E+21	3,043092E+21	5,004696E+22	6,085887E+21	5,613284E+22
-1405	2,502295E+22	2,502437E+22	3,043210E+21	3,042688E+21	5,004732E+22	6,085897E+21	5,613321E+22
-1404	2,502411E+22	2,502451E+22	3,042792E+21	3,043105E+21	5,004862E+22	6,085897E+21	5,613452E+22
-1403	2,502489E+22	2,502407E+22	3,042661E+21	3,042731E+21	5,004897E+22	6,085392E+21	5,613436E+22
-1402	2,502387E+22	2,502508E+22	3,043058E+21	3,042627E+21	5,004894E+22	6,085685E+21	5,613463E+22
-1401	2,502530E+22	2,502443E+22	3,042573E+21	3,043043E+21	5,004973E+22	6,085616E+21	5,613534E+22
-1400	2,502467E+22	2,502430E+22	3,042873E+21	3,042665E+21	5,004897E+22	6,085537E+21	5,613451E+22
-1399	2,502367E+22	2,502456E+22	3,043103E+21	3,043037E+21	5,004823E+22	6,086140E+21	5,613437E+22
-1398	2,502435E+22	2,502323E+22	3,042748E+21	3,043294E+21	5,004758E+22	6,086043E+21	5,613362E+22
-1397	2,502254E+22	2,502326E+22	3,043425E+21	3,043037E+21	5,004580E+22	6,086462E+21	5,613226E+22
-1396	2,502233E+22	2,502269E+22	3,043399E+21	3,043562E+21	5,004502E+22	6,086961E+21	5,613198E+22
-1395	2,502256E+22	2,502116E+22	3,043325E+21	3,043531E+21	5,004372E+22	6,086856E+21	5,613057E+22
-1394	2,502033E+22	2,502151E+22	3,043927E+21	3,043445E+21	5,004185E+22	6,087373E+21	5,612922E+22
-1393	2,502097E+22	2,502076E+22	3,043545E+21	3,044017E+21	5,004173E+22	6,087562E+21	5,612929E+22
-1392	2,502081E+22	2,502016E+22	3,043690E+21	3,043665E+21	5,004098E+22	6,087355E+21	5,612833E+22
-1391	2,501994E+22	2,502094E+22	3,043934E+21	3,043681E+21	5,004088E+22	6,087615E+21	5,612850E+22
-1390	2,502163E+22	2,502042E+22	3,043364E+21	3,043836E+21	5,004205E+22	6,087200E+21	5,612925E+22
-1389	2,502098E+22	2,502123E+22	3,043706E+21	3,043269E+21	5,004220E+22	6,086975E+21	5,612918E+22
-1388	2,502117E+22	2,502220E+22	3,043572E+21	3,043488E+21	5,004338E+22	6,087060E+21	5,613044E+22
-1387	2,502259E+22	2,502175E+22	3,043092E+21	3,043406E+21	5,004434E+22	6,086498E+21	5,613084E+22
-1386	2,502143E+22	2,502281E+22	3,043492E+21	3,043011E+21	5,004425E+22	6,086503E+21	5,613075E+22
-1385	2,502280E+22	2,502297E+22	3,043085E+21	3,043409E+21	5,004577E+22	6,086494E+21	5,613226E+22
-1384	2,502369E+22	2,502252E+22	3,042979E+21	3,043041E+21	5,004621E+22	6,086019E+21	5,613223E+22

1	14	15	16	17	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							
-1383	2,502268E+22	2,502349E+22	3,043334E+21	3,042956E+21	5,004618E+22	6,086290E+21	5,613247E+22
-1382	2,502385E+22	2,502300E+22	3,042836E+21	3,043371E+21	5,004685E+22	6,086207E+21	5,613306E+22
-1381	2,502294E+22	2,502281E+22	3,043214E+21	3,043066E+21	5,004574E+22	6,086280E+21	5,613202E+22
-1380	2,502193E+22	2,502311E+22	3,043494E+21	3,043365E+21	5,004504E+22	6,086859E+21	5,613190E+22
-1379	2,502275E+22	2,502160E+22	3,043172E+21	3,043630E+21	5,004435E+22	6,086802E+21	5,613115E+22
-1378	2,502078E+22	2,502130E+22	3,043838E+21	3,043374E+21	5,004208E+22	6,087212E+21	5,612930E+22
-1377	2,502052E+22	2,502090E+22	3,043793E+21	3,043926E+21	5,004141E+22	6,087719E+21	5,612913E+22
-1376	2,502067E+22	2,501943E+22	3,043703E+21	3,043946E+21	5,004010E+22	6,087649E+21	5,612775E+22
-1375	2,501871E+22	2,501975E+22	3,044226E+21	3,043858E+21	5,003845E+22	6,088084E+21	5,612654E+22
-1374	2,501954E+22	2,501915E+22	3,043813E+21	3,044335E+21	5,003870E+22	6,088148E+21	5,612685E+22
-1373	2,501942E+22	2,501870E+22	3,044007E+21	3,043961E+21	5,003812E+22	6,087968E+21	5,612609E+22
-1372	2,501865E+22	2,501976E+22	3,044263E+21	3,043882E+21	5,003842E+22	6,088145E+21	5,612656E+22
-1371	2,502029E+22	2,501928E+22	3,043693E+21	3,044091E+21	5,003957E+22	6,087784E+21	5,612735E+22
-1370	2,501930E+22	2,501982E+22	3,043998E+21	3,043586E+21	5,003912E+22	6,087583E+21	5,612670E+22
-1369	2,501956E+22	2,502079E+22	3,043855E+21	3,043824E+21	5,004034E+22	6,087678E+21	5,612802E+22
-1368	2,502119E+22	2,502025E+22	3,043384E+21	3,043741E+21	5,004143E+22	6,087125E+21	5,612856E+22
-1367	2,502043E+22	2,502119E+22	3,043722E+21	3,043302E+21	5,004161E+22	6,087024E+21	5,612863E+22
-1366	2,502181E+22	2,502153E+22	3,043313E+21	3,043634E+21	5,004334E+22	6,086947E+21	5,613029E+22
-1365	2,502240E+22	2,502127E+22	3,043267E+21	3,043337E+21	5,004367E+22	6,086605E+21	5,613027E+22
-1364	2,502116E+22	2,502241E+22	3,043661E+21	3,043239E+21	5,004357E+22	6,086900E+21	5,613047E+22
-1363	2,502223E+22	2,502176E+22	3,043212E+21	3,043719E+21	5,004399E+22	6,086931E+21	5,613092E+22
-1362	2,502112E+22	2,502109E+22	3,043604E+21	3,043439E+21	5,004221E+22	6,087043E+21	5,612926E+22
-1361	2,502017E+22	2,502132E+22	3,043906E+21	3,043717E+21	5,004148E+22	6,087624E+21	5,612911E+22
-1360	2,502104E+22	2,501973E+22	3,043597E+21	3,044013E+21	5,004078E+22	6,087610E+21	5,612839E+22
-1359	2,501914E+22	2,501931E+22	3,044173E+21	3,043782E+21	5,003845E+22	6,087955E+21	5,612640E+22
-1358	2,501875E+22	2,501910E+22	3,044089E+21	3,044315E+21	5,003785E+22	6,088404E+21	5,612625E+22
-1357	2,501891E+22	2,501776E+22	3,044034E+21	3,044366E+21	5,003667E+22	6,088401E+21	5,612507E+22
-1356	2,501717E+22	2,501829E+22	3,044569E+21	3,044159E+21	5,003546E+22	6,088728E+21	5,612419E+22
-1355	2,501823E+22	2,501780E+22	3,044179E+21	3,044604E+21	5,003603E+22	6,088782E+21	5,612481E+22
-1354	2,501792E+22	2,501719E+22	3,044349E+21	3,044223E+21	5,003511E+22	6,088572E+21	5,612368E+22
-1353	2,501706E+22	2,501843E+22	3,044585E+21	3,044159E+21	5,003549E+22	6,088744E+21	5,612424E+22
-1352	2,501864E+22	2,501794E+22	3,044001E+21	3,044423E+21	5,003657E+22	6,088423E+21	5,612500E+22
-1351	2,501791E+22	2,501826E+22	3,044222E+21	3,043930E+21	5,003617E+22	6,088151E+21	5,612432E+22
-1350	2,501839E+22	2,501931E+22	3,044064E+21	3,044091E+21	5,003769E+22	6,088154E+21	5,612585E+22
-1349	2,502009E+22	2,501889E+22	3,043650E+21	3,044012E+21	5,003898E+22	6,087662E+21	5,612664E+22
-1348	2,501939E+22	2,502006E+22	3,044014E+21	3,043509E+21	5,003945E+22	6,087524E+21	5,612698E+22
-1347	2,502057E+22	2,502046E+22	3,043641E+21	3,043907E+21	5,004104E+22	6,087548E+21	5,612859E+22
-1346	2,502065E+22	2,501990E+22	3,043605E+21	3,043690E+21	5,004055E+22	6,087295E+21	5,612784E+22
-1345	2,501937E+22	2,502090E+22	3,044037E+21	3,043610E+21	5,004027E+22	6,087647E+21	5,612792E+22
-1344	2,502047E+22	2,502003E+22	3,043624E+21	3,044092E+21	5,004050E+22	6,087716E+21	5,612822E+22
-1343	2,501959E+22	2,501911E+22	3,043953E+21	3,043810E+21	5,003870E+22	6,087763E+21	5,612646E+22
-1342	2,501862E+22	2,501942E+22	3,044228E+21	3,044047E+21	5,003804E+22	6,088275E+21	5,612631E+22
-1341	2,501923E+22	2,501802E+22	3,043945E+21	3,044417E+21	5,003725E+22	6,088363E+21	5,612561E+22
-1340	2,501738E+22	2,501780E+22	3,044509E+21	3,044152E+21	5,003518E+22	6,088661E+21	5,612385E+22
-1339	2,501713E+22	2,501759E+22	3,044455E+21	3,044689E+21	5,003473E+22	6,089144E+21	5,612387E+22
-1338	2,501720E+22	2,501608E+22	3,044407E+21	3,044716E+21	5,003328E+22	6,089123E+21	5,612241E+22
-1337	2,501566E+22	2,501673E+22	3,044954E+21	3,044449E+21	5,003238E+22	6,089404E+21	5,612179E+22
-1336	2,501672E+22	2,501628E+22	3,044571E+21	3,044899E+21	5,003300E+22	6,089470E+21	5,612247E+22
-1335	2,501641E+22	2,501563E+22	3,044627E+21	3,044561E+21	5,003204E+22	6,089188E+21	5,612122E+22

1	14	15	16	17	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	2,501549E+22	2,501694E+22	3,044814E+21	3,044476E+21	5,003243E+22	6,089289E+21	5,612172E+22
-1333	2,501713E+22	2,501653E+22	3,044259E+21	3,044763E+21	5,003366E+22	6,089022E+21	5,612268E+22
-1332	2,501677E+22	2,501699E+22	3,044479E+21	3,044163E+21	5,003376E+22	6,088642E+21	5,612240E+22
-1331	2,501745E+22	2,501812E+22	3,044360E+21	3,044306E+21	5,003557E+22	6,088667E+21	5,612423E+22
-1330	2,501882E+22	2,501761E+22	3,043957E+21	3,044257E+21	5,003644E+22	6,088214E+21	5,612465E+22
-1329	2,501791E+22	2,501890E+22	3,044335E+21	3,043794E+21	5,003681E+22	6,088130E+21	5,612494E+22
-1328	2,501891E+22	2,501919E+22	3,043996E+21	3,044259E+21	5,003810E+22	6,088254E+21	5,612635E+22
-1327	2,501908E+22	2,501824E+22	3,043898E+21	3,044079E+21	5,003732E+22	6,087977E+21	5,612529E+22
-1326	2,501783E+22	2,501914E+22	3,044336E+21	3,043947E+21	5,003697E+22	6,088283E+21	5,612525E+22
-1325	2,501893E+22	2,501830E+22	3,043974E+21	3,044450E+21	5,003723E+22	6,088424E+21	5,612565E+22
-1324	2,501811E+22	2,501747E+22	3,044309E+21	3,044129E+21	5,003558E+22	6,088438E+21	5,612402E+22
-1323	2,501700E+22	2,501785E+22	3,044597E+21	3,044422E+21	5,003485E+22	6,089019E+21	5,612387E+22
-1322	2,501724E+22	2,501627E+22	3,044322E+21	3,044840E+21	5,003351E+22	6,089162E+21	5,612267E+22
-1321	2,501555E+22	2,501609E+22	3,044904E+21	3,044546E+21	5,003164E+22	6,089450E+21	5,612109E+22
-1320	2,501547E+22	2,501589E+22	3,044881E+21	3,045044E+21	5,003136E+22	6,089924E+21	5,612128E+22
-1319	2,501574E+22	2,501429E+22	3,044753E+21	3,045043E+21	5,003003E+22	6,089796E+21	5,611983E+22
-1318	2,501417E+22	2,501512E+22	3,045261E+21	3,044731E+21	5,002928E+22	6,089992E+21	5,611928E+22
-1317	2,501500E+22	2,501490E+22	3,044879E+21	3,045230E+21	5,002990E+22	6,090108E+21	5,612001E+22
-1316	2,501484E+22	2,501435E+22	3,044903E+21	3,044864E+21	5,002920E+22	6,089767E+21	5,611897E+22
-1315	2,501415E+22	2,501565E+22	3,045095E+21	3,044775E+21	5,002980E+22	6,089870E+21	5,611967E+22
-1314	2,501571E+22	2,501511E+22	3,044554E+21	3,045046E+21	5,003082E+22	6,089601E+21	5,612042E+22
-1313	2,501564E+22	2,501567E+22	3,044788E+21	3,044410E+21	5,003131E+22	6,089198E+21	5,612051E+22
-1312	2,501624E+22	2,501684E+22	3,044698E+21	3,044575E+21	5,003308E+22	6,089272E+21	5,612235E+22
-1311	2,501744E+22	2,501624E+22	3,044214E+21	3,044589E+21	5,003368E+22	6,088803E+21	5,612248E+22
-1310	2,501643E+22	2,501744E+22	3,044580E+21	3,044132E+21	5,003387E+22	6,088712E+21	5,612258E+22
-1309	2,501730E+22	2,501770E+22	3,044300E+21	3,044611E+21	5,003500E+22	6,088910E+21	5,612391E+22
-1308	2,501772E+22	2,501675E+22	3,044215E+21	3,044369E+21	5,003447E+22	6,088584E+21	5,612305E+22
-1307	2,501654E+22	2,501759E+22	3,044690E+21	3,044237E+21	5,003413E+22	6,088927E+21	5,612306E+22
-1306	2,501718E+22	2,501664E+22	3,044352E+21	3,044789E+21	5,003382E+22	6,089141E+21	5,612296E+22
-1305	2,501629E+22	2,501588E+22	3,044691E+21	3,044506E+21	5,003216E+22	6,089197E+21	5,612136E+22
-1304	2,501512E+22	2,501617E+22	3,045007E+21	3,044840E+21	5,003130E+22	6,089847E+21	5,612114E+22
-1303	2,501552E+22	2,501441E+22	3,044671E+21	3,045263E+21	5,002993E+22	6,089935E+21	5,611986E+22
-1302	2,501399E+22	2,501427E+22	3,045242E+21	3,044899E+21	5,002826E+22	6,090141E+21	5,611840E+22
-1301	2,501390E+22	2,501425E+22	3,045257E+21	3,045377E+21	5,002816E+22	6,090634E+21	5,611879E+22
-1300	2,501425E+22	2,501284E+22	3,045097E+21	3,045342E+21	5,002709E+22	6,090439E+21	5,611753E+22
-1299	2,501256E+22	2,501374E+22	3,045583E+21	3,045066E+21	5,002630E+22	6,090649E+21	5,611695E+22
-1298	2,501311E+22	2,501336E+22	3,045198E+21	3,045590E+21	5,002647E+22	6,090788E+21	5,611726E+22
-1297	2,501327E+22	2,501283E+22	3,045222E+21	3,045177E+21	5,002611E+22	6,090399E+21	5,611650E+22
-1296	2,501289E+22	2,501417E+22	3,045427E+21	3,045057E+21	5,002706E+22	6,090485E+21	5,611754E+22
-1295	2,501465E+22	2,501358E+22	3,044812E+21	3,045312E+21	5,002823E+22	6,090125E+21	5,611835E+22
-1294	2,501449E+22	2,501434E+22	3,045014E+21	3,044661E+21	5,002883E+22	6,089676E+21	5,611850E+22
-1293	2,501483E+22	2,501571E+22	3,044950E+21	3,044873E+21	5,003054E+22	6,089823E+21	5,612037E+22
-1292	2,501609E+22	2,501509E+22	3,044471E+21	3,044872E+21	5,003118E+22	6,089343E+21	5,612052E+22
-1291	2,501511E+22	2,501616E+22	3,044880E+21	3,044427E+21	5,003127E+22	6,089307E+21	5,612058E+22
-1290	2,501568E+22	2,501616E+22	3,044655E+21	3,044906E+21	5,003185E+22	6,089560E+21	5,612141E+22
-1289	2,501622E+22	2,501517E+22	3,044606E+21	3,044673E+21	5,003138E+22	6,089279E+21	5,612066E+22
-1288	2,501492E+22	2,501594E+22	3,045100E+21	3,044605E+21	5,003086E+22	6,089705E+21	5,612056E+22
-1287	2,501537E+22	2,501481E+22	3,044688E+21	3,045226E+21	5,003018E+22	6,089914E+21	5,612010E+22
-1286	2,501451E+22	2,501401E+22	3,045010E+21	3,044938E+21	5,002852E+22	6,089948E+21	5,611847E+22

1	14	15	16	17	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							
-1285	2,501339E+22	2,501441E+22	3,045368E+21	3,045244E+21	5,002780E+22	6,090613E+21	5,611841E+22
-1284	2,501406E+22	2,501278E+22	3,045040E+21	3,045586E+21	5,002684E+22	6,090626E+21	5,611747E+22
-1283	2,501258E+22	2,501272E+22	3,045621E+21	3,045206E+21	5,002531E+22	6,090827E+21	5,611613E+22
-1282	2,501198E+22	2,501271E+22	3,045645E+21	3,045703E+21	5,002468E+22	6,091347E+21	5,611603E+22
-1281	2,501237E+22	2,501138E+22	3,045465E+21	3,045694E+21	5,002375E+22	6,091160E+21	5,611491E+22
-1280	2,501081E+22	2,501213E+22	3,045939E+21	3,045435E+21	5,002294E+22	6,091374E+21	5,611431E+22
-1279	2,501159E+22	2,501162E+22	3,045473E+21	3,045936E+21	5,002321E+22	6,091409E+21	5,611462E+22
-1278	2,501214E+22	2,501121E+22	3,045462E+21	3,045456E+21	5,002334E+22	6,090917E+21	5,611426E+22
-1277	2,501182E+22	2,501281E+22	3,045693E+21	3,045310E+21	5,002463E+22	6,091003E+21	5,611563E+22
-1276	2,501359E+22	2,501252E+22	3,045064E+21	3,045546E+21	5,002611E+22	6,090609E+21	5,611672E+22
-1275	2,501326E+22	2,501331E+22	3,045265E+21	3,044937E+21	5,002657E+22	6,090202E+21	5,611677E+22
-1274	2,501314E+22	2,501446E+22	3,045255E+21	3,045169E+21	5,002759E+22	6,090424E+21	5,611802E+22
-1273	2,501456E+22	2,501374E+22	3,044814E+21	3,045154E+21	5,002830E+22	6,089969E+21	5,611827E+22
-1272	2,501371E+22	2,501458E+22	3,045260E+21	3,044731E+21	5,002829E+22	6,089991E+21	5,611828E+22
-1271	2,501422E+22	2,501441E+22	3,044982E+21	3,045237E+21	5,002864E+22	6,090219E+21	5,611886E+22
-1270	2,501467E+22	2,501345E+22	3,044905E+21	3,045040E+21	5,002812E+22	6,089945E+21	5,611807E+22
-1269	2,501320E+22	2,501434E+22	3,045412E+21	3,045020E+21	5,002754E+22	6,090433E+21	5,611797E+22
-1268	2,501380E+22	2,501324E+22	3,045009E+21	3,045616E+21	5,002704E+22	6,090625E+21	5,611767E+22
-1267	2,501304E+22	2,501242E+22	3,045358E+21	3,045307E+21	5,002546E+22	6,090665E+21	5,611612E+22
-1266	2,501164E+22	2,501273E+22	3,045779E+21	3,045577E+21	5,002437E+22	6,091357E+21	5,611573E+22
-1265	2,501238E+22	2,501115E+22	3,045485E+21	3,045899E+21	5,002354E+22	6,091385E+21	5,611492E+22
-1264	2,501076E+22	2,501108E+22	3,046056E+21	3,045584E+21	5,002184E+22	6,091640E+21	5,611348E+22
-1263	2,501001E+22	2,501087E+22	3,045977E+21	3,046112E+21	5,002088E+22	6,092088E+21	5,611297E+22
-1262	2,501060E+22	2,500949E+22	3,045755E+21	3,046082E+21	5,002009E+22	6,091836E+21	5,611193E+22
-1261	2,500935E+22	2,501045E+22	3,046219E+21	3,045769E+21	5,001980E+22	6,091988E+21	5,611179E+22
-1260	2,501057E+22	2,501018E+22	3,045745E+21	3,046176E+21	5,002074E+22	6,091921E+21	5,611267E+22
-1259	2,501118E+22	2,501004E+22	3,045726E+21	3,045670E+21	5,002122E+22	6,091396E+21	5,611262E+22
-1258	2,501036E+22	2,501173E+22	3,045988E+21	3,045546E+21	5,002209E+22	6,091533E+21	5,611362E+22
-1257	2,501205E+22	2,501150E+22	3,045382E+21	3,045805E+21	5,002355E+22	6,091187E+21	5,611474E+22
-1256	2,501173E+22	2,501207E+22	3,045601E+21	3,045262E+21	5,002379E+22	6,090863E+21	5,611466E+22
-1255	2,501159E+22	2,501287E+22	3,045544E+21	3,045492E+21	5,002446E+22	6,091036E+21	5,611550E+22
-1254	2,501324E+22	2,501203E+22	3,045103E+21	3,045471E+21	5,002527E+22	6,090573E+21	5,611585E+22
-1253	2,501240E+22	2,501296E+22	3,045562E+21	3,045066E+21	5,002535E+22	6,090628E+21	5,611598E+22
-1252	2,501288E+22	2,501293E+22	3,045275E+21	3,045585E+21	5,002581E+22	6,090861E+21	5,611667E+22
-1251	2,501320E+22	2,501199E+22	3,045197E+21	3,045423E+21	5,002519E+22	6,090620E+21	5,611581E+22
-1250	2,501135E+22	2,501272E+22	3,045773E+21	3,045394E+21	5,002407E+22	6,091167E+21	5,611524E+22
-1249	2,501213E+22	2,501167E+22	3,045435E+21	3,045945E+21	5,002380E+22	6,091380E+21	5,611518E+22
-1248	2,501145E+22	2,501072E+22	3,045814E+21	3,045653E+21	5,002217E+22	6,091468E+21	5,611364E+22
-1247	2,500981E+22	2,501088E+22	3,046178E+21	3,045929E+21	5,002070E+22	6,092107E+21	5,611280E+22
-1246	2,501052E+22	2,500934E+22	3,045837E+21	3,046287E+21	5,001986E+22	6,092124E+21	5,611199E+22
-1245	2,500887E+22	2,500931E+22	3,046381E+21	3,045992E+21	5,001818E+22	6,092373E+21	5,611056E+22
-1244	2,500844E+22	2,500920E+22	3,046273E+21	3,046469E+21	5,001763E+22	6,092742E+21	5,611038E+22
-1243	2,500931E+22	2,500797E+22	3,046033E+21	3,046385E+21	5,001729E+22	6,092418E+21	5,610970E+22
-1242	2,500797E+22	2,500900E+22	3,046537E+21	3,046026E+21	5,001697E+22	6,092564E+21	5,610954E+22
-1241	2,500931E+22	2,500900E+22	3,046100E+21	3,046408E+21	5,001831E+22	6,092508E+21	5,611082E+22
-1240	2,500976E+22	2,500892E+22	3,046065E+21	3,045977E+21	5,001868E+22	6,092042E+21	5,611072E+22
-1239	2,500870E+22	2,501035E+22	3,046260E+21	3,045877E+21	5,001906E+22	6,092136E+21	5,611119E+22
-1238	2,501054E+22	2,500996E+22	3,045642E+21	3,046129E+21	5,002050E+22	6,091771E+21	5,611227E+22
-1237	2,501040E+22	2,501052E+22	3,045870E+21	3,045572E+21	5,002092E+22	6,091442E+21	5,611236E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1236	2,501053E+22	2,501138E+22	3,045814E+21	3,045760E+21	5,002191E+22	6,091574E+21	5,611348E+22
-1235	2,501210E+22	2,501069E+22	3,045371E+21	3,045750E+21	5,002279E+22	6,091121E+21	5,611391E+22
-1234	2,501080E+22	2,501160E+22	3,045869E+21	3,045390E+21	5,002241E+22	6,091260E+21	5,611367E+22
-1233	2,501125E+22	2,501157E+22	3,045645E+21	3,045913E+21	5,002282E+22	6,091558E+21	5,611437E+22
-1232	2,501154E+22	2,501049E+22	3,045601E+21	3,045806E+21	5,002202E+22	6,091406E+21	5,611343E+22
-1231	2,500962E+22	2,501091E+22	3,046151E+21	3,045757E+21	5,002053E+22	6,091908E+21	5,611244E+22
-1230	2,501050E+22	2,500976E+22	3,045833E+21	3,046296E+21	5,002025E+22	6,092130E+21	5,611238E+22
-1229	2,500971E+22	2,500894E+22	3,046209E+21	3,046041E+21	5,001865E+22	6,092250E+21	5,611090E+22
-1228	2,500805E+22	2,500917E+22	3,046526E+21	3,046327E+21	5,001721E+22	6,092854E+21	5,611007E+22
-1227	2,500871E+22	2,500765E+22	3,046153E+21	3,046688E+21	5,001636E+22	6,092841E+21	5,610920E+22
-1226	2,500699E+22	2,500754E+22	3,046721E+21	3,046360E+21	5,001453E+22	6,093081E+21	5,610761E+22
-1225	2,500693E+22	2,500761E+22	3,046654E+21	3,046755E+21	5,001454E+22	6,093409E+21	5,610795E+22
-1224	2,500801E+22	2,500654E+22	3,046413E+21	3,046682E+21	5,001455E+22	6,093094E+21	5,610764E+22
-1223	2,500651E+22	2,500756E+22	3,046843E+21	3,046317E+21	5,001406E+22	6,093160E+21	5,610722E+22
-1222	2,500783E+22	2,500765E+22	3,046381E+21	3,046721E+21	5,001548E+22	6,093102E+21	5,610858E+22
-1221	2,500825E+22	2,500761E+22	3,046321E+21	3,046309E+21	5,001587E+22	6,092630E+21	5,610850E+22
-1220	2,500743E+22	2,500900E+22	3,046496E+21	3,046172E+21	5,001643E+22	6,092668E+21	5,610910E+22
-1219	2,500942E+22	2,500863E+22	3,045877E+21	3,046381E+21	5,001805E+22	6,092258E+21	5,611031E+22
-1218	2,500911E+22	2,500910E+22	3,046169E+21	3,045817E+21	5,001821E+22	6,091986E+21	5,611019E+22
-1217	2,500925E+22	2,501013E+22	3,046171E+21	3,046012E+21	5,001938E+22	6,092183E+21	5,611156E+22
-1216	2,501060E+22	2,500941E+22	3,045729E+21	3,046109E+21	5,002001E+22	6,091838E+21	5,611185E+22
-1215	2,500901E+22	2,500998E+22	3,046186E+21	3,045775E+21	5,001898E+22	6,091961E+21	5,611094E+22
-1214	2,500961E+22	2,500981E+22	3,045986E+21	3,046289E+21	5,001942E+22	6,092275E+21	5,611169E+22
-1213	2,500998E+22	2,500873E+22	3,045964E+21	3,046166E+21	5,001871E+22	6,092130E+21	5,611084E+22
-1212	2,500819E+22	2,500918E+22	3,046517E+21	3,046093E+21	5,001737E+22	6,092610E+21	5,610998E+22
-1211	2,500887E+22	2,500816E+22	3,046183E+21	3,046637E+21	5,001703E+22	6,092819E+21	5,610985E+22
-1210	2,500765E+22	2,500728E+22	3,046583E+21	3,046436E+21	5,001494E+22	6,093019E+21	5,610796E+22
-1209	2,500611E+22	2,500753E+22	3,046929E+21	3,046707E+21	5,001364E+22	6,093636E+21	5,610727E+22
-1208	2,500694E+22	2,500596E+22	3,046550E+21	3,047095E+21	5,001290E+22	6,093645E+21	5,610655E+22
-1207	2,500535E+22	2,500569E+22	3,047058E+21	3,046713E+21	5,001104E+22	6,093771E+21	5,610481E+22
-1206	2,500562E+22	2,500586E+22	3,046996E+21	3,047070E+21	5,001147E+22	6,094066E+21	5,610554E+22
-1205	2,500662E+22	2,500512E+22	3,046729E+21	3,047005E+21	5,001175E+22	6,093734E+21	5,610548E+22
-1204	2,500514E+22	2,500626E+22	3,047104E+21	3,046641E+21	5,001141E+22	6,093745E+21	5,610515E+22
-1203	2,500639E+22	2,500639E+22	3,046621E+21	3,047006E+21	5,001277E+22	6,093627E+21	5,610640E+22
-1202	2,500672E+22	2,500626E+22	3,046604E+21	3,046580E+21	5,001299E+22	6,093184E+21	5,610617E+22
-1201	2,500618E+22	2,500768E+22	3,046832E+21	3,046381E+21	5,001385E+22	6,093213E+21	5,610707E+22
-1200	2,500816E+22	2,500737E+22	3,046228E+21	3,046644E+21	5,001552E+22	6,092871E+21	5,610840E+22
-1199	2,500763E+22	2,500765E+22	3,046457E+21	3,046120E+21	5,001528E+22	6,092576E+21	5,610786E+22
-1198	2,500774E+22	2,500861E+22	3,046467E+21	3,046362E+21	5,001635E+22	6,092829E+21	5,610918E+22
-1197	2,500901E+22	2,500794E+22	3,046030E+21	3,046490E+21	5,001695E+22	6,092520E+21	5,610947E+22
-1196	2,500762E+22	2,500840E+22	3,046481E+21	3,046139E+21	5,001602E+22	6,092620E+21	5,610864E+22
-1195	2,500822E+22	2,500824E+22	3,046306E+21	3,046595E+21	5,001645E+22	6,092901E+21	5,610935E+22
-1194	2,500833E+22	2,500710E+22	3,046356E+21	3,046499E+21	5,001543E+22	6,092855E+21	5,610828E+22
-1193	2,500643E+22	2,500763E+22	3,046953E+21	3,046440E+21	5,001406E+22	6,093394E+21	5,610745E+22
-1192	2,500687E+22	2,500657E+22	3,046606E+21	3,047077E+21	5,001344E+22	6,093683E+21	5,610712E+22
-1191	2,500556E+22	2,500528E+22	3,046945E+21	3,046878E+21	5,001085E+22	6,093824E+21	5,610467E+22
-1190	2,500440E+22	2,500546E+22	3,047294E+21	3,047108E+21	5,000986E+22	6,094402E+21	5,610426E+22
-1189	2,500546E+22	2,500415E+22	3,046906E+21	3,047447E+21	5,000961E+22	6,094352E+21	5,610396E+22
-1188	2,500413E+22	2,500409E+22	3,047368E+21	3,047027E+21	5,000822E+22	6,094396E+21	5,610262E+22

1	14	15	16	17	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							
-1187	2,500428E+22	2,500458E+22	3,047276E+21	3,047344E+21	5,000886E+22	6,094620E+21	5,610348E+22
-1186	2,500494E+22	2,500390E+22	3,047036E+21	3,047299E+21	5,000883E+22	6,094334E+21	5,610317E+22
-1185	2,500357E+22	2,500508E+22	3,047441E+21	3,046906E+21	5,000865E+22	6,094346E+21	5,610300E+22
-1184	2,500489E+22	2,500514E+22	3,046952E+21	3,047293E+21	5,001003E+22	6,094245E+21	5,610427E+22
-1183	2,500524E+22	2,500467E+22	3,046894E+21	3,046854E+21	5,000991E+22	6,093749E+21	5,610366E+22
-1182	2,500498E+22	2,500607E+22	3,047132E+21	3,046672E+21	5,001104E+22	6,093804E+21	5,610485E+22
-1181	2,500682E+22	2,500598E+22	3,046512E+21	3,046979E+21	5,001280E+22	6,093490E+21	5,610629E+22
-1180	2,500633E+22	2,500625E+22	3,046690E+21	3,046490E+21	5,001258E+22	6,093180E+21	5,610576E+22
-1179	2,500638E+22	2,500720E+22	3,046706E+21	3,046683E+21	5,001358E+22	6,093389E+21	5,610697E+22
-1178	2,500749E+22	2,500646E+22	3,046352E+21	3,046800E+21	5,001395E+22	6,093151E+21	5,610710E+22
-1177	2,500622E+22	2,500696E+22	3,046883E+21	3,046412E+21	5,001318E+22	6,093296E+21	5,610648E+22
-1176	2,500660E+22	2,500681E+22	3,046736E+21	3,046926E+21	5,001340E+22	6,093663E+21	5,610707E+22
-1175	2,500635E+22	2,500536E+22	3,046743E+21	3,046893E+21	5,001170E+22	6,093635E+21	5,610534E+22
-1174	2,500452E+22	2,500568E+22	3,047336E+21	3,046878E+21	5,001020E+22	6,094214E+21	5,610441E+22
-1173	2,500496E+22	2,500468E+22	3,046975E+21	3,047517E+21	5,000964E+22	6,094492E+21	5,610413E+22
-1172	2,500404E+22	2,500336E+22	3,047265E+21	3,047283E+21	5,000740E+22	6,094548E+21	5,610195E+22
-1171	2,500304E+22	2,500371E+22	3,047609E+21	3,047410E+21	5,000675E+22	6,095020E+21	5,610177E+22
-1170	2,500394E+22	2,500266E+22	3,047283E+21	3,047751E+21	5,000659E+22	6,095034E+21	5,610163E+22
-1169	2,500257E+22	2,500284E+22	3,047759E+21	3,047322E+21	5,000541E+22	6,095081E+21	5,610049E+22
-1168	2,500247E+22	2,500337E+22	3,047648E+21	3,047687E+21	5,000583E+22	6,095335E+21	5,610117E+22
-1167	2,500306E+22	2,500230E+22	3,047346E+21	3,047638E+21	5,000536E+22	6,094984E+21	5,610035E+22
-1166	2,500211E+22	2,500330E+22	3,047745E+21	3,047215E+21	5,000542E+22	6,094960E+21	5,610038E+22
-1165	2,500357E+22	2,500358E+22	3,047244E+21	3,047573E+21	5,000715E+22	6,094817E+21	5,610197E+22
-1164	2,500419E+22	2,500321E+22	3,047125E+21	3,047148E+21	5,000740E+22	6,094273E+21	5,610167E+22
-1163	2,500382E+22	2,500482E+22	3,047334E+21	3,046945E+21	5,000864E+22	6,094280E+21	5,610292E+22
-1162	2,500538E+22	2,500480E+22	3,046778E+21	3,047288E+21	5,001018E+22	6,094066E+21	5,610425E+22
-1161	2,500498E+22	2,500508E+22	3,047009E+21	3,046775E+21	5,001006E+22	6,093784E+21	5,610385E+22
-1160	2,500496E+22	2,500597E+22	3,047064E+21	3,046979E+21	5,001093E+22	6,094043E+21	5,610498E+22
-1159	2,500590E+22	2,500481E+22	3,046718E+21	3,047103E+21	5,001071E+22	6,093821E+21	5,610453E+22
-1158	2,500470E+22	2,500516E+22	3,047286E+21	3,046771E+21	5,000986E+22	6,094057E+21	5,610392E+22
-1157	2,500473E+22	2,500513E+22	3,047123E+21	3,047339E+21	5,000986E+22	6,094462E+21	5,610433E+22
-1156	2,500453E+22	2,500350E+22	3,047070E+21	3,047358E+21	5,000803E+22	6,094428E+21	5,610246E+22
-1155	2,500283E+22	2,500377E+22	3,047638E+21	3,047273E+21	5,000660E+22	6,094911E+21	5,610152E+22
-1154	2,500328E+22	2,500283E+22	3,047348E+21	3,047870E+21	5,000611E+22	6,095217E+21	5,610132E+22
-1153	2,500259E+22	2,500178E+22	3,047678E+21	3,047575E+21	5,000437E+22	6,095253E+21	5,609962E+22
-1152	2,500146E+22	2,500237E+22	3,048017E+21	3,047729E+21	5,000383E+22	6,095746E+21	5,609957E+22
-1151	2,500199E+22	2,500112E+22	3,047651E+21	3,048102E+21	5,000311E+22	6,095753E+21	5,609886E+22
-1150	2,500079E+22	2,500120E+22	3,048109E+21	3,047705E+21	5,000199E+22	6,095814E+21	5,609780E+22
-1149	2,500071E+22	2,500179E+22	3,047965E+21	3,048038E+21	5,000250E+22	6,096003E+21	5,609850E+22
-1148	2,500172E+22	2,500063E+22	3,047594E+21	3,047968E+21	5,000235E+22	6,095562E+21	5,609791E+22
-1147	2,500105E+22	2,500172E+22	3,047964E+21	3,047458E+21	5,000278E+22	6,095421E+21	5,609820E+22
-1146	2,500237E+22	2,500226E+22	3,047522E+21	3,047832E+21	5,000463E+22	6,095355E+21	5,609998E+22
-1145	2,500297E+22	2,500217E+22	3,047419E+21	3,047416E+21	5,000514E+22	6,094835E+21	5,609997E+22
-1144	2,500241E+22	2,500378E+22	3,047634E+21	3,047257E+21	5,000619E+22	6,094890E+21	5,610108E+22
-1143	2,500378E+22	2,500336E+22	3,047091E+21	3,047592E+21	5,000714E+22	6,094683E+21	5,610183E+22
-1142	2,500365E+22	2,500344E+22	3,047358E+21	3,047081E+21	5,000709E+22	6,094439E+21	5,610153E+22
-1141	2,500346E+22	2,500443E+22	3,047437E+21	3,047277E+21	5,000789E+22	6,094714E+21	5,610260E+22
-1140	2,500442E+22	2,500318E+22	3,047044E+21	3,047468E+21	5,000760E+22	6,094512E+21	5,610211E+22
-1139	2,500304E+22	2,500347E+22	3,047584E+21	3,047135E+21	5,000652E+22	6,094719E+21	5,610124E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1138	2,500282E+22	2,500345E+22	3,047481E+21	3,047743E+21	5,000628E+22	6,095224E+21	5,610150E+22
-1137	2,500283E+22	2,500184E+22	3,047454E+21	3,047732E+21	5,000467E+22	6,095185E+21	5,609986E+22
-1136	2,500117E+22	2,500214E+22	3,048031E+21	3,047634E+21	5,000331E+22	6,095665E+21	5,609897E+22
-1135	2,500154E+22	2,500099E+22	3,047756E+21	3,048218E+21	5,000253E+22	6,095974E+21	5,609851E+22
-1134	2,500099E+22	2,499998E+22	3,048092E+21	3,047957E+21	5,000097E+22	6,096049E+21	5,609702E+22
-1133	2,499956E+22	2,500081E+22	3,048398E+21	3,048120E+21	5,000038E+22	6,096518E+21	5,609690E+22
-1132	2,500025E+22	2,499941E+22	3,047953E+21	3,048512E+21	4,999966E+22	6,096465E+21	5,609613E+22
-1131	2,499926E+22	2,499945E+22	3,048362E+21	3,048022E+21	4,999871E+22	6,096384E+21	5,609509E+22
-1130	2,499927E+22	2,500021E+22	3,048267E+21	3,048307E+21	4,999947E+22	6,096573E+21	5,609605E+22
-1129	2,500056E+22	2,499933E+22	3,047910E+21	3,048189E+21	4,999989E+22	6,096099E+21	5,609598E+22
-1128	2,499983E+22	2,500067E+22	3,048259E+21	3,047713E+21	5,000049E+22	6,095972E+21	5,609647E+22
-1127	2,500085E+22	2,500100E+22	3,047815E+21	3,048122E+21	5,000185E+22	6,095937E+21	5,609779E+22
-1126	2,500160E+22	2,500081E+22	3,047720E+21	3,047743E+21	5,000242E+22	6,095464E+21	5,609788E+22
-1125	2,500095E+22	2,500247E+22	3,047940E+21	3,047559E+21	5,000342E+22	6,095499E+21	5,609892E+22
-1124	2,500250E+22	2,500183E+22	3,047372E+21	3,047898E+21	5,000433E+22	6,095270E+21	5,609960E+22
-1123	2,500243E+22	2,500186E+22	3,047639E+21	3,047362E+21	5,000429E+22	6,095001E+21	5,609929E+22
-1122	2,500189E+22	2,500293E+22	3,047786E+21	3,047607E+21	5,000481E+22	6,095393E+21	5,610021E+22
-1121	2,500270E+22	2,500176E+22	3,047410E+21	3,047839E+21	5,000446E+22	6,095249E+21	5,609971E+22
-1120	2,500125E+22	2,500192E+22	3,047936E+21	3,047546E+21	5,000318E+22	6,095482E+21	5,609866E+22
-1119	2,500093E+22	2,500148E+22	3,047860E+21	3,048130E+21	5,000241E+22	6,095991E+21	5,609840E+22
-1118	2,500128E+22	2,499986E+22	3,047858E+21	3,048108E+21	5,000113E+22	6,095966E+21	5,609710E+22
-1117	2,499953E+22	2,500041E+22	3,048439E+21	3,047985E+21	4,999993E+22	6,096425E+21	5,609636E+22
-1116	2,499990E+22	2,499928E+22	3,048115E+21	3,048610E+21	4,999918E+22	6,096725E+21	5,609591E+22
-1115	2,499928E+22	2,499834E+22	3,048402E+21	3,048326E+21	4,999762E+22	6,096729E+21	5,609435E+22
-1114	2,499769E+22	2,499924E+22	3,048744E+21	3,048481E+21	4,999694E+22	6,097225E+21	5,609416E+22
-1113	2,499865E+22	2,499794E+22	3,048301E+21	3,048816E+21	4,999659E+22	6,097117E+21	5,609371E+22
-1112	2,499783E+22	2,499801E+22	3,048688E+21	3,048300E+21	4,999585E+22	6,096987E+21	5,609283E+22
-1111	2,499780E+22	2,499859E+22	3,048610E+21	3,048573E+21	4,999639E+22	6,097184E+21	5,609357E+22
-1110	2,499925E+22	2,499789E+22	3,048242E+21	3,048506E+21	4,999714E+22	6,096748E+21	5,609389E+22
-1109	2,499829E+22	2,499945E+22	3,048556E+21	3,048051E+21	4,999774E+22	6,096606E+21	5,609434E+22
-1108	2,499948E+22	2,499959E+22	3,048064E+21	3,048476E+21	4,999907E+22	6,096541E+21	5,609561E+22
-1107	2,500039E+22	2,499931E+22	3,047946E+21	3,048013E+21	4,999970E+22	6,095960E+21	5,609566E+22
-1106	2,499965E+22	2,500107E+22	3,048243E+21	3,047807E+21	5,000072E+22	6,096050E+21	5,609677E+22
-1105	2,500123E+22	2,500059E+22	3,047707E+21	3,048138E+21	5,000182E+22	6,095845E+21	5,609766E+22
-1104	2,500089E+22	2,500061E+22	3,047971E+21	3,047679E+21	5,000151E+22	6,095650E+21	5,609716E+22
-1103	2,499999E+22	2,500131E+22	3,048144E+21	3,047982E+21	5,000130E+22	6,096126E+21	5,609743E+22
-1102	2,500098E+22	2,499998E+22	3,047783E+21	3,048257E+21	5,000096E+22	6,096039E+21	5,609700E+22
-1101	2,499952E+22	2,500016E+22	3,048302E+21	3,047936E+21	4,999968E+22	6,096238E+21	5,609592E+22
-1100	2,499946E+22	2,499954E+22	3,048207E+21	3,048510E+21	4,999901E+22	6,096717E+21	5,609572E+22
-1099	2,499986E+22	2,499802E+22	3,048199E+21	3,048446E+21	4,999789E+22	6,096645E+21	5,609453E+22
-1098	2,499778E+22	2,499885E+22	3,048832E+21	3,048357E+21	4,999663E+22	6,097189E+21	5,609382E+22
-1097	2,499805E+22	2,499787E+22	3,048514E+21	3,048981E+21	4,999592E+22	6,097495E+21	5,609341E+22
-1096	2,499741E+22	2,499684E+22	3,048774E+21	3,048706E+21	4,999425E+22	6,097481E+21	5,609173E+22
-1095	2,499580E+22	2,499737E+22	3,049124E+21	3,048816E+21	4,999317E+22	6,097939E+21	5,609111E+22
-1094	2,499714E+22	2,499615E+22	3,048675E+21	3,049132E+21	4,999328E+22	6,097806E+21	5,609109E+22
-1093	2,499637E+22	2,499650E+22	3,049021E+21	3,048601E+21	4,999286E+22	6,097622E+21	5,609049E+22
-1092	2,499644E+22	2,499710E+22	3,048880E+21	3,048910E+21	4,999354E+22	6,097790E+21	5,609133E+22
-1091	2,499793E+22	2,499655E+22	3,048462E+21	3,048817E+21	4,999449E+22	6,097279E+21	5,609176E+22
-1090	2,499692E+22	2,499821E+22	3,048813E+21	3,048348E+21	4,999513E+22	6,097161E+21	5,609229E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1089	2,499823E+22	2,499845E+22	3,048353E+21	3,048710E+21	4,999669E+22	6,097062E+21	5,609375E+22
-1088	2,499920E+22	2,499814E+22	3,048239E+21	3,048251E+21	4,999733E+22	6,096490E+21	5,609382E+22
-1087	2,499817E+22	2,499955E+22	3,048593E+21	3,048075E+21	4,999771E+22	6,096668E+21	5,609438E+22
-1086	2,499966E+22	2,499911E+22	3,048070E+21	3,048486E+21	4,999877E+22	6,096557E+21	5,609533E+22
-1085	2,499909E+22	2,499910E+22	3,048315E+21	3,048080E+21	4,999819E+22	6,096396E+21	5,609459E+22
-1084	2,499835E+22	2,499943E+22	3,048459E+21	3,048405E+21	4,999778E+22	6,096864E+21	5,609464E+22
-1083	2,499953E+22	2,499808E+22	3,048086E+21	3,048609E+21	4,999761E+22	6,096695E+21	5,609430E+22
-1082	2,499803E+22	2,499845E+22	3,048668E+21	3,048268E+21	4,999648E+22	6,096935E+21	5,609342E+22
-1081	2,499795E+22	2,499810E+22	3,048613E+21	3,048822E+21	4,999605E+22	6,097434E+21	5,609348E+22
-1080	2,499809E+22	2,499667E+22	3,048593E+21	3,048812E+21	4,999476E+22	6,097406E+21	5,609217E+22
-1079	2,499565E+22	2,499714E+22	3,049256E+21	3,048760E+21	4,999278E+22	6,098016E+21	5,609080E+22
-1078	2,499608E+22	2,499608E+22	3,048933E+21	3,049389E+21	4,999216E+22	6,098321E+21	5,609048E+22
-1077	2,499552E+22	2,499506E+22	3,049157E+21	3,049085E+21	4,999058E+22	6,098241E+21	5,608882E+22
-1076	2,499434E+22	2,499540E+22	3,049447E+21	3,049176E+21	4,998974E+22	6,098623E+21	5,608837E+22
-1075	2,499586E+22	2,499439E+22	3,048952E+21	3,049440E+21	4,999025E+22	6,098393E+21	5,608864E+22
-1074	2,499495E+22	2,499515E+22	3,049299E+21	3,048931E+21	4,999010E+22	6,098230E+21	5,608833E+22
-1073	2,499510E+22	2,499598E+22	3,049155E+21	3,049209E+21	4,999108E+22	6,098364E+21	5,608944E+22
-1072	2,499660E+22	2,499543E+22	3,048728E+21	3,049087E+21	4,999203E+22	6,097815E+21	5,608985E+22
-1071	2,499550E+22	2,499678E+22	3,049129E+21	3,048587E+21	4,999228E+22	6,097717E+21	5,609000E+22
-1070	2,499695E+22	2,499707E+22	3,048699E+21	3,048941E+21	4,999402E+22	6,097640E+21	5,609166E+22
-1069	2,499770E+22	2,499684E+22	3,048575E+21	3,048536E+21	4,999454E+22	6,097111E+21	5,609165E+22
-1068	2,499665E+22	2,499798E+22	3,048883E+21	3,048442E+21	4,999463E+22	6,097326E+21	5,609196E+22
-1067	2,499813E+22	2,499748E+22	3,048334E+21	3,048856E+21	4,999561E+22	6,097190E+21	5,609280E+22
-1066	2,499754E+22	2,499752E+22	3,048613E+21	3,048458E+21	4,999507E+22	6,097070E+21	5,609214E+22
-1065	2,499698E+22	2,499791E+22	3,048793E+21	3,048723E+21	4,999489E+22	6,097515E+21	5,609241E+22
-1064	2,499815E+22	2,499661E+22	3,048451E+21	3,048923E+21	4,999476E+22	6,097374E+21	5,609213E+22
-1063	2,499630E+22	2,499675E+22	3,049100E+21	3,048625E+21	4,999304E+22	6,097725E+21	5,609077E+22
-1062	2,499601E+22	2,499651E+22	3,049061E+21	3,049232E+21	4,999251E+22	6,098293E+21	5,609081E+22
-1061	2,499595E+22	2,499500E+22	3,049016E+21	3,049269E+21	4,999096E+22	6,098285E+21	5,608924E+22
-1060	2,499375E+22	2,499501E+22	3,049621E+21	3,049205E+21	4,998875E+22	6,098826E+21	5,608758E+22
-1059	2,499445E+22	2,499401E+22	3,049254E+21	3,049741E+21	4,998846E+22	6,098995E+21	5,608745E+22
-1058	2,499405E+22	2,499326E+22	3,049480E+21	3,049407E+21	4,998731E+22	6,098887E+21	5,608620E+22
-1057	2,499299E+22	2,499397E+22	3,049766E+21	3,049460E+21	4,998696E+22	6,099225E+21	5,608619E+22
-1056	2,499444E+22	2,499326E+22	3,049245E+21	3,049740E+21	4,998770E+22	6,098984E+21	5,608668E+22
-1055	2,499334E+22	2,499380E+22	3,049620E+21	3,049238E+21	4,998714E+22	6,098858E+21	5,608600E+22
-1054	2,499364E+22	2,499471E+22	3,049490E+21	3,049484E+21	4,998834E+22	6,098974E+21	5,608732E+22
-1053	2,499514E+22	2,499417E+22	3,049051E+21	3,049347E+21	4,998931E+22	6,098398E+21	5,608771E+22
-1052	2,499424E+22	2,499515E+22	3,049423E+21	3,048873E+21	4,998939E+22	6,098295E+21	5,608769E+22
-1051	2,499563E+22	2,499555E+22	3,048968E+21	3,049228E+21	4,999118E+22	6,098197E+21	5,608937E+22
-1050	2,499616E+22	2,499548E+22	3,048853E+21	3,048900E+21	4,999164E+22	6,097753E+21	5,608939E+22
-1049	2,499521E+22	2,499660E+22	3,049168E+21	3,048803E+21	4,999180E+22	6,097972E+21	5,608977E+22
-1048	2,499673E+22	2,499604E+22	3,048632E+21	3,049190E+21	4,999277E+22	6,097821E+21	5,609059E+22
-1047	2,499604E+22	2,499580E+22	3,048976E+21	3,048775E+21	4,999184E+22	6,097751E+21	5,608959E+22
-1046	2,499551E+22	2,499634E+22	3,049202E+21	3,049029E+21	4,999185E+22	6,098232E+21	5,609008E+22
-1045	2,499634E+22	2,499514E+22	3,048873E+21	3,049288E+21	4,999149E+22	6,098161E+21	5,608965E+22
-1044	2,499443E+22	2,499494E+22	3,049487E+21	3,049073E+21	4,998936E+22	6,098560E+21	5,608792E+22
-1043	2,499410E+22	2,499460E+22	3,049415E+21	3,049648E+21	4,998870E+22	6,099063E+21	5,608776E+22
-1042	2,499407E+22	2,499315E+22	3,049375E+21	3,049682E+21	4,998721E+22	6,099056E+21	5,608627E+22
-1041	2,499222E+22	2,499320E+22	3,049964E+21	3,049543E+21	4,998542E+22	6,099507E+21	5,608493E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,499304E+22	2,499235E+22	3,049595E+21	3,050036E+21	4,998540E+22	6,099631E+21	5,608503E+22
-1039	2,499244E+22	2,499164E+22	3,049852E+21	3,049731E+21	4,998408E+22	6,099583E+21	5,608366E+22
-1038	2,499135E+22	2,499264E+22	3,050130E+21	3,049797E+21	4,998399E+22	6,099927E+21	5,608392E+22
-1037	2,499270E+22	2,499199E+22	3,049597E+21	3,050090E+21	4,998469E+22	6,099687E+21	5,608438E+22
-1036	2,499189E+22	2,499215E+22	3,049915E+21	3,049574E+21	4,998404E+22	6,099489E+21	5,608353E+22
-1035	2,499236E+22	2,499311E+22	3,049755E+21	3,049730E+21	4,998546E+22	6,099485E+21	5,608495E+22
-1034	2,499386E+22	2,499280E+22	3,049323E+21	3,049609E+21	4,998665E+22	6,098932E+21	5,608558E+22
-1033	2,499301E+22	2,499390E+22	3,049683E+21	3,049149E+21	4,998691E+22	6,098833E+21	5,608574E+22
-1032	2,499423E+22	2,499439E+22	3,049226E+21	3,049535E+21	4,998862E+22	6,098761E+21	5,608738E+22
-1031	2,499459E+22	2,499402E+22	3,049163E+21	3,049249E+21	4,998860E+22	6,098411E+21	5,608702E+22
-1030	2,499376E+22	2,499516E+22	3,049507E+21	3,049124E+21	4,998892E+22	6,098631E+21	5,608755E+22
-1029	2,499527E+22	2,499458E+22	3,049004E+21	3,049510E+21	4,998985E+22	6,098514E+21	5,608837E+22
-1028	2,499466E+22	2,499395E+22	3,049338E+21	3,049129E+21	4,998862E+22	6,098467E+21	5,608708E+22
-1027	2,499390E+22	2,499462E+22	3,049558E+21	3,049384E+21	4,998852E+22	6,098942E+21	5,608746E+22
-1026	2,499445E+22	2,499354E+22	3,049238E+21	3,049717E+21	4,998798E+22	6,098955E+21	5,608694E+22
-1025	2,499260E+22	2,499317E+22	3,049854E+21	3,049491E+21	4,998577E+22	6,099344E+21	5,608511E+22
-1024	2,499234E+22	2,499282E+22	3,049778E+21	3,050003E+21	4,998516E+22	6,099781E+21	5,608494E+22
-1023	2,499230E+22	2,499117E+22	3,049784E+21	3,050022E+21	4,998347E+22	6,099806E+21	5,608327E+22
-1022	2,499059E+22	2,499150E+22	3,050373E+21	3,049857E+21	4,998208E+22	6,100231E+21	5,608232E+22
-1021	2,499127E+22	2,499090E+22	3,049995E+21	3,050394E+21	4,998217E+22	6,100389E+21	5,608256E+22
-1020	2,499074E+22	2,498996E+22	3,050183E+21	3,050136E+21	4,998071E+22	6,100319E+21	5,608102E+22
-1019	2,498977E+22	2,499106E+22	3,050419E+21	3,050142E+21	4,998083E+22	6,100561E+21	5,608139E+22
-1018	2,499120E+22	2,499057E+22	3,049883E+21	3,050408E+21	4,998177E+22	6,100291E+21	5,608206E+22
-1017	2,499072E+22	2,499074E+22	3,050186E+21	3,049836E+21	4,998146E+22	6,100022E+21	5,608149E+22
-1016	2,499118E+22	2,499182E+22	3,050025E+21	3,049953E+21	4,998300E+22	6,099978E+21	5,608298E+22
-1015	2,499237E+22	2,499144E+22	3,049635E+21	3,049905E+21	4,998381E+22	6,099540E+21	5,608335E+22
-1014	2,499151E+22	2,499266E+22	3,049992E+21	3,049475E+21	4,998417E+22	6,099467E+21	5,608363E+22
-1013	2,499266E+22	2,499305E+22	3,049557E+21	3,049880E+21	4,998571E+22	6,099438E+21	5,608515E+22
-1012	2,499326E+22	2,499227E+22	3,049463E+21	3,049593E+21	4,998553E+22	6,099056E+21	5,608459E+22
-1011	2,499253E+22	2,499346E+22	3,049803E+21	3,049399E+21	4,998599E+22	6,099202E+21	5,608519E+22
-1010	2,499382E+22	2,499311E+22	3,049343E+21	3,049816E+21	4,998693E+22	6,099159E+21	5,608609E+22
-1009	2,499315E+22	2,499253E+22	3,049675E+21	3,049484E+21	4,998568E+22	6,099159E+21	5,608484E+22
-1008	2,499212E+22	2,499316E+22	3,049906E+21	3,049743E+21	4,998528E+22	6,099650E+21	5,608493E+22
-1007	2,499243E+22	2,499177E+22	3,049649E+21	3,050122E+21	4,998420E+22	6,099770E+21	5,608397E+22
-1006	2,499075E+22	2,499138E+22	3,050269E+21	3,049861E+21	4,998213E+22	6,100130E+21	5,608226E+22
-1005	2,499054E+22	2,499100E+22	3,050210E+21	3,050371E+21	4,998154E+22	6,100581E+21	5,608212E+22
-1004	2,499067E+22	2,498911E+22	3,050169E+21	3,050424E+21	4,997978E+22	6,100593E+21	5,608037E+22
-1003	2,498893E+22	2,498970E+22	3,050704E+21	3,050250E+21	4,997863E+22	6,100954E+21	5,607959E+22
-1002	2,498950E+22	2,498939E+22	3,050326E+21	3,050812E+21	4,997889E+22	6,101137E+21	5,608003E+22
-1001	2,498927E+22	2,498843E+22	3,050479E+21	3,050503E+21	4,997771E+22	6,100983E+21	5,607869E+22
-1000	2,498843E+22	2,498963E+22	3,050702E+21	3,050394E+21	4,997806E+22	6,101096E+21	5,607916E+22
-999	2,498978E+22	2,498907E+22	3,050217E+21	3,050645E+21	4,997886E+22	6,100862E+21	5,607972E+22
-998	2,498932E+22	2,498948E+22	3,050520E+21	3,050067E+21	4,997880E+22	6,100587E+21	5,607939E+22
-997	2,498961E+22	2,499066E+22	3,050363E+21	3,050253E+21	4,998027E+22	6,100616E+21	5,608089E+22
-996	2,499086E+22	2,498988E+22	3,049921E+21	3,050265E+21	4,998075E+22	6,100186E+21	5,608093E+22
-995	2,499014E+22	2,499111E+22	3,050242E+21	3,049800E+21	4,998124E+22	6,100043E+21	5,608128E+22
-994	2,499136E+22	2,499162E+22	3,049835E+21	3,050189E+21	4,998298E+22	6,100024E+21	5,608301E+22
-993	2,499217E+22	2,499079E+22	3,049748E+21	3,049876E+21	4,998296E+22	6,099624E+21	5,608259E+22
-992	2,499126E+22	2,499211E+22	3,050118E+21	3,049659E+21	4,998337E+22	6,099776E+21	5,608314E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-991	2,499202E+22	2,499167E+22	3,049734E+21	3,050169E+21	4,998369E+22	6,099903E+21	5,608359E+22
-990	2,499119E+22	2,499106E+22	3,050086E+21	3,049885E+21	4,998225E+22	6,099971E+21	5,608222E+22
-989	2,499009E+22	2,499146E+22	3,050341E+21	3,050170E+21	4,998155E+22	6,100511E+21	5,608206E+22
-988	2,499061E+22	2,498957E+22	3,050040E+21	3,050547E+21	4,998018E+22	6,100587E+21	5,608077E+22
-987	2,498915E+22	2,498926E+22	3,050619E+21	3,050230E+21	4,997842E+22	6,100849E+21	5,607927E+22
-986	2,498888E+22	2,498921E+22	3,050572E+21	3,050753E+21	4,997809E+22	6,101325E+21	5,607941E+22
-985	2,498911E+22	2,498751E+22	3,050496E+21	3,050825E+21	4,997663E+22	6,101321E+21	5,607795E+22
-984	2,498733E+22	2,498827E+22	3,051015E+21	3,050595E+21	4,997560E+22	6,101610E+21	5,607721E+22
-983	2,498776E+22	2,498789E+22	3,050700E+21	3,051149E+21	4,997565E+22	6,101848E+21	5,607749E+22
-982	2,498772E+22	2,498708E+22	3,050846E+21	3,050779E+21	4,997480E+22	6,101625E+21	5,607643E+22
-981	2,498692E+22	2,498822E+22	3,051082E+21	3,050654E+21	4,997513E+22	6,101735E+21	5,607687E+22
-980	2,498830E+22	2,498742E+22	3,050543E+21	3,050950E+21	4,997571E+22	6,101494E+21	5,607721E+22
-979	2,498785E+22	2,498795E+22	3,050779E+21	3,050396E+21	4,997580E+22	6,101174E+21	5,607698E+22
-978	2,498806E+22	2,498926E+22	3,050631E+21	3,050614E+21	4,997732E+22	6,101244E+21	5,607856E+22
-977	2,498966E+22	2,498845E+22	3,050161E+21	3,050601E+21	4,997811E+22	6,100762E+21	5,607887E+22
-976	2,498907E+22	2,498974E+22	3,050482E+21	3,050034E+21	4,997881E+22	6,100515E+21	5,607933E+22
-975	2,499006E+22	2,499024E+22	3,050173E+21	3,050432E+21	4,998030E+22	6,100605E+21	5,608091E+22
-974	2,499070E+22	2,498962E+22	3,050110E+21	3,050146E+21	4,998032E+22	6,100256E+21	5,608058E+22
-973	2,498944E+22	2,499083E+22	3,050518E+21	3,050022E+21	4,998028E+22	6,100540E+21	5,608082E+22
-972	2,499010E+22	2,498987E+22	3,050111E+21	3,050600E+21	4,997997E+22	6,100711E+21	5,608068E+22
-971	2,498939E+22	2,498911E+22	3,050432E+21	3,050308E+21	4,997850E+22	6,100740E+21	5,607924E+22
-970	2,498838E+22	2,498952E+22	3,050707E+21	3,050573E+21	4,997790E+22	6,101280E+21	5,607918E+22
-969	2,498921E+22	2,498761E+22	3,050388E+21	3,050929E+21	4,997683E+22	6,101317E+21	5,607814E+22
-968	2,498769E+22	2,498756E+22	3,050950E+21	3,050566E+21	4,997525E+22	6,101516E+21	5,607677E+22
-967	2,498704E+22	2,498763E+22	3,050971E+21	3,051144E+21	4,997467E+22	6,102115E+21	5,607679E+22
-966	2,498722E+22	2,498611E+22	3,050907E+21	3,051198E+21	4,997333E+22	6,102106E+21	5,607544E+22
-965	2,498551E+22	2,498678E+22	3,051443E+21	3,050953E+21	4,997229E+22	6,102396E+21	5,607469E+22
-964	2,498609E+22	2,498601E+22	3,051082E+21	3,051465E+21	4,997210E+22	6,102548E+21	5,607465E+22
-963	2,498620E+22	2,498532E+22	3,051171E+21	3,051064E+21	4,997152E+22	6,102235E+21	5,607375E+22
-962	2,498534E+22	2,498672E+22	3,051384E+21	3,050971E+21	4,997206E+22	6,102355E+21	5,607442E+22
-961	2,498688E+22	2,498598E+22	3,050787E+21	3,051300E+21	4,997287E+22	6,102087E+21	5,607496E+22
-960	2,498655E+22	2,498664E+22	3,050988E+21	3,050693E+21	4,997319E+22	6,101680E+21	5,607487E+22
-959	2,498672E+22	2,498792E+22	3,050918E+21	3,050907E+21	4,997464E+22	6,101826E+21	5,607646E+22
-958	2,498844E+22	2,498729E+22	3,050477E+21	3,050838E+21	4,997573E+22	6,101315E+21	5,607704E+22
-957	2,498782E+22	2,498851E+22	3,050844E+21	3,050297E+21	4,997633E+22	6,101141E+21	5,607747E+22
-956	2,498854E+22	2,498870E+22	3,050525E+21	3,050753E+21	4,997724E+22	6,101278E+21	5,607852E+22
-955	2,498901E+22	2,498806E+22	3,050432E+21	3,050535E+21	4,997707E+22	6,100967E+21	5,607804E+22
-954	2,498761E+22	2,498916E+22	3,050865E+21	3,050451E+21	4,997677E+22	6,101316E+21	5,607808E+22
-953	2,498853E+22	2,498801E+22	3,050435E+21	3,051012E+21	4,997653E+22	6,101447E+21	5,607798E+22
-952	2,498799E+22	2,498726E+22	3,050743E+21	3,050626E+21	4,997525E+22	6,101369E+21	5,607661E+22
-951	2,498677E+22	2,498773E+22	3,051108E+21	3,050905E+21	4,997450E+22	6,102013E+21	5,607651E+22
-950	2,498748E+22	2,498618E+22	3,050807E+21	3,051271E+21	4,997367E+22	6,102078E+21	5,607574E+22
-949	2,498579E+22	2,498611E+22	3,051387E+21	3,050969E+21	4,997190E+22	6,102355E+21	5,607426E+22
-948	2,498505E+22	2,498583E+22	3,051386E+21	3,051560E+21	4,997088E+22	6,102945E+21	5,607382E+22
-947	2,498543E+22	2,498431E+22	3,051270E+21	3,051583E+21	4,996974E+22	6,102854E+21	5,607259E+22
-946	2,498381E+22	2,498500E+22	3,051802E+21	3,051300E+21	4,996880E+22	6,103103E+21	5,607191E+22
-945	2,498469E+22	2,498426E+22	3,051389E+21	3,051791E+21	4,996895E+22	6,103180E+21	5,607213E+22
-944	2,498481E+22	2,498380E+22	3,051421E+21	3,051355E+21	4,996861E+22	6,102776E+21	5,607139E+22
-943	2,498373E+22	2,498531E+22	3,051682E+21	3,051316E+21	4,996904E+22	6,102998E+21	5,607204E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-942	2,498539E+22	2,498479E+22	3,051092E+21	3,051610E+21	4,997019E+22	6,102703E+21	5,607289E+22
-941	2,498526E+22	2,498538E+22	3,051306E+21	3,050986E+21	4,997064E+22	6,102292E+21	5,607293E+22
-940	2,498549E+22	2,498637E+22	3,051230E+21	3,051163E+21	4,997186E+22	6,102393E+21	5,607425E+22
-939	2,498720E+22	2,498587E+22	3,050772E+21	3,051093E+21	4,997306E+22	6,101866E+21	5,607493E+22
-938	2,498631E+22	2,498719E+22	3,051164E+21	3,050619E+21	4,997350E+22	6,101783E+21	5,607528E+22
-937	2,498699E+22	2,498724E+22	3,050819E+21	3,051123E+21	4,997423E+22	6,101943E+21	5,607618E+22
-936	2,498744E+22	2,498652E+22	3,050712E+21	3,050884E+21	4,997397E+22	6,101596E+21	5,607556E+22
-935	2,498596E+22	2,498746E+22	3,051228E+21	3,050818E+21	4,997342E+22	6,102046E+21	5,607546E+22
-934	2,498694E+22	2,498641E+22	3,050835E+21	3,051325E+21	4,997335E+22	6,102161E+21	5,607551E+22
-933	2,498641E+22	2,498562E+22	3,051174E+21	3,050982E+21	4,997203E+22	6,102156E+21	5,607419E+22
-932	2,498494E+22	2,498586E+22	3,051520E+21	3,051307E+21	4,997079E+22	6,102828E+21	5,607362E+22
-931	2,498550E+22	2,498441E+22	3,051198E+21	3,051719E+21	4,996991E+22	6,102916E+21	5,607282E+22
-930	2,498381E+22	2,498431E+22	3,051784E+21	3,051427E+21	4,996812E+22	6,103212E+21	5,607134E+22
-929	2,498339E+22	2,498391E+22	3,051737E+21	3,051954E+21	4,996730E+22	6,103691E+21	5,607099E+22
-928	2,498396E+22	2,498252E+22	3,051576E+21	3,051873E+21	4,996648E+22	6,103449E+21	5,606992E+22
-927	2,498222E+22	2,498333E+22	3,052152E+21	3,051602E+21	4,996555E+22	6,103754E+21	5,606931E+22
-926	2,498302E+22	2,498298E+22	3,051731E+21	3,052079E+21	4,996600E+22	6,103810E+21	5,606981E+22
-925	2,498321E+22	2,498254E+22	3,051754E+21	3,051699E+21	4,996576E+22	6,103453E+21	5,606921E+22
-924	2,498220E+22	2,498374E+22	3,051987E+21	3,051651E+21	4,996595E+22	6,103638E+21	5,606959E+22
-923	2,498411E+22	2,498335E+22	3,051378E+21	3,051907E+21	4,996746E+22	6,103284E+21	5,607074E+22
-922	2,498407E+22	2,498397E+22	3,051603E+21	3,051258E+21	4,996805E+22	6,102861E+21	5,607091E+22
-921	2,498440E+22	2,498496E+22	3,051502E+21	3,051430E+21	4,996936E+22	6,102932E+21	5,607229E+22
-920	2,498589E+22	2,498461E+22	3,051016E+21	3,051364E+21	4,997050E+22	6,102380E+21	5,607288E+22
-919	2,498462E+22	2,498582E+22	3,051490E+21	3,050981E+21	4,997043E+22	6,102471E+21	5,607290E+22
-918	2,498527E+22	2,498591E+22	3,051182E+21	3,051461E+21	4,997118E+22	6,102643E+21	5,607382E+22
-917	2,498589E+22	2,498492E+22	3,051101E+21	3,051237E+21	4,997081E+22	6,102337E+21	5,607315E+22
-916	2,498435E+22	2,498549E+22	3,051611E+21	3,051158E+21	4,996984E+22	6,102769E+21	5,607261E+22
-915	2,498533E+22	2,498460E+22	3,051208E+21	3,051690E+21	4,996993E+22	6,102898E+21	5,607283E+22
-914	2,498458E+22	2,498391E+22	3,051553E+21	3,051407E+21	4,996849E+22	6,102959E+21	5,607145E+22
-913	2,498316E+22	2,498409E+22	3,051864E+21	3,051752E+21	4,996726E+22	6,103615E+21	5,607087E+22
-912	2,498378E+22	2,498269E+22	3,051523E+21	3,052100E+21	4,996646E+22	6,103623E+21	5,607009E+22
-911	2,498204E+22	2,498254E+22	3,052178E+21	3,051804E+21	4,996459E+22	6,103982E+21	5,606857E+22
-910	2,498171E+22	2,498234E+22	3,052145E+21	3,052240E+21	4,996405E+22	6,104385E+21	5,606844E+22
-909	2,498235E+22	2,498094E+22	3,051981E+21	3,052200E+21	4,996329E+22	6,104181E+21	5,606747E+22
-908	2,498044E+22	2,498158E+22	3,052504E+21	3,051965E+21	4,996201E+22	6,104470E+21	5,606648E+22
-907	2,498131E+22	2,498138E+22	3,052050E+21	3,052460E+21	4,996268E+22	6,104510E+21	5,606719E+22
-906	2,498168E+22	2,498100E+22	3,052065E+21	3,052064E+21	4,996268E+22	6,104129E+21	5,606681E+22
-905	2,498108E+22	2,498218E+22	3,052246E+21	3,051946E+21	4,996326E+22	6,104193E+21	5,606745E+22
-904	2,498306E+22	2,498201E+22	3,051617E+21	3,052107E+21	4,996507E+22	6,103724E+21	5,606879E+22
-903	2,498279E+22	2,498277E+22	3,051905E+21	3,051514E+21	4,996556E+22	6,103419E+21	5,606898E+22
-902	2,498283E+22	2,498395E+22	3,051827E+21	3,051681E+21	4,996678E+22	6,103508E+21	5,607029E+22
-901	2,498424E+22	2,498342E+22	3,051361E+21	3,051707E+21	4,996766E+22	6,103068E+21	5,607073E+22
-900	2,498292E+22	2,498409E+22	3,051824E+21	3,051350E+21	4,996701E+22	6,103174E+21	5,607019E+22
-899	2,498370E+22	2,498413E+22	3,051523E+21	3,051815E+21	4,996783E+22	6,103338E+21	5,607117E+22
-898	2,498441E+22	2,498313E+22	3,051460E+21	3,051602E+21	4,996754E+22	6,103062E+21	5,607060E+22
-897	2,498298E+22	2,498365E+22	3,051929E+21	3,051536E+21	4,996664E+22	6,103465E+21	5,607010E+22
-896	2,498373E+22	2,498298E+22	3,051514E+21	3,052060E+21	4,996671E+22	6,103574E+21	5,607029E+22
-895	2,498272E+22	2,498228E+22	3,051934E+21	3,051843E+21	4,996500E+22	6,103777E+21	5,606878E+22
-894	2,498129E+22	2,498256E+22	3,052283E+21	3,052108E+21	4,996384E+22	6,104390E+21	5,606823E+22

1	14	15	16	17	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							
-893	2,498207E+22	2,498102E+22	3,051963E+21	3,052451E+21	4,996308E+22	6,104414E+21	5,606750E+22
-892	2,498025E+22	2,498055E+22	3,052597E+21	3,052139E+21	4,996081E+22	6,104736E+21	5,606554E+22
-891	2,497991E+22	2,498055E+22	3,052535E+21	3,052588E+21	4,996046E+22	6,105122E+21	5,606558E+22
-890	2,498049E+22	2,497928E+22	3,052340E+21	3,052599E+21	4,995977E+22	6,104939E+21	5,606471E+22
-889	2,497887E+22	2,497988E+22	3,052779E+21	3,052363E+21	4,995875E+22	6,105143E+21	5,606390E+22
-888	2,497998E+22	2,497987E+22	3,052292E+21	3,052769E+21	4,995986E+22	6,105061E+21	5,606492E+22
-887	2,498041E+22	2,497962E+22	3,052359E+21	3,052351E+21	4,996003E+22	6,104710E+21	5,606474E+22
-886	2,497989E+22	2,498107E+22	3,052567E+21	3,052140E+21	4,996096E+22	6,104707E+21	5,606567E+22
-885	2,498179E+22	2,498090E+22	3,051953E+21	3,052354E+21	4,996269E+22	6,104307E+21	5,606700E+22
-884	2,498110E+22	2,498133E+22	3,052222E+21	3,051840E+21	4,996244E+22	6,104062E+21	5,606650E+22
-883	2,498111E+22	2,498247E+22	3,052141E+21	3,052047E+21	4,996358E+22	6,104189E+21	5,606777E+22
-882	2,498263E+22	2,498175E+22	3,051689E+21	3,052086E+21	4,996437E+22	6,103775E+21	5,606815E+22
-881	2,498168E+22	2,498223E+22	3,052098E+21	3,051694E+21	4,996392E+22	6,103792E+21	5,606771E+22
-880	2,498251E+22	2,498243E+22	3,051797E+21	3,052090E+21	4,996495E+22	6,103887E+21	5,606883E+22
-879	2,498291E+22	2,498162E+22	3,051802E+21	3,051947E+21	4,996454E+22	6,103750E+21	5,606829E+22
-878	2,498126E+22	2,498238E+22	3,052307E+21	3,051867E+21	4,996363E+22	6,104175E+21	5,606781E+22
-877	2,498192E+22	2,498156E+22	3,051939E+21	3,052451E+21	4,996348E+22	6,104390E+21	5,606787E+22
-876	2,498074E+22	2,498043E+22	3,052366E+21	3,052252E+21	4,996117E+22	6,104618E+21	5,606579E+22
-875	2,497940E+22	2,498066E+22	3,052716E+21	3,052482E+21	4,996007E+22	6,105198E+21	5,606527E+22
-874	2,498024E+22	2,497908E+22	3,052399E+21	3,052838E+21	4,995932E+22	6,105237E+21	5,606456E+22
-873	2,497859E+22	2,497856E+22	3,052936E+21	3,052548E+21	4,995715E+22	6,105483E+21	5,606263E+22
-872	2,497818E+22	2,497880E+22	3,052825E+21	3,052968E+21	4,995698E+22	6,105794E+21	5,606278E+22
-871	2,497878E+22	2,497770E+22	3,052663E+21	3,053014E+21	4,995648E+22	6,105677E+21	5,606216E+22
-870	2,497743E+22	2,497851E+22	3,053103E+21	3,052653E+21	4,995594E+22	6,105756E+21	5,606169E+22
-869	2,497876E+22	2,497858E+22	3,052639E+21	3,053020E+21	4,995734E+22	6,105660E+21	5,606300E+22
-868	2,497904E+22	2,497816E+22	3,052684E+21	3,052594E+21	4,995721E+22	6,105278E+21	5,606249E+22
-867	2,497837E+22	2,497977E+22	3,052885E+21	3,052402E+21	4,995814E+22	6,105288E+21	5,606343E+22
-866	2,498011E+22	2,497960E+22	3,052269E+21	3,052684E+21	4,995970E+22	6,104954E+21	5,606465E+22
-865	2,497965E+22	2,497974E+22	3,052470E+21	3,052206E+21	4,995939E+22	6,104676E+21	5,606407E+22
-864	2,497979E+22	2,498090E+22	3,052381E+21	3,052350E+21	4,996068E+22	6,104731E+21	5,606541E+22
-863	2,498134E+22	2,498023E+22	3,051992E+21	3,052406E+21	4,996157E+22	6,104397E+21	5,606597E+22
-862	2,498045E+22	2,498088E+22	3,052428E+21	3,051949E+21	4,996133E+22	6,104376E+21	5,606571E+22
-861	2,498111E+22	2,498114E+22	3,052172E+21	3,052411E+21	4,996225E+22	6,104582E+21	5,606683E+22
-860	2,498102E+22	2,498003E+22	3,052188E+21	3,052348E+21	4,996105E+22	6,104536E+21	5,606559E+22
-859	2,497928E+22	2,498070E+22	3,052727E+21	3,052289E+21	4,995998E+22	6,105016E+21	5,606500E+22
-858	2,497997E+22	2,497970E+22	3,052386E+21	3,052871E+21	4,995967E+22	6,105257E+21	5,606492E+22
-857	2,497908E+22	2,497832E+22	3,052743E+21	3,052658E+21	4,995740E+22	6,105401E+21	5,606280E+22
-856	2,497777E+22	2,497870E+22	3,053059E+21	3,052828E+21	4,995647E+22	6,105887E+21	5,606236E+22
-855	2,497840E+22	2,497732E+22	3,052764E+21	3,053241E+21	4,995572E+22	6,106005E+21	5,606173E+22
-854	2,497680E+22	2,497707E+22	3,053279E+21	3,052909E+21	4,995387E+22	6,106188E+21	5,606006E+22
-853	2,497660E+22	2,497732E+22	3,053186E+21	3,053331E+21	4,995392E+22	6,106516E+21	5,606043E+22
-852	2,497713E+22	2,497605E+22	3,053018E+21	3,053347E+21	4,995318E+22	6,106365E+21	5,605954E+22
-851	2,497601E+22	2,497702E+22	3,053457E+21	3,052928E+21	4,995303E+22	6,106385E+21	5,605941E+22
-850	2,497735E+22	2,497714E+22	3,053006E+21	3,053291E+21	4,995449E+22	6,106297E+21	5,606078E+22
-849	2,497765E+22	2,497667E+22	3,052954E+21	3,052912E+21	4,995432E+22	6,105866E+21	5,606019E+22
-848	2,497685E+22	2,497835E+22	3,053119E+21	3,052715E+21	4,995521E+22	6,105834E+21	5,606104E+22
-847	2,497851E+22	2,497819E+22	3,052549E+21	3,053041E+21	4,995670E+22	6,105590E+21	5,606229E+22
-846	2,497835E+22	2,497839E+22	3,052758E+21	3,052477E+21	4,995674E+22	6,105235E+21	5,606198E+22
-845	2,497867E+22	2,497951E+22	3,052715E+21	3,052609E+21	4,995818E+22	6,105324E+21	5,606350E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-844	2,497990E+22	2,497871E+22	3,052344E+21	3,052698E+21	4,995861E+22	6,105042E+21	5,606365E+22
-843	2,497882E+22	2,497948E+22	3,052792E+21	3,052286E+21	4,995830E+22	6,105078E+21	5,606338E+22
-842	2,497924E+22	2,497965E+22	3,052572E+21	3,052814E+21	4,995888E+22	6,105387E+21	5,606427E+22
-841	2,497927E+22	2,497822E+22	3,052532E+21	3,052795E+21	4,995749E+22	6,105327E+21	5,606282E+22
-840	2,497758E+22	2,497881E+22	3,053071E+21	3,052672E+21	4,995639E+22	6,105743E+21	5,606213E+22
-839	2,497826E+22	2,497786E+22	3,052782E+21	3,053260E+21	4,995611E+22	6,106041E+21	5,606215E+22
-838	2,497747E+22	2,497658E+22	3,053135E+21	3,052991E+21	4,995405E+22	6,106126E+21	5,606017E+22
-837	2,497606E+22	2,497704E+22	3,053456E+21	3,053205E+21	4,995310E+22	6,106662E+21	5,605976E+22
-836	2,497638E+22	2,497554E+22	3,053148E+21	3,053665E+21	4,995191E+22	6,106813E+21	5,605872E+22
-835	2,497497E+22	2,497534E+22	3,053658E+21	3,053301E+21	4,995031E+22	6,106958E+21	5,605727E+22
-834	2,497497E+22	2,497565E+22	3,053584E+21	3,053676E+21	4,995062E+22	6,107260E+21	5,605788E+22
-833	2,497581E+22	2,497434E+22	3,053333E+21	3,053653E+21	4,995015E+22	6,106985E+21	5,605713E+22
-832	2,497467E+22	2,497553E+22	3,053736E+21	3,053180E+21	4,995020E+22	6,106916E+21	5,605712E+22
-831	2,497576E+22	2,497588E+22	3,053303E+21	3,053597E+21	4,995163E+22	6,106899E+21	5,605853E+22
-830	2,497610E+22	2,497550E+22	3,053228E+21	3,053203E+21	4,995160E+22	6,106431E+21	5,605803E+22
-829	2,497548E+22	2,497707E+22	3,053413E+21	3,053024E+21	4,995255E+22	6,106437E+21	5,605899E+22
-828	2,497702E+22	2,497668E+22	3,052859E+21	3,053350E+21	4,995370E+22	6,106209E+21	5,605991E+22
-827	2,497708E+22	2,497692E+22	3,053085E+21	3,052761E+21	4,995400E+22	6,105846E+21	5,605985E+22
-826	2,497733E+22	2,497804E+22	3,053080E+21	3,052922E+21	4,995537E+22	6,106002E+21	5,606138E+22
-825	2,497842E+22	2,497714E+22	3,052643E+21	3,053082E+21	4,995556E+22	6,105725E+21	5,606129E+22
-824	2,497719E+22	2,497789E+22	3,053088E+21	3,052680E+21	4,995509E+22	6,105768E+21	5,606085E+22
-823	2,497745E+22	2,497799E+22	3,052936E+21	3,053221E+21	4,995544E+22	6,106157E+21	5,606160E+22
-822	2,497767E+22	2,497656E+22	3,052909E+21	3,053131E+21	4,995424E+22	6,106040E+21	5,606028E+22
-821	2,497609E+22	2,497706E+22	3,053477E+21	3,052998E+21	4,995315E+22	6,106474E+21	5,605963E+22
-820	2,497631E+22	2,497599E+22	3,053203E+21	3,053620E+21	4,995230E+22	6,106823E+21	5,605912E+22
-819	2,497548E+22	2,497485E+22	3,053544E+21	3,053388E+21	4,995033E+22	6,106932E+21	5,605726E+22
-818	2,497407E+22	2,497526E+22	3,053879E+21	3,053634E+21	4,994933E+22	6,107513E+21	5,605684E+22
-817	2,497463E+22	2,497364E+22	3,053497E+21	3,054094E+21	4,994827E+22	6,107590E+21	5,605586E+22
-816	2,497348E+22	2,497357E+22	3,053974E+21	3,053644E+21	4,994705E+22	6,107618E+21	5,605467E+22
-815	2,497350E+22	2,497409E+22	3,053935E+21	3,053987E+21	4,994759E+22	6,107922E+21	5,605551E+22
-814	2,497442E+22	2,497303E+22	3,053657E+21	3,053917E+21	4,994745E+22	6,107573E+21	5,605503E+22
-813	2,497318E+22	2,497427E+22	3,054047E+21	3,053487E+21	4,994745E+22	6,107534E+21	5,605498E+22
-812	2,497389E+22	2,497443E+22	3,053619E+21	3,053944E+21	4,994833E+22	6,107564E+21	5,605589E+22
-811	2,497452E+22	2,497401E+22	3,053544E+21	3,053532E+21	4,994853E+22	6,107077E+21	5,605561E+22
-810	2,497415E+22	2,497551E+22	3,053751E+21	3,053332E+21	4,994967E+22	6,107083E+21	5,605675E+22
-809	2,497592E+22	2,497505E+22	3,053133E+21	3,053650E+21	4,995096E+22	6,106783E+21	5,605775E+22
-808	2,497590E+22	2,497546E+22	3,053338E+21	3,053044E+21	4,995135E+22	6,106381E+21	5,605773E+22
-807	2,497582E+22	2,497678E+22	3,053379E+21	3,053259E+21	4,995260E+22	6,106637E+21	5,605924E+22
-806	2,497690E+22	2,497586E+22	3,052955E+21	3,053405E+21	4,995276E+22	6,106360E+21	5,605912E+22
-805	2,497565E+22	2,497642E+22	3,053450E+21	3,053025E+21	4,995208E+22	6,106475E+21	5,605855E+22
-804	2,497560E+22	2,497628E+22	3,053344E+21	3,053565E+21	4,995188E+22	6,106909E+21	5,605879E+22
-803	2,497595E+22	2,497476E+22	3,053342E+21	3,053478E+21	4,995071E+22	6,106820E+21	5,605753E+22
-802	2,497428E+22	2,497520E+22	3,053925E+21	3,053395E+21	4,994948E+22	6,107320E+21	5,605680E+22
-801	2,497440E+22	2,497402E+22	3,053565E+21	3,054081E+21	4,994842E+22	6,107647E+21	5,605606E+22
-800	2,497361E+22	2,497291E+22	3,053874E+21	3,053838E+21	4,994652E+22	6,107712E+21	5,605424E+22
-799	2,497230E+22	2,497347E+22	3,054241E+21	3,054055E+21	4,994577E+22	6,108296E+21	5,605406E+22
-798	2,497319E+22	2,497203E+22	3,053855E+21	3,054410E+21	4,994522E+22	6,108264E+21	5,605348E+22
-797	2,497216E+22	2,497209E+22	3,054336E+21	3,053929E+21	4,994425E+22	6,108265E+21	5,605251E+22
-796	2,497171E+22	2,497263E+22	3,054303E+21	3,054280E+21	4,994434E+22	6,108583E+21	5,605293E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-795	2,497262E+22	2,497167E+22	3,054004E+21	3,054241E+21	4,994430E+22	6,108245E+21	5,605254E+22
-794	2,497148E+22	2,497276E+22	3,054392E+21	3,053847E+21	4,994424E+22	6,108239E+21	5,605248E+22
-793	2,497241E+22	2,497275E+22	3,053889E+21	3,054296E+21	4,994516E+22	6,108185E+21	5,605335E+22
-792	2,497338E+22	2,497241E+22	3,053786E+21	3,053826E+21	4,994579E+22	6,107613E+21	5,605340E+22
-791	2,497307E+22	2,497408E+22	3,054030E+21	3,053604E+21	4,994715E+22	6,107634E+21	5,605478E+22
-790	2,497479E+22	2,497386E+22	3,053417E+21	3,053901E+21	4,994866E+22	6,107318E+21	5,605598E+22
-789	2,497458E+22	2,497430E+22	3,053629E+21	3,053353E+21	4,994887E+22	6,106983E+21	5,605585E+22
-788	2,497394E+22	2,497536E+22	3,053733E+21	3,053601E+21	4,994930E+22	6,107334E+21	5,605663E+22
-787	2,497513E+22	2,497433E+22	3,053350E+21	3,053747E+21	4,994945E+22	6,107097E+21	5,605655E+22
-786	2,497400E+22	2,497463E+22	3,053887E+21	3,053383E+21	4,994863E+22	6,107270E+21	5,605590E+22
-785	2,497392E+22	2,497429E+22	3,053724E+21	3,053943E+21	4,994821E+22	6,107667E+21	5,605588E+22
-784	2,497421E+22	2,497285E+22	3,053687E+21	3,053882E+21	4,994706E+22	6,107568E+21	5,605463E+22
-783	2,497237E+22	2,497341E+22	3,054275E+21	3,053844E+21	4,994578E+22	6,108118E+21	5,605390E+22
-782	2,497267E+22	2,497233E+22	3,053915E+21	3,054494E+21	4,994500E+22	6,108409E+21	5,605341E+22
-781	2,497207E+22	2,497125E+22	3,054234E+21	3,054220E+21	4,994332E+22	6,108454E+21	5,605177E+22
-780	2,497054E+22	2,497177E+22	3,054647E+21	3,054387E+21	4,994232E+22	6,109034E+21	5,605135E+22
-779	2,497158E+22	2,497047E+22	3,054281E+21	3,054712E+21	4,994204E+22	6,108992E+21	5,605104E+22
-778	2,497044E+22	2,497054E+22	3,054753E+21	3,054280E+21	4,994098E+22	6,109033E+21	5,605001E+22
-777	2,496988E+22	2,497095E+22	3,054619E+21	3,054667E+21	4,994083E+22	6,109286E+21	5,605012E+22
-776	2,497096E+22	2,496995E+22	3,054276E+21	3,054612E+21	4,994090E+22	6,108888E+21	5,604979E+22
-775	2,497006E+22	2,497115E+22	3,054665E+21	3,054179E+21	4,994121E+22	6,108844E+21	5,605005E+22
-774	2,497141E+22	2,497132E+22	3,054154E+21	3,054534E+21	4,994273E+22	6,108688E+21	5,605142E+22
-773	2,497242E+22	2,497118E+22	3,054056E+21	3,054046E+21	4,994359E+22	6,108102E+21	5,605169E+22
-772	2,497158E+22	2,497292E+22	3,054339E+21	3,053857E+21	4,994450E+22	6,108196E+21	5,605269E+22
-771	2,497317E+22	2,497274E+22	3,053760E+21	3,054190E+21	4,994591E+22	6,107950E+21	5,605386E+22
-770	2,497289E+22	2,497291E+22	3,054007E+21	3,053718E+21	4,994581E+22	6,107726E+21	5,605353E+22
-769	2,497225E+22	2,497362E+22	3,054067E+21	3,053973E+21	4,994587E+22	6,108040E+21	5,605391E+22
-768	2,497360E+22	2,497246E+22	3,053682E+21	3,054110E+21	4,994606E+22	6,107792E+21	5,605385E+22
-767	2,497247E+22	2,497279E+22	3,054241E+21	3,053765E+21	4,994525E+22	6,108006E+21	5,605326E+22
-766	2,497236E+22	2,497258E+22	3,054067E+21	3,054324E+21	4,994494E+22	6,108391E+21	5,605334E+22
-765	2,497253E+22	2,497120E+22	3,054027E+21	3,054303E+21	4,994373E+22	6,108329E+21	5,605206E+22
-764	2,497037E+22	2,497163E+22	3,054664E+21	3,054261E+21	4,994200E+22	6,108925E+21	5,605092E+22
-763	2,497089E+22	2,497062E+22	3,054355E+21	3,054858E+21	4,994152E+22	6,109213E+21	5,605073E+22
-762	2,497045E+22	2,496951E+22	3,054695E+21	3,054580E+21	4,993995E+22	6,109276E+21	5,604923E+22
-761	2,496880E+22	2,496995E+22	3,055041E+21	3,054728E+21	4,993875E+22	6,109769E+21	5,604852E+22
-760	2,496980E+22	2,496877E+22	3,054628E+21	3,055071E+21	4,993857E+22	6,109699E+21	5,604827E+22
-759	2,496861E+22	2,496889E+22	3,055073E+21	3,054663E+21	4,993750E+22	6,109736E+21	5,604724E+22
-758	2,496830E+22	2,496938E+22	3,054910E+21	3,055001E+21	4,993768E+22	6,109910E+21	5,604759E+22
-757	2,496968E+22	2,496850E+22	3,054542E+21	3,054908E+21	4,993818E+22	6,109450E+21	5,604763E+22
-756	2,496869E+22	2,496970E+22	3,054967E+21	3,054435E+21	4,993839E+22	6,109402E+21	5,604780E+22
-755	2,497018E+22	2,497011E+22	3,054501E+21	3,054769E+21	4,994028E+22	6,109271E+21	5,604955E+22
-754	2,497103E+22	2,496999E+22	3,054404E+21	3,054359E+21	4,994102E+22	6,108763E+21	5,604978E+22
-753	2,496991E+22	2,497149E+22	3,054631E+21	3,054213E+21	4,994140E+22	6,108844E+21	5,605024E+22
-752	2,497156E+22	2,497114E+22	3,054053E+21	3,054553E+21	4,994271E+22	6,108606E+21	5,605131E+22
-751	2,497139E+22	2,497122E+22	3,054322E+21	3,054079E+21	4,994261E+22	6,108401E+21	5,605101E+22
-750	2,497097E+22	2,497195E+22	3,054389E+21	3,054282E+21	4,994292E+22	6,108671E+21	5,605159E+22
-749	2,497225E+22	2,497088E+22	3,054005E+21	3,054430E+21	4,994313E+22	6,108436E+21	5,605157E+22
-748	2,497063E+22	2,497119E+22	3,054600E+21	3,054132E+21	4,994182E+22	6,108733E+21	5,605055E+22
-747	2,497050E+22	2,497102E+22	3,054477E+21	3,054706E+21	4,994152E+22	6,109183E+21	5,605071E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-746	2,497069E+22	2,496952E+22	3,054467E+21	3,054733E+21	4,994021E+22	6,109200E+21	5,604941E+22
-745	2,496856E+22	2,496973E+22	3,055063E+21	3,054664E+21	4,993829E+22	6,109727E+21	5,604802E+22
-744	2,496925E+22	2,496869E+22	3,054762E+21	3,055222E+21	4,993794E+22	6,109984E+21	5,604792E+22
-743	2,496873E+22	2,496772E+22	3,055095E+21	3,054958E+21	4,993646E+22	6,110053E+21	5,604651E+22
-742	2,496708E+22	2,496831E+22	3,055384E+21	3,055098E+21	4,993539E+22	6,110481E+21	5,604587E+22
-741	2,496801E+22	2,496717E+22	3,054935E+21	3,055446E+21	4,993518E+22	6,110381E+21	5,604556E+22
-740	2,496673E+22	2,496722E+22	3,055396E+21	3,055020E+21	4,993395E+22	6,110416E+21	5,604437E+22
-739	2,496685E+22	2,496784E+22	3,055268E+21	3,055282E+21	4,993468E+22	6,110550E+21	5,604523E+22
-738	2,496844E+22	2,496708E+22	3,054904E+21	3,055194E+21	4,993551E+22	6,110098E+21	5,604561E+22
-737	2,496736E+22	2,496826E+22	3,055256E+21	3,054718E+21	4,993562E+22	6,109974E+21	5,604559E+22
-736	2,496876E+22	2,496876E+22	3,054777E+21	3,055079E+21	4,993752E+22	6,109856E+21	5,604738E+22
-735	2,496950E+22	2,496867E+22	3,054676E+21	3,054707E+21	4,993817E+22	6,109383E+21	5,604755E+22
-734	2,496854E+22	2,497007E+22	3,054900E+21	3,054532E+21	4,993861E+22	6,109432E+21	5,604804E+22
-733	2,497027E+22	2,496970E+22	3,054335E+21	3,054841E+21	4,993997E+22	6,109176E+21	5,604914E+22
-732	2,496989E+22	2,496964E+22	3,054670E+21	3,054376E+21	4,993952E+22	6,109046E+21	5,604857E+22
-731	2,496946E+22	2,497045E+22	3,054798E+21	3,054586E+21	4,993991E+22	6,109385E+21	5,604930E+22
-730	2,497053E+22	2,496937E+22	3,054421E+21	3,054844E+21	4,993990E+22	6,109264E+21	5,604916E+22
-729	2,496866E+22	2,496935E+22	3,054964E+21	3,054575E+21	4,993801E+22	6,109539E+21	5,604755E+22
-728	2,496868E+22	2,496909E+22	3,054863E+21	3,055136E+21	4,993777E+22	6,109999E+21	5,604777E+22
-727	2,496900E+22	2,496761E+22	3,054866E+21	3,055134E+21	4,993661E+22	6,110001E+21	5,604661E+22
-726	2,496701E+22	2,496789E+22	3,055454E+21	3,055012E+21	4,993491E+22	6,110466E+21	5,604537E+22
-725	2,496757E+22	2,496706E+22	3,055130E+21	3,055558E+21	4,993463E+22	6,110689E+21	5,604532E+22
-724	2,496664E+22	2,496608E+22	3,055474E+21	3,055339E+21	4,993272E+22	6,110813E+21	5,604354E+22
-723	2,496512E+22	2,496671E+22	3,055780E+21	3,055464E+21	4,993183E+22	6,111244E+21	5,604307E+22
-722	2,496626E+22	2,496554E+22	3,055318E+21	3,055838E+21	4,993180E+22	6,111156E+21	5,604295E+22
-721	2,496518E+22	2,496543E+22	3,055704E+21	3,055361E+21	4,993061E+22	6,111064E+21	5,604167E+22
-720	2,496565E+22	2,496616E+22	3,055580E+21	3,055580E+21	4,993181E+22	6,111160E+21	5,604297E+22
-719	2,496718E+22	2,496570E+22	3,055202E+21	3,055496E+21	4,993288E+22	6,110698E+21	5,604358E+22
-718	2,496609E+22	2,496703E+22	3,055510E+21	3,055027E+21	4,993312E+22	6,110537E+21	5,604365E+22
-717	2,496734E+22	2,496755E+22	3,055026E+21	3,055371E+21	4,993489E+22	6,110397E+21	5,604528E+22
-716	2,496788E+22	2,496729E+22	3,054980E+21	3,055008E+21	4,993516E+22	6,109989E+21	5,604515E+22
-715	2,496715E+22	2,496866E+22	3,055268E+21	3,054790E+21	4,993581E+22	6,110058E+21	5,604586E+22
-714	2,496884E+22	2,496827E+22	3,054731E+21	3,055148E+21	4,993711E+22	6,109879E+21	5,604699E+22
-713	2,496826E+22	2,496799E+22	3,055009E+21	3,054728E+21	4,993625E+22	6,109737E+21	5,604598E+22
-712	2,496778E+22	2,496871E+22	3,055145E+21	3,054984E+21	4,993649E+22	6,110129E+21	5,604662E+22
-711	2,496871E+22	2,496766E+22	3,054775E+21	3,055278E+21	4,993637E+22	6,110052E+21	5,604642E+22
-710	2,496708E+22	2,496758E+22	3,055297E+21	3,054987E+21	4,993466E+22	6,110284E+21	5,604495E+22
-709	2,496712E+22	2,496735E+22	3,055217E+21	3,055483E+21	4,993448E+22	6,110700E+21	5,604518E+22
-708	2,496721E+22	2,496587E+22	3,055285E+21	3,055491E+21	4,993308E+22	6,110776E+21	5,604385E+22
-707	2,496520E+22	2,496626E+22	3,055910E+21	3,055364E+21	4,993146E+22	6,111274E+21	5,604274E+22
-706	2,496553E+22	2,496544E+22	3,055569E+21	3,055990E+21	4,993097E+22	6,111559E+21	5,604253E+22
-705	2,496454E+22	2,496412E+22	3,055834E+21	3,055780E+21	4,992866E+22	6,111614E+21	5,604027E+22
-704	2,496342E+22	2,496468E+22	3,056130E+21	3,055861E+21	4,992809E+22	6,111992E+21	5,604008E+22
-703	2,496482E+22	2,496376E+22	3,055653E+21	3,056179E+21	4,992858E+22	6,111832E+21	5,604042E+22
-702	2,496408E+22	2,496388E+22	3,055986E+21	3,055647E+21	4,992795E+22	6,111634E+21	5,603959E+22
-701	2,496442E+22	2,496494E+22	3,055845E+21	3,055828E+21	4,992937E+22	6,111673E+21	5,604104E+22
-700	2,496556E+22	2,496456E+22	3,055499E+21	3,055781E+21	4,993013E+22	6,111280E+21	5,604141E+22
-699	2,496452E+22	2,496588E+22	3,055854E+21	3,055303E+21	4,993041E+22	6,111156E+21	5,604156E+22
-698	2,496579E+22	2,496630E+22	3,055383E+21	3,055683E+21	4,993209E+22	6,111066E+21	5,604316E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-697	2,496633E+22	2,496564E+22	3,055299E+21	3,055319E+21	4,993196E+22	6,110618E+21	5,604258E+22
-696	2,496582E+22	2,496690E+22	3,055609E+21	3,055118E+21	4,993272E+22	6,110727E+21	5,604345E+22
-695	2,496735E+22	2,496666E+22	3,055060E+21	3,055522E+21	4,993401E+22	6,110582E+21	5,604459E+22
-694	2,496673E+22	2,496636E+22	3,055290E+21	3,055140E+21	4,993309E+22	6,110430E+21	5,604352E+22
-693	2,496618E+22	2,496710E+22	3,055433E+21	3,055363E+21	4,993328E+22	6,110797E+21	5,604408E+22
-692	2,496696E+22	2,496597E+22	3,055145E+21	3,055647E+21	4,993292E+22	6,110792E+21	5,604372E+22
-691	2,496550E+22	2,496594E+22	3,055743E+21	3,055307E+21	4,993145E+22	6,111050E+21	5,604250E+22
-690	2,496539E+22	2,496578E+22	3,055687E+21	3,055837E+21	4,993117E+22	6,111524E+21	5,604269E+22
-689	2,496515E+22	2,496404E+22	3,055698E+21	3,055894E+21	4,992919E+22	6,111592E+21	5,604078E+22
-688	2,496320E+22	2,496430E+22	3,056308E+21	3,055805E+21	4,992750E+22	6,112113E+21	5,603962E+22
-687	2,496354E+22	2,496353E+22	3,055942E+21	3,056426E+21	4,992707E+22	6,112368E+21	5,603944E+22
-686	2,496299E+22	2,496223E+22	3,056143E+21	3,056176E+21	4,992522E+22	6,112320E+21	5,603754E+22
-685	2,496212E+22	2,496299E+22	3,056422E+21	3,056166E+21	4,992511E+22	6,112578E+21	5,603769E+22
-684	2,496341E+22	2,496232E+22	3,056000E+21	3,056464E+21	4,992573E+22	6,112464E+21	5,603820E+22
-683	2,496268E+22	2,496273E+22	3,056350E+21	3,055921E+21	4,992541E+22	6,112271E+21	5,603768E+22
-682	2,496277E+22	2,496385E+22	3,056202E+21	3,056154E+21	4,992661E+22	6,112356E+21	5,603897E+22
-681	2,496377E+22	2,496308E+22	3,055805E+21	3,056121E+21	4,992685E+22	6,111926E+21	5,603878E+22
-680	2,496308E+22	2,496414E+22	3,056169E+21	3,055627E+21	4,992723E+22	6,111796E+21	5,603902E+22
-679	2,496438E+22	2,496467E+22	3,055699E+21	3,055982E+21	4,992905E+22	6,111681E+21	5,604073E+22
-678	2,496516E+22	2,496406E+22	3,055560E+21	3,055636E+21	4,992921E+22	6,111196E+21	5,604041E+22
-677	2,496451E+22	2,496545E+22	3,055853E+21	3,055425E+21	4,992996E+22	6,111278E+21	5,604124E+22
-676	2,496569E+22	2,496527E+22	3,055373E+21	3,055880E+21	4,993095E+22	6,111252E+21	5,604220E+22
-675	2,496517E+22	2,496496E+22	3,055658E+21	3,055481E+21	4,993013E+22	6,111139E+21	5,604127E+22
-674	2,496455E+22	2,496565E+22	3,055843E+21	3,055717E+21	4,993020E+22	6,111560E+21	5,604176E+22
-673	2,496520E+22	2,496415E+22	3,055556E+21	3,056002E+21	4,992935E+22	6,111558E+21	5,604090E+22
-672	2,496383E+22	2,496398E+22	3,056189E+21	3,055698E+21	4,992781E+22	6,111887E+21	5,603970E+22
-671	2,496339E+22	2,496397E+22	3,056113E+21	3,056265E+21	4,992736E+22	6,112378E+21	5,603974E+22
-670	2,496321E+22	2,496210E+22	3,056049E+21	3,056369E+21	4,992532E+22	6,112418E+21	5,603773E+22
-669	2,496138E+22	2,496234E+22	3,056626E+21	3,056215E+21	4,992372E+22	6,112841E+21	5,603656E+22
-668	2,496179E+22	2,496167E+22	3,056313E+21	3,056796E+21	4,992345E+22	6,113108E+21	5,603656E+22
-667	2,496157E+22	2,496065E+22	3,056541E+21	3,056467E+21	4,992222E+22	6,113009E+21	5,603523E+22
-666	2,496067E+22	2,496169E+22	3,056816E+21	3,056459E+21	4,992237E+22	6,113275E+21	5,603564E+22
-665	2,496165E+22	2,496088E+22	3,056349E+21	3,056786E+21	4,992254E+22	6,113135E+21	5,603567E+22
-664	2,496102E+22	2,496121E+22	3,056684E+21	3,056279E+21	4,992223E+22	6,112963E+21	5,603519E+22
-663	2,496108E+22	2,496236E+22	3,056509E+21	3,056490E+21	4,992344E+22	6,112999E+21	5,603644E+22
-662	2,496242E+22	2,496146E+22	3,056050E+21	3,056445E+21	4,992388E+22	6,112496E+21	5,603638E+22
-661	2,496196E+22	2,496256E+22	3,056399E+21	3,055884E+21	4,992452E+22	6,112283E+21	5,603681E+22
-660	2,496310E+22	2,496325E+22	3,056001E+21	3,056259E+21	4,992635E+22	6,112260E+21	5,603861E+22
-659	2,496382E+22	2,496286E+22	3,055889E+21	3,055934E+21	4,992668E+22	6,111823E+21	5,603850E+22
-658	2,496295E+22	2,496425E+22	3,056193E+21	3,055784E+21	4,992719E+22	6,111977E+21	5,603917E+22
-657	2,496390E+22	2,496363E+22	3,055725E+21	3,056245E+21	4,992753E+22	6,111970E+21	5,603950E+22
-656	2,496365E+22	2,496312E+22	3,056051E+21	3,055850E+21	4,992678E+22	6,111901E+21	5,603868E+22
-655	2,496289E+22	2,496389E+22	3,056258E+21	3,056060E+21	4,992678E+22	6,112318E+21	5,603909E+22
-654	2,496356E+22	2,496235E+22	3,055927E+21	3,056395E+21	4,992591E+22	6,112321E+21	5,603823E+22
-653	2,496202E+22	2,496218E+22	3,056529E+21	3,056092E+21	4,992421E+22	6,112621E+21	5,603683E+22
-652	2,496130E+22	2,496218E+22	3,056501E+21	3,056695E+21	4,992348E+22	6,113196E+21	5,603668E+22
-651	2,496138E+22	2,496038E+22	3,056455E+21	3,056769E+21	4,992175E+22	6,113223E+21	5,603497E+22
-650	2,495969E+22	2,496065E+22	3,057024E+21	3,056592E+21	4,992034E+22	6,113617E+21	5,603396E+22
-649	2,496011E+22	2,495983E+22	3,056711E+21	3,057142E+21	4,991993E+22	6,113853E+21	5,603379E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,496012E+22	2,495889E+22	3,056935E+21	3,056824E+21	4,991901E+22	6,113759E+21	5,603277E+22
-647	2,495891E+22	2,496021E+22	3,057175E+21	3,056812E+21	4,991912E+22	6,113988E+21	5,603311E+22
-646	2,496001E+22	2,495934E+22	3,056626E+21	3,057167E+21	4,991935E+22	6,113792E+21	5,603314E+22
-645	2,495954E+22	2,495958E+22	3,056924E+21	3,056586E+21	4,991913E+22	6,113509E+21	5,603264E+22
-644	2,495962E+22	2,496083E+22	3,056807E+21	3,056760E+21	4,992046E+22	6,113566E+21	5,603402E+22
-643	2,496124E+22	2,496015E+22	3,056375E+21	3,056672E+21	4,992139E+22	6,113047E+21	5,603443E+22
-642	2,496069E+22	2,496140E+22	3,056717E+21	3,056154E+21	4,992210E+22	6,112872E+21	5,603497E+22
-641	2,496148E+22	2,496187E+22	3,056321E+21	3,056578E+21	4,992335E+22	6,112899E+21	5,603625E+22
-640	2,496230E+22	2,496133E+22	3,056226E+21	3,056304E+21	4,992363E+22	6,112530E+21	5,603616E+22
-639	2,496129E+22	2,496273E+22	3,056541E+21	3,056139E+21	4,992403E+22	6,112680E+21	5,603671E+22
-638	2,496244E+22	2,496193E+22	3,056047E+21	3,056608E+21	4,992437E+22	6,112655E+21	5,603702E+22
-637	2,496223E+22	2,496136E+22	3,056381E+21	3,056184E+21	4,992359E+22	6,112565E+21	5,603616E+22
-636	2,496113E+22	2,496222E+22	3,056660E+21	3,056434E+21	4,992335E+22	6,113093E+21	5,603645E+22
-635	2,496167E+22	2,496079E+22	3,056344E+21	3,056798E+21	4,992246E+22	6,113143E+21	5,603560E+22
-634	2,496005E+22	2,496051E+22	3,056931E+21	3,056541E+21	4,992056E+22	6,113472E+21	5,603403E+22
-633	2,495927E+22	2,496008E+22	3,056910E+21	3,057114E+21	4,991935E+22	6,114023E+21	5,603338E+22
-632	2,495973E+22	2,495829E+22	3,056874E+21	3,057162E+21	4,991802E+22	6,114036E+21	5,603205E+22
-631	2,495807E+22	2,495887E+22	3,057423E+21	3,056939E+21	4,991694E+22	6,114361E+21	5,603130E+22
-630	2,495856E+22	2,495815E+22	3,057052E+21	3,057508E+21	4,991670E+22	6,114560E+21	5,603126E+22
-629	2,495849E+22	2,495738E+22	3,057223E+21	3,057163E+21	4,991588E+22	6,114386E+21	5,603026E+22
-628	2,495713E+22	2,495878E+22	3,057499E+21	3,057145E+21	4,991591E+22	6,114644E+21	5,603055E+22
-627	2,495846E+22	2,495800E+22	3,056958E+21	3,057447E+21	4,991646E+22	6,114406E+21	5,603087E+22
-626	2,495816E+22	2,495825E+22	3,057241E+21	3,056859E+21	4,991641E+22	6,114100E+21	5,603051E+22
-625	2,495818E+22	2,495924E+22	3,057142E+21	3,057027E+21	4,991742E+22	6,114169E+21	5,603159E+22
-624	2,495995E+22	2,495866E+22	3,056713E+21	3,056996E+21	4,991861E+22	6,113709E+21	5,603232E+22
-623	2,495913E+22	2,496008E+22	3,057022E+21	3,056508E+21	4,991921E+22	6,113531E+21	5,603274E+22
-622	2,496001E+22	2,496034E+22	3,056589E+21	3,056968E+21	4,992035E+22	6,113557E+21	5,603391E+22
-621	2,496094E+22	2,495971E+22	3,056483E+21	3,056634E+21	4,992065E+22	6,113117E+21	5,603377E+22
-620	2,495983E+22	2,496116E+22	3,056886E+21	3,056447E+21	4,992099E+22	6,113333E+21	5,603433E+22
-619	2,496102E+22	2,496051E+22	3,056442E+21	3,056895E+21	4,992153E+22	6,113337E+21	5,603486E+22
-618	2,496055E+22	2,495993E+22	3,056780E+21	3,056542E+21	4,992048E+22	6,113322E+21	5,603380E+22
-617	2,495902E+22	2,496043E+22	3,057074E+21	3,056847E+21	4,991945E+22	6,113921E+21	5,603337E+22
-616	2,495973E+22	2,495881E+22	3,056763E+21	3,057254E+21	4,991854E+22	6,114017E+21	5,603256E+22
-615	2,495810E+22	2,495854E+22	3,057328E+21	3,056962E+21	4,991664E+22	6,114290E+21	5,603093E+22
-614	2,495767E+22	2,495804E+22	3,057269E+21	3,057517E+21	4,991571E+22	6,114786E+21	5,603050E+22
-613	2,495829E+22	2,495640E+22	3,057217E+21	3,057505E+21	4,991469E+22	6,114721E+21	5,602942E+22
-612	2,495638E+22	2,495732E+22	3,057809E+21	3,057295E+21	4,991369E+22	6,115103E+21	5,602880E+22
-611	2,495679E+22	2,495684E+22	3,057440E+21	3,057853E+21	4,991362E+22	6,115294E+21	5,602892E+22
-610	2,495668E+22	2,495601E+22	3,057580E+21	3,057525E+21	4,991269E+22	6,115105E+21	5,602779E+22
-609	2,495529E+22	2,495703E+22	3,057860E+21	3,057469E+21	4,991232E+22	6,115329E+21	5,602765E+22
-608	2,495700E+22	2,495626E+22	3,057316E+21	3,057752E+21	4,991326E+22	6,115069E+21	5,602833E+22
-607	2,495674E+22	2,495673E+22	3,057565E+21	3,057150E+21	4,991347E+22	6,114715E+21	5,602819E+22
-606	2,495688E+22	2,495773E+22	3,057408E+21	3,057365E+21	4,991461E+22	6,114773E+21	5,602938E+22
-605	2,495860E+22	2,495728E+22	3,056940E+21	3,057324E+21	4,991588E+22	6,114264E+21	5,603015E+22
-604	2,495769E+22	2,495877E+22	3,057298E+21	3,056844E+21	4,991646E+22	6,114142E+21	5,603060E+22
-603	2,495867E+22	2,495911E+22	3,056913E+21	3,057243E+21	4,991778E+22	6,114156E+21	5,603193E+22
-602	2,495962E+22	2,495842E+22	3,056827E+21	3,056921E+21	4,991804E+22	6,113748E+21	5,603179E+22
-601	2,495822E+22	2,495948E+22	3,057291E+21	3,056754E+21	4,991769E+22	6,114045E+21	5,603174E+22
-600	2,495926E+22	2,495882E+22	3,056868E+21	3,057276E+21	4,991809E+22	6,114144E+21	5,603223E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-599	2,495851E+22	2,495823E+22	3,057175E+21	3,056983E+21	4,991675E+22	6,114158E+21	5,603090E+22
-598	2,495714E+22	2,495835E+22	3,057428E+21	3,057318E+21	4,991549E+22	6,114746E+21	5,603024E+22
-597	2,495806E+22	2,495673E+22	3,057097E+21	3,057656E+21	4,991479E+22	6,114753E+21	5,602954E+22
-596	2,495650E+22	2,495667E+22	3,057708E+21	3,057327E+21	4,991317E+22	6,115034E+21	5,602820E+22
-595	2,495614E+22	2,495650E+22	3,057684E+21	3,057836E+21	4,991264E+22	6,115520E+21	5,602816E+22
-594	2,495655E+22	2,495507E+22	3,057615E+21	3,057863E+21	4,991162E+22	6,115479E+21	5,602710E+22
-593	2,495429E+22	2,495568E+22	3,058219E+21	3,057677E+21	4,990997E+22	6,115897E+21	5,602587E+22
-592	2,495488E+22	2,495514E+22	3,057845E+21	3,058238E+21	4,991002E+22	6,116083E+21	5,602610E+22
-591	2,495486E+22	2,495433E+22	3,057936E+21	3,057882E+21	4,990919E+22	6,115818E+21	5,602500E+22
-590	2,495388E+22	2,495515E+22	3,058156E+21	3,057815E+21	4,990904E+22	6,115971E+21	5,602501E+22
-589	2,495580E+22	2,495459E+22	3,057574E+21	3,058053E+21	4,991039E+22	6,115627E+21	5,602602E+22
-588	2,495541E+22	2,495540E+22	3,057834E+21	3,057474E+21	4,991081E+22	6,115308E+21	5,602612E+22
-587	2,495557E+22	2,495663E+22	3,057694E+21	3,057673E+21	4,991220E+22	6,115366E+21	5,602757E+22
-586	2,495725E+22	2,495612E+22	3,057231E+21	3,057622E+21	4,991337E+22	6,114854E+21	5,602822E+22
-585	2,495616E+22	2,495724E+22	3,057647E+21	3,057122E+21	4,991340E+22	6,114769E+21	5,602817E+22
-584	2,495727E+22	2,495757E+22	3,057302E+21	3,057515E+21	4,991484E+22	6,114817E+21	5,602965E+22
-583	2,495795E+22	2,495692E+22	3,057215E+21	3,057239E+21	4,991487E+22	6,114454E+21	5,602933E+22
-582	2,495649E+22	2,495772E+22	3,057637E+21	3,057163E+21	4,991421E+22	6,114800E+21	5,602901E+22
-581	2,495746E+22	2,495701E+22	3,057186E+21	3,057693E+21	4,991446E+22	6,114878E+21	5,602934E+22
-580	2,495668E+22	2,495642E+22	3,057524E+21	3,057414E+21	4,991309E+22	6,114938E+21	5,602803E+22
-579	2,495554E+22	2,495663E+22	3,057806E+21	3,057686E+21	4,991216E+22	6,115492E+21	5,602766E+22
-578	2,495651E+22	2,495508E+22	3,057493E+21	3,058012E+21	4,991160E+22	6,115505E+21	5,602710E+22
-577	2,495471E+22	2,495486E+22	3,058156E+21	3,057701E+21	4,990957E+22	6,115857E+21	5,602542E+22
-576	2,495423E+22	2,495485E+22	3,058141E+21	3,058241E+21	4,990908E+22	6,116383E+21	5,602546E+22
-575	2,495442E+22	2,495344E+22	3,058033E+21	3,058303E+21	4,990786E+22	6,116336E+21	5,602420E+22
-574	2,495243E+22	2,495366E+22	3,058567E+21	3,058116E+21	4,990609E+22	6,116682E+21	5,602277E+22
-573	2,495329E+22	2,495317E+22	3,058146E+21	3,058579E+21	4,990646E+22	6,116724E+21	5,602319E+22
-572	2,495346E+22	2,495264E+22	3,058241E+21	3,058191E+21	4,990610E+22	6,116432E+21	5,602253E+22
-571	2,495266E+22	2,495380E+22	3,058464E+21	3,058077E+21	4,990646E+22	6,116541E+21	5,602300E+22
-570	2,495447E+22	2,495353E+22	3,057864E+21	3,058339E+21	4,990800E+22	6,116204E+21	5,602420E+22
-569	2,495385E+22	2,495408E+22	3,058149E+21	3,057780E+21	4,990793E+22	6,115928E+21	5,602386E+22
-568	2,495409E+22	2,495530E+22	3,058037E+21	3,057961E+21	4,990939E+22	6,115997E+21	5,602539E+22
-567	2,495572E+22	2,495480E+22	3,057567E+21	3,057908E+21	4,991052E+22	6,115475E+21	5,602599E+22
-566	2,495483E+22	2,495552E+22	3,057965E+21	3,057443E+21	4,991035E+22	6,115408E+21	5,602576E+22
-565	2,495583E+22	2,495592E+22	3,057613E+21	3,057834E+21	4,991174E+22	6,115447E+21	5,602719E+22
-564	2,495625E+22	2,495540E+22	3,057541E+21	3,057643E+21	4,991165E+22	6,115184E+21	5,602683E+22
-563	2,495480E+22	2,495615E+22	3,057975E+21	3,057572E+21	4,991095E+22	6,115547E+21	5,602650E+22
-562	2,495580E+22	2,495535E+22	3,057534E+21	3,058089E+21	4,991115E+22	6,115624E+21	5,602677E+22
-561	2,495495E+22	2,495445E+22	3,057926E+21	3,057786E+21	4,990940E+22	6,115713E+21	5,602511E+22
-560	2,495393E+22	2,495482E+22	3,058250E+21	3,058034E+21	4,990875E+22	6,116284E+21	5,602504E+22
-559	2,495465E+22	2,495347E+22	3,057941E+21	3,058395E+21	4,990812E+22	6,116336E+21	5,602446E+22
-558	2,495280E+22	2,495300E+22	3,058553E+21	3,058157E+21	4,990580E+22	6,116710E+21	5,602251E+22
-557	2,495229E+22	2,495299E+22	3,058499E+21	3,058660E+21	4,990528E+22	6,117159E+21	5,602244E+22
-556	2,495254E+22	2,495164E+22	3,058388E+21	3,058709E+21	4,990418E+22	6,117098E+21	5,602128E+22
-555	2,495092E+22	2,495195E+22	3,058907E+21	3,058441E+21	4,990287E+22	6,117348E+21	5,602022E+22
-554	2,495194E+22	2,495160E+22	3,058478E+21	3,058855E+21	4,990355E+22	6,117332E+21	5,602088E+22
-553	2,495193E+22	2,495106E+22	3,058600E+21	3,058489E+21	4,990299E+22	6,117088E+21	5,602008E+22
-552	2,495114E+22	2,495250E+22	3,058813E+21	3,058398E+21	4,990364E+22	6,117211E+21	5,602085E+22
-551	2,495277E+22	2,495227E+22	3,058202E+21	3,058684E+21	4,990504E+22	6,116886E+21	5,602193E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,495240E+22	2,495244E+22	3,058437E+21	3,058133E+21	4,990484E+22	6,116570E+21	5,602141E+22
-549	2,495279E+22	2,495368E+22	3,058309E+21	3,058230E+21	4,990647E+22	6,116539E+21	5,602301E+22
-548	2,495437E+22	2,495334E+22	3,057865E+21	3,058193E+21	4,990771E+22	6,116058E+21	5,602377E+22
-547	2,495349E+22	2,495416E+22	3,058275E+21	3,057747E+21	4,990765E+22	6,116023E+21	5,602367E+22
-546	2,495423E+22	2,495461E+22	3,057924E+21	3,058179E+21	4,990884E+22	6,116103E+21	5,602494E+22
-545	2,495442E+22	2,495373E+22	3,057904E+21	3,058041E+21	4,990815E+22	6,115944E+21	5,602410E+22
-544	2,495312E+22	2,495444E+22	3,058362E+21	3,057950E+21	4,990756E+22	6,116312E+21	5,602387E+22
-543	2,495410E+22	2,495365E+22	3,057946E+21	3,058463E+21	4,990774E+22	6,116409E+21	5,602415E+22
-542	2,495343E+22	2,495243E+22	3,058317E+21	3,058190E+21	4,990586E+22	6,116508E+21	5,602237E+22
-541	2,495226E+22	2,495298E+22	3,058634E+21	3,058418E+21	4,990524E+22	6,117051E+21	5,602229E+22
-540	2,495271E+22	2,495183E+22	3,058333E+21	3,058840E+21	4,990454E+22	6,117173E+21	5,602171E+22
-539	2,495093E+22	2,495126E+22	3,058940E+21	3,058581E+21	4,990219E+22	6,117521E+21	5,601972E+22
-538	2,495047E+22	2,495125E+22	3,058872E+21	3,059019E+21	4,990172E+22	6,117891E+21	5,601961E+22
-537	2,495076E+22	2,494969E+22	3,058787E+21	3,059042E+21	4,990045E+22	6,117828E+21	5,601828E+22
-536	2,494934E+22	2,495023E+22	3,059301E+21	3,058736E+21	4,989958E+22	6,118037E+21	5,601761E+22
-535	2,495026E+22	2,495020E+22	3,058854E+21	3,059184E+21	4,990045E+22	6,118038E+21	5,601849E+22
-534	2,495036E+22	2,494946E+22	3,058901E+21	3,058872E+21	4,989982E+22	6,117773E+21	5,601759E+22
-533	2,494966E+22	2,495099E+22	3,059078E+21	3,058731E+21	4,990065E+22	6,117809E+21	5,601846E+22
-532	2,495134E+22	2,495091E+22	3,058475E+21	3,059000E+21	4,990225E+22	6,117475E+21	5,601972E+22
-531	2,495124E+22	2,495107E+22	3,058710E+21	3,058403E+21	4,990231E+22	6,117113E+21	5,601942E+22
-530	2,495158E+22	2,495237E+22	3,058601E+21	3,058470E+21	4,990396E+22	6,117071E+21	5,602103E+22
-529	2,495281E+22	2,495188E+22	3,058212E+21	3,058507E+21	4,990469E+22	6,116718E+21	5,602141E+22
-528	2,495184E+22	2,495274E+22	3,058633E+21	3,058110E+21	4,990458E+22	6,116742E+21	5,602133E+22
-527	2,495243E+22	2,495307E+22	3,058301E+21	3,058578E+21	4,990549E+22	6,116878E+21	5,602237E+22
-526	2,495284E+22	2,495174E+22	3,058247E+21	3,058456E+21	4,990458E+22	6,116702E+21	5,602129E+22
-525	2,495169E+22	2,495251E+22	3,058700E+21	3,058295E+21	4,990420E+22	6,116995E+21	5,602120E+22
-524	2,495251E+22	2,495196E+22	3,058331E+21	3,058820E+21	4,990447E+22	6,117151E+21	5,602162E+22
-523	2,495180E+22	2,495087E+22	3,058708E+21	3,058576E+21	4,990268E+22	6,117284E+21	5,601996E+22
-522	2,495036E+22	2,495144E+22	3,059024E+21	3,058797E+21	4,990181E+22	6,117822E+21	5,601963E+22
-521	2,495054E+22	2,494998E+22	3,058774E+21	3,059254E+21	4,990052E+22	6,118029E+21	5,601855E+22
-520	2,494897E+22	2,494943E+22	3,059370E+21	3,058962E+21	4,989840E+22	6,118332E+21	5,601673E+22
-519	2,494859E+22	2,494941E+22	3,059298E+21	3,059382E+21	4,989800E+22	6,118680E+21	5,601668E+22
-518	2,494916E+22	2,494765E+22	3,059153E+21	3,059433E+21	4,989681E+22	6,118587E+21	5,601540E+22
-517	2,494782E+22	2,494850E+22	3,059607E+21	3,059103E+21	4,989632E+22	6,118710E+21	5,601503E+22
-516	2,494863E+22	2,494877E+22	3,059156E+21	3,059577E+21	4,989740E+22	6,118733E+21	5,601613E+22
-515	2,494899E+22	2,494807E+22	3,059175E+21	3,059221E+21	4,989706E+22	6,118397E+21	5,601546E+22
-514	2,494838E+22	2,494965E+22	3,059347E+21	3,058978E+21	4,989804E+22	6,118325E+21	5,601636E+22
-513	2,494995E+22	2,494946E+22	3,058808E+21	3,059232E+21	4,989941E+22	6,118040E+21	5,601745E+22
-512	2,494987E+22	2,494977E+22	3,059060E+21	3,058642E+21	4,989964E+22	6,117702E+21	5,601735E+22
-511	2,494993E+22	2,495114E+22	3,058965E+21	3,058785E+21	4,990107E+22	6,117750E+21	5,601882E+22
-510	2,495115E+22	2,495024E+22	3,058529E+21	3,058910E+21	4,990139E+22	6,117439E+21	5,601883E+22
-509	2,495029E+22	2,495102E+22	3,058921E+21	3,058489E+21	4,990131E+22	6,117410E+21	5,601872E+22
-508	2,495094E+22	2,495143E+22	3,058623E+21	3,058948E+21	4,990236E+22	6,117571E+21	5,601994E+22
-507	2,495158E+22	2,495007E+22	3,058579E+21	3,058793E+21	4,990165E+22	6,117372E+21	5,601902E+22
-506	2,495026E+22	2,495097E+22	3,059064E+21	3,058600E+21	4,990123E+22	6,117664E+21	5,601889E+22
-505	2,495061E+22	2,495034E+22	3,058767E+21	3,059205E+21	4,990095E+22	6,117972E+21	5,601892E+22
-504	2,494970E+22	2,494926E+22	3,059159E+21	3,059006E+21	4,989896E+22	6,118165E+21	5,601712E+22
-503	2,494815E+22	2,494965E+22	3,059484E+21	3,059247E+21	4,989781E+22	6,118731E+21	5,601654E+22
-502	2,494861E+22	2,494772E+22	3,059177E+21	3,059698E+21	4,989632E+22	6,118875E+21	5,601520E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-501	2,494733E+22	2,494726E+22	3,059721E+21	3,059335E+21	4,989459E+22	6,119056E+21	5,601364E+22
-500	2,494698E+22	2,494760E+22	3,059652E+21	3,059751E+21	4,989458E+22	6,119403E+21	5,601398E+22
-499	2,494768E+22	2,494612E+22	3,059466E+21	3,059807E+21	4,989380E+22	6,119273E+21	5,601307E+22
-498	2,494631E+22	2,494717E+22	3,059895E+21	3,059426E+21	4,989348E+22	6,119321E+21	5,601281E+22
-497	2,494699E+22	2,494735E+22	3,059507E+21	3,059892E+21	4,989433E+22	6,119399E+21	5,601373E+22
-496	2,494751E+22	2,494678E+22	3,059526E+21	3,059484E+21	4,989429E+22	6,119010E+21	5,601330E+22
-495	2,494691E+22	2,494832E+22	3,059716E+21	3,059235E+21	4,989523E+22	6,118951E+21	5,601418E+22
-494	2,494850E+22	2,494782E+22	3,059139E+21	3,059542E+21	4,989632E+22	6,118680E+21	5,601500E+22
-493	2,494839E+22	2,494823E+22	3,059343E+21	3,058991E+21	4,989662E+22	6,118335E+21	5,601495E+22
-492	2,494828E+22	2,494965E+22	3,059267E+21	3,059181E+21	4,989794E+22	6,118448E+21	5,601638E+22
-491	2,494976E+22	2,494866E+22	3,058815E+21	3,059297E+21	4,989842E+22	6,118112E+21	5,601653E+22
-490	2,494902E+22	2,494944E+22	3,059202E+21	3,058783E+21	4,989846E+22	6,117985E+21	5,601645E+22
-489	2,494943E+22	2,494978E+22	3,059007E+21	3,059244E+21	4,989921E+22	6,118251E+21	5,601746E+22
-488	2,494995E+22	2,494865E+22	3,058994E+21	3,059110E+21	4,989860E+22	6,118105E+21	5,601671E+22
-487	2,494828E+22	2,494950E+22	3,059513E+21	3,058998E+21	4,989779E+22	6,118511E+21	5,601630E+22
-486	2,494850E+22	2,494842E+22	3,059188E+21	3,059670E+21	4,989692E+22	6,118858E+21	5,601577E+22
-485	2,494774E+22	2,494720E+22	3,059540E+21	3,059458E+21	4,989494E+22	6,118998E+21	5,601394E+22
-484	2,494629E+22	2,494762E+22	3,059868E+21	3,059673E+21	4,989391E+22	6,119541E+21	5,601345E+22
-483	2,494711E+22	2,494573E+22	3,059533E+21	3,060087E+21	4,989284E+22	6,119620E+21	5,601246E+22
-482	2,494588E+22	2,494553E+22	3,060048E+21	3,059661E+21	4,989141E+22	6,119708E+21	5,601111E+22
-481	2,494523E+22	2,494604E+22	3,060040E+21	3,060120E+21	4,989127E+22	6,120160E+21	5,601143E+22
-480	2,494590E+22	2,494480E+22	3,059853E+21	3,060164E+21	4,989070E+22	6,120017E+21	5,601072E+22
-479	2,494457E+22	2,494579E+22	3,060289E+21	3,059772E+21	4,989036E+22	6,120060E+21	5,601042E+22
-478	2,494543E+22	2,494560E+22	3,059859E+21	3,060205E+21	4,989104E+22	6,120064E+21	5,601110E+22
-477	2,494612E+22	2,494513E+22	3,059831E+21	3,059760E+21	4,989125E+22	6,119591E+21	5,601084E+22
-476	2,494544E+22	2,494688E+22	3,060022E+21	3,059545E+21	4,989231E+22	6,119567E+21	5,601188E+22
-475	2,494709E+22	2,494642E+22	3,059401E+21	3,059890E+21	4,989351E+22	6,119291E+21	5,601280E+22
-474	2,494697E+22	2,494686E+22	3,059580E+21	3,059309E+21	4,989383E+22	6,118889E+21	5,601272E+22
-473	2,494678E+22	2,494816E+22	3,059584E+21	3,059513E+21	4,989495E+22	6,119097E+21	5,601404E+22
-472	2,494835E+22	2,494728E+22	3,059165E+21	3,059587E+21	4,989563E+22	6,118752E+21	5,601438E+22
-471	2,494757E+22	2,494800E+22	3,059600E+21	3,059098E+21	4,989558E+22	6,118698E+21	5,601428E+22
-470	2,494780E+22	2,494803E+22	3,059405E+21	3,059611E+21	4,989582E+22	6,119015E+21	5,601484E+22
-469	2,494812E+22	2,494693E+22	3,059368E+21	3,059539E+21	4,989505E+22	6,118907E+21	5,601396E+22
-468	2,494626E+22	2,494769E+22	3,059910E+21	3,059469E+21	4,989395E+22	6,119379E+21	5,601333E+22
-467	2,494670E+22	2,494642E+22	3,059557E+21	3,060116E+21	4,989312E+22	6,119674E+21	5,601279E+22
-466	2,494613E+22	2,494522E+22	3,059886E+21	3,059809E+21	4,989135E+22	6,119694E+21	5,601104E+22
-465	2,494457E+22	2,494568E+22	3,060288E+21	3,060020E+21	4,989025E+22	6,120308E+21	5,601056E+22
-464	2,494534E+22	2,494419E+22	3,059963E+21	3,060432E+21	4,988953E+22	6,120394E+21	5,600992E+22
-463	2,494399E+22	2,494409E+22	3,060473E+21	3,060059E+21	4,988808E+22	6,120533E+21	5,600862E+22
-462	2,494332E+22	2,494430E+22	3,060434E+21	3,060529E+21	4,988762E+22	6,120963E+21	5,600858E+22
-461	2,494423E+22	2,494312E+22	3,060195E+21	3,060535E+21	4,988734E+22	6,120730E+21	5,600807E+22
-460	2,494300E+22	2,494414E+22	3,060625E+21	3,060100E+21	4,988714E+22	6,120725E+21	5,600786E+22
-459	2,494412E+22	2,494399E+22	3,060156E+21	3,060504E+21	4,988811E+22	6,120660E+21	5,600877E+22
-458	2,494482E+22	2,494370E+22	3,060079E+21	3,060032E+21	4,988852E+22	6,120111E+21	5,600863E+22
-457	2,494383E+22	2,494546E+22	3,060328E+21	3,059886E+21	4,988929E+22	6,120214E+21	5,600950E+22
-456	2,494551E+22	2,494518E+22	3,059721E+21	3,060222E+21	4,989069E+22	6,119943E+21	5,601064E+22
-455	2,494555E+22	2,494547E+22	3,059916E+21	3,059640E+21	4,989102E+22	6,119556E+21	5,601057E+22
-454	2,494543E+22	2,494643E+22	3,059922E+21	3,059816E+21	4,989186E+22	6,119738E+21	5,601160E+22
-453	2,494702E+22	2,494568E+22	3,059498E+21	3,059886E+21	4,989269E+22	6,119384E+21	5,601208E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-452	2,494595E+22	2,494650E+22	3,059967E+21	3,059461E+21	4,989245E+22	6,119427E+21	5,601187E+22
-451	2,494607E+22	2,494645E+22	3,059754E+21	3,060019E+21	4,989251E+22	6,119773E+21	5,601229E+22
-450	2,494633E+22	2,494524E+22	3,059701E+21	3,059929E+21	4,989157E+22	6,119629E+21	5,601120E+22
-449	2,494436E+22	2,494581E+22	3,060320E+21	3,059876E+21	4,989017E+22	6,120196E+21	5,601037E+22
-448	2,494490E+22	2,494466E+22	3,059988E+21	3,060471E+21	4,988956E+22	6,120459E+21	5,601002E+22
-447	2,494440E+22	2,494343E+22	3,060334E+21	3,060192E+21	4,988784E+22	6,120526E+21	5,600836E+22
-446	2,494274E+22	2,494372E+22	3,060710E+21	3,060441E+21	4,988646E+22	6,121151E+21	5,600761E+22
-445	2,494343E+22	2,494243E+22	3,060352E+21	3,060880E+21	4,988586E+22	6,121232E+21	5,600709E+22
-444	2,494209E+22	2,494238E+22	3,060857E+21	3,060509E+21	4,988447E+22	6,121366E+21	5,600583E+22
-443	2,494176E+22	2,494249E+22	3,060765E+21	3,060904E+21	4,988425E+22	6,121669E+21	5,600592E+22
-442	2,494283E+22	2,494144E+22	3,060479E+21	3,060796E+21	4,988427E+22	6,121275E+21	5,600554E+22
-441	2,494152E+22	2,494257E+22	3,060958E+21	3,060373E+21	4,988408E+22	6,121331E+21	5,600541E+22
-440	2,494252E+22	2,494277E+22	3,060490E+21	3,060770E+21	4,988529E+22	6,121260E+21	5,600655E+22
-439	2,494321E+22	2,494248E+22	3,060411E+21	3,060372E+21	4,988568E+22	6,120782E+21	5,600647E+22
-438	2,494228E+22	2,494385E+22	3,060639E+21	3,060238E+21	4,988614E+22	6,120877E+21	5,600701E+22
-437	2,494416E+22	2,494363E+22	3,060020E+21	3,060548E+21	4,988779E+22	6,120568E+21	5,600836E+22
-436	2,494427E+22	2,494394E+22	3,060232E+21	3,059950E+21	4,988821E+22	6,120182E+21	5,600839E+22
-435	2,494424E+22	2,494487E+22	3,060228E+21	3,060118E+21	4,988911E+22	6,120346E+21	5,600946E+22
-434	2,494558E+22	2,494427E+22	3,059794E+21	3,060192E+21	4,988985E+22	6,119985E+21	5,600984E+22
-433	2,494408E+22	2,494497E+22	3,060350E+21	3,059869E+21	4,988905E+22	6,120219E+21	5,600927E+22
-432	2,494407E+22	2,494493E+22	3,060173E+21	3,060413E+21	4,988900E+22	6,120586E+21	5,600959E+22
-431	2,494449E+22	2,494346E+22	3,060137E+21	3,060346E+21	4,988795E+22	6,120483E+21	5,600843E+22
-430	2,494258E+22	2,494361E+22	3,060743E+21	3,060271E+21	4,988619E+22	6,121014E+21	5,600720E+22
-429	2,494320E+22	2,494266E+22	3,060396E+21	3,060869E+21	4,988586E+22	6,121265E+21	5,600713E+22
-428	2,494255E+22	2,494161E+22	3,060733E+21	3,060627E+21	4,988416E+22	6,121360E+21	5,600552E+22
-427	2,494094E+22	2,494194E+22	3,061064E+21	3,060882E+21	4,988288E+22	6,121946E+21	5,600483E+22
-426	2,494173E+22	2,494076E+22	3,060672E+21	3,061251E+21	4,988249E+22	6,121923E+21	5,600441E+22
-425	2,494035E+22	2,494068E+22	3,061232E+21	3,060866E+21	4,988103E+22	6,122098E+21	5,600313E+22
-424	2,494014E+22	2,494104E+22	3,061150E+21	3,061165E+21	4,988117E+22	6,122315E+21	5,600349E+22
-423	2,494131E+22	2,493998E+22	3,060860E+21	3,061092E+21	4,988130E+22	6,121952E+21	5,600325E+22
-422	2,493986E+22	2,494089E+22	3,061296E+21	3,060712E+21	4,988075E+22	6,122009E+21	5,600276E+22
-421	2,494089E+22	2,494125E+22	3,060797E+21	3,061141E+21	4,988214E+22	6,121938E+21	5,600408E+22
-420	2,494167E+22	2,494095E+22	3,060711E+21	3,060746E+21	4,988262E+22	6,121457E+21	5,600408E+22
-419	2,494113E+22	2,494225E+22	3,060898E+21	3,060557E+21	4,988338E+22	6,121456E+21	5,600484E+22
-418	2,494309E+22	2,494219E+22	3,060270E+21	3,060774E+21	4,988528E+22	6,121044E+21	5,600632E+22
-417	2,494292E+22	2,494259E+22	3,060564E+21	3,060234E+21	4,988551E+22	6,120798E+21	5,600631E+22
-416	2,494257E+22	2,494374E+22	3,060596E+21	3,060407E+21	4,988632E+22	6,121003E+21	5,600732E+22
-415	2,494375E+22	2,494294E+22	3,060188E+21	3,060582E+21	4,988669E+22	6,120770E+21	5,600746E+22
-414	2,494218E+22	2,494307E+22	3,060744E+21	3,060297E+21	4,988525E+22	6,121041E+21	5,600629E+22
-413	2,494230E+22	2,494295E+22	3,060566E+21	3,060821E+21	4,988525E+22	6,121387E+21	5,600663E+22
-412	2,494279E+22	2,494145E+22	3,060541E+21	3,060758E+21	4,988424E+22	6,121299E+21	5,600554E+22
-411	2,494107E+22	2,494157E+22	3,061096E+21	3,060680E+21	4,988265E+22	6,121776E+21	5,600443E+22
-410	2,494150E+22	2,494089E+22	3,060731E+21	3,061255E+21	4,988239E+22	6,121986E+21	5,600438E+22
-409	2,494062E+22	2,493993E+22	3,061129E+21	3,061074E+21	4,988054E+22	6,122204E+21	5,600275E+22
-408	2,493903E+22	2,494040E+22	3,061484E+21	3,061242E+21	4,987943E+22	6,122726E+21	5,600216E+22
-407	2,494000E+22	2,493913E+22	3,061104E+21	3,061595E+21	4,987913E+22	6,122699E+21	5,600183E+22
-406	2,493863E+22	2,493876E+22	3,061636E+21	3,061185E+21	4,987739E+22	6,122821E+21	5,600021E+22
-405	2,493843E+22	2,493933E+22	3,061524E+21	3,061485E+21	4,987776E+22	6,123009E+21	5,600077E+22
-404	2,493953E+22	2,493843E+22	3,061202E+21	3,061466E+21	4,987796E+22	6,122668E+21	5,600063E+22

1	14	15	16	17	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							
-403	2,493835E+22	2,493926E+22	3,061557E+21	3,061096E+21	4,987761E+22	6,122653E+21	5,600026E+22
-402	2,493958E+22	2,493977E+22	3,061031E+21	3,061447E+21	4,987935E+22	6,122479E+21	5,600183E+22
-401	2,494040E+22	2,493955E+22	3,060999E+21	3,061047E+21	4,987995E+22	6,122047E+21	5,600200E+22
-400	2,493990E+22	2,494109E+22	3,061223E+21	3,060776E+21	4,988098E+22	6,121999E+21	5,600298E+22
-399	2,494177E+22	2,494102E+22	3,060630E+21	3,061052E+21	4,988279E+22	6,121682E+21	5,600447E+22
-398	2,494121E+22	2,494106E+22	3,060924E+21	3,060598E+21	4,988227E+22	6,121522E+21	5,600379E+22
-397	2,494072E+22	2,494216E+22	3,060966E+21	3,060817E+21	4,988288E+22	6,121783E+21	5,600467E+22
-396	2,494193E+22	2,494111E+22	3,060569E+21	3,061010E+21	4,988304E+22	6,121579E+21	5,600462E+22
-395	2,494068E+22	2,494099E+22	3,061072E+21	3,060691E+21	4,988167E+22	6,121763E+21	5,600344E+22
-394	2,494088E+22	2,494103E+22	3,060883E+21	3,061140E+21	4,988191E+22	6,122023E+21	5,600394E+22
-393	2,494112E+22	2,493971E+22	3,060924E+21	3,061138E+21	4,988083E+22	6,122062E+21	5,600289E+22
-392	2,493920E+22	2,494016E+22	3,061503E+21	3,061043E+21	4,987935E+22	6,122546E+21	5,600190E+22
-391	2,493959E+22	2,493940E+22	3,061175E+21	3,061670E+21	4,987898E+22	6,122845E+21	5,600183E+22
-390	2,493861E+22	2,493803E+22	3,061568E+21	3,061494E+21	4,987664E+22	6,123062E+21	5,599970E+22
-389	2,493717E+22	2,493854E+22	3,061909E+21	3,061613E+21	4,987571E+22	6,123521E+21	5,599924E+22
-388	2,493822E+22	2,493726E+22	3,061518E+21	3,061958E+21	4,987548E+22	6,123476E+21	5,599895E+22
-387	2,493707E+22	2,493686E+22	3,061957E+21	3,061563E+21	4,987393E+22	6,123521E+21	5,599745E+22
-386	2,493682E+22	2,493769E+22	3,061793E+21	3,061837E+21	4,987451E+22	6,123629E+21	5,599814E+22
-385	2,493787E+22	2,493693E+22	3,061505E+21	3,061865E+21	4,987480E+22	6,123370E+21	5,599817E+22
-384	2,493694E+22	2,493796E+22	3,061859E+21	3,061392E+21	4,987490E+22	6,123251E+21	5,599815E+22
-383	2,493840E+22	2,493848E+22	3,061365E+21	3,061712E+21	4,987688E+22	6,123077E+21	5,599996E+22
-382	2,493911E+22	2,493807E+22	3,061331E+21	3,061305E+21	4,987718E+22	6,122636E+21	5,599981E+22
-381	2,493844E+22	2,493973E+22	3,061566E+21	3,061051E+21	4,987817E+22	6,122617E+21	5,600079E+22
-380	2,494001E+22	2,493965E+22	3,060987E+21	3,061401E+21	4,987966E+22	6,122388E+21	5,600205E+22
-379	2,493959E+22	2,493937E+22	3,061221E+21	3,061002E+21	4,987896E+22	6,122223E+21	5,600118E+22
-378	2,493915E+22	2,494039E+22	3,061257E+21	3,061166E+21	4,987954E+22	6,122423E+21	5,600196E+22
-377	2,494035E+22	2,493936E+22	3,060922E+21	3,061384E+21	4,987971E+22	6,122306E+21	5,600202E+22
-376	2,493920E+22	2,493938E+22	3,061448E+21	3,060997E+21	4,987858E+22	6,122445E+21	5,600103E+22
-375	2,493929E+22	2,493948E+22	3,061305E+21	3,061505E+21	4,987877E+22	6,122810E+21	5,600158E+22
-374	2,493911E+22	2,493795E+22	3,061352E+21	3,061578E+21	4,987705E+22	6,122930E+21	5,599999E+22
-373	2,493711E+22	2,493837E+22	3,061948E+21	3,061499E+21	4,987548E+22	6,123447E+21	5,599893E+22
-372	2,493754E+22	2,493748E+22	3,061637E+21	3,062111E+21	4,987503E+22	6,123748E+21	5,599877E+22
-371	2,493691E+22	2,493591E+22	3,061947E+21	3,061903E+21	4,987282E+22	6,123850E+21	5,599667E+22
-370	2,493555E+22	2,493660E+22	3,062245E+21	3,061940E+21	4,987215E+22	6,124185E+21	5,599634E+22
-369	2,493644E+22	2,493557E+22	3,061871E+21	3,062336E+21	4,987200E+22	6,124207E+21	5,599621E+22
-368	2,493533E+22	2,493546E+22	3,062283E+21	3,061903E+21	4,987079E+22	6,124186E+21	5,599498E+22
-367	2,493530E+22	2,493632E+22	3,062136E+21	3,062190E+21	4,987161E+22	6,124326E+21	5,599594E+22
-366	2,493633E+22	2,493536E+22	3,061842E+21	3,062193E+21	4,987169E+22	6,124035E+21	5,599573E+22
-365	2,493563E+22	2,493654E+22	3,062196E+21	3,061665E+21	4,987217E+22	6,123861E+21	5,599603E+22
-364	2,493708E+22	2,493706E+22	3,061723E+21	3,061976E+21	4,987414E+22	6,123698E+21	5,599784E+22
-363	2,493776E+22	2,493656E+22	3,061614E+21	3,061622E+21	4,987431E+22	6,123236E+21	5,599755E+22
-362	2,493689E+22	2,493830E+22	3,061824E+21	3,061378E+21	4,987519E+22	6,123203E+21	5,599840E+22
-361	2,493826E+22	2,493816E+22	3,061304E+21	3,061792E+21	4,987642E+22	6,123095E+21	5,599951E+22
-360	2,493804E+22	2,493787E+22	3,061554E+21	3,061327E+21	4,987591E+22	6,122881E+21	5,599879E+22
-359	2,493780E+22	2,493878E+22	3,061636E+21	3,061483E+21	4,987658E+22	6,123119E+21	5,599970E+22
-358	2,493872E+22	2,493757E+22	3,061321E+21	3,061730E+21	4,987629E+22	6,123051E+21	5,599934E+22
-357	2,493743E+22	2,493775E+22	3,061853E+21	3,061382E+21	4,987518E+22	6,123234E+21	5,599841E+22
-356	2,493727E+22	2,493780E+22	3,061741E+21	3,061946E+21	4,987507E+22	6,123687E+21	5,599876E+22
-355	2,493723E+22	2,493601E+22	3,061730E+21	3,062056E+21	4,987324E+22	6,123785E+21	5,599703E+22

1	14	15	16	17	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							
-354	2,493532E+22	2,493642E+22	3,062310E+21	3,061902E+21	4,987174E+22	6,124212E+21	5,599595E+22
-353	2,493573E+22	2,493560E+22	3,062043E+21	3,062508E+21	4,987134E+22	6,124551E+21	5,599589E+22
-352	2,493525E+22	2,493421E+22	3,062341E+21	3,062235E+21	4,986946E+22	6,124576E+21	5,599403E+22
-351	2,493388E+22	2,493498E+22	3,062640E+21	3,062305E+21	4,986886E+22	6,124945E+21	5,599380E+22
-350	2,493449E+22	2,493386E+22	3,062249E+21	3,062746E+21	4,986836E+22	6,124995E+21	5,599335E+22
-349	2,493361E+22	2,493381E+22	3,062642E+21	3,062281E+21	4,986742E+22	6,124924E+21	5,599235E+22
-348	2,493375E+22	2,493469E+22	3,062513E+21	3,062521E+21	4,986844E+22	6,125033E+21	5,599348E+22
-347	2,493512E+22	2,493371E+22	3,062134E+21	3,062486E+21	4,986882E+22	6,124620E+21	5,599344E+22
-346	2,493438E+22	2,493507E+22	3,062462E+21	3,061904E+21	4,986945E+22	6,124366E+21	5,599382E+22
-345	2,493550E+22	2,493583E+22	3,062029E+21	3,062278E+21	4,987133E+22	6,124307E+21	5,599564E+22
-344	2,493614E+22	2,493539E+22	3,061912E+21	3,061928E+21	4,987153E+22	6,123840E+21	5,599537E+22
-343	2,493536E+22	2,493693E+22	3,062158E+21	3,061723E+21	4,987230E+22	6,123880E+21	5,599618E+22
-342	2,493659E+22	2,493649E+22	3,061657E+21	3,062147E+21	4,987308E+22	6,123804E+21	5,599688E+22
-341	2,493657E+22	2,493617E+22	3,061919E+21	3,061664E+21	4,987274E+22	6,123583E+21	5,599633E+22
-340	2,493627E+22	2,493706E+22	3,062043E+21	3,061844E+21	4,987333E+22	6,123887E+21	5,599722E+22
-339	2,493711E+22	2,493577E+22	3,061665E+21	3,062159E+21	4,987288E+22	6,123823E+21	5,599670E+22
-338	2,493564E+22	2,493600E+22	3,062189E+21	3,061817E+21	4,987164E+22	6,124006E+21	5,599565E+22
-337	2,493532E+22	2,493604E+22	3,062142E+21	3,062400E+21	4,987136E+22	6,124541E+21	5,599590E+22
-336	2,493547E+22	2,493427E+22	3,062137E+21	3,062427E+21	4,986975E+22	6,124565E+21	5,599431E+22
-335	2,493374E+22	2,493462E+22	3,062741E+21	3,062250E+21	4,986835E+22	6,124991E+21	5,599335E+22
-334	2,493379E+22	2,493370E+22	3,062482E+21	3,062864E+21	4,986748E+22	6,125346E+21	5,599283E+22
-333	2,493328E+22	2,493249E+22	3,062755E+21	3,062621E+21	4,986576E+22	6,125377E+21	5,599114E+22
-332	2,493192E+22	2,493324E+22	3,063050E+21	3,062718E+21	4,986516E+22	6,125768E+21	5,599093E+22
-331	2,493281E+22	2,493201E+22	3,062575E+21	3,063158E+21	4,986482E+22	6,125733E+21	5,599055E+22
-330	2,493221E+22	2,493214E+22	3,062921E+21	3,062605E+21	4,986436E+22	6,125525E+21	5,598988E+22
-329	2,493240E+22	2,493322E+22	3,062829E+21	3,062812E+21	4,986562E+22	6,125640E+21	5,599126E+22
-328	2,493384E+22	2,493249E+22	3,062439E+21	3,062727E+21	4,986633E+22	6,125165E+21	5,599149E+22
-327	2,493299E+22	2,493389E+22	3,062775E+21	3,062202E+21	4,986688E+22	6,124977E+21	5,599185E+22
-326	2,493364E+22	2,493442E+22	3,062361E+21	3,062633E+21	4,986806E+22	6,124994E+21	5,599305E+22
-325	2,493447E+22	2,493386E+22	3,062252E+21	3,062290E+21	4,986833E+22	6,124542E+21	5,599287E+22
-324	2,493388E+22	2,493521E+22	3,062525E+21	3,062071E+21	4,986909E+22	6,124596E+21	5,599369E+22
-323	2,493532E+22	2,493464E+22	3,061967E+21	3,062493E+21	4,986995E+22	6,124460E+21	5,599441E+22
-322	2,493524E+22	2,493448E+22	3,062207E+21	3,061992E+21	4,986973E+22	6,124199E+21	5,599393E+22
-321	2,493458E+22	2,493557E+22	3,062387E+21	3,062231E+21	4,987015E+22	6,124618E+21	5,599477E+22
-320	2,493537E+22	2,493435E+22	3,062030E+21	3,062539E+21	4,986972E+22	6,124568E+21	5,599429E+22
-319	2,493393E+22	2,493439E+22	3,062606E+21	3,062214E+21	4,986832E+22	6,124820E+21	5,599314E+22
-318	2,493332E+22	2,493420E+22	3,062599E+21	3,062783E+21	4,986752E+22	6,125381E+21	5,599290E+22
-317	2,493363E+22	2,493236E+22	3,062602E+21	3,062796E+21	4,986600E+22	6,125398E+21	5,599139E+22
-316	2,493181E+22	2,493264E+22	3,063213E+21	3,062649E+21	4,986445E+22	6,125862E+21	5,599032E+22
-315	2,493184E+22	2,493169E+22	3,062850E+21	3,063322E+21	4,986353E+22	6,126172E+21	5,598970E+22
-314	2,493140E+22	2,493056E+22	3,063073E+21	3,063064E+21	4,986196E+22	6,126138E+21	5,598810E+22
-313	2,493017E+22	2,493149E+22	3,063393E+21	3,063135E+21	4,986166E+22	6,126528E+21	5,598818E+22
-312	2,493144E+22	2,493048E+22	3,062907E+21	3,063460E+21	4,986192E+22	6,126367E+21	5,598829E+22
-311	2,493102E+22	2,493074E+22	3,063256E+21	3,062867E+21	4,986177E+22	6,126123E+21	5,598789E+22
-310	2,493078E+22	2,493185E+22	3,063180E+21	3,063077E+21	4,986263E+22	6,126257E+21	5,598889E+22
-309	2,493214E+22	2,493123E+22	3,062775E+21	3,063030E+21	4,986336E+22	6,125806E+21	5,598917E+22
-308	2,493128E+22	2,493243E+22	3,063127E+21	3,062560E+21	4,986371E+22	6,125687E+21	5,598940E+22
-307	2,493211E+22	2,493271E+22	3,062644E+21	3,063003E+21	4,986482E+22	6,125647E+21	5,599047E+22
-306	2,493319E+22	2,493217E+22	3,062511E+21	3,062617E+21	4,986537E+22	6,125128E+21	5,599049E+22

1	14	15	16	17	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							
-305	2,493265E+22	2,493362E+22	3,062829E+21	3,062392E+21	4,986627E+22	6,125221E+21	5,599150E+22
-304	2,493406E+22	2,493327E+22	3,062289E+21	3,062790E+21	4,986733E+22	6,125078E+21	5,599241E+22
-303	2,493381E+22	2,493316E+22	3,062551E+21	3,062352E+21	4,986696E+22	6,124903E+21	5,599187E+22
-302	2,493258E+22	2,493399E+22	3,062794E+21	3,062624E+21	4,986657E+22	6,125418E+21	5,599199E+22
-301	2,493342E+22	2,493266E+22	3,062477E+21	3,062931E+21	4,986608E+22	6,125408E+21	5,599149E+22
-300	2,493209E+22	2,493243E+22	3,063084E+21	3,062614E+21	4,986452E+22	6,125698E+21	5,599022E+22
-299	2,493148E+22	2,493205E+22	3,063010E+21	3,063184E+21	4,986353E+22	6,126194E+21	5,598972E+22
-298	2,493178E+22	2,493035E+22	3,062966E+21	3,063210E+21	4,986212E+22	6,126176E+21	5,598830E+22
-297	2,492983E+22	2,493078E+22	3,063573E+21	3,063103E+21	4,986061E+22	6,126676E+21	5,598729E+22
-296	2,493006E+22	2,492999E+22	3,063200E+21	3,063731E+21	4,986005E+22	6,126931E+21	5,598698E+22
-295	2,492990E+22	2,492894E+22	3,063420E+21	3,063438E+21	4,985884E+22	6,126859E+21	5,598570E+22
-294	2,492851E+22	2,492986E+22	3,063772E+21	3,063451E+21	4,985837E+22	6,127223E+21	5,598559E+22
-293	2,492996E+22	2,492902E+22	3,063303E+21	3,063735E+21	4,985899E+22	6,127038E+21	5,598602E+22
-292	2,492946E+22	2,492929E+22	3,063649E+21	3,063184E+21	4,985875E+22	6,126833E+21	5,598558E+22
-291	2,492906E+22	2,493028E+22	3,063484E+21	3,063441E+21	4,985934E+22	6,126925E+21	5,598627E+22
-290	2,493050E+22	2,492960E+22	3,063040E+21	3,063400E+21	4,986010E+22	6,126440E+21	5,598654E+22
-289	2,492981E+22	2,493080E+22	3,063408E+21	3,062917E+21	4,986061E+22	6,126325E+21	5,598693E+22
-288	2,493099E+22	2,493122E+22	3,062931E+21	3,063276E+21	4,986221E+22	6,126207E+21	5,598842E+22
-287	2,493214E+22	2,493079E+22	3,062816E+21	3,062875E+21	4,986293E+22	6,125691E+21	5,598863E+22
-286	2,493105E+22	2,493229E+22	3,063183E+21	3,062687E+21	4,986334E+22	6,125871E+21	5,598921E+22
-285	2,493230E+22	2,493196E+22	3,062680E+21	3,063127E+21	4,986426E+22	6,125807E+21	5,599007E+22
-284	2,493191E+22	2,493157E+22	3,062984E+21	3,062765E+21	4,986347E+22	6,125750E+21	5,598922E+22
-283	2,493069E+22	2,493208E+22	3,063178E+21	3,063046E+21	4,986277E+22	6,126224E+21	5,598899E+22
-282	2,493169E+22	2,493063E+22	3,062848E+21	3,063335E+21	4,986231E+22	6,126182E+21	5,598850E+22
-281	2,493036E+22	2,493042E+22	3,063479E+21	3,063030E+21	4,986078E+22	6,126509E+21	5,598729E+22
-280	2,492978E+22	2,493022E+22	3,063387E+21	3,063582E+21	4,985999E+22	6,126968E+21	5,598696E+22
-279	2,493000E+22	2,492861E+22	3,063331E+21	3,063644E+21	4,985861E+22	6,126975E+21	5,598559E+22
-278	2,492779E+22	2,492897E+22	3,063968E+21	3,063531E+21	4,985676E+22	6,127500E+21	5,598426E+22
-277	2,492830E+22	2,492827E+22	3,063629E+21	3,064096E+21	4,985657E+22	6,127726E+21	5,598430E+22
-276	2,492834E+22	2,492724E+22	3,063858E+21	3,063779E+21	4,985558E+22	6,127637E+21	5,598322E+22
-275	2,492694E+22	2,492813E+22	3,064132E+21	3,063764E+21	4,985507E+22	6,127896E+21	5,598296E+22
-274	2,492832E+22	2,492747E+22	3,063618E+21	3,064059E+21	4,985579E+22	6,127677E+21	5,598347E+22
-273	2,492772E+22	2,492781E+22	3,063950E+21	3,063553E+21	4,985553E+22	6,127503E+21	5,598303E+22
-272	2,492752E+22	2,492884E+22	3,063768E+21	3,063768E+21	4,985636E+22	6,127536E+21	5,598390E+22
-271	2,492924E+22	2,492821E+22	3,063316E+21	3,063706E+21	4,985744E+22	6,127021E+21	5,598446E+22
-270	2,492844E+22	2,492930E+22	3,063720E+21	3,063190E+21	4,985774E+22	6,126910E+21	5,598465E+22
-269	2,492971E+22	2,492987E+22	3,063296E+21	3,063533E+21	4,985957E+22	6,126829E+21	5,598640E+22
-268	2,493068E+22	2,492945E+22	3,063191E+21	3,063216E+21	4,986014E+22	6,126407E+21	5,598654E+22
-267	2,492928E+22	2,493069E+22	3,063509E+21	3,063085E+21	4,985997E+22	6,126594E+21	5,598657E+22
-266	2,493052E+22	2,493023E+22	3,063015E+21	3,063541E+21	4,986075E+22	6,126556E+21	5,598730E+22
-265	2,493020E+22	2,492971E+22	3,063350E+21	3,063184E+21	4,985991E+22	6,126534E+21	5,598644E+22
-264	2,492918E+22	2,493023E+22	3,063550E+21	3,063398E+21	4,985940E+22	6,126948E+21	5,598635E+22
-263	2,493015E+22	2,492886E+22	3,063222E+21	3,063688E+21	4,985902E+22	6,126910E+21	5,598593E+22
-262	2,492835E+22	2,492863E+22	3,063880E+21	3,063423E+21	4,985698E+22	6,127303E+21	5,598429E+22
-261	2,492776E+22	2,492852E+22	3,063826E+21	3,063988E+21	4,985628E+22	6,127814E+21	5,598409E+22
-260	2,492805E+22	2,492683E+22	3,063786E+21	3,064089E+21	4,985488E+22	6,127875E+21	5,598276E+22
-259	2,492596E+22	2,492702E+22	3,064360E+21	3,063942E+21	4,985299E+22	6,128302E+21	5,598129E+22
-258	2,492671E+22	2,492640E+22	3,064012E+21	3,064457E+21	4,985311E+22	6,128469E+21	5,598158E+22
-257	2,492673E+22	2,492555E+22	3,064233E+21	3,064138E+21	4,985228E+22	6,128371E+21	5,598065E+22

1	14	15	16	17	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							
-256	2,492536E+22	2,492664E+22	3,064459E+21	3,064101E+21	4,985200E+22	6,128561E+21	5,598056E+22
-255	2,492666E+22	2,492603E+22	3,063917E+21	3,064407E+21	4,985269E+22	6,128324E+21	5,598102E+22
-254	2,492589E+22	2,492624E+22	3,064273E+21	3,063902E+21	4,985213E+22	6,128174E+21	5,598030E+22
-253	2,492608E+22	2,492731E+22	3,064122E+21	3,064057E+21	4,985339E+22	6,128178E+21	5,598157E+22
-252	2,492795E+22	2,492671E+22	3,063680E+21	3,064001E+21	4,985465E+22	6,127681E+21	5,598233E+22
-251	2,492710E+22	2,492776E+22	3,064014E+21	3,063491E+21	4,985485E+22	6,127505E+21	5,598236E+22
-250	2,492825E+22	2,492842E+22	3,063588E+21	3,063864E+21	4,985667E+22	6,127451E+21	5,598412E+22
-249	2,492903E+22	2,492802E+22	3,063497E+21	3,063602E+21	4,985705E+22	6,127099E+21	5,598415E+22
-248	2,492776E+22	2,492916E+22	3,063826E+21	3,063444E+21	4,985692E+22	6,127271E+21	5,598419E+22
-247	2,492902E+22	2,492865E+22	3,063352E+21	3,063874E+21	4,985767E+22	6,127226E+21	5,598490E+22
-246	2,492848E+22	2,492795E+22	3,063751E+21	3,063529E+21	4,985643E+22	6,127280E+21	5,598371E+22
-245	2,492747E+22	2,492851E+22	3,064004E+21	3,063742E+21	4,985598E+22	6,127746E+21	5,598372E+22
-244	2,492824E+22	2,492714E+22	3,063680E+21	3,064130E+21	4,985538E+22	6,127810E+21	5,598319E+22
-243	2,492626E+22	2,492665E+22	3,064263E+21	3,063902E+21	4,985291E+22	6,128166E+21	5,598108E+22
-242	2,492585E+22	2,492648E+22	3,064220E+21	3,064450E+21	4,985233E+22	6,128670E+21	5,598100E+22
-241	2,492632E+22	2,492489E+22	3,064186E+21	3,064516E+21	4,985122E+22	6,128701E+21	5,597992E+22
-240	2,492448E+22	2,492524E+22	3,064740E+21	3,064284E+21	4,984972E+22	6,129025E+21	5,597874E+22
-239	2,492516E+22	2,492487E+22	3,064376E+21	3,064766E+21	4,985003E+22	6,129142E+21	5,597917E+22
-238	2,492477E+22	2,492403E+22	3,064599E+21	3,064484E+21	4,984881E+22	6,129083E+21	5,597789E+22
-237	2,492345E+22	2,492515E+22	3,064841E+21	3,064439E+21	4,984861E+22	6,129280E+21	5,597789E+22
-236	2,492493E+22	2,492450E+22	3,064284E+21	3,064779E+21	4,984944E+22	6,129063E+21	5,597850E+22
-235	2,492438E+22	2,492448E+22	3,064560E+21	3,064239E+21	4,984886E+22	6,128798E+21	5,597766E+22
-234	2,492490E+22	2,492564E+22	3,064420E+21	3,064359E+21	4,985053E+22	6,128779E+21	5,597931E+22
-233	2,492672E+22	2,492527E+22	3,063979E+21	3,064315E+21	4,985200E+22	6,128294E+21	5,598029E+22
-232	2,492582E+22	2,492646E+22	3,064285E+21	3,063814E+21	4,985228E+22	6,128099E+21	5,598038E+22
-231	2,492677E+22	2,492714E+22	3,063873E+21	3,064187E+21	4,985391E+22	6,128060E+21	5,598197E+22
-230	2,492726E+22	2,492652E+22	3,063847E+21	3,063948E+21	4,985378E+22	6,127795E+21	5,598157E+22
-229	2,492616E+22	2,492758E+22	3,064248E+21	3,063754E+21	4,985374E+22	6,128001E+21	5,598174E+22
-228	2,492738E+22	2,492699E+22	3,063801E+21	3,064226E+21	4,985436E+22	6,128027E+21	5,598239E+22
-227	2,492662E+22	2,492606E+22	3,064140E+21	3,063928E+21	4,985269E+22	6,128068E+21	5,598075E+22
-226	2,492557E+22	2,492658E+22	3,064392E+21	3,064190E+21	4,985215E+22	6,128583E+21	5,598073E+22
-225	2,492623E+22	2,492525E+22	3,064071E+21	3,064615E+21	4,985148E+22	6,128686E+21	5,598017E+22
-224	2,492457E+22	2,492476E+22	3,064626E+21	3,064347E+21	4,984934E+22	6,128974E+21	5,597831E+22
-223	2,492428E+22	2,492469E+22	3,064591E+21	3,064813E+21	4,984897E+22	6,129404E+21	5,597837E+22
-222	2,492453E+22	2,492315E+22	3,064610E+21	3,064867E+21	4,984769E+22	6,129477E+21	5,597716E+22
-221	2,492274E+22	2,492365E+22	3,065188E+21	3,064613E+21	4,984639E+22	6,129801E+21	5,597619E+22
-220	2,492318E+22	2,492333E+22	3,064804E+21	3,065162E+21	4,984650E+22	6,129966E+21	5,597647E+22
-219	2,492273E+22	2,492221E+22	3,064938E+21	3,064903E+21	4,984493E+22	6,129840E+21	5,597477E+22
-218	2,492182E+22	2,492323E+22	3,065166E+21	3,064823E+21	4,984504E+22	6,129989E+21	5,597503E+22
-217	2,492355E+22	2,492277E+22	3,064596E+21	3,065114E+21	4,984633E+22	6,129710E+21	5,597603E+22
-216	2,492336E+22	2,492297E+22	3,064822E+21	3,064514E+21	4,984633E+22	6,129337E+21	5,597567E+22
-215	2,492376E+22	2,492442E+22	3,064680E+21	3,064602E+21	4,984818E+22	6,129282E+21	5,597746E+22
-214	2,492511E+22	2,492413E+22	3,064288E+21	3,064608E+21	4,984924E+22	6,128895E+21	5,597814E+22
-213	2,492420E+22	2,492526E+22	3,064651E+21	3,064115E+21	4,984946E+22	6,128766E+21	5,597822E+22
-212	2,492508E+22	2,492579E+22	3,064270E+21	3,064532E+21	4,985087E+22	6,128802E+21	5,597967E+22
-211	2,492557E+22	2,492474E+22	3,064202E+21	3,064309E+21	4,985031E+22	6,128512E+21	5,597882E+22
-210	2,492464E+22	2,492564E+22	3,064629E+21	3,064132E+21	4,985028E+22	6,128761E+21	5,597904E+22
-209	2,492569E+22	2,492518E+22	3,064179E+21	3,064651E+21	4,985087E+22	6,128830E+21	5,597970E+22
-208	2,492494E+22	2,492425E+22	3,064471E+21	3,064382E+21	4,984918E+22	6,128852E+21	5,597803E+22

1	14	15	16	17	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							
-207	2,492381E+22	2,492480E+22	3,064731E+21	3,064617E+21	4,984861E+22	6,129348E+21	5,597796E+22
-206	2,492434E+22	2,492340E+22	3,064478E+21	3,065027E+21	4,984774E+22	6,129505E+21	5,597725E+22
-205	2,492288E+22	2,492299E+22	3,065093E+21	3,064691E+21	4,984587E+22	6,129784E+21	5,597566E+22
-204	2,492250E+22	2,492305E+22	3,065072E+21	3,065168E+21	4,984555E+22	6,130240E+21	5,597579E+22
-203	2,492251E+22	2,492133E+22	3,065019E+21	3,065254E+21	4,984384E+22	6,130273E+21	5,597411E+22
-202	2,492076E+22	2,492177E+22	3,065575E+21	3,065034E+21	4,984253E+22	6,130610E+21	5,597314E+22
-201	2,492121E+22	2,492151E+22	3,065163E+21	3,065580E+21	4,984273E+22	6,130743E+21	5,597347E+22
-200	2,492121E+22	2,492041E+22	3,065228E+21	3,065279E+21	4,984163E+22	6,130507E+21	5,597213E+22
-199	2,492060E+22	2,492162E+22	3,065439E+21	3,065106E+21	4,984222E+22	6,130545E+21	5,597277E+22
-198	2,492223E+22	2,492136E+22	3,064925E+21	3,065385E+21	4,984359E+22	6,130309E+21	5,597390E+22
-197	2,492205E+22	2,492183E+22	3,065176E+21	3,064776E+21	4,984388E+22	6,129952E+21	5,597383E+22
-196	2,492215E+22	2,492332E+22	3,065038E+21	3,064932E+21	4,984547E+22	6,129971E+21	5,597544E+22
-195	2,492329E+22	2,492263E+22	3,064607E+21	3,064973E+21	4,984592E+22	6,129580E+21	5,597550E+22
-194	2,492266E+22	2,492348E+22	3,064996E+21	3,064488E+21	4,984614E+22	6,129484E+21	5,597562E+22
-193	2,492354E+22	2,492403E+22	3,064628E+21	3,064879E+21	4,984757E+22	6,129507E+21	5,597707E+22
-192	2,492424E+22	2,492300E+22	3,064517E+21	3,064669E+21	4,984724E+22	6,129185E+21	5,597643E+22
-191	2,492318E+22	2,492398E+22	3,064930E+21	3,064479E+21	4,984716E+22	6,129409E+21	5,597657E+22
-190	2,492379E+22	2,492356E+22	3,064546E+21	3,065051E+21	4,984735E+22	6,129597E+21	5,597695E+22
-189	2,492315E+22	2,492264E+22	3,064881E+21	3,064770E+21	4,984579E+22	6,129651E+21	5,597544E+22
-188	2,492200E+22	2,492315E+22	3,065176E+21	3,065013E+21	4,984514E+22	6,130189E+21	5,597533E+22
-187	2,492246E+22	2,492148E+22	3,064912E+21	3,065414E+21	4,984394E+22	6,130326E+21	5,597426E+22
-186	2,492117E+22	2,492099E+22	3,065549E+21	3,065094E+21	4,984215E+22	6,130643E+21	5,597280E+22
-185	2,492051E+22	2,492123E+22	3,065503E+21	3,065586E+21	4,984174E+22	6,131088E+21	5,597283E+22
-184	2,492060E+22	2,491948E+22	3,065364E+21	3,065708E+21	4,984008E+22	6,131072E+21	5,597115E+22
-183	2,491897E+22	2,491990E+22	3,065881E+21	3,065428E+21	4,983887E+22	6,131309E+21	5,597018E+22
-182	2,491949E+22	2,491973E+22	3,065514E+21	3,065934E+21	4,983922E+22	6,131449E+21	5,597067E+22
-181	2,491988E+22	2,491889E+22	3,065596E+21	3,065552E+21	4,983877E+22	6,131148E+21	5,596992E+22
-180	2,491927E+22	2,492036E+22	3,065809E+21	3,065388E+21	4,983962E+22	6,131197E+21	5,597082E+22
-179	2,492060E+22	2,492000E+22	3,065250E+21	3,065697E+21	4,984060E+22	6,130947E+21	5,597155E+22
-178	2,492047E+22	2,492037E+22	3,065500E+21	3,065136E+21	4,984084E+22	6,130636E+21	5,597148E+22
-177	2,492048E+22	2,492186E+22	3,065358E+21	3,065282E+21	4,984235E+22	6,130640E+21	5,597299E+22
-176	2,492192E+22	2,492100E+22	3,064878E+21	3,065317E+21	4,984291E+22	6,130195E+21	5,597311E+22
-175	2,492142E+22	2,492182E+22	3,065271E+21	3,064779E+21	4,984324E+22	6,130050E+21	5,597329E+22
-174	2,492208E+22	2,492244E+22	3,064976E+21	3,065193E+21	4,984452E+22	6,130169E+21	5,597469E+22
-173	2,492268E+22	2,492156E+22	3,064898E+21	3,065007E+21	4,984424E+22	6,129905E+21	5,597414E+22
-172	2,492138E+22	2,492254E+22	3,065321E+21	3,064890E+21	4,984391E+22	6,130211E+21	5,597413E+22
-171	2,492180E+22	2,492170E+22	3,064942E+21	3,065476E+21	4,984350E+22	6,130418E+21	5,597392E+22
-170	2,492144E+22	2,492061E+22	3,065313E+21	3,065193E+21	4,984205E+22	6,130506E+21	5,597256E+22
-169	2,492021E+22	2,492124E+22	3,065623E+21	3,065392E+21	4,984145E+22	6,131015E+21	5,597246E+22
-168	2,492074E+22	2,491959E+22	3,065309E+21	3,065817E+21	4,984033E+22	6,131126E+21	5,597146E+22
-167	2,491929E+22	2,491918E+22	3,065912E+21	3,065490E+21	4,983848E+22	6,131402E+21	5,596988E+22
-166	2,491834E+22	2,491945E+22	3,065900E+21	3,066008E+21	4,983779E+22	6,131908E+21	5,596970E+22
-165	2,491871E+22	2,491777E+22	3,065768E+21	3,066096E+21	4,983648E+22	6,131864E+21	5,596834E+22
-164	2,491731E+22	2,491825E+22	3,066262E+21	3,065797E+21	4,983556E+22	6,132059E+21	5,596762E+22
-163	2,491790E+22	2,491795E+22	3,065879E+21	3,066269E+21	4,983585E+22	6,132148E+21	5,596800E+22
-162	2,491858E+22	2,491724E+22	3,065959E+21	3,065891E+21	4,983582E+22	6,131850E+21	5,596767E+22
-161	2,491770E+22	2,491897E+22	3,066145E+21	3,065721E+21	4,983667E+22	6,131866E+21	5,596854E+22
-160	2,491909E+22	2,491859E+22	3,065521E+21	3,066061E+21	4,983768E+22	6,131582E+21	5,596926E+22
-159	2,491905E+22	2,491883E+22	3,065748E+21	3,065447E+21	4,983789E+22	6,131195E+21	5,596908E+22

1	14	15	16	17	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							
-158	2,491896E+22	2,492032E+22	3,065677E+21	3,065568E+21	4,983927E+22	6,131245E+21	5,597052E+22
-157	2,492060E+22	2,491961E+22	3,065229E+21	3,065569E+21	4,984021E+22	6,130798E+21	5,597101E+22
-156	2,492000E+22	2,492048E+22	3,065628E+21	3,065082E+21	4,984048E+22	6,130710E+21	5,597119E+22
-155	2,492028E+22	2,492086E+22	3,065336E+21	3,065554E+21	4,984114E+22	6,130891E+21	5,597203E+22
-154	2,492096E+22	2,491983E+22	3,065277E+21	3,065431E+21	4,984079E+22	6,130708E+21	5,597150E+22
-153	2,491953E+22	2,492080E+22	3,065709E+21	3,065301E+21	4,984033E+22	6,131010E+21	5,597134E+22
-152	2,492019E+22	2,491983E+22	3,065303E+21	3,065888E+21	4,984003E+22	6,131191E+21	5,597122E+22
-151	2,491990E+22	2,491872E+22	3,065679E+21	3,065561E+21	4,983862E+22	6,131240E+21	5,596986E+22
-150	2,491835E+22	2,491946E+22	3,066055E+21	3,065782E+21	4,983781E+22	6,131837E+21	5,596965E+22
-149	2,491877E+22	2,491796E+22	3,065749E+21	3,066224E+21	4,983674E+22	6,131973E+21	5,596871E+22
-148	2,491722E+22	2,491747E+22	3,066329E+21	3,065946E+21	4,983469E+22	6,132275E+21	5,596697E+22
-147	2,491626E+22	2,491737E+22	3,066305E+21	3,066440E+21	4,983363E+22	6,132745E+21	5,596637E+22
-146	2,491709E+22	2,491570E+22	3,066172E+21	3,066494E+21	4,983280E+22	6,132666E+21	5,596546E+22
-145	2,491581E+22	2,491651E+22	3,066637E+21	3,066130E+21	4,983232E+22	6,132767E+21	5,596508E+22
-144	2,491656E+22	2,491635E+22	3,066195E+21	3,066602E+21	4,983291E+22	6,132797E+21	5,596571E+22
-143	2,491710E+22	2,491585E+22	3,066229E+21	3,066198E+21	4,983295E+22	6,132426E+21	5,596538E+22
-142	2,491600E+22	2,491765E+22	3,066456E+21	3,066033E+21	4,983365E+22	6,132489E+21	5,596614E+22
-141	2,491753E+22	2,491731E+22	3,065855E+21	3,066332E+21	4,983483E+22	6,132187E+21	5,596702E+22
-140	2,491761E+22	2,491750E+22	3,066081E+21	3,065736E+21	4,983511E+22	6,131817E+21	5,596693E+22
-139	2,491743E+22	2,491866E+22	3,066031E+21	3,065861E+21	4,983609E+22	6,131893E+21	5,596798E+22
-138	2,491920E+22	2,491797E+22	3,065599E+21	3,065924E+21	4,983716E+22	6,131523E+21	5,596869E+22
-137	2,491831E+22	2,491896E+22	3,065969E+21	3,065475E+21	4,983728E+22	6,131444E+21	5,596872E+22
-136	2,491864E+22	2,491915E+22	3,065643E+21	3,065993E+21	4,983778E+22	6,131636E+21	5,596942E+22
-135	2,491941E+22	2,491803E+22	3,065582E+21	3,065820E+21	4,983744E+22	6,131401E+21	5,596884E+22
-134	2,491789E+22	2,491903E+22	3,066099E+21	3,065661E+21	4,983691E+22	6,131760E+21	5,596867E+22
-133	2,491859E+22	2,491824E+22	3,065745E+21	3,066211E+21	4,983682E+22	6,131957E+21	5,596878E+22
-132	2,491808E+22	2,491717E+22	3,066120E+21	3,065951E+21	4,983524E+22	6,132072E+21	5,596731E+22
-131	2,491610E+22	2,491759E+22	3,066497E+21	3,066216E+21	4,983369E+22	6,132713E+21	5,596640E+22
-130	2,491672E+22	2,491595E+22	3,066190E+21	3,066697E+21	4,983267E+22	6,132887E+21	5,596555E+22
-129	2,491524E+22	2,491547E+22	3,066734E+21	3,066373E+21	4,983071E+22	6,133107E+21	5,596382E+22
-128	2,491469E+22	2,491535E+22	3,066658E+21	3,066837E+21	4,983004E+22	6,133496E+21	5,596353E+22
-127	2,491575E+22	2,491390E+22	3,066493E+21	3,066817E+21	4,982965E+22	6,133310E+21	5,596296E+22
-126	2,491424E+22	2,491503E+22	3,066994E+21	3,066452E+21	4,982927E+22	6,133446E+21	5,596272E+22
-125	2,491492E+22	2,491518E+22	3,066555E+21	3,066913E+21	4,983010E+22	6,133468E+21	5,596357E+22
-124	2,491539E+22	2,491462E+22	3,066564E+21	3,066539E+21	4,983001E+22	6,133103E+21	5,596311E+22
-123	2,491421E+22	2,491601E+22	3,066803E+21	3,066353E+21	4,983021E+22	6,133156E+21	5,596337E+22
-122	2,491609E+22	2,491561E+22	3,066213E+21	3,066641E+21	4,983170E+22	6,132854E+21	5,596456E+22
-121	2,491616E+22	2,491594E+22	3,066416E+21	3,066038E+21	4,983210E+22	6,132454E+21	5,596455E+22
-120	2,491607E+22	2,491707E+22	3,066320E+21	3,066219E+21	4,983314E+22	6,132539E+21	5,596568E+22
-119	2,491773E+22	2,491645E+22	3,065857E+21	3,066286E+21	4,983418E+22	6,132143E+21	5,596633E+22
-118	2,491669E+22	2,491747E+22	3,066281E+21	3,065855E+21	4,983416E+22	6,132135E+21	5,596629E+22
-117	2,491712E+22	2,491772E+22	3,066008E+21	3,066321E+21	4,983484E+22	6,132329E+21	5,596716E+22
-116	2,491789E+22	2,491655E+22	3,065973E+21	3,066165E+21	4,983444E+22	6,132138E+21	5,596658E+22
-115	2,491611E+22	2,491719E+22	3,066550E+21	3,066021E+21	4,983330E+22	6,132570E+21	5,596587E+22
-114	2,491672E+22	2,491640E+22	3,066222E+21	3,066627E+21	4,983312E+22	6,132849E+21	5,596596E+22
-113	2,491591E+22	2,491535E+22	3,066563E+21	3,066418E+21	4,983126E+22	6,132981E+21	5,596424E+22
-112	2,491411E+22	2,491542E+22	3,066881E+21	3,066709E+21	4,982953E+22	6,133590E+21	5,596312E+22
-111	2,491492E+22	2,491379E+22	3,066541E+21	3,067116E+21	4,982871E+22	6,133657E+21	5,596237E+22
-110	2,491359E+22	2,491355E+22	3,067107E+21	3,066742E+21	4,982714E+22	6,133849E+21	5,596099E+22

1	14	15	16	17	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							
-109	2,491319E+22	2,491380E+22	3,067060E+21	3,067141E+21	4,982699E+22	6,134201E+21	5,596119E+22
-108	2,491410E+22	2,491262E+22	3,066875E+21	3,067152E+21	4,982673E+22	6,134027E+21	5,596076E+22
-107	2,491228E+22	2,491352E+22	3,067379E+21	3,066808E+21	4,982579E+22	6,134187E+21	5,595998E+22
-106	2,491312E+22	2,491360E+22	3,066941E+21	3,067273E+21	4,982672E+22	6,134214E+21	5,596093E+22
-105	2,491365E+22	2,491304E+22	3,066904E+21	3,066879E+21	4,982670E+22	6,133783E+21	5,596048E+22
-104	2,491285E+22	2,491420E+22	3,067089E+21	3,066693E+21	4,982706E+22	6,133782E+21	5,596084E+22
-103	2,491489E+22	2,491396E+22	3,066473E+21	3,066943E+21	4,982885E+22	6,133417E+21	5,596227E+22
-102	2,491480E+22	2,491453E+22	3,066697E+21	3,066374E+21	4,982933E+22	6,133072E+21	5,596241E+22
-101	2,491466E+22	2,491585E+22	3,066631E+21	3,066552E+21	4,983050E+22	6,133184E+21	5,596369E+22
-100	2,491623E+22	2,491517E+22	3,066184E+21	3,066640E+21	4,983140E+22	6,132823E+21	5,596422E+22
-99	2,491501E+22	2,491578E+22	3,066666E+21	3,066195E+21	4,983079E+22	6,132861E+21	5,596365E+22
-98	2,491559E+22	2,491601E+22	3,066447E+21	3,066650E+21	4,983160E+22	6,133097E+21	5,596469E+22
-97	2,491611E+22	2,491488E+22	3,066413E+21	3,066522E+21	4,983099E+22	6,132935E+21	5,596393E+22
-96	2,491423E+22	2,491529E+22	3,066948E+21	3,066460E+21	4,982953E+22	6,133408E+21	5,596294E+22
-95	2,491472E+22	2,491446E+22	3,066581E+21	3,067070E+21	4,982919E+22	6,133651E+21	5,596284E+22
-94	2,491386E+22	2,491337E+22	3,066944E+21	3,066874E+21	4,982724E+22	6,133819E+21	5,596105E+22
-93	2,491235E+22	2,491358E+22	3,067278E+21	3,067096E+21	4,982593E+22	6,134374E+21	5,596031E+22
-92	2,491333E+22	2,491208E+22	3,066941E+21	3,067482E+21	4,982541E+22	6,134423E+21	5,595983E+22
-91	2,491185E+22	2,491173E+22	3,067539E+21	3,067106E+21	4,982358E+22	6,134645E+21	5,595822E+22
-90	2,491144E+22	2,491220E+22	3,067497E+21	3,067522E+21	4,982364E+22	6,135019E+21	5,595866E+22
-89	2,491210E+22	2,491112E+22	3,067266E+21	3,067556E+21	4,982322E+22	6,134823E+21	5,595805E+22
-88	2,491053E+22	2,491166E+22	3,067701E+21	3,067222E+21	4,982220E+22	6,134923E+21	5,595712E+22
-87	2,491161E+22	2,491176E+22	3,067222E+21	3,067595E+21	4,982337E+22	6,134817E+21	5,595819E+22
-86	2,491229E+22	2,491141E+22	3,067197E+21	3,067176E+21	4,982370E+22	6,134373E+21	5,595807E+22
-85	2,491166E+22	2,491286E+22	3,067394E+21	3,066954E+21	4,982452E+22	6,134349E+21	5,595887E+22
-84	2,491353E+22	2,491284E+22	3,066774E+21	3,067246E+21	4,982637E+22	6,134020E+21	5,596039E+22
-83	2,491317E+22	2,491314E+22	3,067030E+21	3,066713E+21	4,982630E+22	6,133743E+21	5,596005E+22
-82	2,491310E+22	2,491438E+22	3,067009E+21	3,066884E+21	4,982748E+22	6,133892E+21	5,596138E+22
-81	2,491458E+22	2,491370E+22	3,066567E+21	3,066971E+21	4,982828E+22	6,133538E+21	5,596182E+22
-80	2,491355E+22	2,491392E+22	3,067032E+21	3,066564E+21	4,982747E+22	6,133596E+21	5,596106E+22
-79	2,491396E+22	2,491418E+22	3,066813E+21	3,067007E+21	4,982814E+22	6,133820E+21	5,596196E+22
-78	2,491421E+22	2,491318E+22	3,066790E+21	3,066961E+21	4,982739E+22	6,133751E+21	5,596114E+22
-77	2,491231E+22	2,491354E+22	3,067336E+21	3,066905E+21	4,982585E+22	6,134241E+21	5,596009E+22
-76	2,491281E+22	2,491264E+22	3,066972E+21	3,067511E+21	4,982546E+22	6,134483E+21	5,595994E+22
-75	2,491197E+22	2,491126E+22	3,067370E+21	3,067283E+21	4,982323E+22	6,134653E+21	5,595788E+22
-74	2,491070E+22	2,491164E+22	3,067734E+21	3,067464E+21	4,982234E+22	6,135198E+21	5,595754E+22
-73	2,491150E+22	2,491043E+22	3,067388E+21	3,067859E+21	4,982193E+22	6,135247E+21	5,595718E+22
-72	2,491004E+22	2,490994E+22	3,067918E+21	3,067539E+21	4,981997E+22	6,135457E+21	5,595543E+22
-71	2,490959E+22	2,491047E+22	3,067834E+21	3,067909E+21	4,982006E+22	6,135742E+21	5,595580E+22
-70	2,491031E+22	2,490946E+22	3,067593E+21	3,067933E+21	4,981977E+22	6,135526E+21	5,595530E+22
-69	2,490908E+22	2,491009E+22	3,068020E+21	3,067525E+21	4,981916E+22	6,135545E+21	5,595471E+22
-68	2,491030E+22	2,491033E+22	3,067537E+21	3,067866E+21	4,982063E+22	6,135402E+21	5,595603E+22
-67	2,491083E+22	2,490989E+22	3,067545E+21	3,067470E+21	4,982072E+22	6,135015E+21	5,595573E+22
-66	2,491023E+22	2,491155E+22	3,067748E+21	3,067281E+21	4,982178E+22	6,135030E+21	5,595681E+22
-65	2,491186E+22	2,491155E+22	3,067123E+21	3,067603E+21	4,982341E+22	6,134726E+21	5,595813E+22
-64	2,491167E+22	2,491143E+22	3,067337E+21	3,067098E+21	4,982309E+22	6,134435E+21	5,595753E+22
-63	2,491171E+22	2,491266E+22	3,067308E+21	3,067193E+21	4,982437E+22	6,134501E+21	5,595887E+22
-62	2,491309E+22	2,491208E+22	3,066904E+21	3,067294E+21	4,982516E+22	6,134198E+21	5,595936E+22
-61	2,491203E+22	2,491239E+22	3,067398E+21	3,066906E+21	4,982442E+22	6,134304E+21	5,595873E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-60	2,491215E+22	2,491270E+22	3,067182E+21	3,067392E+21	4,982486E+22	6,134574E+21	5,595943E+22
-59	2,491212E+22	2,491132E+22	3,067204E+21	3,067402E+21	4,982344E+22	6,134607E+21	5,595804E+22
-58	2,491043E+22	2,491161E+22	3,067767E+21	3,067330E+21	4,982204E+22	6,135097E+21	5,595714E+22
-57	2,491095E+22	2,491074E+22	3,067411E+21	3,067918E+21	4,982169E+22	6,135329E+21	5,595702E+22
-56	2,491037E+22	2,490914E+22	3,067774E+21	3,067709E+21	4,981951E+22	6,135482E+21	5,595499E+22
-55	2,490905E+22	2,490976E+22	3,068119E+21	3,067848E+21	4,981880E+22	6,135967E+21	5,595477E+22
-54	2,490960E+22	2,490881E+22	3,067776E+21	3,068288E+21	4,981841E+22	6,136064E+21	5,595447E+22
-53	2,490821E+22	2,490833E+22	3,068291E+21	3,067946E+21	4,981654E+22	6,136238E+21	5,595278E+22
-52	2,490781E+22	2,490886E+22	3,068191E+21	3,068255E+21	4,981667E+22	6,136446E+21	5,595312E+22
-51	2,490859E+22	2,490765E+22	3,067974E+21	3,068253E+21	4,981623E+22	6,136227E+21	5,595246E+22
-50	2,490763E+22	2,490843E+22	3,068402E+21	3,067806E+21	4,981606E+22	6,136208E+21	5,595227E+22
-49	2,490871E+22	2,490896E+22	3,067908E+21	3,068175E+21	4,981767E+22	6,136083E+21	5,595375E+22
-48	2,490933E+22	2,490832E+22	3,067838E+21	3,067849E+21	4,981765E+22	6,135687E+21	5,595334E+22
-47	2,490873E+22	2,491001E+22	3,068015E+21	3,067623E+21	4,981873E+22	6,135638E+21	5,595437E+22
-46	2,491037E+22	2,491012E+22	3,067408E+21	3,067941E+21	4,982049E+22	6,135349E+21	5,595584E+22
-45	2,491042E+22	2,490997E+22	3,067636E+21	3,067398E+21	4,982039E+22	6,135035E+21	5,595543E+22
-44	2,491037E+22	2,491125E+22	3,067642E+21	3,067469E+21	4,982162E+22	6,135111E+21	5,595673E+22
-43	2,491139E+22	2,491048E+22	3,067300E+21	3,067641E+21	4,982187E+22	6,134941E+21	5,595681E+22
-42	2,491020E+22	2,491079E+22	3,067813E+21	3,067309E+21	4,982099E+22	6,135122E+21	5,595612E+22
-41	2,491011E+22	2,491098E+22	3,067610E+21	3,067836E+21	4,982109E+22	6,135446E+21	5,595654E+22
-40	2,491032E+22	2,490912E+22	3,067587E+21	3,067870E+21	4,981944E+22	6,135457E+21	5,595490E+22
-39	2,490883E+22	2,490949E+22	3,068133E+21	3,067719E+21	4,981832E+22	6,135852E+21	5,595417E+22
-38	2,490929E+22	2,490890E+22	3,067813E+21	3,068306E+21	4,981819E+22	6,136119E+21	5,595431E+22
-37	2,490871E+22	2,490752E+22	3,068176E+21	3,068102E+21	4,981623E+22	6,136278E+21	5,595250E+22
-36	2,490715E+22	2,490827E+22	3,068513E+21	3,068230E+21	4,981542E+22	6,136743E+21	5,595216E+22
-35	2,490746E+22	2,490706E+22	3,068213E+21	3,068689E+21	4,981452E+22	6,136901E+21	5,595142E+22
-34	2,490632E+22	2,490659E+22	3,068717E+21	3,068312E+21	4,981292E+22	6,137029E+21	5,594994E+22
-33	2,490601E+22	2,490713E+22	3,068599E+21	3,068592E+21	4,981315E+22	6,137191E+21	5,595034E+22
-32	2,490707E+22	2,490570E+22	3,068316E+21	3,068619E+21	4,981277E+22	6,136935E+21	5,594971E+22
-31	2,490623E+22	2,490677E+22	3,068682E+21	3,068150E+21	4,981300E+22	6,136832E+21	5,594983E+22
-30	2,490717E+22	2,490756E+22	3,068190E+21	3,068554E+21	4,981473E+22	6,136743E+21	5,595147E+22
-29	2,490797E+22	2,490697E+22	3,068107E+21	3,068200E+21	4,981494E+22	6,136306E+21	5,595125E+22
-28	2,490744E+22	2,490866E+22	3,068293E+21	3,067892E+21	4,981610E+22	6,136185E+21	5,595229E+22
-27	2,490892E+22	2,490860E+22	3,067763E+21	3,068199E+21	4,981752E+22	6,135962E+21	5,595349E+22
-26	2,490899E+22	2,490856E+22	3,068026E+21	3,067671E+21	4,981755E+22	6,135698E+21	5,595325E+22
-25	2,490857E+22	2,490986E+22	3,068053E+21	3,067813E+21	4,981844E+22	6,135866E+21	5,595430E+22
-24	2,490952E+22	2,490867E+22	3,067667E+21	3,068086E+21	4,981819E+22	6,135753E+21	5,595395E+22
-23	2,490841E+22	2,490885E+22	3,068150E+21	3,067739E+21	4,981726E+22	6,135889E+21	5,595315E+22
-22	2,490836E+22	2,490909E+22	3,067976E+21	3,068261E+21	4,981744E+22	6,136237E+21	5,595368E+22
-21	2,490884E+22	2,490727E+22	3,067959E+21	3,068262E+21	4,981611E+22	6,136221E+21	5,595233E+22
-20	2,490727E+22	2,490780E+22	3,068527E+21	3,068067E+21	4,981507E+22	6,136594E+21	5,595167E+22
-19	2,490734E+22	2,490721E+22	3,068278E+21	3,068711E+21	4,981455E+22	6,136990E+21	5,595154E+22
-18	2,490663E+22	2,490588E+22	3,068647E+21	3,068536E+21	4,981252E+22	6,137183E+21	5,594970E+22
-17	2,490492E+22	2,490652E+22	3,068979E+21	3,068670E+21	4,981144E+22	6,137649E+21	5,594909E+22
-16	2,490555E+22	2,490486E+22	3,068604E+21	3,069121E+21	4,981041E+22	6,137725E+21	5,594813E+22
-15	2,490471E+22	2,490448E+22	3,069049E+21	3,068665E+21	4,980918E+22	6,137714E+21	5,594690E+22
-14	2,490447E+22	2,490538E+22	3,068930E+21	3,068936E+21	4,980986E+22	6,137867E+21	5,594772E+22
-13	2,490569E+22	2,490426E+22	3,068607E+21	3,068964E+21	4,980995E+22	6,137571E+21	5,594752E+22
-12	2,490480E+22	2,490553E+22	3,068949E+21	3,068457E+21	4,981034E+22	6,137405E+21	5,594774E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-11	2,490560E+22	2,490620E+22	3,068526E+21	3,068861E+21	4,981180E+22	6,137387E+21	5,594919E+22
-10	2,490654E+22	2,490569E+22	3,068457E+21	3,068468E+21	4,981223E+22	6,136925E+21	5,594915E+22
-9	2,490595E+22	2,490732E+22	3,068673E+21	3,068161E+21	4,981328E+22	6,136834E+21	5,595011E+22
-8	2,490744E+22	2,490690E+22	3,068118E+21	3,068527E+21	4,981434E+22	6,136645E+21	5,595098E+22
-7	2,490740E+22	2,490691E+22	3,068349E+21	3,068048E+21	4,981431E+22	6,136397E+21	5,595071E+22
-6	2,490676E+22	2,490823E+22	3,068393E+21	3,068255E+21	4,981499E+22	6,136647E+21	5,595164E+22
-5	2,490788E+22	2,490692E+22	3,067997E+21	3,068529E+21	4,981480E+22	6,136527E+21	5,595132E+22
-4	2,490692E+22	2,490707E+22	3,068476E+21	3,068099E+21	4,981399E+22	6,136576E+21	5,595057E+22
-3	2,490670E+22	2,490722E+22	3,068403E+21	3,068609E+21	4,981392E+22	6,137012E+21	5,595093E+22
-2	2,490712E+22	2,490568E+22	3,068422E+21	3,068617E+21	4,981280E+22	6,137038E+21	5,594984E+22
-1	2,490523E+22	2,490623E+22	3,069008E+21	3,068481E+21	4,981146E+22	6,137490E+21	5,594895E+22
1	2,490515E+22	2,490522E+22	3,068721E+21	3,069184E+21	4,981038E+22	6,137905E+21	5,594828E+22
2	2,490460E+22	2,490383E+22	3,069034E+21	3,068989E+21	4,980843E+22	6,138023E+21	5,594646E+22
3	2,490302E+22	2,490450E+22	3,069355E+21	3,069088E+21	4,980751E+22	6,138443E+21	5,594596E+22
4	2,490403E+22	2,490294E+22	3,068947E+21	3,069492E+21	4,980697E+22	6,138439E+21	5,594541E+22
5	2,490333E+22	2,490282E+22	3,069358E+21	3,068969E+21	4,980616E+22	6,138327E+21	5,594448E+22
6	2,490285E+22	2,490389E+22	3,069298E+21	3,069277E+21	4,980673E+22	6,138575E+21	5,594531E+22
7	2,490404E+22	2,490303E+22	3,068976E+21	3,069302E+21	4,980707E+22	6,138278E+21	5,594535E+22
8	2,490314E+22	2,490422E+22	3,069323E+21	3,068790E+21	4,980736E+22	6,138114E+21	5,594547E+22
9	2,490410E+22	2,490450E+22	3,068869E+21	3,069177E+21	4,980860E+22	6,138046E+21	5,594664E+22
10	2,490518E+22	2,490404E+22	3,068764E+21	3,068756E+21	4,980922E+22	6,137520E+21	5,594674E+22
11	2,490443E+22	2,490581E+22	3,069000E+21	3,068491E+21	4,981025E+22	6,137491E+21	5,594774E+22
12	2,490589E+22	2,490545E+22	3,068418E+21	3,068906E+21	4,981135E+22	6,137324E+21	5,594867E+22
13	2,490580E+22	2,490541E+22	3,068635E+21	3,068414E+21	4,981122E+22	6,137049E+21	5,594826E+22
14	2,490505E+22	2,490653E+22	3,068767E+21	3,068639E+21	4,981159E+22	6,137406E+21	5,594899E+22
15	2,490629E+22	2,490530E+22	3,068399E+21	3,068877E+21	4,981159E+22	6,137277E+21	5,594887E+22
16	2,490527E+22	2,490541E+22	3,068917E+21	3,068461E+21	4,981068E+22	6,137378E+21	5,594806E+22
17	2,490496E+22	2,490529E+22	3,068836E+21	3,069016E+21	4,981025E+22	6,137852E+21	5,594810E+22
18	2,490519E+22	2,490382E+22	3,068829E+21	3,069068E+21	4,980901E+22	6,137897E+21	5,594691E+22
19	2,490309E+22	2,490436E+22	3,069429E+21	3,068971E+21	4,980745E+22	6,138400E+21	5,594585E+22
20	2,490324E+22	2,490322E+22	3,069109E+21	3,069638E+21	4,980646E+22	6,138746E+21	5,594521E+22
21	2,490291E+22	2,490186E+22	3,069385E+21	3,069343E+21	4,980477E+22	6,138728E+21	5,594349E+22
22	2,490131E+22	2,490256E+22	3,069768E+21	3,069425E+21	4,980388E+22	6,139193E+21	5,594307E+22
23	2,490234E+22	2,490143E+22	3,069360E+21	3,069815E+21	4,980377E+22	6,139175E+21	5,594294E+22
24	2,490155E+22	2,490148E+22	3,069755E+21	3,069337E+21	4,980303E+22	6,139092E+21	5,594212E+22
25	2,490109E+22	2,490223E+22	3,069659E+21	3,069663E+21	4,980332E+22	6,139322E+21	5,594264E+22
26	2,490248E+22	2,490144E+22	3,069291E+21	3,069653E+21	4,980391E+22	6,138944E+21	5,594286E+22
27	2,490167E+22	2,490267E+22	3,069636E+21	3,069116E+21	4,980433E+22	6,138752E+21	5,594308E+22
28	2,490283E+22	2,490296E+22	3,069162E+21	3,069476E+21	4,980579E+22	6,138637E+21	5,594443E+22
29	2,490390E+22	2,490264E+22	3,069032E+21	3,069041E+21	4,980654E+22	6,138072E+21	5,594461E+22
30	2,490281E+22	2,490434E+22	3,069342E+21	3,068851E+21	4,980715E+22	6,138193E+21	5,594534E+22
31	2,490418E+22	2,490409E+22	3,068785E+21	3,069276E+21	4,980827E+22	6,138061E+21	5,594633E+22
32	2,490417E+22	2,490383E+22	3,069013E+21	3,068795E+21	4,980801E+22	6,137808E+21	5,594581E+22
33	2,490349E+22	2,490453E+22	3,069146E+21	3,069001E+21	4,980802E+22	6,138148E+21	5,594617E+22
34	2,490478E+22	2,490346E+22	3,068776E+21	3,069229E+21	4,980824E+22	6,138006E+21	5,594625E+22
35	2,490351E+22	2,490370E+22	3,069325E+21	3,068865E+21	4,980721E+22	6,138190E+21	5,594540E+22
36	2,490307E+22	2,490359E+22	3,069231E+21	3,069454E+21	4,980666E+22	6,138685E+21	5,594534E+22
37	2,490325E+22	2,490206E+22	3,069203E+21	3,069483E+21	4,980531E+22	6,138685E+21	5,594399E+22
38	2,490105E+22	2,490239E+22	3,069870E+21	3,069394E+21	4,980343E+22	6,139264E+21	5,594270E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
39	2,490133E+22	2,490141E+22	3,069557E+21	3,070001E+21	4,980275E+22	6,139558E+21	5,594230E+22
40	2,490113E+22	2,490004E+22	3,069832E+21	3,069721E+21	4,980117E+22	6,139553E+21	5,594072E+22
41	2,489953E+22	2,490060E+22	3,070177E+21	3,069831E+21	4,980013E+22	6,140009E+21	5,594014E+22
42	2,490057E+22	2,489973E+22	3,069722E+21	3,070244E+21	4,980030E+22	6,139966E+21	5,594026E+22
43	2,489977E+22	2,489986E+22	3,070100E+21	3,069769E+21	4,979963E+22	6,139869E+21	5,593950E+22
44	2,489964E+22	2,490058E+22	3,069962E+21	3,070025E+21	4,980022E+22	6,139987E+21	5,594021E+22
45	2,490121E+22	2,489990E+22	3,069558E+21	3,069901E+21	4,980110E+22	6,139459E+21	5,594056E+22
46	2,490028E+22	2,490118E+22	3,069975E+21	3,069379E+21	4,980146E+22	6,139354E+21	5,594081E+22
47	2,490129E+22	2,490177E+22	3,069515E+21	3,069737E+21	4,980306E+22	6,139251E+21	5,594231E+22
48	2,490219E+22	2,490138E+22	3,069389E+21	3,069390E+21	4,980357E+22	6,138779E+21	5,594235E+22
49	2,490112E+22	2,490262E+22	3,069680E+21	3,069238E+21	4,980374E+22	6,138918E+21	5,594266E+22
50	2,490266E+22	2,490235E+22	3,069114E+21	3,069647E+21	4,980500E+22	6,138761E+21	5,594376E+22
51	2,490270E+22	2,490211E+22	3,069359E+21	3,069158E+21	4,980481E+22	6,138517E+21	5,594332E+22
52	2,490215E+22	2,490280E+22	3,069491E+21	3,069351E+21	4,980495E+22	6,138842E+21	5,594379E+22
53	2,490322E+22	2,490189E+22	3,069121E+21	3,069574E+21	4,980511E+22	6,138695E+21	5,594381E+22
54	2,490153E+22	2,490205E+22	3,069757E+21	3,069307E+21	4,980357E+22	6,139064E+21	5,594263E+22
55	2,490091E+22	2,490196E+22	3,069693E+21	3,069878E+21	4,980287E+22	6,139570E+21	5,594244E+22
56	2,490122E+22	2,490017E+22	3,069669E+21	3,069926E+21	4,980139E+22	6,139595E+21	5,594099E+22
57	2,489916E+22	2,490008E+22	3,070306E+21	3,069810E+21	4,979924E+22	6,140116E+21	5,593935E+22
58	2,489958E+22	2,489933E+22	3,069967E+21	3,070402E+21	4,979891E+22	6,140369E+21	5,593928E+22
59	2,489930E+22	2,489823E+22	3,070218E+21	3,070151E+21	4,979753E+22	6,140369E+21	5,593790E+22
60	2,489784E+22	2,489890E+22	3,070511E+21	3,070258E+21	4,979674E+22	6,140769E+21	5,593751E+22
61	2,489899E+22	2,489819E+22	3,070024E+21	3,070594E+21	4,979718E+22	6,140618E+21	5,593780E+22
62	2,489819E+22	2,489829E+22	3,070455E+21	3,070099E+21	4,979648E+22	6,140554E+21	5,593703E+22
63	2,489813E+22	2,489925E+22	3,070332E+21	3,070262E+21	4,979738E+22	6,140594E+21	5,593797E+22
64	2,489976E+22	2,489854E+22	3,069926E+21	3,070176E+21	4,979830E+22	6,140102E+21	5,593840E+22
65	2,489867E+22	2,489951E+22	3,070318E+21	3,069711E+21	4,979817E+22	6,140029E+21	5,593820E+22
66	2,489961E+22	2,490024E+22	3,069836E+21	3,070117E+21	4,979984E+22	6,139954E+21	5,593980E+22
67	2,490054E+22	2,489977E+22	3,069708E+21	3,069796E+21	4,980031E+22	6,139504E+21	5,593981E+22
68	2,489980E+22	2,490087E+22	3,069967E+21	3,069604E+21	4,980068E+22	6,139570E+21	5,594025E+22
69	2,490144E+22	2,490072E+22	3,069402E+21	3,069924E+21	4,980216E+22	6,139326E+21	5,594149E+22
70	2,490122E+22	2,490054E+22	3,069737E+21	3,069486E+21	4,980176E+22	6,139223E+21	5,594098E+22
71	2,490033E+22	2,490150E+22	3,069913E+21	3,069681E+21	4,980184E+22	6,139594E+21	5,594143E+22
72	2,490119E+22	2,490041E+22	3,069568E+21	3,070002E+21	4,980160E+22	6,139570E+21	5,594117E+22
73	2,489941E+22	2,489998E+22	3,070202E+21	3,069775E+21	4,979939E+22	6,139977E+21	5,593937E+22
74	2,489895E+22	2,489985E+22	3,070118E+21	3,070323E+21	4,979879E+22	6,140442E+21	5,593924E+22
75	2,489936E+22	2,489805E+22	3,070090E+21	3,070367E+21	4,979741E+22	6,140456E+21	5,593786E+22
76	2,489760E+22	2,489799E+22	3,070671E+21	3,070233E+21	4,979559E+22	6,140904E+21	5,593649E+22
77	2,489796E+22	2,489755E+22	3,070307E+21	3,070781E+21	4,979551E+22	6,141088E+21	5,593660E+22
78	2,489746E+22	2,489661E+22	3,070608E+21	3,070579E+21	4,979408E+22	6,141188E+21	5,593527E+22
79	2,489603E+22	2,489748E+22	3,070912E+21	3,070598E+21	4,979351E+22	6,141510E+21	5,593502E+22
80	2,489733E+22	2,489668E+22	3,070430E+21	3,070913E+21	4,979401E+22	6,141343E+21	5,593535E+22
81	2,489658E+22	2,489649E+22	3,070829E+21	3,070397E+21	4,979307E+22	6,141226E+21	5,593430E+22
82	2,489654E+22	2,489764E+22	3,070684E+21	3,070559E+21	4,979418E+22	6,141243E+21	5,593542E+22
83	2,489803E+22	2,489707E+22	3,070258E+21	3,070533E+21	4,979509E+22	6,140791E+21	5,593588E+22
84	2,489716E+22	2,489792E+22	3,070581E+21	3,070097E+21	4,979508E+22	6,140678E+21	5,593576E+22
85	2,489824E+22	2,489871E+22	3,070084E+21	3,070440E+21	4,979694E+22	6,140524E+21	5,593747E+22
86	2,489918E+22	2,489826E+22	3,070019E+21	3,070129E+21	4,979744E+22	6,140148E+21	5,593759E+22
87	2,489846E+22	2,489956E+22	3,070318E+21	3,069862E+21	4,979802E+22	6,140180E+21	5,593820E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,489999E+22	2,489939E+22	3,069802E+21	3,070241E+21	4,979938E+22	6,140043E+21	5,593942E+22
89	2,489940E+22	2,489885E+22	3,070143E+21	3,069894E+21	4,979825E+22	6,140037E+21	5,593829E+22
90	2,489832E+22	2,489976E+22	3,070331E+21	3,070136E+21	4,979807E+22	6,140467E+21	5,593854E+22
91	2,489914E+22	2,489844E+22	3,069994E+21	3,070481E+21	4,979759E+22	6,140476E+21	5,593806E+22
92	2,489771E+22	2,489775E+22	3,070575E+21	3,070218E+21	4,979546E+22	6,140793E+21	5,593626E+22
93	2,489739E+22	2,489778E+22	3,070476E+21	3,070674E+21	4,979517E+22	6,141150E+21	5,593632E+22
94	2,489762E+22	2,489618E+22	3,070502E+21	3,070760E+21	4,979380E+22	6,141262E+21	5,593506E+22
95	2,489567E+22	2,489650E+22	3,071092E+21	3,070598E+21	4,979218E+22	6,141690E+21	5,593387E+22
96	2,489603E+22	2,489608E+22	3,070746E+21	3,071191E+21	4,979211E+22	6,141937E+21	5,593404E+22
97	2,489550E+22	2,489476E+22	3,071030E+21	3,070985E+21	4,979025E+22	6,142015E+21	5,593227E+22
98	2,489425E+22	2,489571E+22	3,071312E+21	3,070946E+21	4,978996E+22	6,142258E+21	5,593222E+22
99	2,489564E+22	2,489494E+22	3,070815E+21	3,071247E+21	4,979058E+22	6,142061E+21	5,593264E+22
100	2,489513E+22	2,489472E+22	3,071133E+21	3,070748E+21	4,978984E+22	6,141880E+21	5,593172E+22
101	2,489503E+22	2,489611E+22	3,070944E+21	3,070890E+21	4,979114E+22	6,141834E+21	5,593297E+22
102	2,489639E+22	2,489561E+22	3,070558E+21	3,070929E+21	4,979200E+22	6,141488E+21	5,593349E+22
103	2,489571E+22	2,489660E+22	3,070889E+21	3,070411E+21	4,979231E+22	6,141300E+21	5,593361E+22
104	2,489699E+22	2,489731E+22	3,070429E+21	3,070734E+21	4,979430E+22	6,141163E+21	5,593547E+22
105	2,489781E+22	2,489662E+22	3,070374E+21	3,070423E+21	4,979443E+22	6,140797E+21	5,593523E+22
106	2,489694E+22	2,489807E+22	3,070694E+21	3,070178E+21	4,979501E+22	6,140872E+21	5,593588E+22
107	2,489810E+22	2,489790E+22	3,070201E+21	3,070632E+21	4,979600E+22	6,140833E+21	5,593683E+22
108	2,489761E+22	2,489705E+22	3,070497E+21	3,070348E+21	4,979467E+22	6,140845E+21	5,593551E+22
109	2,489656E+22	2,489785E+22	3,070678E+21	3,070528E+21	4,979441E+22	6,141206E+21	5,593562E+22
110	2,489734E+22	2,489653E+22	3,070399E+21	3,070896E+21	4,979387E+22	6,141294E+21	5,593516E+22
111	2,489604E+22	2,489597E+22	3,070986E+21	3,070558E+21	4,979202E+22	6,141545E+21	5,593356E+22
112	2,489566E+22	2,489605E+22	3,070924E+21	3,071060E+21	4,979171E+22	6,141984E+21	5,593369E+22
113	2,489557E+22	2,489433E+22	3,070942E+21	3,071211E+21	4,978990E+22	6,142153E+21	5,593205E+22
114	2,489362E+22	2,489472E+22	3,071528E+21	3,071056E+21	4,978833E+22	6,142584E+21	5,593092E+22
115	2,489402E+22	2,489422E+22	3,071190E+21	3,071625E+21	4,978824E+22	6,142815E+21	5,593105E+22
116	2,489389E+22	2,489276E+22	3,071384E+21	3,071374E+21	4,978665E+22	6,142759E+21	5,592940E+22
117	2,489276E+22	2,489390E+22	3,071622E+21	3,071240E+21	4,978665E+22	6,142862E+21	5,592951E+22
118	2,489398E+22	2,489338E+22	3,071150E+21	3,071587E+21	4,978736E+22	6,142737E+21	5,593010E+22
119	2,489346E+22	2,489343E+22	3,071446E+21	3,071062E+21	4,978689E+22	6,142508E+21	5,592939E+22
120	2,489351E+22	2,489478E+22	3,071281E+21	3,071236E+21	4,978829E+22	6,142517E+21	5,593081E+22
121	2,489486E+22	2,489403E+22	3,070891E+21	3,071272E+21	4,978888E+22	6,142163E+21	5,593105E+22
122	2,489438E+22	2,489510E+22	3,071222E+21	3,070711E+21	4,978948E+22	6,141933E+21	5,593141E+22
123	2,489562E+22	2,489583E+22	3,070799E+21	3,071030E+21	4,979145E+22	6,141829E+21	5,593328E+22
124	2,489644E+22	2,489503E+22	3,070693E+21	3,070772E+21	4,979147E+22	6,141465E+21	5,593293E+22
125	2,489531E+22	2,489655E+22	3,071008E+21	3,070538E+21	4,979186E+22	6,141546E+21	5,593341E+22
126	2,489619E+22	2,489628E+22	3,070579E+21	3,071062E+21	4,979246E+22	6,141641E+21	5,593411E+22
127	2,489578E+22	2,489537E+22	3,070892E+21	3,070725E+21	4,979115E+22	6,141616E+21	5,593276E+22
128	2,489492E+22	2,489602E+22	3,071106E+21	3,070902E+21	4,979094E+22	6,142007E+21	5,593295E+22
129	2,489551E+22	2,489447E+22	3,070838E+21	3,071288E+21	4,978998E+22	6,142125E+21	5,593210E+22
130	2,489414E+22	2,489413E+22	3,071421E+21	3,070975E+21	4,978827E+22	6,142396E+21	5,593066E+22
131	2,489356E+22	2,489427E+22	3,071377E+21	3,071520E+21	4,978782E+22	6,142897E+21	5,593072E+22
132	2,489366E+22	2,489237E+22	3,071329E+21	3,071696E+21	4,978602E+22	6,143025E+21	5,592905E+22
133	2,489185E+22	2,489282E+22	3,071884E+21	3,071450E+21	4,978467E+22	6,143334E+21	5,592801E+22
134	2,489226E+22	2,489242E+22	3,071581E+21	3,071998E+21	4,978468E+22	6,143579E+21	5,592826E+22
135	2,489229E+22	2,489118E+22	3,071759E+21	3,071675E+21	4,978347E+22	6,143434E+21	5,592690E+22
136	2,489119E+22	2,489238E+22	3,071996E+21	3,071573E+21	4,978358E+22	6,143569E+21	5,592715E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,489213E+22	2,489177E+22	3,071508E+21	3,071973E+21	4,978390E+22	6,143481E+21	5,592738E+22
138	2,489180E+22	2,489188E+22	3,071783E+21	3,071438E+21	4,978368E+22	6,143222E+21	5,592690E+22
139	2,489201E+22	2,489319E+22	3,071641E+21	3,071576E+21	4,978520E+22	6,143216E+21	5,592842E+22
140	2,489370E+22	2,489238E+22	3,071182E+21	3,071582E+21	4,978608E+22	6,142764E+21	5,592884E+22
141	2,489321E+22	2,489360E+22	3,071500E+21	3,070962E+21	4,978681E+22	6,142462E+21	5,592927E+22
142	2,489402E+22	2,489453E+22	3,071138E+21	3,071348E+21	4,978855E+22	6,142486E+21	5,593104E+22
143	2,489470E+22	2,489380E+22	3,071032E+21	3,071107E+21	4,978850E+22	6,142139E+21	5,593064E+22
144	2,489357E+22	2,489503E+22	3,071393E+21	3,070924E+21	4,978860E+22	6,142317E+21	5,593091E+22
145	2,489427E+22	2,489441E+22	3,070984E+21	3,071465E+21	4,978868E+22	6,142449E+21	5,593113E+22
146	2,489408E+22	2,489345E+22	3,071299E+21	3,071114E+21	4,978752E+22	6,142413E+21	5,592994E+22
147	2,489319E+22	2,489406E+22	3,071551E+21	3,071305E+21	4,978725E+22	6,142856E+21	5,593010E+22
148	2,489379E+22	2,489249E+22	3,071218E+21	3,071751E+21	4,978628E+22	6,142969E+21	5,592925E+22
149	2,489229E+22	2,489228E+22	3,071778E+21	3,071431E+21	4,978456E+22	6,143209E+21	5,592777E+22
150	2,489155E+22	2,489246E+22	3,071794E+21	3,071990E+21	4,978402E+22	6,143784E+21	5,592780E+22
151	2,489185E+22	2,489064E+22	3,071742E+21	3,072070E+21	4,978249E+22	6,143812E+21	5,592630E+22
152	2,489025E+22	2,489104E+22	3,072311E+21	3,071788E+21	4,978129E+22	6,144099E+21	5,592539E+22
153	2,489037E+22	2,489058E+22	3,072007E+21	3,072334E+21	4,978096E+22	6,144341E+21	5,592530E+22
154	2,489040E+22	2,488954E+22	3,072154E+21	3,072038E+21	4,977994E+22	6,144192E+21	5,592414E+22
155	2,488930E+22	2,489076E+22	3,072388E+21	3,071970E+21	4,978006E+22	6,144358E+21	5,592442E+22
156	2,489055E+22	2,489001E+22	3,071819E+21	3,072374E+21	4,978056E+22	6,144194E+21	5,592475E+22
157	2,489050E+22	2,489027E+22	3,072048E+21	3,071754E+21	4,978077E+22	6,143802E+21	5,592457E+22
158	2,489074E+22	2,489173E+22	3,071948E+21	3,071867E+21	4,978247E+22	6,143815E+21	5,592628E+22
159	2,489241E+22	2,489114E+22	3,071496E+21	3,071824E+21	4,978355E+22	6,143320E+21	5,592687E+22
160	2,489179E+22	2,489238E+22	3,071839E+21	3,071276E+21	4,978417E+22	6,143115E+21	5,592728E+22
161	2,489208E+22	2,489304E+22	3,071508E+21	3,071729E+21	4,978512E+22	6,143238E+21	5,592836E+22
162	2,489285E+22	2,489215E+22	3,071416E+21	3,071515E+21	4,978500E+22	6,142931E+21	5,592793E+22
163	2,489186E+22	2,489311E+22	3,071807E+21	3,071324E+21	4,978498E+22	6,143131E+21	5,592811E+22
164	2,489278E+22	2,489233E+22	3,071339E+21	3,071862E+21	4,978511E+22	6,143201E+21	5,592831E+22
165	2,489258E+22	2,489154E+22	3,071630E+21	3,071481E+21	4,978413E+22	6,143112E+21	5,592724E+22
166	2,489136E+22	2,489237E+22	3,071934E+21	3,071727E+21	4,978373E+22	6,143662E+21	5,592740E+22
167	2,489189E+22	2,489096E+22	3,071620E+21	3,072161E+21	4,978285E+22	6,143781E+21	5,592663E+22
168	2,489047E+22	2,489060E+22	3,072217E+21	3,071854E+21	4,978106E+22	6,144071E+21	5,592514E+22
169	2,488949E+22	2,489058E+22	3,072260E+21	3,072385E+21	4,978006E+22	6,144646E+21	5,592471E+22
170	2,489000E+22	2,488876E+22	3,072200E+21	3,072441E+21	4,977876E+22	6,144641E+21	5,592340E+22
171	2,488839E+22	2,488912E+22	3,072771E+21	3,072169E+21	4,977751E+22	6,144940E+21	5,592245E+22
172	2,488855E+22	2,488868E+22	3,072365E+21	3,072764E+21	4,977723E+22	6,145129E+21	5,592236E+22
173	2,488867E+22	2,488776E+22	3,072449E+21	3,072453E+21	4,977643E+22	6,144902E+21	5,592133E+22
174	2,488764E+22	2,488909E+22	3,072708E+21	3,072371E+21	4,977673E+22	6,145080E+21	5,592181E+22
175	2,488924E+22	2,488857E+22	3,072125E+21	3,072666E+21	4,977781E+22	6,144791E+21	5,592261E+22
176	2,488939E+22	2,488889E+22	3,072363E+21	3,072008E+21	4,977828E+22	6,144372E+21	5,592265E+22
177	2,488919E+22	2,489036E+22	3,072298E+21	3,072127E+21	4,977955E+22	6,144425E+21	5,592398E+22
178	2,489074E+22	2,488987E+22	3,071846E+21	3,072132E+21	4,978062E+22	6,143978E+21	5,592459E+22
179	2,488999E+22	2,489087E+22	3,072221E+21	3,071656E+21	4,978086E+22	6,143877E+21	5,592474E+22
180	2,489041E+22	2,489123E+22	3,071834E+21	3,072137E+21	4,978164E+22	6,143971E+21	5,592561E+22
181	2,489137E+22	2,489030E+22	3,071716E+21	3,071887E+21	4,978167E+22	6,143603E+21	5,592527E+22
182	2,489041E+22	2,489131E+22	3,072155E+21	3,071696E+21	4,978171E+22	6,143852E+21	5,592556E+22
183	2,489133E+22	2,489072E+22	3,071707E+21	3,072204E+21	4,978205E+22	6,143910E+21	5,592596E+22
184	2,489096E+22	2,489000E+22	3,072022E+21	3,071885E+21	4,978096E+22	6,143907E+21	5,592487E+22
185	2,488922E+22	2,489065E+22	3,072379E+21	3,072169E+21	4,977987E+22	6,144548E+21	5,592442E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,488982E+22	2,488916E+22	3,072097E+21	3,072597E+21	4,977898E+22	6,144695E+21	5,592367E+22
187	2,488852E+22	2,488859E+22	3,072719E+21	3,072283E+21	4,977711E+22	6,145002E+21	5,592211E+22
188	2,488765E+22	2,488840E+22	3,072685E+21	3,072791E+21	4,977605E+22	6,145476E+21	5,592152E+22
189	2,488817E+22	2,488677E+22	3,072568E+21	3,072837E+21	4,977494E+22	6,145405E+21	5,592034E+22
190	2,488645E+22	2,488731E+22	3,073124E+21	3,072602E+21	4,977376E+22	6,145726E+21	5,591949E+22
191	2,488678E+22	2,488704E+22	3,072699E+21	3,073148E+21	4,977383E+22	6,145848E+21	5,591967E+22
192	2,488721E+22	2,488622E+22	3,072773E+21	3,072807E+21	4,977343E+22	6,145580E+21	5,591901E+22
193	2,488609E+22	2,488754E+22	3,073057E+21	3,072671E+21	4,977363E+22	6,145727E+21	5,591936E+22
194	2,488788E+22	2,488718E+22	3,072494E+21	3,072926E+21	4,977506E+22	6,145420E+21	5,592048E+22
195	2,488794E+22	2,488749E+22	3,072746E+21	3,072309E+21	4,977544E+22	6,145055E+21	5,592049E+22
196	2,488756E+22	2,488884E+22	3,072607E+21	3,072485E+21	4,977640E+22	6,145092E+21	5,592149E+22
197	2,488908E+22	2,488829E+22	3,072128E+21	3,072514E+21	4,977737E+22	6,144642E+21	5,592201E+22
198	2,488839E+22	2,488916E+22	3,072535E+21	3,072049E+21	4,977755E+22	6,144584E+21	5,592213E+22
199	2,488907E+22	2,488959E+22	3,072158E+21	3,072452E+21	4,977866E+22	6,144610E+21	5,592327E+22
200	2,489014E+22	2,488870E+22	3,072060E+21	3,072199E+21	4,977884E+22	6,144258E+21	5,592310E+22
201	2,488865E+22	2,488972E+22	3,072549E+21	3,072043E+21	4,977837E+22	6,144592E+21	5,592297E+22
202	2,488942E+22	2,488923E+22	3,072141E+21	3,072597E+21	4,977865E+22	6,144738E+21	5,592339E+22
203	2,488893E+22	2,488826E+22	3,072499E+21	3,072343E+21	4,977720E+22	6,144841E+21	5,592204E+22
204	2,488723E+22	2,488863E+22	3,072804E+21	3,072626E+21	4,977587E+22	6,145430E+21	5,592130E+22
205	2,488800E+22	2,488708E+22	3,072493E+21	3,073017E+21	4,977508E+22	6,145510E+21	5,592059E+22
206	2,488669E+22	2,488651E+22	3,073132E+21	3,072705E+21	4,977320E+22	6,145837E+21	5,591904E+22
207	2,488588E+22	2,488657E+22	3,073068E+21	3,073177E+21	4,977245E+22	6,146245E+21	5,591870E+22
208	2,488639E+22	2,488505E+22	3,072929E+21	3,073255E+21	4,977145E+22	6,146184E+21	5,591763E+22
209	2,488444E+22	2,488555E+22	3,073503E+21	3,073018E+21	4,976999E+22	6,146521E+21	5,591651E+22
210	2,488511E+22	2,488539E+22	3,073102E+21	3,073503E+21	4,977050E+22	6,146605E+21	5,591711E+22
211	2,488575E+22	2,488459E+22	3,073180E+21	3,073127E+21	4,977035E+22	6,146306E+21	5,591665E+22
212	2,488470E+22	2,488589E+22	3,073391E+21	3,072960E+21	4,977059E+22	6,146350E+21	5,591694E+22
213	2,488638E+22	2,488573E+22	3,072794E+21	3,073222E+21	4,977211E+22	6,146015E+21	5,591812E+22
214	2,488623E+22	2,488610E+22	3,073050E+21	3,072673E+21	4,977233E+22	6,145724E+21	5,591806E+22
215	2,488595E+22	2,488742E+22	3,072908E+21	3,072825E+21	4,977337E+22	6,145732E+21	5,591910E+22
216	2,488767E+22	2,488681E+22	3,072434E+21	3,072851E+21	4,977448E+22	6,145285E+21	5,591976E+22
217	2,488685E+22	2,488753E+22	3,072879E+21	3,072373E+21	4,977438E+22	6,145252E+21	5,591963E+22
218	2,488763E+22	2,488803E+22	3,072559E+21	3,072762E+21	4,977566E+22	6,145321E+21	5,592098E+22
219	2,488854E+22	2,488715E+22	3,072484E+21	3,072587E+21	4,977570E+22	6,145071E+21	5,592077E+22
220	2,488680E+22	2,488795E+22	3,072922E+21	3,072488E+21	4,977475E+22	6,145409E+21	5,592016E+22
221	2,488748E+22	2,488737E+22	3,072523E+21	3,073057E+21	4,977485E+22	6,145580E+21	5,592043E+22
222	2,488705E+22	2,488628E+22	3,072905E+21	3,072808E+21	4,977333E+22	6,145714E+21	5,591904E+22
223	2,488554E+22	2,488665E+22	3,073210E+21	3,073003E+21	4,977219E+22	6,146213E+21	5,591840E+22
224	2,488634E+22	2,488521E+22	3,072896E+21	3,073379E+21	4,977155E+22	6,146275E+21	5,591782E+22
225	2,488462E+22	2,488467E+22	3,073550E+21	3,073096E+21	4,976929E+22	6,146646E+21	5,591594E+22
226	2,488383E+22	2,488485E+22	3,073509E+21	3,073578E+21	4,976868E+22	6,147087E+21	5,591577E+22
227	2,488445E+22	2,488331E+22	3,073374E+21	3,073690E+21	4,976776E+22	6,147063E+21	5,591483E+22
228	2,488272E+22	2,488367E+22	3,073864E+21	3,073414E+21	4,976639E+22	6,147278E+21	5,591367E+22
229	2,488366E+22	2,488365E+22	3,073446E+21	3,073839E+21	4,976731E+22	6,147285E+21	5,591460E+22
230	2,488431E+22	2,488301E+22	3,073518E+21	3,073456E+21	4,976733E+22	6,146974E+21	5,591430E+22
231	2,488326E+22	2,488452E+22	3,073698E+21	3,073262E+21	4,976778E+22	6,146960E+21	5,591474E+22
232	2,488481E+22	2,488443E+22	3,073084E+21	3,073555E+21	4,976924E+22	6,146639E+21	5,591588E+22
233	2,488440E+22	2,488459E+22	3,073378E+21	3,073037E+21	4,976899E+22	6,146415E+21	5,591541E+22
234	2,488443E+22	2,488587E+22	3,073279E+21	3,073149E+21	4,977030E+22	6,146428E+21	5,591673E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
235	2,488629E+22	2,488518E+22	3,072826E+21	3,073182E+21	4,977148E+22	6,146009E+21	5,591749E+22
236	2,488543E+22	2,488580E+22	3,073207E+21	3,072712E+21	4,977123E+22	6,145918E+21	5,591715E+22
237	2,488609E+22	2,488640E+22	3,072888E+21	3,073129E+21	4,977249E+22	6,146017E+21	5,591851E+22
238	2,488671E+22	2,488553E+22	3,072838E+21	3,073018E+21	4,977224E+22	6,145855E+21	5,591810E+22
239	2,488506E+22	2,488628E+22	3,073288E+21	3,072893E+21	4,977133E+22	6,146181E+21	5,591751E+22
240	2,488579E+22	2,488563E+22	3,072912E+21	3,073433E+21	4,977142E+22	6,146344E+21	5,591776E+22
241	2,488512E+22	2,488438E+22	3,073350E+21	3,073189E+21	4,976951E+22	6,146539E+21	5,591605E+22
242	2,488368E+22	2,488480E+22	3,073696E+21	3,073369E+21	4,976848E+22	6,147065E+21	5,591555E+22
243	2,488432E+22	2,488338E+22	3,073380E+21	3,073826E+21	4,976769E+22	6,147205E+21	5,591490E+22
244	2,488251E+22	2,488264E+22	3,073941E+21	3,073580E+21	4,976515E+22	6,147521E+21	5,591267E+22
245	2,488192E+22	2,488283E+22	3,073893E+21	3,074040E+21	4,976475E+22	6,147933E+21	5,591268E+22
246	2,488275E+22	2,488141E+22	3,073753E+21	3,074113E+21	4,976416E+22	6,147866E+21	5,591203E+22
247	2,488134E+22	2,488197E+22	3,074210E+21	3,073737E+21	4,976332E+22	6,147947E+21	5,591126E+22
248	2,488226E+22	2,488221E+22	3,073782E+21	3,074120E+21	4,976448E+22	6,147901E+21	5,591238E+22
249	2,488249E+22	2,488165E+22	3,073865E+21	3,073777E+21	4,976414E+22	6,147642E+21	5,591178E+22
250	2,488145E+22	2,488317E+22	3,074071E+21	3,073587E+21	4,976462E+22	6,147659E+21	5,591227E+22
251	2,488310E+22	2,488297E+22	3,073462E+21	3,073923E+21	4,976607E+22	6,147385E+21	5,591345E+22
252	2,488290E+22	2,488282E+22	3,073677E+21	3,073388E+21	4,976573E+22	6,147065E+21	5,591279E+22
253	2,488317E+22	2,488411E+22	3,073592E+21	3,073473E+21	4,976728E+22	6,147065E+21	5,591435E+22
254	2,488497E+22	2,488361E+22	3,073147E+21	3,073530E+21	4,976858E+22	6,146677E+21	5,591525E+22
255	2,488405E+22	2,488434E+22	3,073508E+21	3,073066E+21	4,976838E+22	6,146574E+21	5,591496E+22
256	2,488447E+22	2,488498E+22	3,073218E+21	3,073496E+21	4,976945E+22	6,146714E+21	5,591616E+22
257	2,488477E+22	2,488389E+22	3,073238E+21	3,073416E+21	4,976865E+22	6,146654E+21	5,591531E+22
258	2,488326E+22	2,488452E+22	3,073758E+21	3,073253E+21	4,976778E+22	6,147011E+21	5,591479E+22
259	2,488396E+22	2,488380E+22	3,073406E+21	3,073819E+21	4,976776E+22	6,147225E+21	5,591499E+22
260	2,488315E+22	2,488232E+22	3,073773E+21	3,073613E+21	4,976548E+22	6,147387E+21	5,591286E+22
261	2,488168E+22	2,488276E+22	3,074107E+21	3,073834E+21	4,976444E+22	6,147941E+21	5,591238E+22
262	2,488223E+22	2,488140E+22	3,073780E+21	3,074326E+21	4,976363E+22	6,148106E+21	5,591174E+22
263	2,488076E+22	2,488073E+22	3,074299E+21	3,074026E+21	4,976150E+22	6,148325E+21	5,590982E+22
264	2,488040E+22	2,488109E+22	3,074247E+21	3,074401E+21	4,976148E+22	6,148648E+21	5,591013E+22
265	2,488107E+22	2,487977E+22	3,074150E+21	3,074445E+21	4,976084E+22	6,148595E+21	5,590944E+22
266	2,487977E+22	2,488052E+22	3,074634E+21	3,074036E+21	4,976029E+22	6,148670E+21	5,590896E+22
267	2,488047E+22	2,488082E+22	3,074195E+21	3,074476E+21	4,976129E+22	6,148671E+21	5,590996E+22
268	2,488057E+22	2,487997E+22	3,074192E+21	3,074174E+21	4,976054E+22	6,148366E+21	5,590891E+22
269	2,487985E+22	2,488133E+22	3,074386E+21	3,073971E+21	4,976119E+22	6,148357E+21	5,590955E+22
270	2,488166E+22	2,488121E+22	3,073773E+21	3,074272E+21	4,976287E+22	6,148045E+21	5,591091E+22
271	2,488181E+22	2,488123E+22	3,073947E+21	3,073679E+21	4,976305E+22	6,147625E+21	5,591067E+22
272	2,488198E+22	2,488276E+22	3,073876E+21	3,073739E+21	4,976475E+22	6,147614E+21	5,591236E+22
273	2,488325E+22	2,488233E+22	3,073493E+21	3,073858E+21	4,976558E+22	6,147350E+21	5,591293E+22
274	2,488228E+22	2,488300E+22	3,073920E+21	3,073414E+21	4,976528E+22	6,147334E+21	5,591261E+22
275	2,488259E+22	2,488345E+22	3,073670E+21	3,073888E+21	4,976604E+22	6,147558E+21	5,591360E+22
276	2,488288E+22	2,488195E+22	3,073643E+21	3,073829E+21	4,976483E+22	6,147472E+21	5,591231E+22
277	2,488155E+22	2,488240E+22	3,074181E+21	3,073674E+21	4,976395E+22	6,147855E+21	5,591181E+22
278	2,488208E+22	2,488179E+22	3,073825E+21	3,074274E+21	4,976387E+22	6,148099E+21	5,591197E+22
279	2,488132E+22	2,488038E+22	3,074133E+21	3,074092E+21	4,976170E+22	6,148226E+21	5,590992E+22
280	2,487981E+22	2,488088E+22	3,074466E+21	3,074288E+21	4,976069E+22	6,148754E+21	5,590945E+22
281	2,488027E+22	2,487953E+22	3,074197E+21	3,074763E+21	4,975980E+22	6,148960E+21	5,590876E+22
282	2,487912E+22	2,487897E+22	3,074757E+21	3,074374E+21	4,975809E+22	6,149130E+21	5,590722E+22
283	2,487875E+22	2,487950E+22	3,074717E+21	3,074732E+21	4,975825E+22	6,149449E+21	5,590770E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
284	2,487924E+22	2,487806E+22	3,074536E+21	3,074793E+21	4,975730E+22	6,149329E+21	5,590663E+22
285	2,487790E+22	2,487880E+22	3,074998E+21	3,074419E+21	4,975670E+22	6,149417E+21	5,590612E+22
286	2,487855E+22	2,487916E+22	3,074533E+21	3,074870E+21	4,975771E+22	6,149403E+21	5,590711E+22
287	2,487908E+22	2,487828E+22	3,074465E+21	3,074536E+21	4,975736E+22	6,149001E+21	5,590636E+22
288	2,487865E+22	2,487977E+22	3,074651E+21	3,074255E+21	4,975841E+22	6,148906E+21	5,590732E+22
289	2,488035E+22	2,487977E+22	3,074100E+21	3,074552E+21	4,976012E+22	6,148651E+21	5,590877E+22
290	2,488051E+22	2,488000E+22	3,074309E+21	3,073953E+21	4,976051E+22	6,148262E+21	5,590877E+22
291	2,488036E+22	2,488158E+22	3,074258E+21	3,074089E+21	4,976194E+22	6,148348E+21	5,591029E+22
292	2,488135E+22	2,488074E+22	3,073844E+21	3,074261E+21	4,976209E+22	6,148106E+21	5,591020E+22
293	2,488058E+22	2,488110E+22	3,074307E+21	3,073839E+21	4,976168E+22	6,148147E+21	5,590983E+22
294	2,488085E+22	2,488152E+22	3,074071E+21	3,074288E+21	4,976238E+22	6,148359E+21	5,591074E+22
295	2,488135E+22	2,488000E+22	3,074003E+21	3,074228E+21	4,976136E+22	6,148231E+21	5,590959E+22
296	2,487991E+22	2,488056E+22	3,074532E+21	3,074060E+21	4,976047E+22	6,148592E+21	5,590906E+22
297	2,488001E+22	2,488001E+22	3,074233E+21	3,074711E+21	4,976002E+22	6,148944E+21	5,590897E+22
298	2,487939E+22	2,487866E+22	3,074580E+21	3,074513E+21	4,975804E+22	6,149093E+21	5,590714E+22
299	2,487794E+22	2,487914E+22	3,074933E+21	3,074704E+21	4,975708E+22	6,149637E+21	5,590672E+22
300	2,487838E+22	2,487758E+22	3,074635E+21	3,075157E+21	4,975596E+22	6,149791E+21	5,590575E+22
301	2,487746E+22	2,487702E+22	3,075195E+21	3,074763E+21	4,975448E+22	6,149958E+21	5,590444E+22
302	2,487685E+22	2,487773E+22	3,075130E+21	3,075118E+21	4,975457E+22	6,150247E+21	5,590482E+22
303	2,487742E+22	2,487636E+22	3,074860E+21	3,075208E+21	4,975377E+22	6,150068E+21	5,590384E+22
304	2,487619E+22	2,487708E+22	3,075287E+21	3,074792E+21	4,975327E+22	6,150079E+21	5,590335E+22
305	2,487684E+22	2,487747E+22	3,074869E+21	3,075217E+21	4,975432E+22	6,150086E+21	5,590440E+22
306	2,487778E+22	2,487679E+22	3,074820E+21	3,074810E+21	4,975457E+22	6,149629E+21	5,590420E+22
307	2,487737E+22	2,487845E+22	3,075014E+21	3,074539E+21	4,975582E+22	6,149553E+21	5,590537E+22
308	2,487878E+22	2,487836E+22	3,074430E+21	3,074872E+21	4,975713E+22	6,149301E+21	5,590643E+22
309	2,487893E+22	2,487848E+22	3,074645E+21	3,074333E+21	4,975741E+22	6,148978E+21	5,590639E+22
310	2,487859E+22	2,488002E+22	3,074608E+21	3,074472E+21	4,975861E+22	6,149080E+21	5,590769E+22
311	2,487984E+22	2,487902E+22	3,074153E+21	3,074647E+21	4,975885E+22	6,148799E+21	5,590765E+22
312	2,487916E+22	2,487932E+22	3,074631E+21	3,074180E+21	4,975848E+22	6,148811E+21	5,590729E+22
313	2,487919E+22	2,487978E+22	3,074473E+21	3,074649E+21	4,975897E+22	6,149122E+21	5,590809E+22
314	2,487963E+22	2,487837E+22	3,074439E+21	3,074605E+21	4,975801E+22	6,149044E+21	5,590705E+22
315	2,487795E+22	2,487893E+22	3,074973E+21	3,074508E+21	4,975688E+22	6,149482E+21	5,590636E+22
316	2,487789E+22	2,487801E+22	3,074660E+21	3,075178E+21	4,975590E+22	6,149837E+21	5,590574E+22
317	2,487756E+22	2,487650E+22	3,075027E+21	3,074967E+21	4,975406E+22	6,149994E+21	5,590406E+22
318	2,487611E+22	2,487717E+22	3,075378E+21	3,075098E+21	4,975328E+22	6,150476E+21	5,590376E+22
319	2,487672E+22	2,487571E+22	3,075022E+21	3,075542E+21	4,975243E+22	6,150564E+21	5,590299E+22
320	2,487567E+22	2,487531E+22	3,075546E+21	3,075131E+21	4,975098E+22	6,150677E+21	5,590166E+22
321	2,487475E+22	2,487609E+22	3,075510E+21	3,075510E+21	4,975084E+22	6,151020E+21	5,590186E+22
322	2,487557E+22	2,487478E+22	3,075244E+21	3,075569E+21	4,975035E+22	6,150813E+21	5,590116E+22
323	2,487461E+22	2,487552E+22	3,075649E+21	3,075142E+21	4,975012E+22	6,150791E+21	5,590092E+22
324	2,487536E+22	2,487574E+22	3,075207E+21	3,075537E+21	4,975110E+22	6,150744E+21	5,590184E+22
325	2,487656E+22	2,487516E+22	3,075162E+21	3,075139E+21	4,975172E+22	6,150301E+21	5,590202E+22
326	2,487589E+22	2,487706E+22	3,075340E+21	3,074873E+21	4,975295E+22	6,150213E+21	5,590317E+22
327	2,487728E+22	2,487694E+22	3,074706E+21	3,075246E+21	4,975422E+22	6,149952E+21	5,590417E+22
328	2,487744E+22	2,487695E+22	3,074922E+21	3,074683E+21	4,975439E+22	6,149605E+21	5,590400E+22
329	2,487694E+22	2,487839E+22	3,074970E+21	3,074803E+21	4,975533E+22	6,149774E+21	5,590511E+22
330	2,487836E+22	2,487748E+22	3,074560E+21	3,074941E+21	4,975584E+22	6,149502E+21	5,590534E+22
331	2,487758E+22	2,487776E+22	3,075049E+21	3,074524E+21	4,975534E+22	6,149573E+21	5,590491E+22
332	2,487717E+22	2,487797E+22	3,074888E+21	3,075052E+21	4,975514E+22	6,149940E+21	5,590508E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
333	2,487767E+22	2,487645E+22	3,074862E+21	3,075080E+21	4,975412E+22	6,149942E+21	5,590406E+22
334	2,487589E+22	2,487698E+22	3,075394E+21	3,074969E+21	4,975287E+22	6,150363E+21	5,590323E+22
335	2,487614E+22	2,487600E+22	3,075046E+21	3,075625E+21	4,975214E+22	6,150671E+21	5,590281E+22
336	2,487596E+22	2,487456E+22	3,075406E+21	3,075354E+21	4,975052E+22	6,150759E+21	5,590128E+22
337	2,487425E+22	2,487538E+22	3,075815E+21	3,075479E+21	4,974963E+22	6,151293E+21	5,590092E+22
338	2,487480E+22	2,487414E+22	3,075461E+21	3,075923E+21	4,974894E+22	6,151384E+21	5,590033E+22
339	2,487365E+22	2,487370E+22	3,075956E+21	3,075562E+21	4,974735E+22	6,151518E+21	5,589887E+22
340	2,487270E+22	2,487414E+22	3,075896E+21	3,075926E+21	4,974684E+22	6,151822E+21	5,589866E+22
341	2,487402E+22	2,487280E+22	3,075619E+21	3,075956E+21	4,974682E+22	6,151575E+21	5,589839E+22
342	2,487320E+22	2,487381E+22	3,075992E+21	3,075459E+21	4,974700E+22	6,151451E+21	5,589845E+22
343	2,487415E+22	2,487421E+22	3,075495E+21	3,075853E+21	4,974837E+22	6,151349E+21	5,589972E+22
344	2,487520E+22	2,487385E+22	3,075419E+21	3,075437E+21	4,974906E+22	6,150856E+21	5,589991E+22
345	2,487423E+22	2,487581E+22	3,075659E+21	3,075194E+21	4,975004E+22	6,150853E+21	5,590089E+22
346	2,487570E+22	2,487567E+22	3,075068E+21	3,075535E+21	4,975137E+22	6,150602E+21	5,590197E+22
347	2,487590E+22	2,487555E+22	3,075297E+21	3,075007E+21	4,975145E+22	6,150304E+21	5,590176E+22
348	2,487527E+22	2,487662E+22	3,075360E+21	3,075137E+21	4,975189E+22	6,150497E+21	5,590238E+22
349	2,487677E+22	2,487563E+22	3,074971E+21	3,075336E+21	4,975240E+22	6,150307E+21	5,590270E+22
350	2,487570E+22	2,487601E+22	3,075431E+21	3,074957E+21	4,975172E+22	6,150389E+21	5,590211E+22
351	2,487536E+22	2,487606E+22	3,075233E+21	3,075536E+21	4,975142E+22	6,150768E+21	5,590218E+22
352	2,487593E+22	2,487449E+22	3,075205E+21	3,075521E+21	4,975042E+22	6,150726E+21	5,590114E+22
353	2,487411E+22	2,487507E+22	3,075812E+21	3,075374E+21	4,974918E+22	6,151186E+21	5,590036E+22
354	2,487446E+22	2,487430E+22	3,075511E+21	3,075968E+21	4,974876E+22	6,151480E+21	5,590024E+22
355	2,487412E+22	2,487296E+22	3,075866E+21	3,075743E+21	4,974708E+22	6,151609E+21	5,589869E+22
356	2,487201E+22	2,487352E+22	3,076258E+21	3,075898E+21	4,974553E+22	6,152156E+21	5,589768E+22
357	2,487273E+22	2,487218E+22	3,075896E+21	3,076379E+21	4,974490E+22	6,152274E+21	5,589718E+22
358	2,487167E+22	2,487177E+22	3,076341E+21	3,075979E+21	4,974344E+22	6,152320E+21	5,589576E+22
359	2,487120E+22	2,487219E+22	3,076221E+21	3,076311E+21	4,974339E+22	6,152532E+21	5,589592E+22
360	2,487279E+22	2,487111E+22	3,075913E+21	3,076267E+21	4,974389E+22	6,152181E+21	5,589607E+22
361	2,487181E+22	2,487240E+22	3,076326E+21	3,075762E+21	4,974420E+22	6,152088E+21	5,589629E+22
362	2,487266E+22	2,487312E+22	3,075849E+21	3,076145E+21	4,974578E+22	6,151994E+21	5,589778E+22
363	2,487357E+22	2,487269E+22	3,075759E+21	3,075778E+21	4,974626E+22	6,151537E+21	5,589779E+22
364	2,487240E+22	2,487415E+22	3,076022E+21	3,075533E+21	4,974655E+22	6,151555E+21	5,589810E+22
365	2,487415E+22	2,487392E+22	3,075450E+21	3,075877E+21	4,974807E+22	6,151327E+21	5,589939E+22
366	2,487432E+22	2,487383E+22	3,075664E+21	3,075345E+21	4,974815E+22	6,151010E+21	5,589916E+22
367	2,487377E+22	2,487483E+22	3,075689E+21	3,075530E+21	4,974860E+22	6,151220E+21	5,589982E+22
368	2,487513E+22	2,487393E+22	3,075275E+21	3,075742E+21	4,974906E+22	6,151017E+21	5,590008E+22
369	2,487386E+22	2,487431E+22	3,075786E+21	3,075385E+21	4,974817E+22	6,151172E+21	5,589934E+22
370	2,487365E+22	2,487444E+22	3,075642E+21	3,075912E+21	4,974809E+22	6,151554E+21	5,589965E+22
371	2,487425E+22	2,487286E+22	3,075636E+21	3,075908E+21	4,974711E+22	6,151544E+21	5,589865E+22
372	2,487222E+22	2,487313E+22	3,076289E+21	3,075758E+21	4,974535E+22	6,152047E+21	5,589740E+22
373	2,487256E+22	2,487238E+22	3,076007E+21	3,076391E+21	4,974494E+22	6,152398E+21	5,589734E+22
374	2,487191E+22	2,487112E+22	3,076316E+21	3,076206E+21	4,974303E+22	6,152522E+21	5,589555E+22
375	2,487000E+22	2,487142E+22	3,076635E+21	3,076391E+21	4,974142E+22	6,153026E+21	5,589445E+22
376	2,487095E+22	2,487011E+22	3,076233E+21	3,076795E+21	4,974106E+22	6,153028E+21	5,589409E+22
377	2,487010E+22	2,486993E+22	3,076693E+21	3,076337E+21	4,974003E+22	6,153031E+21	5,589306E+22
378	2,486987E+22	2,487071E+22	3,076599E+21	3,076587E+21	4,974059E+22	6,153185E+21	5,589377E+22
379	2,487130E+22	2,486992E+22	3,076275E+21	3,076570E+21	4,974122E+22	6,152845E+21	5,589407E+22
380	2,486998E+22	2,487101E+22	3,076684E+21	3,076095E+21	4,974099E+22	6,152779E+21	5,589377E+22
381	2,487092E+22	2,487160E+22	3,076224E+21	3,076495E+21	4,974253E+22	6,152719E+21	5,589525E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,487183E+22	2,487114E+22	3,076102E+21	3,076122E+21	4,974297E+22	6,152224E+21	5,589519E+22
383	2,487102E+22	2,487234E+22	3,076319E+21	3,075890E+21	4,974336E+22	6,152209E+21	5,589557E+22
384	2,487285E+22	2,487220E+22	3,075736E+21	3,076202E+21	4,974504E+22	6,151939E+21	5,589698E+22
385	2,487284E+22	2,487227E+22	3,075984E+21	3,075712E+21	4,974511E+22	6,151697E+21	5,589680E+22
386	2,487218E+22	2,487342E+22	3,076047E+21	3,075901E+21	4,974560E+22	6,151948E+21	5,589755E+22
387	2,487341E+22	2,487246E+22	3,075652E+21	3,076153E+21	4,974588E+22	6,151806E+21	5,589768E+22
388	2,487199E+22	2,487241E+22	3,076212E+21	3,075786E+21	4,974440E+22	6,151999E+21	5,589640E+22
389	2,487195E+22	2,487252E+22	3,076121E+21	3,076293E+21	4,974447E+22	6,152414E+21	5,589688E+22
390	2,487236E+22	2,487103E+22	3,076109E+21	3,076300E+21	4,974339E+22	6,152409E+21	5,589580E+22
391	2,487027E+22	2,487115E+22	3,076714E+21	3,076217E+21	4,974142E+22	6,152931E+21	5,589435E+22
392	2,487047E+22	2,487045E+22	3,076392E+21	3,076846E+21	4,974092E+22	6,153238E+21	5,589416E+22
393	2,486980E+22	2,486914E+22	3,076713E+21	3,076668E+21	4,973894E+22	6,153381E+21	5,589233E+22
394	2,486821E+22	2,486959E+22	3,077039E+21	3,076776E+21	4,973780E+22	6,153815E+21	5,589161E+22
395	2,486939E+22	2,486844E+22	3,076618E+21	3,077154E+21	4,973783E+22	6,153772E+21	5,589161E+22
396	2,486846E+22	2,486814E+22	3,077092E+21	3,076676E+21	4,973660E+22	6,153768E+21	5,589037E+22
397	2,486829E+22	2,486919E+22	3,077004E+21	3,076935E+21	4,973748E+22	6,153939E+21	5,589142E+22
398	2,486946E+22	2,486854E+22	3,076636E+21	3,076941E+21	4,973800E+22	6,153577E+21	5,589158E+22
399	2,486834E+22	2,486930E+22	3,076988E+21	3,076495E+21	4,973764E+22	6,153483E+21	5,589112E+22
400	2,486945E+22	2,486988E+22	3,076502E+21	3,076818E+21	4,973933E+22	6,153321E+21	5,589265E+22
401	2,487044E+22	2,486951E+22	3,076403E+21	3,076430E+21	4,973995E+22	6,152833E+21	5,589278E+22
402	2,486977E+22	2,487092E+22	3,076651E+21	3,076165E+21	4,974070E+22	6,152816E+21	5,589351E+22
403	2,487139E+22	2,487094E+22	3,076071E+21	3,076530E+21	4,974233E+22	6,152602E+21	5,589493E+22
404	2,487102E+22	2,487072E+22	3,076351E+21	3,076092E+21	4,974174E+22	6,152443E+21	5,589418E+22
405	2,487046E+22	2,487176E+22	3,076461E+21	3,076292E+21	4,974221E+22	6,152753E+21	5,589496E+22
406	2,487158E+22	2,487078E+22	3,076075E+21	3,076543E+21	4,974236E+22	6,152617E+21	5,589498E+22
407	2,487039E+22	2,487042E+22	3,076615E+21	3,076212E+21	4,974081E+22	6,152826E+21	5,589364E+22
408	2,487024E+22	2,487058E+22	3,076527E+21	3,076684E+21	4,974082E+22	6,153211E+21	5,589404E+22
409	2,487038E+22	2,486923E+22	3,076529E+21	3,076755E+21	4,973962E+22	6,153284E+21	5,589290E+22
410	2,486827E+22	2,486935E+22	3,077133E+21	3,076669E+21	4,973762E+22	6,153803E+21	5,589142E+22
411	2,486843E+22	2,486859E+22	3,076804E+21	3,077298E+21	4,973702E+22	6,154102E+21	5,589112E+22
412	2,486783E+22	2,486701E+22	3,077136E+21	3,077086E+21	4,973484E+22	6,154222E+21	5,588906E+22
413	2,486659E+22	2,486761E+22	3,077478E+21	3,077139E+21	4,973421E+22	6,154617E+21	5,588882E+22
414	2,486769E+22	2,486680E+22	3,077040E+21	3,077504E+21	4,973450E+22	6,154543E+21	5,588904E+22
415	2,486684E+22	2,486647E+22	3,077436E+21	3,077071E+21	4,973331E+22	6,154508E+21	5,588782E+22
416	2,486659E+22	2,486762E+22	3,077310E+21	3,077289E+21	4,973421E+22	6,154599E+21	5,588881E+22
417	2,486776E+22	2,486703E+22	3,076944E+21	3,077294E+21	4,973479E+22	6,154238E+21	5,588902E+22
418	2,486692E+22	2,486782E+22	3,077302E+21	3,076788E+21	4,973474E+22	6,154090E+21	5,588883E+22
419	2,486811E+22	2,486849E+22	3,076825E+21	3,077095E+21	4,973660E+22	6,153920E+21	5,589052E+22
420	2,486894E+22	2,486792E+22	3,076764E+21	3,076740E+21	4,973686E+22	6,153503E+21	5,589037E+22
421	2,486827E+22	2,486945E+22	3,077030E+21	3,076521E+21	4,973772E+22	6,153550E+21	5,589127E+22
422	2,486959E+22	2,486950E+22	3,076448E+21	3,076933E+21	4,973909E+22	6,153381E+21	5,589247E+22
423	2,486938E+22	2,486885E+22	3,076690E+21	3,076537E+21	4,973824E+22	6,153228E+21	5,589146E+22
424	2,486892E+22	2,486988E+22	3,076804E+21	3,076665E+21	4,973880E+22	6,153470E+21	5,589227E+22
425	2,486997E+22	2,486899E+22	3,076462E+21	3,076916E+21	4,973896E+22	6,153379E+21	5,589234E+22
426	2,486873E+22	2,486874E+22	3,077038E+21	3,076586E+21	4,973747E+22	6,153624E+21	5,589109E+22
427	2,486828E+22	2,486898E+22	3,076945E+21	3,077095E+21	4,973726E+22	6,154040E+21	5,589130E+22
428	2,486810E+22	2,486724E+22	3,076977E+21	3,077218E+21	4,973534E+22	6,154195E+21	5,588954E+22
429	2,486624E+22	2,486729E+22	3,077589E+21	3,077115E+21	4,973353E+22	6,154704E+21	5,588823E+22
430	2,486648E+22	2,486662E+22	3,077246E+21	3,077713E+21	4,973310E+22	6,154959E+21	5,588805E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
431	2,486624E+22	2,486490E+22	3,077522E+21	3,077507E+21	4,973114E+22	6,155029E+21	5,588617E+22
432	2,486507E+22	2,486580E+22	3,077838E+21	3,077502E+21	4,973087E+22	6,155340E+21	5,588621E+22
433	2,486595E+22	2,486530E+22	3,077400E+21	3,077896E+21	4,973125E+22	6,155295E+21	5,588654E+22
434	2,486515E+22	2,486506E+22	3,077782E+21	3,077444E+21	4,973020E+22	6,155227E+21	5,588543E+22
435	2,486491E+22	2,486617E+22	3,077645E+21	3,077615E+21	4,973108E+22	6,155259E+21	5,588634E+22
436	2,486608E+22	2,486532E+22	3,077305E+21	3,077601E+21	4,973140E+22	6,154906E+21	5,588630E+22
437	2,486553E+22	2,486619E+22	3,077674E+21	3,077074E+21	4,973173E+22	6,154748E+21	5,588647E+22
438	2,486654E+22	2,486708E+22	3,077196E+21	3,077409E+21	4,973362E+22	6,154605E+21	5,588823E+22
439	2,486742E+22	2,486633E+22	3,077069E+21	3,077142E+21	4,973375E+22	6,154211E+21	5,588796E+22
440	2,486671E+22	2,486784E+22	3,077319E+21	3,076899E+21	4,973455E+22	6,154218E+21	5,588877E+22
441	2,486799E+22	2,486793E+22	3,076773E+21	3,077316E+21	4,973592E+22	6,154089E+21	5,589001E+22
442	2,486800E+22	2,486726E+22	3,077033E+21	3,076883E+21	4,973527E+22	6,153916E+21	5,588918E+22
443	2,486740E+22	2,486831E+22	3,077187E+21	3,076983E+21	4,973571E+22	6,154170E+21	5,588988E+22
444	2,486810E+22	2,486722E+22	3,076907E+21	3,077296E+21	4,973532E+22	6,154203E+21	5,588953E+22
445	2,486675E+22	2,486695E+22	3,077503E+21	3,077021E+21	4,973370E+22	6,154525E+21	5,588823E+22
446	2,486602E+22	2,486712E+22	3,077412E+21	3,077569E+21	4,973314E+22	6,154981E+21	5,588812E+22
447	2,486613E+22	2,486494E+22	3,077386E+21	3,077720E+21	4,973107E+22	6,155106E+21	5,588618E+22
448	2,486453E+22	2,486506E+22	3,077964E+21	3,077528E+21	4,972960E+22	6,155492E+21	5,588509E+22
449	2,486483E+22	2,486471E+22	3,077647E+21	3,078103E+21	4,972954E+22	6,155750E+21	5,588529E+22
450	2,486465E+22	2,486331E+22	3,077912E+21	3,077877E+21	4,972796E+22	6,155789E+21	5,588375E+22
451	2,486326E+22	2,486442E+22	3,078214E+21	3,077857E+21	4,972769E+22	6,156070E+21	5,588376E+22
452	2,486390E+22	2,486368E+22	3,077809E+21	3,078271E+21	4,972759E+22	6,156079E+21	5,588367E+22
453	2,486334E+22	2,486342E+22	3,078185E+21	3,077794E+21	4,972676E+22	6,155980E+21	5,588274E+22
454	2,486318E+22	2,486457E+22	3,078031E+21	3,077941E+21	4,972774E+22	6,155972E+21	5,588371E+22
455	2,486465E+22	2,486346E+22	3,077630E+21	3,077961E+21	4,972812E+22	6,155591E+21	5,588371E+22
456	2,486422E+22	2,486455E+22	3,077955E+21	3,077415E+21	4,972878E+22	6,155370E+21	5,588415E+22
457	2,486506E+22	2,486565E+22	3,077488E+21	3,077792E+21	4,973071E+22	6,155280E+21	5,588599E+22
458	2,486599E+22	2,486493E+22	3,077361E+21	3,077515E+21	4,973091E+22	6,154876E+21	5,588579E+22
459	2,486530E+22	2,486641E+22	3,077626E+21	3,077213E+21	4,973170E+22	6,154839E+21	5,588654E+22
460	2,486640E+22	2,486625E+22	3,077165E+21	3,077619E+21	4,973264E+22	6,154784E+21	5,588742E+22
461	2,486644E+22	2,486566E+22	3,077471E+21	3,077200E+21	4,973210E+22	6,154671E+21	5,588677E+22
462	2,486546E+22	2,486675E+22	3,077647E+21	3,077357E+21	4,973221E+22	6,155005E+21	5,588721E+22
463	2,486605E+22	2,486528E+22	3,077318E+21	3,077775E+21	4,973133E+22	6,155093E+21	5,588642E+22
464	2,486475E+22	2,486488E+22	3,077882E+21	3,077490E+21	4,972963E+22	6,155373E+21	5,588501E+22
465	2,486408E+22	2,486506E+22	3,077808E+21	3,078029E+21	4,972914E+22	6,155837E+21	5,588498E+22
466	2,486451E+22	2,486300E+22	3,077776E+21	3,078136E+21	4,972751E+22	6,155912E+21	5,588342E+22
467	2,486296E+22	2,486331E+22	3,078357E+21	3,077887E+21	4,972628E+22	6,156244E+21	5,588252E+22
468	2,486294E+22	2,486300E+22	3,078102E+21	3,078495E+21	4,972594E+22	6,156597E+21	5,588254E+22
469	2,486270E+22	2,486176E+22	3,078361E+21	3,078292E+21	4,972447E+22	6,156653E+21	5,588112E+22
470	2,486114E+22	2,486282E+22	3,078651E+21	3,078271E+21	4,972396E+22	6,156923E+21	5,588088E+22
471	2,486210E+22	2,486167E+22	3,078175E+21	3,078685E+21	4,972377E+22	6,156861E+21	5,588063E+22
472	2,486187E+22	2,486145E+22	3,078498E+21	3,078130E+21	4,972331E+22	6,156628E+21	5,587994E+22
473	2,486175E+22	2,486288E+22	3,078351E+21	3,078267E+21	4,972463E+22	6,156618E+21	5,588125E+22
474	2,486335E+22	2,486207E+22	3,077916E+21	3,078290E+21	4,972542E+22	6,156206E+21	5,588163E+22
475	2,486279E+22	2,486330E+22	3,078223E+21	3,077724E+21	4,972609E+22	6,155947E+21	5,588203E+22
476	2,486341E+22	2,486423E+22	3,077835E+21	3,078118E+21	4,972764E+22	6,155953E+21	5,588359E+22
477	2,486448E+22	2,486353E+22	3,077735E+21	3,077819E+21	4,972800E+22	6,155555E+21	5,588356E+22
478	2,486368E+22	2,486494E+22	3,078039E+21	3,077521E+21	4,972862E+22	6,155560E+21	5,588418E+22
479	2,486479E+22	2,486442E+22	3,077563E+21	3,077988E+21	4,972922E+22	6,155550E+21	5,588477E+22

1	14	15	16	17	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	2,486471E+22	2,486385E+22	3,077847E+21	3,077614E+21	4,972856E+22	6,155461E+21	5,588402E+22
481	2,486345E+22	2,486495E+22	3,078038E+21	3,077840E+21	4,972840E+22	6,155878E+21	5,588428E+22
482	2,486415E+22	2,486336E+22	3,077695E+21	3,078262E+21	4,972751E+22	6,155957E+21	5,588347E+22
483	2,486302E+22	2,486291E+22	3,078246E+21	3,077901E+21	4,972593E+22	6,156147E+21	5,588208E+22
484	2,486229E+22	2,486301E+22	3,078255E+21	3,078417E+21	4,972531E+22	6,156673E+21	5,588198E+22
485	2,486277E+22	2,486126E+22	3,078251E+21	3,078512E+21	4,972402E+22	6,156763E+21	5,588079E+22
486	2,486095E+22	2,486174E+22	3,078838E+21	3,078299E+21	4,972270E+22	6,157137E+21	5,587983E+22
487	2,486086E+22	2,486111E+22	3,078536E+21	3,078954E+21	4,972196E+22	6,157490E+21	5,587945E+22
488	2,486077E+22	2,485985E+22	3,078738E+21	3,078721E+21	4,972062E+22	6,157459E+21	5,587807E+22
489	2,485935E+22	2,486093E+22	3,079007E+21	3,078661E+21	4,972027E+22	6,157668E+21	5,587794E+22
490	2,486063E+22	2,485990E+22	3,078496E+21	3,079024E+21	4,972053E+22	6,157520E+21	5,587805E+22
491	2,486056E+22	2,485991E+22	3,078785E+21	3,078410E+21	4,972047E+22	6,157195E+21	5,587767E+22
492	2,486022E+22	2,486142E+22	3,078703E+21	3,078587E+21	4,972164E+22	6,157289E+21	5,587892E+22
493	2,486176E+22	2,486085E+22	3,078277E+21	3,078628E+21	4,972261E+22	6,156905E+21	5,587952E+22
494	2,486113E+22	2,486198E+22	3,078594E+21	3,078071E+21	4,972312E+22	6,156665E+21	5,587978E+22
495	2,486189E+22	2,486248E+22	3,078185E+21	3,078464E+21	4,972437E+22	6,156649E+21	5,588102E+22
496	2,486309E+22	2,486180E+22	3,078066E+21	3,078140E+21	4,972489E+22	6,156206E+21	5,588110E+22
497	2,486209E+22	2,486330E+22	3,078403E+21	3,077880E+21	4,972539E+22	6,156283E+21	5,588168E+22
498	2,486309E+22	2,486286E+22	3,077914E+21	3,078393E+21	4,972595E+22	6,156307E+21	5,588226E+22
499	2,486289E+22	2,486221E+22	3,078184E+21	3,078024E+21	4,972510E+22	6,156208E+21	5,588131E+22
500	2,486149E+22	2,486303E+22	3,078459E+21	3,078274E+21	4,972452E+22	6,156733E+21	5,588125E+22
501	2,486236E+22	2,486153E+22	3,078137E+21	3,078667E+21	4,972389E+22	6,156803E+21	5,588069E+22
502	2,486124E+22	2,486108E+22	3,078710E+21	3,078302E+21	4,972232E+22	6,157011E+21	5,587933E+22
503	2,486053E+22	2,486099E+22	3,078709E+21	3,078849E+21	4,972152E+22	6,157558E+21	5,587908E+22
504	2,486090E+22	2,485939E+22	3,078673E+21	3,078962E+21	4,972029E+22	6,157635E+21	5,587792E+22
505	2,485884E+22	2,485992E+22	3,079261E+21	3,078777E+21	4,971877E+22	6,158038E+21	5,587681E+22
506	2,485895E+22	2,485922E+22	3,078917E+21	3,079391E+21	4,971817E+22	6,158307E+21	5,587648E+22
507	2,485908E+22	2,485796E+22	3,079073E+21	3,079059E+21	4,971704E+22	6,158132E+21	5,587517E+22
508	2,485769E+22	2,485906E+22	3,079398E+21	3,078976E+21	4,971674E+22	6,158374E+21	5,587512E+22
509	2,485905E+22	2,485844E+22	3,078887E+21	3,079322E+21	4,971749E+22	6,158210E+21	5,587570E+22
510	2,485886E+22	2,485862E+22	3,079159E+21	3,078756E+21	4,971748E+22	6,157915E+21	5,587540E+22
511	2,485854E+22	2,485983E+22	3,079046E+21	3,078970E+21	4,971837E+22	6,158016E+21	5,587639E+22
512	2,486023E+22	2,485928E+22	3,078587E+21	3,078985E+21	4,971950E+22	6,157573E+21	5,587708E+22
513	2,485966E+22	2,486041E+22	3,078912E+21	3,078416E+21	4,972007E+22	6,157329E+21	5,587740E+22
514	2,486058E+22	2,486091E+22	3,078498E+21	3,078781E+21	4,972148E+22	6,157280E+21	5,587876E+22
515	2,486171E+22	2,486031E+22	3,078371E+21	3,078450E+21	4,972202E+22	6,156821E+21	5,587884E+22
516	2,486034E+22	2,486170E+22	3,078789E+21	3,078274E+21	4,972204E+22	6,157063E+21	5,587910E+22
517	2,486118E+22	2,486133E+22	3,078328E+21	3,078812E+21	4,972250E+22	6,157140E+21	5,587964E+22
518	2,486101E+22	2,486045E+22	3,078611E+21	3,078465E+21	4,972146E+22	6,157076E+21	5,587854E+22
519	2,485976E+22	2,486082E+22	3,078882E+21	3,078697E+21	4,972058E+22	6,157579E+21	5,587816E+22
520	2,486074E+22	2,485950E+22	3,078554E+21	3,079063E+21	4,972024E+22	6,157618E+21	5,587786E+22
521	2,485944E+22	2,485924E+22	3,079140E+21	3,078727E+21	4,971868E+22	6,157867E+21	5,587654E+22
522	2,485859E+22	2,485924E+22	3,079121E+21	3,079290E+21	4,971783E+22	6,158411E+21	5,587624E+22
523	2,485890E+22	2,485767E+22	3,079053E+21	3,079374E+21	4,971656E+22	6,158427E+21	5,587499E+22
524	2,485678E+22	2,485799E+22	3,079697E+21	3,079189E+21	4,971477E+22	6,158886E+21	5,587365E+22
525	2,485705E+22	2,485748E+22	3,079352E+21	3,079737E+21	4,971453E+22	6,159090E+21	5,587362E+22
526	2,485736E+22	2,485625E+22	3,079494E+21	3,079412E+21	4,971360E+22	6,158906E+21	5,587251E+22
527	2,485606E+22	2,485717E+22	3,079778E+21	3,079355E+21	4,971323E+22	6,159133E+21	5,587236E+22
528	2,485746E+22	2,485684E+22	3,079221E+21	3,079722E+21	4,971429E+22	6,158943E+21	5,587324E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
529	2,485721E+22	2,485710E+22	3,079473E+21	3,079169E+21	4,971431E+22	6,158642E+21	5,587295E+22
530	2,485716E+22	2,485826E+22	3,079333E+21	3,079328E+21	4,971541E+22	6,158661E+21	5,587407E+22
531	2,485899E+22	2,485777E+22	3,078852E+21	3,079245E+21	4,971676E+22	6,158096E+21	5,587486E+22
532	2,485827E+22	2,485887E+22	3,079267E+21	3,078697E+21	4,971714E+22	6,157964E+21	5,587510E+22
533	2,485898E+22	2,485964E+22	3,078887E+21	3,079069E+21	4,971862E+22	6,157956E+21	5,587658E+22
534	2,485988E+22	2,485895E+22	3,078772E+21	3,078833E+21	4,971883E+22	6,157605E+21	5,587644E+22
535	2,485848E+22	2,485982E+22	3,079180E+21	3,078711E+21	4,971830E+22	6,157891E+21	5,587619E+22
536	2,485946E+22	2,485938E+22	3,078708E+21	3,079236E+21	4,971884E+22	6,157944E+21	5,587678E+22
537	2,485931E+22	2,485850E+22	3,079000E+21	3,078882E+21	4,971781E+22	6,157882E+21	5,587569E+22
538	2,485824E+22	2,485891E+22	3,079263E+21	3,079091E+21	4,971715E+22	6,158354E+21	5,587550E+22
539	2,485906E+22	2,485777E+22	3,078936E+21	3,079439E+21	4,971683E+22	6,158375E+21	5,587521E+22
540	2,485737E+22	2,485749E+22	3,079601E+21	3,079185E+21	4,971486E+22	6,158786E+21	5,587365E+22
541	2,485637E+22	2,485758E+22	3,079601E+21	3,079723E+21	4,971395E+22	6,159324E+21	5,587328E+22
542	2,485679E+22	2,485579E+22	3,079524E+21	3,079819E+21	4,971258E+22	6,159342E+21	5,587192E+22
543	2,485490E+22	2,485571E+22	3,080124E+21	3,079602E+21	4,971061E+22	6,159726E+21	5,587034E+22
544	2,485537E+22	2,485543E+22	3,079742E+21	3,080117E+21	4,971081E+22	6,159859E+21	5,587067E+22
545	2,485565E+22	2,485451E+22	3,079853E+21	3,079812E+21	4,971015E+22	6,159665E+21	5,586982E+22
546	2,485450E+22	2,485558E+22	3,080081E+21	3,079752E+21	4,971008E+22	6,159833E+21	5,586991E+22
547	2,485598E+22	2,485540E+22	3,079498E+21	3,080051E+21	4,971138E+22	6,159548E+21	5,587093E+22
548	2,485573E+22	2,485562E+22	3,079805E+21	3,079490E+21	4,971135E+22	6,159295E+21	5,587064E+22
549	2,485571E+22	2,485699E+22	3,079693E+21	3,079567E+21	4,971271E+22	6,159260E+21	5,587197E+22
550	2,485757E+22	2,485647E+22	3,079230E+21	3,079526E+21	4,971404E+22	6,158756E+21	5,587279E+22
551	2,485669E+22	2,485718E+22	3,079640E+21	3,079047E+21	4,971387E+22	6,158687E+21	5,587255E+22
552	2,485722E+22	2,485804E+22	3,079250E+21	3,079476E+21	4,971526E+22	6,158725E+21	5,587399E+22
553	2,485805E+22	2,485721E+22	3,079128E+21	3,079284E+21	4,971526E+22	6,158412E+21	5,587367E+22
554	2,485693E+22	2,485786E+22	3,079506E+21	3,079130E+21	4,971479E+22	6,158636E+21	5,587343E+22
555	2,485803E+22	2,485753E+22	3,079035E+21	3,079569E+21	4,971557E+22	6,158604E+21	5,587417E+22
556	2,485769E+22	2,485671E+22	3,079414E+21	3,079252E+21	4,971441E+22	6,158666E+21	5,587307E+22
557	2,485632E+22	2,485745E+22	3,079723E+21	3,079453E+21	4,971377E+22	6,159176E+21	5,587295E+22
558	2,485693E+22	2,485622E+22	3,079417E+21	3,079887E+21	4,971314E+22	6,159304E+21	5,587245E+22
559	2,485516E+22	2,485538E+22	3,080071E+21	3,079671E+21	4,971054E+22	6,159742E+21	5,587028E+22
560	2,485433E+22	2,485545E+22	3,080040E+21	3,080173E+21	4,970979E+22	6,160213E+21	5,587000E+22
561	2,485489E+22	2,485367E+22	3,079936E+21	3,080252E+21	4,970856E+22	6,160188E+21	5,586875E+22
562	2,485336E+22	2,485365E+22	3,080474E+21	3,080006E+21	4,970701E+22	6,160480E+21	5,586749E+22
563	2,485386E+22	2,485373E+22	3,080059E+21	3,080471E+21	4,970759E+22	6,160530E+21	5,586812E+22
564	2,485393E+22	2,485299E+22	3,080213E+21	3,080213E+21	4,970692E+22	6,160426E+21	5,586735E+22
565	2,485282E+22	2,485429E+22	3,080456E+21	3,080080E+21	4,970711E+22	6,160536E+21	5,586765E+22
566	2,485443E+22	2,485401E+22	3,079885E+21	3,080360E+21	4,970844E+22	6,160244E+21	5,586869E+22
567	2,485424E+22	2,485390E+22	3,080174E+21	3,079786E+21	4,970814E+22	6,159961E+21	5,586810E+22
568	2,485422E+22	2,485541E+22	3,080051E+21	3,079860E+21	4,970963E+22	6,159911E+21	5,586954E+22
569	2,485580E+22	2,485497E+22	3,079579E+21	3,079889E+21	4,971077E+22	6,159468E+21	5,587023E+22
570	2,485505E+22	2,485554E+22	3,079932E+21	3,079459E+21	4,971059E+22	6,159392E+21	5,586998E+22
571	2,485566E+22	2,485636E+22	3,079535E+21	3,079838E+21	4,971202E+22	6,159373E+21	5,587139E+22
572	2,485647E+22	2,485549E+22	3,079480E+21	3,079669E+21	4,971196E+22	6,159150E+21	5,587111E+22
573	2,485541E+22	2,485633E+22	3,079896E+21	3,079444E+21	4,971174E+22	6,159340E+21	5,587108E+22
574	2,485644E+22	2,485599E+22	3,079476E+21	3,079932E+21	4,971242E+22	6,159408E+21	5,587183E+22
575	2,485580E+22	2,485486E+22	3,079865E+21	3,079696E+21	4,971066E+22	6,159561E+21	5,587022E+22
576	2,485422E+22	2,485560E+22	3,080177E+21	3,079933E+21	4,970982E+22	6,160109E+21	5,586993E+22
577	2,485473E+22	2,485419E+22	3,079871E+21	3,080387E+21	4,970892E+22	6,160258E+21	5,586918E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
578	2,485334E+22	2,485311E+22	3,080461E+21	3,080133E+21	4,970645E+22	6,160594E+21	5,586704E+22
579	2,485269E+22	2,485334E+22	3,080401E+21	3,080529E+21	4,970603E+22	6,160930E+21	5,586696E+22
580	2,485317E+22	2,485180E+22	3,080340E+21	3,080639E+21	4,970497E+22	6,160979E+21	5,586595E+22
581	2,485154E+22	2,485223E+22	3,080875E+21	3,080353E+21	4,970377E+22	6,161228E+21	5,586499E+22
582	2,485206E+22	2,485237E+22	3,080476E+21	3,080859E+21	4,970443E+22	6,161335E+21	5,586577E+22
583	2,485214E+22	2,485127E+22	3,080608E+21	3,080594E+21	4,970341E+22	6,161202E+21	5,586462E+22
584	2,485118E+22	2,485266E+22	3,080829E+21	3,080405E+21	4,970384E+22	6,161234E+21	5,586507E+22
585	2,485285E+22	2,485241E+22	3,080242E+21	3,080672E+21	4,970526E+22	6,160913E+21	5,586617E+22
586	2,485286E+22	2,485219E+22	3,080469E+21	3,080123E+21	4,970505E+22	6,160592E+21	5,586565E+22
587	2,485273E+22	2,485391E+22	3,080320E+21	3,080187E+21	4,970664E+22	6,160506E+21	5,586715E+22
588	2,485411E+22	2,485348E+22	3,079898E+21	3,080299E+21	4,970759E+22	6,160197E+21	5,586779E+22
589	2,485345E+22	2,485410E+22	3,080268E+21	3,079811E+21	4,970755E+22	6,160079E+21	5,586763E+22
590	2,485424E+22	2,485479E+22	3,079914E+21	3,080182E+21	4,970904E+22	6,160096E+21	5,586913E+22
591	2,485497E+22	2,485363E+22	3,079873E+21	3,080015E+21	4,970860E+22	6,159888E+21	5,586849E+22
592	2,485378E+22	2,485464E+22	3,080314E+21	3,079804E+21	4,970842E+22	6,160119E+21	5,586854E+22
593	2,485443E+22	2,485433E+22	3,079918E+21	3,080359E+21	4,970876E+22	6,160277E+21	5,586903E+22
594	2,485383E+22	2,485295E+22	3,080263E+21	3,080185E+21	4,970677E+22	6,160448E+21	5,586722E+22
595	2,485228E+22	2,485361E+22	3,080559E+21	3,080358E+21	4,970589E+22	6,160917E+21	5,586680E+22
596	2,485277E+22	2,485217E+22	3,080301E+21	3,080826E+21	4,970494E+22	6,161128E+21	5,586607E+22
597	2,485155E+22	2,485128E+22	3,080892E+21	3,080493E+21	4,970283E+22	6,161385E+21	5,586422E+22
598	2,485097E+22	2,485157E+22	3,080858E+21	3,080915E+21	4,970254E+22	6,161773E+21	5,586431E+22
599	2,485121E+22	2,484997E+22	3,080779E+21	3,081078E+21	4,970118E+22	6,161857E+21	5,586303E+22
600	2,484962E+22	2,485052E+22	3,081285E+21	3,080793E+21	4,970014E+22	6,162078E+21	5,586222E+22
601	2,485014E+22	2,485061E+22	3,080886E+21	3,081272E+21	4,970075E+22	6,162158E+21	5,586291E+22
602	2,485064E+22	2,484941E+22	3,080927E+21	3,080962E+21	4,970005E+22	6,161890E+21	5,586194E+22
603	2,484982E+22	2,485096E+22	3,081113E+21	3,080672E+21	4,970078E+22	6,161785E+21	5,586256E+22
604	2,485128E+22	2,485093E+22	3,080569E+21	3,080987E+21	4,970221E+22	6,161556E+21	5,586377E+22
605	2,485122E+22	2,485098E+22	3,080789E+21	3,080431E+21	4,970220E+22	6,161220E+21	5,586342E+22
606	2,485114E+22	2,485256E+22	3,080672E+21	3,080546E+21	4,970371E+22	6,161218E+21	5,586493E+22
607	2,485248E+22	2,485180E+22	3,080255E+21	3,080673E+21	4,970428E+22	6,160927E+21	5,586521E+22
608	2,485202E+22	2,485245E+22	3,080622E+21	3,080151E+21	4,970446E+22	6,160772E+21	5,586524E+22
609	2,485274E+22	2,485313E+22	3,080310E+21	3,080520E+21	4,970587E+22	6,160830E+21	5,586670E+22
610	2,485350E+22	2,485189E+22	3,080228E+21	3,080408E+21	4,970538E+22	6,160636E+21	5,586602E+22
611	2,485203E+22	2,485300E+22	3,080671E+21	3,080202E+21	4,970503E+22	6,160874E+21	5,586590E+22
612	2,485235E+22	2,485262E+22	3,080344E+21	3,080831E+21	4,970497E+22	6,161175E+21	5,586614E+22
613	2,485182E+22	2,485116E+22	3,080704E+21	3,080604E+21	4,970298E+22	6,161308E+21	5,586429E+22
614	2,485048E+22	2,485166E+22	3,081024E+21	3,080767E+21	4,970214E+22	6,161791E+21	5,586393E+22
615	2,485087E+22	2,485000E+22	3,080762E+21	3,081236E+21	4,970087E+22	6,161999E+21	5,586287E+22
616	2,484963E+22	2,484935E+22	3,081332E+21	3,080909E+21	4,969898E+22	6,162241E+21	5,586122E+22
617	2,484890E+22	2,484980E+22	3,081299E+21	3,081364E+21	4,969869E+22	6,162663E+21	5,586136E+22
618	2,484936E+22	2,484807E+22	3,081144E+21	3,081544E+21	4,969743E+22	6,162688E+21	5,586012E+22
619	2,484795E+22	2,484874E+22	3,081611E+21	3,081159E+21	4,969670E+22	6,162771E+21	5,585947E+22
620	2,484852E+22	2,484896E+22	3,081246E+21	3,081613E+21	4,969747E+22	6,162859E+21	5,586033E+22
621	2,484915E+22	2,484798E+22	3,081275E+21	3,081231E+21	4,969713E+22	6,162506E+21	5,585964E+22
622	2,484837E+22	2,484956E+22	3,081475E+21	3,080980E+21	4,969794E+22	6,162455E+21	5,586039E+22
623	2,484949E+22	2,484939E+22	3,080924E+21	3,081359E+21	4,969889E+22	6,162283E+21	5,586117E+22
624	2,484955E+22	2,484944E+22	3,081132E+21	3,080818E+21	4,969899E+22	6,161949E+21	5,586094E+22
625	2,484957E+22	2,485089E+22	3,081041E+21	3,080915E+21	4,970046E+22	6,161956E+21	5,586241E+22
626	2,485122E+22	2,485000E+22	3,080565E+21	3,081025E+21	4,970122E+22	6,161590E+21	5,586281E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
627	2,485075E+22	2,485081E+22	3,080923E+21	3,080446E+21	4,970157E+22	6,161369E+21	5,586294E+22
628	2,485106E+22	2,485168E+22	3,080689E+21	3,080881E+21	4,970274E+22	6,161570E+21	5,586431E+22
629	2,485161E+22	2,485056E+22	3,080625E+21	3,080788E+21	4,970217E+22	6,161413E+21	5,586358E+22
630	2,485012E+22	2,485134E+22	3,081118E+21	3,080635E+21	4,970145E+22	6,161753E+21	5,586321E+22
631	2,485022E+22	2,485059E+22	3,080807E+21	3,081276E+21	4,970081E+22	6,162083E+21	5,586289E+22
632	2,484993E+22	2,484908E+22	3,081149E+21	3,081032E+21	4,969901E+22	6,162181E+21	5,586119E+22
633	2,484859E+22	2,484951E+22	3,081490E+21	3,081193E+21	4,969810E+22	6,162684E+21	5,586078E+22
634	2,484909E+22	2,484792E+22	3,081155E+21	3,081709E+21	4,969701E+22	6,162864E+21	5,585987E+22
635	2,484782E+22	2,484749E+22	3,081682E+21	3,081357E+21	4,969530E+22	6,163039E+21	5,585834E+22
636	2,484694E+22	2,484805E+22	3,081702E+21	3,081822E+21	4,969500E+22	6,163523E+21	5,585852E+22
637	2,484762E+22	2,484648E+22	3,081537E+21	3,081898E+21	4,969410E+22	6,163435E+21	5,585753E+22
638	2,484645E+22	2,484710E+22	3,082013E+21	3,081471E+21	4,969355E+22	6,163483E+21	5,585703E+22
639	2,484678E+22	2,484725E+22	3,081649E+21	3,081914E+21	4,969403E+22	6,163564E+21	5,585759E+22
640	2,484740E+22	2,484646E+22	3,081647E+21	3,081563E+21	4,969387E+22	6,163210E+21	5,585708E+22
641	2,484654E+22	2,484802E+22	3,081850E+21	3,081360E+21	4,969456E+22	6,163210E+21	5,585777E+22
642	2,484794E+22	2,484768E+22	3,081223E+21	3,081767E+21	4,969561E+22	6,162990E+21	5,585860E+22
643	2,484823E+22	2,484781E+22	3,081390E+21	3,081151E+21	4,969604E+22	6,162541E+21	5,585858E+22
644	2,484826E+22	2,484938E+22	3,081358E+21	3,081238E+21	4,969764E+22	6,162595E+21	5,586023E+22
645	2,484990E+22	2,484868E+22	3,080908E+21	3,081298E+21	4,969859E+22	6,162206E+21	5,586079E+22
646	2,484929E+22	2,484948E+22	3,081311E+21	3,080794E+21	4,969877E+22	6,162104E+21	5,586088E+22
647	2,484903E+22	2,485008E+22	3,081112E+21	3,081297E+21	4,969911E+22	6,162408E+21	5,586152E+22
648	2,484956E+22	2,484875E+22	3,081060E+21	3,081241E+21	4,969832E+22	6,162302E+21	5,586062E+22
649	2,484816E+22	2,484925E+22	3,081576E+21	3,081083E+21	4,969741E+22	6,162659E+21	5,586007E+22
650	2,484853E+22	2,484830E+22	3,081198E+21	3,081715E+21	4,969682E+22	6,162913E+21	5,585974E+22
651	2,484828E+22	2,484700E+22	3,081509E+21	3,081427E+21	4,969528E+22	6,162937E+21	5,585822E+22
652	2,484669E+22	2,484770E+22	3,081896E+21	3,081634E+21	4,969439E+22	6,163529E+21	5,585792E+22
653	2,484713E+22	2,484635E+22	3,081569E+21	3,082125E+21	4,969348E+22	6,163694E+21	5,585718E+22
654	2,484600E+22	2,484584E+22	3,082119E+21	3,081778E+21	4,969184E+22	6,163896E+21	5,585574E+22
655	2,484494E+22	2,484622E+22	3,082154E+21	3,082200E+21	4,969116E+22	6,164354E+21	5,585552E+22
656	2,484585E+22	2,484472E+22	3,081969E+21	3,082243E+21	4,969056E+22	6,164212E+21	5,585477E+22
657	2,484470E+22	2,484530E+22	3,082443E+21	3,081822E+21	4,968999E+22	6,164265E+21	5,585426E+22
658	2,484507E+22	2,484545E+22	3,081984E+21	3,082315E+21	4,969053E+22	6,164300E+21	5,585483E+22
659	2,484575E+22	2,484482E+22	3,081921E+21	3,081963E+21	4,969057E+22	6,163885E+21	5,585446E+22
660	2,484494E+22	2,484641E+22	3,082158E+21	3,081767E+21	4,969135E+22	6,163924E+21	5,585528E+22
661	2,484664E+22	2,484625E+22	3,081532E+21	3,082074E+21	4,969290E+22	6,163606E+21	5,585650E+22
662	2,484715E+22	2,484637E+22	3,081716E+21	3,081425E+21	4,969353E+22	6,163141E+21	5,585667E+22
663	2,484671E+22	2,484790E+22	3,081734E+21	3,081518E+21	4,969462E+22	6,163251E+21	5,585787E+22
664	2,484818E+22	2,484733E+22	3,081292E+21	3,081633E+21	4,969551E+22	6,162926E+21	5,585843E+22
665	2,484733E+22	2,484785E+22	3,081738E+21	3,081208E+21	4,969518E+22	6,162946E+21	5,585813E+22
666	2,484715E+22	2,484813E+22	3,081488E+21	3,081746E+21	4,969528E+22	6,163234E+21	5,585851E+22
667	2,484787E+22	2,484674E+22	3,081405E+21	3,081656E+21	4,969461E+22	6,163060E+21	5,585767E+22
668	2,484648E+22	2,484724E+22	3,081964E+21	3,081499E+21	4,969373E+22	6,163463E+21	5,585719E+22
669	2,484690E+22	2,484653E+22	3,081602E+21	3,082089E+21	4,969342E+22	6,163691E+21	5,585712E+22
670	2,484657E+22	2,484532E+22	3,081929E+21	3,081851E+21	4,969189E+22	6,163780E+21	5,585567E+22
671	2,484452E+22	2,484593E+22	3,082356E+21	3,082090E+21	4,969044E+22	6,164446E+21	5,585489E+22
672	2,484507E+22	2,484454E+22	3,082047E+21	3,082568E+21	4,968961E+22	6,164615E+21	5,585422E+22
673	2,484406E+22	2,484387E+22	3,082604E+21	3,082198E+21	4,968793E+22	6,164802E+21	5,585273E+22
674	2,484320E+22	2,484415E+22	3,082550E+21	3,082587E+21	4,968735E+22	6,165137E+21	5,585249E+22
675	2,484415E+22	2,484286E+22	3,082305E+21	3,082604E+21	4,968701E+22	6,164909E+21	5,585192E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
676	2,484290E+22	2,484364E+22	3,082776E+21	3,082226E+21	4,968653E+22	6,165002E+21	5,585154E+22
677	2,484340E+22	2,484397E+22	3,082304E+21	3,082675E+21	4,968737E+22	6,164979E+21	5,585235E+22
678	2,484436E+22	2,484337E+22	3,082238E+21	3,082307E+21	4,968773E+22	6,164545E+21	5,585228E+22
679	2,484347E+22	2,484488E+22	3,082495E+21	3,082067E+21	4,968834E+22	6,164562E+21	5,585290E+22
680	2,484530E+22	2,484482E+22	3,081897E+21	3,082341E+21	4,969012E+22	6,164239E+21	5,585436E+22
681	2,484570E+22	2,484492E+22	3,082108E+21	3,081738E+21	4,969062E+22	6,163846E+21	5,585446E+22
682	2,484507E+22	2,484631E+22	3,082068E+21	3,081895E+21	4,969138E+22	6,163963E+21	5,585534E+22
683	2,484640E+22	2,484569E+22	3,081613E+21	3,082045E+21	4,969208E+22	6,163657E+21	5,585574E+22
684	2,484553E+22	2,484602E+22	3,082103E+21	3,081652E+21	4,969155E+22	6,163755E+21	5,585531E+22
685	2,484555E+22	2,484631E+22	3,081865E+21	3,082112E+21	4,969185E+22	6,163977E+21	5,585583E+22
686	2,484641E+22	2,484493E+22	3,081799E+21	3,082018E+21	4,969134E+22	6,163817E+21	5,585515E+22
687	2,484458E+22	2,484541E+22	3,082399E+21	3,081886E+21	4,968999E+22	6,164285E+21	5,585427E+22
688	2,484486E+22	2,484485E+22	3,082070E+21	3,082519E+21	4,968971E+22	6,164588E+21	5,585429E+22
689	2,484443E+22	2,484348E+22	3,082423E+21	3,082337E+21	4,968791E+22	6,164760E+21	5,585267E+22
690	2,484249E+22	2,484385E+22	3,082786E+21	3,082564E+21	4,968634E+22	6,165350E+21	5,585169E+22
691	2,484326E+22	2,484251E+22	3,082437E+21	3,082988E+21	4,968577E+22	6,165425E+21	5,585120E+22
692	2,484229E+22	2,484189E+22	3,083005E+21	3,082607E+21	4,968418E+22	6,165612E+21	5,584979E+22
693	2,484153E+22	2,484244E+22	3,082925E+21	3,082941E+21	4,968397E+22	6,165866E+21	5,584984E+22
694	2,484251E+22	2,484128E+22	3,082651E+21	3,082987E+21	4,968379E+22	6,165639E+21	5,584943E+22
695	2,484098E+22	2,484198E+22	3,083136E+21	3,082616E+21	4,968296E+22	6,165752E+21	5,584871E+22
696	2,484181E+22	2,484240E+22	3,082681E+21	3,083019E+21	4,968421E+22	6,165699E+21	5,584991E+22
697	2,484296E+22	2,484176E+22	3,082620E+21	3,082619E+21	4,968473E+22	6,165239E+21	5,584997E+22
698	2,484216E+22	2,484324E+22	3,082813E+21	3,082356E+21	4,968540E+22	6,165169E+21	5,585057E+22
699	2,484388E+22	2,484339E+22	3,082196E+21	3,082636E+21	4,968726E+22	6,164832E+21	5,585209E+22
700	2,484397E+22	2,484351E+22	3,082433E+21	3,082119E+21	4,968749E+22	6,164551E+21	5,585204E+22
701	2,484334E+22	2,484487E+22	3,082407E+21	3,082260E+21	4,968821E+22	6,164666E+21	5,585288E+22
702	2,484481E+22	2,484408E+22	3,081964E+21	3,082418E+21	4,968889E+22	6,164382E+21	5,585328E+22
703	2,484378E+22	2,484420E+22	3,082495E+21	3,082021E+21	4,968798E+22	6,164516E+21	5,585250E+22
704	2,484392E+22	2,484451E+22	3,082304E+21	3,082469E+21	4,968843E+22	6,164773E+21	5,585320E+22
705	2,484463E+22	2,484314E+22	3,082262E+21	3,082446E+21	4,968777E+22	6,164708E+21	5,585248E+22
706	2,484263E+22	2,484349E+22	3,082798E+21	3,082374E+21	4,968612E+22	6,165172E+21	5,585129E+22
707	2,484286E+22	2,484291E+22	3,082473E+21	3,083012E+21	4,968577E+22	6,165486E+21	5,585126E+22
708	2,484249E+22	2,484147E+22	3,082852E+21	3,082829E+21	4,968396E+22	6,165681E+21	5,584964E+22
709	2,484078E+22	2,484189E+22	3,083203E+21	3,082942E+21	4,968267E+22	6,166145E+21	5,584882E+22
710	2,484161E+22	2,484068E+22	3,082847E+21	3,083333E+21	4,968229E+22	6,166180E+21	5,584847E+22
711	2,484028E+22	2,484010E+22	3,083418E+21	3,082972E+21	4,968039E+22	6,166389E+21	5,584678E+22
712	2,483951E+22	2,484079E+22	3,083349E+21	3,083316E+21	4,968030E+22	6,166665E+21	5,584697E+22
713	2,484060E+22	2,483962E+22	3,083072E+21	3,083398E+21	4,968022E+22	6,166471E+21	5,584669E+22
714	2,483937E+22	2,484018E+22	3,083464E+21	3,082996E+21	4,967954E+22	6,166460E+21	5,584600E+22
715	2,484046E+22	2,484074E+22	3,082992E+21	3,083339E+21	4,968121E+22	6,166331E+21	5,584754E+22
716	2,484163E+22	2,484025E+22	3,082941E+21	3,082940E+21	4,968188E+22	6,165880E+21	5,584776E+22
717	2,484078E+22	2,484191E+22	3,083124E+21	3,082649E+21	4,968269E+22	6,165773E+21	5,584847E+22
718	2,484231E+22	2,484212E+22	3,082511E+21	3,082975E+21	4,968443E+22	6,165485E+21	5,584991E+22
719	2,484205E+22	2,484196E+22	3,082794E+21	3,082511E+21	4,968402E+22	6,165305E+21	5,584932E+22
720	2,484163E+22	2,484318E+22	3,082817E+21	3,082629E+21	4,968481E+22	6,165446E+21	5,585026E+22
721	2,484322E+22	2,484227E+22	3,082393E+21	3,082802E+21	4,968549E+22	6,165195E+21	5,585068E+22
722	2,484221E+22	2,484223E+22	3,082857E+21	3,082412E+21	4,968444E+22	6,165269E+21	5,584971E+22
723	2,484225E+22	2,484269E+22	3,082673E+21	3,082884E+21	4,968494E+22	6,165556E+21	5,585050E+22
724	2,484269E+22	2,484137E+22	3,082659E+21	3,082922E+21	4,968405E+22	6,165582E+21	5,584964E+22

1	14	15	16	17	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							
725	2,484076E+22	2,484173E+22	3,083208E+21	3,082811E+21	4,968249E+22	6,166019E+21	5,584851E+22
726	2,484108E+22	2,484112E+22	3,082895E+21	3,083410E+21	4,968220E+22	6,166305E+21	5,584850E+22
727	2,484047E+22	2,483953E+22	3,083313E+21	3,083218E+21	4,968001E+22	6,166531E+21	5,584654E+22
728	2,483888E+22	2,484003E+22	3,083689E+21	3,083302E+21	4,967892E+22	6,166991E+21	5,584591E+22
729	2,483960E+22	2,483887E+22	3,083322E+21	3,083754E+21	4,967847E+22	6,167076E+21	5,584554E+22
730	2,483824E+22	2,483816E+22	3,083789E+21	3,083433E+21	4,967640E+22	6,167222E+21	5,584362E+22
731	2,483772E+22	2,483888E+22	3,083703E+21	3,083757E+21	4,967660E+22	6,167460E+21	5,584406E+22
732	2,483900E+22	2,483783E+22	3,083418E+21	3,083805E+21	4,967683E+22	6,167223E+21	5,584405E+22
733	2,483813E+22	2,483860E+22	3,083775E+21	3,083296E+21	4,967673E+22	6,167071E+21	5,584380E+22
734	2,483923E+22	2,483939E+22	3,083306E+21	3,083595E+21	4,967862E+22	6,166901E+21	5,584552E+22
735	2,483991E+22	2,483896E+22	3,083282E+21	3,083244E+21	4,967887E+22	6,166525E+21	5,584540E+22
736	2,483900E+22	2,484059E+22	3,083504E+21	3,082979E+21	4,967960E+22	6,166482E+21	5,584608E+22
737	2,484050E+22	2,484062E+22	3,082912E+21	3,083359E+21	4,968111E+22	6,166271E+21	5,584738E+22
738	2,484043E+22	2,484011E+22	3,083123E+21	3,082905E+21	4,968054E+22	6,166027E+21	5,584657E+22
739	2,484024E+22	2,484128E+22	3,083161E+21	3,083000E+21	4,968151E+22	6,166161E+21	5,584768E+22
740	2,484175E+22	2,484050E+22	3,082759E+21	3,083202E+21	4,968225E+22	6,165961E+21	5,584821E+22
741	2,484071E+22	2,484058E+22	3,083204E+21	3,082806E+21	4,968129E+22	6,166010E+21	5,584730E+22
742	2,484048E+22	2,484111E+22	3,083053E+21	3,083293E+21	4,968159E+22	6,166346E+21	5,584794E+22
743	2,484057E+22	2,483961E+22	3,083104E+21	3,083364E+21	4,968018E+22	6,166468E+21	5,584665E+22
744	2,483880E+22	2,483983E+22	3,083711E+21	3,083207E+21	4,967863E+22	6,166918E+21	5,584555E+22
745	2,483911E+22	2,483918E+22	3,083417E+21	3,083810E+21	4,967829E+22	6,167227E+21	5,584552E+22
746	2,483846E+22	2,483742E+22	3,083748E+21	3,083645E+21	4,967588E+22	6,167394E+21	5,584327E+22
747	2,483686E+22	2,483800E+22	3,084098E+21	3,083757E+21	4,967486E+22	6,167855E+21	5,584271E+22
748	2,483752E+22	2,483694E+22	3,083712E+21	3,084244E+21	4,967446E+22	6,167956E+21	5,584242E+22
749	2,483654E+22	2,483632E+22	3,084124E+21	3,083857E+21	4,967286E+22	6,167981E+21	5,584084E+22
750	2,483631E+22	2,483723E+22	3,084032E+21	3,084094E+21	4,967354E+22	6,168126E+21	5,584167E+22
751	2,483747E+22	2,483629E+22	3,083781E+21	3,084110E+21	4,967376E+22	6,167891E+21	5,584165E+22
752	2,483670E+22	2,483723E+22	3,084170E+21	3,083568E+21	4,967393E+22	6,167738E+21	5,584167E+22
753	2,483756E+22	2,483811E+22	3,083704E+21	3,083929E+21	4,967566E+22	6,167634E+21	5,584330E+22
754	2,483807E+22	2,483738E+22	3,083604E+21	3,083641E+21	4,967545E+22	6,167245E+21	5,584270E+22
755	2,483740E+22	2,483882E+22	3,083833E+21	3,083383E+21	4,967621E+22	6,167217E+21	5,584343E+22
756	2,483899E+22	2,483880E+22	3,083251E+21	3,083742E+21	4,967779E+22	6,166993E+21	5,584478E+22
757	2,483921E+22	2,483840E+22	3,083429E+21	3,083230E+21	4,967761E+22	6,166660E+21	5,584427E+22
758	2,483894E+22	2,483974E+22	3,083485E+21	3,083304E+21	4,967869E+22	6,166789E+21	5,584547E+22
759	2,483987E+22	2,483901E+22	3,083148E+21	3,083572E+21	4,967888E+22	6,166720E+21	5,584560E+22
760	2,483875E+22	2,483908E+22	3,083656E+21	3,083201E+21	4,967783E+22	6,166857E+21	5,584469E+22
761	2,483844E+22	2,483942E+22	3,083547E+21	3,083724E+21	4,967786E+22	6,167271E+21	5,584514E+22
762	2,483856E+22	2,483755E+22	3,083544E+21	3,083811E+21	4,967610E+22	6,167355E+21	5,584346E+22
763	2,483698E+22	2,483765E+22	3,084158E+21	3,083648E+21	4,967463E+22	6,167806E+21	5,584244E+22
764	2,483714E+22	2,483710E+22	3,083854E+21	3,084270E+21	4,967425E+22	6,168124E+21	5,584237E+22
765	2,483659E+22	2,483547E+22	3,084117E+21	3,084114E+21	4,967206E+22	6,168232E+21	5,584029E+22
766	2,483501E+22	2,483615E+22	3,084453E+21	3,084202E+21	4,967115E+22	6,168655E+21	5,583981E+22
767	2,483559E+22	2,483512E+22	3,084113E+21	3,084671E+21	4,967070E+22	6,168784E+21	5,583949E+22
768	2,483500E+22	2,483464E+22	3,084544E+21	3,084190E+21	4,966963E+22	6,168735E+21	5,583837E+22
769	2,483481E+22	2,483572E+22	3,084464E+21	3,084399E+21	4,967052E+22	6,168864E+21	5,583939E+22
770	2,483583E+22	2,483472E+22	3,084137E+21	3,084430E+21	4,967054E+22	6,168568E+21	5,583911E+22
771	2,483501E+22	2,483566E+22	3,084517E+21	3,083929E+21	4,967067E+22	6,168446E+21	5,583912E+22
772	2,483570E+22	2,483656E+22	3,084046E+21	3,084317E+21	4,967227E+22	6,168363E+21	5,584063E+22
773	2,483658E+22	2,483574E+22	3,083891E+21	3,084007E+21	4,967231E+22	6,167897E+21	5,584021E+22

1	14	15	16	17	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							
774	2,483610E+22	2,483718E+22	3,084122E+21	3,083691E+21	4,967328E+22	6,167813E+21	5,584109E+22
775	2,483753E+22	2,483724E+22	3,083602E+21	3,084056E+21	4,967476E+22	6,167658E+21	5,584242E+22
776	2,483777E+22	2,483695E+22	3,083821E+21	3,083542E+21	4,967473E+22	6,167363E+21	5,584209E+22
777	2,483718E+22	2,483836E+22	3,083909E+21	3,083695E+21	4,967554E+22	6,167604E+21	5,584314E+22
778	2,483785E+22	2,483726E+22	3,083543E+21	3,084027E+21	4,967511E+22	6,167570E+21	5,584268E+22
779	2,483689E+22	2,483704E+22	3,084087E+21	3,083678E+21	4,967394E+22	6,167765E+21	5,584170E+22
780	2,483654E+22	2,483736E+22	3,083991E+21	3,084168E+21	4,967390E+22	6,168159E+21	5,584206E+22
781	2,483689E+22	2,483548E+22	3,083938E+21	3,084231E+21	4,967236E+22	6,168169E+21	5,584053E+22
782	2,483523E+22	2,483571E+22	3,084541E+21	3,084046E+21	4,967094E+22	6,168586E+21	5,583953E+22
783	2,483498E+22	2,483526E+22	3,084278E+21	3,084712E+21	4,967024E+22	6,168990E+21	5,583923E+22
784	2,483458E+22	2,483371E+22	3,084564E+21	3,084536E+21	4,966830E+22	6,169100E+21	5,583740E+22
785	2,483316E+22	2,483443E+22	3,084907E+21	3,084614E+21	4,966758E+22	6,169522E+21	5,583711E+22
786	2,483383E+22	2,483325E+22	3,084520E+21	3,085052E+21	4,966709E+22	6,169572E+21	5,583666E+22
787	2,483352E+22	2,483284E+22	3,084947E+21	3,084553E+21	4,966636E+22	6,169500E+21	5,583586E+22
788	2,483313E+22	2,483410E+22	3,084848E+21	3,084747E+21	4,966724E+22	6,169595E+21	5,583683E+22
789	2,483417E+22	2,483320E+22	3,084441E+21	3,084803E+21	4,966737E+22	6,169244E+21	5,583661E+22
790	2,483339E+22	2,483410E+22	3,084797E+21	3,084284E+21	4,966749E+22	6,169081E+21	5,583657E+22
791	2,483397E+22	2,483492E+22	3,084382E+21	3,084665E+21	4,966890E+22	6,169046E+21	5,583794E+22
792	2,483520E+22	2,483421E+22	3,084252E+21	3,084297E+21	4,966941E+22	6,168549E+21	5,583796E+22
793	2,483477E+22	2,483574E+22	3,084500E+21	3,083996E+21	4,967051E+22	6,168495E+21	5,583900E+22
794	2,483591E+22	2,483567E+22	3,083955E+21	3,084406E+21	4,967158E+22	6,168361E+21	5,583994E+22
795	2,483610E+22	2,483532E+22	3,084189E+21	3,083960E+21	4,967142E+22	6,168149E+21	5,583957E+22
796	2,483526E+22	2,483665E+22	3,084300E+21	3,084123E+21	4,967191E+22	6,168423E+21	5,584034E+22
797	2,483616E+22	2,483542E+22	3,083902E+21	3,084451E+21	4,967159E+22	6,168352E+21	5,583994E+22
798	2,483530E+22	2,483513E+22	3,084459E+21	3,084059E+21	4,967043E+22	6,168518E+21	5,583895E+22
799	2,483467E+22	2,483546E+22	3,084435E+21	3,084559E+21	4,967013E+22	6,168994E+21	5,583912E+22
800	2,483501E+22	2,483371E+22	3,084407E+21	3,084633E+21	4,966871E+22	6,169040E+21	5,583775E+22
801	2,483316E+22	2,483396E+22	3,085005E+21	3,084513E+21	4,966712E+22	6,169518E+21	5,583664E+22
802	2,483282E+22	2,483321E+22	3,084715E+21	3,085199E+21	4,966603E+22	6,169914E+21	5,583595E+22
803	2,483278E+22	2,483158E+22	3,085007E+21	3,084998E+21	4,966436E+22	6,170005E+21	5,583437E+22
804	2,483142E+22	2,483250E+22	3,085337E+21	3,085001E+21	4,966392E+22	6,170339E+21	5,583426E+22
805	2,483233E+22	2,483149E+22	3,084881E+21	3,085406E+21	4,966382E+22	6,170287E+21	5,583410E+22
806	2,483187E+22	2,483127E+22	3,085274E+21	3,084883E+21	4,966314E+22	6,170157E+21	5,583329E+22
807	2,483112E+22	2,483263E+22	3,085206E+21	3,085107E+21	4,966375E+22	6,170313E+21	5,583406E+22
808	2,483236E+22	2,483173E+22	3,084809E+21	3,085143E+21	4,966410E+22	6,169952E+21	5,583405E+22
809	2,483181E+22	2,483258E+22	3,085156E+21	3,084629E+21	4,966440E+22	6,169785E+21	5,583418E+22
810	2,483249E+22	2,483319E+22	3,084717E+21	3,084993E+21	4,966569E+22	6,169710E+21	5,583540E+22
811	2,483396E+22	2,483252E+22	3,084598E+21	3,084642E+21	4,966648E+22	6,169240E+21	5,583572E+22
812	2,483327E+22	2,483425E+22	3,084841E+21	3,084354E+21	4,966752E+22	6,169195E+21	5,583671E+22
813	2,483435E+22	2,483416E+22	3,084259E+21	3,084808E+21	4,966852E+22	6,169067E+21	5,583759E+22
814	2,483449E+22	2,483369E+22	3,084508E+21	3,084353E+21	4,966819E+22	6,168861E+21	5,583705E+22
815	2,483345E+22	2,483489E+22	3,084706E+21	3,084502E+21	4,966835E+22	6,169208E+21	5,583755E+22
816	2,483449E+22	2,483371E+22	3,084354E+21	3,084790E+21	4,966820E+22	6,169144E+21	5,583734E+22
817	2,483354E+22	2,483340E+22	3,084926E+21	3,084444E+21	4,966694E+22	6,169370E+21	5,583631E+22
818	2,483253E+22	2,483350E+22	3,084887E+21	3,084995E+21	4,966603E+22	6,169882E+21	5,583591E+22
819	2,483293E+22	2,483169E+22	3,084861E+21	3,085137E+21	4,966462E+22	6,169998E+21	5,583462E+22
820	2,483106E+22	2,483192E+22	3,085441E+21	3,084993E+21	4,966298E+22	6,170433E+21	5,583341E+22
821	2,483106E+22	2,483118E+22	3,085103E+21	3,085646E+21	4,966224E+22	6,170749E+21	5,583299E+22
822	2,483124E+22	2,482971E+22	3,085368E+21	3,085370E+21	4,966095E+22	6,170737E+21	5,583168E+22

1	14	15	16	17	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							
823	2,482966E+22	2,483079E+22	3,085747E+21	3,085349E+21	4,966044E+22	6,171096E+21	5,583154E+22
824	2,483053E+22	2,483006E+22	3,085296E+21	3,085742E+21	4,966059E+22	6,171038E+21	5,583163E+22
825	2,482997E+22	2,482983E+22	3,085662E+21	3,085279E+21	4,965980E+22	6,170941E+21	5,583074E+22
826	2,482916E+22	2,483082E+22	3,085571E+21	3,085504E+21	4,965998E+22	6,171075E+21	5,583105E+22
827	2,483086E+22	2,482986E+22	3,085168E+21	3,085523E+21	4,966072E+22	6,170691E+21	5,583141E+22
828	2,483044E+22	2,483086E+22	3,085486E+21	3,084948E+21	4,966131E+22	6,170434E+21	5,583174E+22
829	2,483133E+22	2,483162E+22	3,085005E+21	3,085310E+21	4,966295E+22	6,170316E+21	5,583327E+22
830	2,483261E+22	2,483116E+22	3,084868E+21	3,084954E+21	4,966377E+22	6,169822E+21	5,583359E+22
831	2,483151E+22	2,483290E+22	3,085186E+21	3,084704E+21	4,966441E+22	6,169890E+21	5,583430E+22
832	2,483263E+22	2,483280E+22	3,084660E+21	3,085140E+21	4,966543E+22	6,169800E+21	5,583523E+22
833	2,483278E+22	2,483216E+22	3,084933E+21	3,084728E+21	4,966495E+22	6,169661E+21	5,583461E+22
834	2,483161E+22	2,483298E+22	3,085148E+21	3,084887E+21	4,966458E+22	6,170035E+21	5,583462E+22
835	2,483274E+22	2,483169E+22	3,084817E+21	3,085225E+21	4,966443E+22	6,170042E+21	5,583447E+22
836	2,483150E+22	2,483146E+22	3,085358E+21	3,084912E+21	4,966296E+22	6,170270E+21	5,583323E+22
837	2,483058E+22	2,483145E+22	3,085265E+21	3,085508E+21	4,966203E+22	6,170773E+21	5,583281E+22
838	2,483105E+22	2,482962E+22	3,085228E+21	3,085607E+21	4,966066E+22	6,170835E+21	5,583150E+22
839	2,482919E+22	2,482995E+22	3,085862E+21	3,085416E+21	4,965914E+22	6,171277E+21	5,583042E+22
840	2,482941E+22	2,482946E+22	3,085562E+21	3,085985E+21	4,965887E+22	6,171547E+21	5,583042E+22
841	2,482948E+22	2,482816E+22	3,085816E+21	3,085733E+21	4,965765E+22	6,171549E+21	5,582920E+22
842	2,482755E+22	2,482906E+22	3,086169E+21	3,085733E+21	4,965661E+22	6,171902E+21	5,582852E+22
843	2,482855E+22	2,482826E+22	3,085707E+21	3,086161E+21	4,965681E+22	6,171868E+21	5,582867E+22
844	2,482808E+22	2,482803E+22	3,086026E+21	3,085670E+21	4,965611E+22	6,171696E+21	5,582781E+22
845	2,482774E+22	2,482898E+22	3,085871E+21	3,085869E+21	4,965672E+22	6,171741E+21	5,582846E+22
846	2,482968E+22	2,482823E+22	3,085443E+21	3,085826E+21	4,965792E+22	6,171269E+21	5,582919E+22
847	2,482912E+22	2,482946E+22	3,085802E+21	3,085250E+21	4,965858E+22	6,171052E+21	5,582964E+22
848	2,482988E+22	2,483050E+22	3,085359E+21	3,085608E+21	4,966038E+22	6,170967E+21	5,583134E+22
849	2,483096E+22	2,482998E+22	3,085229E+21	3,085323E+21	4,966094E+22	6,170552E+21	5,583149E+22
850	2,482964E+22	2,483120E+22	3,085583E+21	3,085083E+21	4,966084E+22	6,170666E+21	5,583151E+22
851	2,483098E+22	2,483095E+22	3,085091E+21	3,085525E+21	4,966192E+22	6,170616E+21	5,583254E+22
852	2,483107E+22	2,483028E+22	3,085349E+21	3,085109E+21	4,966135E+22	6,170458E+21	5,583181E+22
853	2,482992E+22	2,483100E+22	3,085524E+21	3,085315E+21	4,966092E+22	6,170839E+21	5,583176E+22
854	2,483089E+22	2,482983E+22	3,085164E+21	3,085668E+21	4,966072E+22	6,170831E+21	5,583155E+22
855	2,482945E+22	2,482957E+22	3,085747E+21	3,085376E+21	4,965902E+22	6,171123E+21	5,583015E+22
856	2,482871E+22	2,482968E+22	3,085704E+21	3,085915E+21	4,965839E+22	6,171619E+21	5,583001E+22
857	2,482930E+22	2,482790E+22	3,085678E+21	3,086014E+21	4,965720E+22	6,171692E+21	5,582890E+22
858	2,482730E+22	2,482800E+22	3,086336E+21	3,085803E+21	4,965530E+22	6,172139E+21	5,582744E+22
859	2,482757E+22	2,482760E+22	3,086051E+21	3,086390E+21	4,965517E+22	6,172441E+21	5,582761E+22
860	2,482737E+22	2,482641E+22	3,086249E+21	3,086165E+21	4,965378E+22	6,172413E+21	5,582620E+22
861	2,482562E+22	2,482712E+22	3,086525E+21	3,086194E+21	4,965274E+22	6,172719E+21	5,582546E+22
862	2,482684E+22	2,482634E+22	3,086019E+21	3,086557E+21	4,965317E+22	6,172576E+21	5,582575E+22
863	2,482655E+22	2,482626E+22	3,086351E+21	3,086014E+21	4,965281E+22	6,172365E+21	5,582518E+22
864	2,482650E+22	2,482755E+22	3,086226E+21	3,086137E+21	4,965405E+22	6,172364E+21	5,582641E+22
865	2,482831E+22	2,482707E+22	3,085794E+21	3,086128E+21	4,965538E+22	6,171922E+21	5,582730E+22
866	2,482738E+22	2,482810E+22	3,086162E+21	3,085592E+21	4,965548E+22	6,171754E+21	5,582723E+22
867	2,482817E+22	2,482898E+22	3,085752E+21	3,085976E+21	4,965715E+22	6,171728E+21	5,582888E+22
868	2,482916E+22	2,482836E+22	3,085606E+21	3,085693E+21	4,965752E+22	6,171299E+21	5,582882E+22
869	2,482814E+22	2,482932E+22	3,085916E+21	3,085472E+21	4,965746E+22	6,171388E+21	5,582885E+22
870	2,482949E+22	2,482909E+22	3,085420E+21	3,085884E+21	4,965857E+22	6,171304E+21	5,582988E+22
871	2,482937E+22	2,482853E+22	3,085717E+21	3,085513E+21	4,965791E+22	6,171230E+21	5,582913E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
872	2,482815E+22	2,482939E+22	3,085928E+21	3,085723E+21	4,965754E+22	6,171651E+21	5,582919E+22
873	2,482898E+22	2,482818E+22	3,085585E+21	3,086127E+21	4,965716E+22	6,171712E+21	5,582887E+22
874	2,482745E+22	2,482753E+22	3,086201E+21	3,085820E+21	4,965498E+22	6,172022E+21	5,582700E+22
875	2,482694E+22	2,482764E+22	3,086202E+21	3,086326E+21	4,965458E+22	6,172528E+21	5,582710E+22
876	2,482739E+22	2,482603E+22	3,086160E+21	3,086409E+21	4,965342E+22	6,172569E+21	5,582599E+22
877	2,482541E+22	2,482605E+22	3,086755E+21	3,086243E+21	4,965146E+22	6,172999E+21	5,582446E+22
878	2,482552E+22	2,482577E+22	3,086426E+21	3,086818E+21	4,965129E+22	6,173244E+21	5,582453E+22
879	2,482529E+22	2,482457E+22	3,086624E+21	3,086605E+21	4,964986E+22	6,173229E+21	5,582309E+22
880	2,482389E+22	2,482540E+22	3,086903E+21	3,086557E+21	4,964929E+22	6,173461E+21	5,582275E+22
881	2,482538E+22	2,482479E+22	3,086380E+21	3,086900E+21	4,965017E+22	6,173280E+21	5,582345E+22
882	2,482508E+22	2,482458E+22	3,086721E+21	3,086332E+21	4,964965E+22	6,173053E+21	5,582271E+22
883	2,482509E+22	2,482608E+22	3,086616E+21	3,086467E+21	4,965118E+22	6,173084E+21	5,582426E+22
884	2,482660E+22	2,482575E+22	3,086146E+21	3,086485E+21	4,965235E+22	6,172631E+21	5,582498E+22
885	2,482576E+22	2,482643E+22	3,086470E+21	3,085998E+21	4,965219E+22	6,172468E+21	5,582466E+22
886	2,482663E+22	2,482727E+22	3,086051E+21	3,086321E+21	4,965390E+22	6,172372E+21	5,582627E+22
887	2,482766E+22	2,482664E+22	3,085937E+21	3,086033E+21	4,965430E+22	6,171970E+21	5,582627E+22
888	2,482674E+22	2,482774E+22	3,086292E+21	3,085781E+21	4,965448E+22	6,172073E+21	5,582655E+22
889	2,482784E+22	2,482765E+22	3,085807E+21	3,086252E+21	4,965549E+22	6,172058E+21	5,582755E+22
890	2,482734E+22	2,482678E+22	3,086130E+21	3,085938E+21	4,965412E+22	6,172068E+21	5,582619E+22
891	2,482622E+22	2,482752E+22	3,086388E+21	3,086167E+21	4,965374E+22	6,172555E+21	5,582630E+22
892	2,482698E+22	2,482631E+22	3,086046E+21	3,086561E+21	4,965329E+22	6,172607E+21	5,582589E+22
893	2,482573E+22	2,482542E+22	3,086627E+21	3,086278E+21	4,965115E+22	6,172905E+21	5,582406E+22
894	2,482518E+22	2,482565E+22	3,086620E+21	3,086733E+21	4,965083E+22	6,173354E+21	5,582418E+22
895	2,482539E+22	2,482420E+22	3,086586E+21	3,086861E+21	4,964959E+22	6,173447E+21	5,582304E+22
896	2,482341E+22	2,482432E+22	3,087176E+21	3,086685E+21	4,964772E+22	6,173861E+21	5,582159E+22
897	2,482350E+22	2,482401E+22	3,086833E+21	3,087260E+21	4,964751E+22	6,174093E+21	5,582160E+22
898	2,482337E+22	2,482254E+22	3,087033E+21	3,087013E+21	4,964591E+22	6,174046E+21	5,581996E+22
899	2,482242E+22	2,482348E+22	3,087319E+21	3,086905E+21	4,964591E+22	6,174223E+21	5,582013E+22
900	2,482382E+22	2,482320E+22	3,086774E+21	3,087221E+21	4,964703E+22	6,173995E+21	5,582102E+22
901	2,482362E+22	2,482301E+22	3,087032E+21	3,086698E+21	4,964663E+22	6,173730E+21	5,582036E+22
902	2,482350E+22	2,482462E+22	3,086901E+21	3,086801E+21	4,964811E+22	6,173703E+21	5,582182E+22
903	2,482491E+22	2,482430E+22	3,086452E+21	3,086831E+21	4,964921E+22	6,173283E+21	5,582250E+22
904	2,482432E+22	2,482498E+22	3,086800E+21	3,086301E+21	4,964930E+22	6,173101E+21	5,582241E+22
905	2,482520E+22	2,482584E+22	3,086402E+21	3,086622E+21	4,965104E+22	6,173024E+21	5,582406E+22
906	2,482603E+22	2,482496E+22	3,086332E+21	3,086374E+21	4,965099E+22	6,172706E+21	5,582370E+22
907	2,482511E+22	2,482607E+22	3,086712E+21	3,086172E+21	4,965118E+22	6,172885E+21	5,582407E+22
908	2,482588E+22	2,482601E+22	3,086224E+21	3,086695E+21	4,965189E+22	6,172919E+21	5,582481E+22
909	2,482554E+22	2,482474E+22	3,086503E+21	3,086433E+21	4,965028E+22	6,172936E+21	5,582322E+22
910	2,482452E+22	2,482548E+22	3,086763E+21	3,086591E+21	4,965000E+22	6,173354E+21	5,582335E+22
911	2,482525E+22	2,482438E+22	3,086462E+21	3,086976E+21	4,964963E+22	6,173438E+21	5,582307E+22
912	2,482401E+22	2,482367E+22	3,087076E+21	3,086672E+21	4,964768E+22	6,173748E+21	5,582142E+22
913	2,482318E+22	2,482404E+22	3,087065E+21	3,087151E+21	4,964723E+22	6,174216E+21	5,582144E+22
914	2,482310E+22	2,482224E+22	3,087047E+21	3,087318E+21	4,964534E+22	6,174365E+21	5,581970E+22
915	2,482137E+22	2,482228E+22	3,087638E+21	3,087123E+21	4,964364E+22	6,174761E+21	5,581840E+22
916	2,482158E+22	2,482208E+22	3,087259E+21	3,087655E+21	4,964366E+22	6,174915E+21	5,581858E+22
917	2,482186E+22	2,482050E+22	3,087386E+21	3,087409E+21	4,964236E+22	6,174795E+21	5,581715E+22
918	2,482103E+22	2,482177E+22	3,087643E+21	3,087239E+21	4,964279E+22	6,174882E+21	5,581768E+22
919	2,482225E+22	2,482180E+22	3,087103E+21	3,087580E+21	4,964405E+22	6,174683E+21	5,581873E+22
920	2,482204E+22	2,482173E+22	3,087358E+21	3,087046E+21	4,964377E+22	6,174405E+21	5,581818E+22

1	14	15	16	17	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							
921	2,482188E+22	2,482328E+22	3,087234E+21	3,087123E+21	4,964516E+22	6,174357E+21	5,581952E+22
922	2,482323E+22	2,482262E+22	3,086820E+21	3,087147E+21	4,964585E+22	6,173967E+21	5,581982E+22
923	2,482289E+22	2,482330E+22	3,087197E+21	3,086611E+21	4,964619E+22	6,173808E+21	5,582000E+22
924	2,482353E+22	2,482430E+22	3,086803E+21	3,086961E+21	4,964783E+22	6,173763E+21	5,582159E+22
925	2,482436E+22	2,482321E+22	3,086671E+21	3,086814E+21	4,964757E+22	6,173485E+21	5,582105E+22
926	2,482337E+22	2,482429E+22	3,087034E+21	3,086603E+21	4,964767E+22	6,173637E+21	5,582130E+22
927	2,482409E+22	2,482422E+22	3,086588E+21	3,087134E+21	4,964831E+22	6,173722E+21	5,582204E+22
928	2,482399E+22	2,482300E+22	3,086890E+21	3,086830E+21	4,964699E+22	6,173721E+21	5,582071E+22
929	2,482290E+22	2,482378E+22	3,087189E+21	3,086951E+21	4,964669E+22	6,174139E+21	5,582083E+22
930	2,482330E+22	2,482253E+22	3,086949E+21	3,087378E+21	4,964583E+22	6,174326E+21	5,582016E+22
931	2,482199E+22	2,482182E+22	3,087574E+21	3,087119E+21	4,964381E+22	6,174693E+21	5,581850E+22
932	2,482083E+22	2,482215E+22	3,087549E+21	3,087623E+21	4,964298E+22	6,175173E+21	5,581815E+22
933	2,482106E+22	2,481997E+22	3,087453E+21	3,087821E+21	4,964103E+22	6,175274E+21	5,581631E+22
934	2,481967E+22	2,482007E+22	3,087994E+21	3,087530E+21	4,963974E+22	6,175524E+21	5,581526E+22
935	2,482001E+22	2,482020E+22	3,087632E+21	3,088025E+21	4,964021E+22	6,175657E+21	5,581587E+22
936	2,482043E+22	2,481902E+22	3,087743E+21	3,087742E+21	4,963945E+22	6,175485E+21	5,581493E+22
937	2,481939E+22	2,482054E+22	3,087987E+21	3,087560E+21	4,963993E+22	6,175547E+21	5,581548E+22
938	2,482034E+22	2,482035E+22	3,087486E+21	3,087925E+21	4,964069E+22	6,175411E+21	5,581610E+22
939	2,482035E+22	2,482019E+22	3,087748E+21	3,087382E+21	4,964054E+22	6,175130E+21	5,581567E+22
940	2,482018E+22	2,482174E+22	3,087617E+21	3,087442E+21	4,964192E+22	6,175059E+21	5,581697E+22
941	2,482180E+22	2,482079E+22	3,087146E+21	3,087514E+21	4,964259E+22	6,174661E+21	5,581725E+22
942	2,482152E+22	2,482158E+22	3,087494E+21	3,086971E+21	4,964310E+22	6,174464E+21	5,581756E+22
943	2,482195E+22	2,482275E+22	3,087121E+21	3,087375E+21	4,964469E+22	6,174496E+21	5,581919E+22
944	2,482279E+22	2,482168E+22	3,087000E+21	3,087232E+21	4,964447E+22	6,174233E+21	5,581871E+22
945	2,482181E+22	2,482272E+22	3,087389E+21	3,086978E+21	4,964452E+22	6,174367E+21	5,581889E+22
946	2,482237E+22	2,482237E+22	3,087027E+21	3,087493E+21	4,964474E+22	6,174520E+21	5,581926E+22
947	2,482231E+22	2,482121E+22	3,087379E+21	3,087192E+21	4,964351E+22	6,174571E+21	5,581809E+22
948	2,482084E+22	2,482209E+22	3,087689E+21	3,087347E+21	4,964293E+22	6,175036E+21	5,581796E+22
949	2,482111E+22	2,482048E+22	3,087390E+21	3,087871E+21	4,964159E+22	6,175261E+21	5,581686E+22
950	2,481983E+22	2,481969E+22	3,087977E+21	3,087602E+21	4,963952E+22	6,175579E+21	5,581510E+22
951	2,481878E+22	2,482003E+22	3,087956E+21	3,088091E+21	4,963881E+22	6,176047E+21	5,581486E+22
952	2,481939E+22	2,481803E+22	3,087840E+21	3,088234E+21	4,963742E+22	6,176074E+21	5,581349E+22
953	2,481816E+22	2,481837E+22	3,088368E+21	3,087877E+21	4,963653E+22	6,176245E+21	5,581277E+22
954	2,481828E+22	2,481855E+22	3,088060E+21	3,088387E+21	4,963683E+22	6,176447E+21	5,581328E+22
955	2,481866E+22	2,481760E+22	3,088163E+21	3,088121E+21	4,963626E+22	6,176284E+21	5,581254E+22
956	2,481742E+22	2,481908E+22	3,088393E+21	3,087940E+21	4,963650E+22	6,176333E+21	5,581284E+22
957	2,481862E+22	2,481848E+22	3,087829E+21	3,088321E+21	4,963711E+22	6,176149E+21	5,581326E+22
958	2,481893E+22	2,481833E+22	3,088046E+21	3,087718E+21	4,963726E+22	6,175764E+21	5,581302E+22
959	2,481877E+22	2,482006E+22	3,087935E+21	3,087775E+21	4,963884E+22	6,175709E+21	5,581455E+22
960	2,482047E+22	2,481938E+22	3,087452E+21	3,087857E+21	4,963985E+22	6,175309E+21	5,581516E+22
961	2,482004E+22	2,482025E+22	3,087792E+21	3,087307E+21	4,964029E+22	6,175099E+21	5,581539E+22
962	2,482019E+22	2,482119E+22	3,087507E+21	3,087738E+21	4,964138E+22	6,175246E+21	5,581662E+22
963	2,482116E+22	2,482011E+22	3,087416E+21	3,087585E+21	4,964128E+22	6,175002E+21	5,581628E+22
964	2,482002E+22	2,482107E+22	3,087842E+21	3,087330E+21	4,964110E+22	6,175171E+21	5,581627E+22
965	2,482062E+22	2,482041E+22	3,087464E+21	3,087902E+21	4,964104E+22	6,175366E+21	5,581640E+22
966	2,482046E+22	2,481927E+22	3,087795E+21	3,087635E+21	4,963973E+22	6,175429E+21	5,581516E+22
967	2,481870E+22	2,482017E+22	3,088114E+21	3,087849E+21	4,963887E+22	6,175963E+21	5,581483E+22
968	2,481907E+22	2,481851E+22	3,087797E+21	3,088373E+21	4,963759E+22	6,176170E+21	5,581376E+22
969	2,481798E+22	2,481766E+22	3,088359E+21	3,088030E+21	4,963564E+22	6,176389E+21	5,581203E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
970	2,481696E+22	2,481794E+22	3,088405E+21	3,088485E+21	4,963490E+22	6,176889E+21	5,581179E+22
971	2,481772E+22	2,481627E+22	3,088302E+21	3,088599E+21	4,963399E+22	6,176901E+21	5,581089E+22
972	2,481627E+22	2,481686E+22	3,088821E+21	3,088257E+21	4,963313E+22	6,177078E+21	5,581021E+22
973	2,481636E+22	2,481681E+22	3,088456E+21	3,088816E+21	4,963316E+22	6,177272E+21	5,581044E+22
974	2,481685E+22	2,481584E+22	3,088504E+21	3,088521E+21	4,963269E+22	6,177025E+21	5,580972E+22
975	2,481574E+22	2,481734E+22	3,088724E+21	3,088310E+21	4,963308E+22	6,177033E+21	5,581011E+22
976	2,481723E+22	2,481686E+22	3,088137E+21	3,088641E+21	4,963410E+22	6,176778E+21	5,581087E+22
977	2,481767E+22	2,481687E+22	3,088340E+21	3,087998E+21	4,963455E+22	6,176338E+21	5,581088E+22
978	2,481728E+22	2,481858E+22	3,088301E+21	3,088099E+21	4,963585E+22	6,176400E+21	5,581225E+22
979	2,481883E+22	2,481807E+22	3,087837E+21	3,088217E+21	4,963690E+22	6,176054E+21	5,581295E+22
980	2,481826E+22	2,481882E+22	3,088183E+21	3,087691E+21	4,963709E+22	6,175874E+21	5,581296E+22
981	2,481853E+22	2,481928E+22	3,087886E+21	3,088135E+21	4,963782E+22	6,176021E+21	5,581384E+22
982	2,481962E+22	2,481822E+22	3,087786E+21	3,087956E+21	4,963785E+22	6,175742E+21	5,581359E+22
983	2,481830E+22	2,481927E+22	3,088250E+21	3,087730E+21	4,963757E+22	6,175980E+21	5,581355E+22
984	2,481875E+22	2,481872E+22	3,087868E+21	3,088336E+21	4,963747E+22	6,176203E+21	5,581367E+22
985	2,481845E+22	2,481752E+22	3,088182E+21	3,088079E+21	4,963597E+22	6,176262E+21	5,581223E+22
986	2,481654E+22	2,481810E+22	3,088573E+21	3,088313E+21	4,963464E+22	6,176886E+21	5,581153E+22
987	2,481713E+22	2,481654E+22	3,088265E+21	3,088803E+21	4,963368E+22	6,177068E+21	5,581075E+22
988	2,481613E+22	2,481575E+22	3,088821E+21	3,088439E+21	4,963188E+22	6,177260E+21	5,580914E+22
989	2,481524E+22	2,481588E+22	3,088843E+21	3,088912E+21	4,963113E+22	6,177755E+21	5,580888E+22
990	2,481598E+22	2,481449E+22	3,088699E+21	3,089029E+21	4,963046E+22	6,177729E+21	5,580819E+22
991	2,481432E+22	2,481520E+22	3,089210E+21	3,088706E+21	4,962952E+22	6,177916E+21	5,580743E+22
992	2,481459E+22	2,481514E+22	3,088815E+21	3,089222E+21	4,962973E+22	6,178037E+21	5,580777E+22
993	2,481530E+22	2,481415E+22	3,088822E+21	3,088835E+21	4,962945E+22	6,177658E+21	5,580711E+22
994	2,481418E+22	2,481559E+22	3,089101E+21	3,088604E+21	4,962977E+22	6,177706E+21	5,580748E+22
995	2,481575E+22	2,481545E+22	3,088518E+21	3,088925E+21	4,963120E+22	6,177443E+21	5,580864E+22
996	2,481599E+22	2,481557E+22	3,088709E+21	3,088334E+21	4,963156E+22	6,177043E+21	5,580860E+22
997	2,481558E+22	2,481695E+22	3,088646E+21	3,088497E+21	4,963252E+22	6,177143E+21	5,580967E+22
998	2,481725E+22	2,481641E+22	3,088162E+21	3,088602E+21	4,963366E+22	6,176764E+21	5,581042E+22
999	2,481670E+22	2,481713E+22	3,088525E+21	3,088072E+21	4,963384E+22	6,176597E+21	5,581044E+22
1000	2,481711E+22	2,481762E+22	3,088236E+21	3,088487E+21	4,963473E+22	6,176723E+21	5,581146E+22
1001	2,481812E+22	2,481661E+22	3,088140E+21	3,088301E+21	4,963472E+22	6,176440E+21	5,581117E+22
1002	2,481641E+22	2,481752E+22	3,088690E+21	3,088153E+21	4,963392E+22	6,176843E+21	5,581077E+22
1003	2,481666E+22	2,481703E+22	3,088330E+21	3,088787E+21	4,963369E+22	6,177117E+21	5,581081E+22
1004	2,481633E+22	2,481561E+22	3,088649E+21	3,088557E+21	4,963194E+22	6,177206E+21	5,580914E+22
1005	2,481466E+22	2,481575E+22	3,089016E+21	3,088780E+21	4,963041E+22	6,177796E+21	5,580820E+22
1006	2,481545E+22	2,481438E+22	3,088691E+21	3,089228E+21	4,962983E+22	6,177918E+21	5,580775E+22
1007	2,481437E+22	2,481386E+22	3,089248E+21	3,088870E+21	4,962823E+22	6,178117E+21	5,580634E+22
1008	2,481341E+22	2,481421E+22	3,089249E+21	3,089334E+21	4,962762E+22	6,178583E+21	5,580620E+22
1009	2,481407E+22	2,481291E+22	3,089072E+21	3,089416E+21	4,962698E+22	6,178488E+21	5,580547E+22
1010	2,481235E+22	2,481341E+22	3,089630E+21	3,089089E+21	4,962576E+22	6,178719E+21	5,580448E+22
1011	2,481275E+22	2,481351E+22	3,089233E+21	3,089542E+21	4,962626E+22	6,178774E+21	5,580504E+22
1012	2,481362E+22	2,481255E+22	3,089217E+21	3,089164E+21	4,962618E+22	6,178381E+21	5,580456E+22
1013	2,481265E+22	2,481374E+22	3,089460E+21	3,088968E+21	4,962639E+22	6,178428E+21	5,580482E+22
1014	2,481423E+22	2,481386E+22	3,088840E+21	3,089316E+21	4,962810E+22	6,178155E+21	5,580625E+22
1015	2,481438E+22	2,481405E+22	3,089015E+21	3,088753E+21	4,962843E+22	6,177768E+21	5,580620E+22
1016	2,481416E+22	2,481536E+22	3,088942E+21	3,088876E+21	4,962952E+22	6,177818E+21	5,580733E+22
1017	2,481595E+22	2,481485E+22	3,088454E+21	3,088897E+21	4,963080E+22	6,177350E+21	5,580815E+22
1018	2,481523E+22	2,481547E+22	3,088916E+21	3,088388E+21	4,963071E+22	6,177304E+21	5,580801E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,481541E+22	2,481621E+22	3,088675E+21	3,088806E+21	4,963161E+22	6,177481E+21	5,580910E+22
1020	2,481611E+22	2,481511E+22	3,088587E+21	3,088717E+21	4,963123E+22	6,177304E+21	5,580853E+22
1021	2,481433E+22	2,481546E+22	3,089125E+21	3,088635E+21	4,962979E+22	6,177760E+21	5,580755E+22
1022	2,481473E+22	2,481491E+22	3,088748E+21	3,089260E+21	4,962964E+22	6,178008E+21	5,580765E+22
1023	2,481448E+22	2,481350E+22	3,089064E+21	3,089016E+21	4,962798E+22	6,178080E+21	5,580606E+22
1024	2,481306E+22	2,481376E+22	3,089419E+21	3,089202E+21	4,962682E+22	6,178621E+21	5,580544E+22
1025	2,481381E+22	2,481262E+22	3,089089E+21	3,089609E+21	4,962643E+22	6,178697E+21	5,580513E+22
1026	2,481236E+22	2,481214E+22	3,089709E+21	3,089311E+21	4,962450E+22	6,179020E+21	5,580352E+22
1027	2,481128E+22	2,481265E+22	3,089714E+21	3,089744E+21	4,962393E+22	6,179458E+21	5,580339E+22
1028	2,481200E+22	2,481116E+22	3,089517E+21	3,089830E+21	4,962316E+22	6,179347E+21	5,580251E+22
1029	2,481055E+22	2,481125E+22	3,090028E+21	3,089479E+21	4,962181E+22	6,179507E+21	5,580131E+22
1030	2,481119E+22	2,481158E+22	3,089592E+21	3,089894E+21	4,962278E+22	6,179486E+21	5,580226E+22
1031	2,481203E+22	2,481090E+22	3,089550E+21	3,089537E+21	4,962293E+22	6,179087E+21	5,580201E+22
1032	2,481119E+22	2,481224E+22	3,089746E+21	3,089348E+21	4,962344E+22	6,179094E+21	5,580253E+22
1033	2,481280E+22	2,481247E+22	3,089111E+21	3,089642E+21	4,962526E+22	6,178753E+21	5,580402E+22
1034	2,481290E+22	2,481256E+22	3,089353E+21	3,089083E+21	4,962545E+22	6,178436E+21	5,580389E+22
1035	2,481269E+22	2,481403E+22	3,089318E+21	3,089136E+21	4,962672E+22	6,178454E+21	5,580518E+22
1036	2,481441E+22	2,481347E+22	3,088860E+21	3,089203E+21	4,962788E+22	6,178063E+21	5,580594E+22
1037	2,481355E+22	2,481367E+22	3,089329E+21	3,088779E+21	4,962723E+22	6,178108E+21	5,580533E+22
1038	2,481350E+22	2,481446E+22	3,089083E+21	3,089254E+21	4,962797E+22	6,178337E+21	5,580631E+22
1039	2,481408E+22	2,481323E+22	3,088993E+21	3,089221E+21	4,962731E+22	6,178214E+21	5,580552E+22
1040	2,481259E+22	2,481333E+22	3,089501E+21	3,089107E+21	4,962592E+22	6,178608E+21	5,580453E+22
1041	2,481313E+22	2,481288E+22	3,089120E+21	3,089642E+21	4,962601E+22	6,178763E+21	5,580477E+22
1042	2,481277E+22	2,481155E+22	3,089506E+21	3,089417E+21	4,962432E+22	6,178923E+21	5,580324E+22
1043	2,481110E+22	2,481217E+22	3,089898E+21	3,089578E+21	4,962327E+22	6,179476E+21	5,580275E+22
1044	2,481163E+22	2,481107E+22	3,089576E+21	3,090054E+21	4,962270E+22	6,179630E+21	5,580233E+22
1045	2,481017E+22	2,481008E+22	3,090171E+21	3,089788E+21	4,962025E+22	6,179959E+21	5,580021E+22
1046	2,480927E+22	2,481061E+22	3,090138E+21	3,090173E+21	4,961988E+22	6,180311E+21	5,580019E+22
1047	2,481018E+22	2,480916E+22	3,089902E+21	3,090235E+21	4,961934E+22	6,180137E+21	5,579948E+22
1048	2,480911E+22	2,480932E+22	3,090350E+21	3,089849E+21	4,961843E+22	6,180199E+21	5,579863E+22
1049	2,480981E+22	2,481000E+22	3,089887E+21	3,090214E+21	4,961982E+22	6,180100E+21	5,579992E+22
1050	2,481044E+22	2,480948E+22	3,089886E+21	3,089911E+21	4,961992E+22	6,179797E+21	5,579972E+22
1051	2,480959E+22	2,481102E+22	3,090104E+21	3,089670E+21	4,962061E+22	6,179774E+21	5,580038E+22
1052	2,481127E+22	2,481112E+22	3,089488E+21	3,089960E+21	4,962239E+22	6,179449E+21	5,580184E+22
1053	2,481143E+22	2,481080E+22	3,089724E+21	3,089404E+21	4,962223E+22	6,179128E+21	5,580136E+22
1054	2,481120E+22	2,481240E+22	3,089696E+21	3,089454E+21	4,962360E+22	6,179150E+21	5,580275E+22
1055	2,481261E+22	2,481189E+22	3,089243E+21	3,089591E+21	4,962450E+22	6,178834E+21	5,580334E+22
1056	2,481178E+22	2,481196E+22	3,089675E+21	3,089226E+21	4,962374E+22	6,178901E+21	5,580264E+22
1057	2,481175E+22	2,481265E+22	3,089422E+21	3,089660E+21	4,962440E+22	6,179082E+21	5,580348E+22
1058	2,481226E+22	2,481129E+22	3,089395E+21	3,089653E+21	4,962356E+22	6,179048E+21	5,580260E+22
1059	2,481087E+22	2,481160E+22	3,089925E+21	3,089469E+21	4,962247E+22	6,179394E+21	5,580187E+22
1060	2,481139E+22	2,481115E+22	3,089590E+21	3,090038E+21	4,962254E+22	6,179627E+21	5,580217E+22
1061	2,481082E+22	2,480958E+22	3,089978E+21	3,089878E+21	4,962040E+22	6,179856E+21	5,580026E+22
1062	2,480900E+22	2,481031E+22	3,090360E+21	3,090059E+21	4,961931E+22	6,180419E+21	5,579973E+22
1063	2,480941E+22	2,480909E+22	3,090030E+21	3,090548E+21	4,961851E+22	6,180579E+21	5,579909E+22
1064	2,480834E+22	2,480791E+22	3,090556E+21	3,090240E+21	4,961625E+22	6,180796E+21	5,579705E+22
1065	2,480767E+22	2,480858E+22	3,090484E+21	3,090509E+21	4,961625E+22	6,180993E+21	5,579725E+22
1066	2,480854E+22	2,480737E+22	3,090286E+21	3,090590E+21	4,961591E+22	6,180876E+21	5,579678E+22
1067	2,480743E+22	2,480797E+22	3,090724E+21	3,090167E+21	4,961540E+22	6,180891E+21	5,579629E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1068	2,480810E+22	2,480872E+22	3,090275E+21	3,090579E+21	4,961682E+22	6,180854E+21	5,579767E+22
1069	2,480874E+22	2,480785E+22	3,090255E+21	3,090289E+21	4,961658E+22	6,180544E+21	5,579713E+22
1070	2,480805E+22	2,480944E+22	3,090462E+21	3,090000E+21	4,961748E+22	6,180462E+21	5,579795E+22
1071	2,480974E+22	2,480956E+22	3,089849E+21	3,090284E+21	4,961930E+22	6,180132E+21	5,579943E+22
1072	2,481008E+22	2,480911E+22	3,090043E+21	3,089757E+21	4,961919E+22	6,179800E+21	5,579899E+22
1073	2,480966E+22	2,481084E+22	3,090006E+21	3,089800E+21	4,962051E+22	6,179806E+21	5,580031E+22
1074	2,481078E+22	2,481031E+22	3,089603E+21	3,090029E+21	4,962109E+22	6,179633E+21	5,580072E+22
1075	2,480995E+22	2,481034E+22	3,090056E+21	3,089624E+21	4,962029E+22	6,179680E+21	5,579997E+22
1076	2,481008E+22	2,481086E+22	3,089845E+21	3,090058E+21	4,962094E+22	6,179903E+21	5,580084E+22
1077	2,481059E+22	2,480921E+22	3,089826E+21	3,090053E+21	4,961980E+22	6,179879E+21	5,579967E+22
1078	2,480914E+22	2,480972E+22	3,090374E+21	3,089868E+21	4,961886E+22	6,180242E+21	5,579910E+22
1079	2,480932E+22	2,480939E+22	3,090059E+21	3,090488E+21	4,961871E+22	6,180547E+21	5,579926E+22
1080	2,480878E+22	2,480765E+22	3,090398E+21	3,090376E+21	4,961643E+22	6,180774E+21	5,579721E+22
1081	2,480700E+22	2,480834E+22	3,090756E+21	3,090482E+21	4,961535E+22	6,181238E+21	5,579658E+22
1082	2,480742E+22	2,480710E+22	3,090459E+21	3,090973E+21	4,961453E+22	6,181432E+21	5,579596E+22
1083	2,480654E+22	2,480614E+22	3,090974E+21	3,090584E+21	4,961268E+22	6,181557E+21	5,579424E+22
1084	2,480601E+22	2,480690E+22	3,090916E+21	3,090873E+21	4,961290E+22	6,181789E+21	5,579469E+22
1085	2,480673E+22	2,480562E+22	3,090692E+21	3,091004E+21	4,961235E+22	6,181696E+21	5,579404E+22
1086	2,480569E+22	2,480641E+22	3,091097E+21	3,090584E+21	4,961209E+22	6,181681E+21	5,579377E+22
1087	2,480636E+22	2,480710E+22	3,090654E+21	3,090974E+21	4,961346E+22	6,181628E+21	5,579509E+22
1088	2,480737E+22	2,480611E+22	3,090560E+21	3,090647E+21	4,961348E+22	6,181207E+21	5,579469E+22
1089	2,480680E+22	2,480782E+22	3,090743E+21	3,090261E+21	4,961462E+22	6,181003E+21	5,579562E+22
1090	2,480819E+22	2,480808E+22	3,090191E+21	3,090594E+21	4,961627E+22	6,180785E+21	5,579705E+22
1091	2,480836E+22	2,480786E+22	3,090392E+21	3,090080E+21	4,961623E+22	6,180472E+21	5,579670E+22
1092	2,480791E+22	2,480939E+22	3,090395E+21	3,090190E+21	4,961730E+22	6,180584E+21	5,579789E+22
1093	2,480895E+22	2,480844E+22	3,090002E+21	3,090451E+21	4,961739E+22	6,180453E+21	5,579784E+22
1094	2,480833E+22	2,480847E+22	3,090446E+21	3,090016E+21	4,961680E+22	6,180462E+21	5,579727E+22
1095	2,480840E+22	2,480899E+22	3,090274E+21	3,090445E+21	4,961739E+22	6,180720E+21	5,579811E+22
1096	2,480900E+22	2,480730E+22	3,090222E+21	3,090486E+21	4,961630E+22	6,180708E+21	5,579701E+22
1097	2,480731E+22	2,480796E+22	3,090768E+21	3,090291E+21	4,961527E+22	6,181059E+21	5,579633E+22
1098	2,480714E+22	2,480762E+22	3,090519E+21	3,090978E+21	4,961475E+22	6,181496E+21	5,579625E+22
1099	2,480666E+22	2,480584E+22	3,090859E+21	3,090816E+21	4,961250E+22	6,181675E+21	5,579417E+22
1100	2,480510E+22	2,480635E+22	3,091226E+21	3,090902E+21	4,961145E+22	6,182128E+21	5,579358E+22
1101	2,480551E+22	2,480493E+22	3,090912E+21	3,091385E+21	4,961044E+22	6,182297E+21	5,579274E+22
1102	2,480473E+22	2,480424E+22	3,091395E+21	3,090986E+21	4,960897E+22	6,182380E+21	5,579135E+22
1103	2,480409E+22	2,480520E+22	3,091335E+21	3,091298E+21	4,960929E+22	6,182633E+21	5,579192E+22
1104	2,480505E+22	2,480387E+22	3,091030E+21	3,091444E+21	4,960892E+22	6,182474E+21	5,579139E+22
1105	2,480416E+22	2,480475E+22	3,091396E+21	3,090923E+21	4,960892E+22	6,182320E+21	5,579124E+22
1106	2,480485E+22	2,480556E+22	3,090988E+21	3,091291E+21	4,961042E+22	6,182279E+21	5,579270E+22
1107	2,480594E+22	2,480477E+22	3,090894E+21	3,090899E+21	4,961071E+22	6,181792E+21	5,579251E+22
1108	2,480537E+22	2,480646E+22	3,091111E+21	3,090563E+21	4,961183E+22	6,181673E+21	5,579350E+22
1109	2,480640E+22	2,480653E+22	3,090565E+21	3,090973E+21	4,961293E+22	6,181537E+21	5,579447E+22
1110	2,480660E+22	2,480626E+22	3,090761E+21	3,090496E+21	4,961286E+22	6,181257E+21	5,579412E+22
1111	2,480618E+22	2,480759E+22	3,090794E+21	3,090604E+21	4,961376E+22	6,181399E+21	5,579516E+22
1112	2,480753E+22	2,480645E+22	3,090347E+21	3,090857E+21	4,961398E+22	6,181204E+21	5,579519E+22
1113	2,480695E+22	2,480664E+22	3,090781E+21	3,090356E+21	4,961359E+22	6,181137E+21	5,579473E+22
1114	2,480663E+22	2,480735E+22	3,090689E+21	3,090842E+21	4,961398E+22	6,181531E+21	5,579551E+22
1115	2,480697E+22	2,480585E+22	3,090659E+21	3,090896E+21	4,961283E+22	6,181555E+21	5,579438E+22
1116	2,480524E+22	2,480624E+22	3,091249E+21	3,090755E+21	4,961148E+22	6,182003E+21	5,579349E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1117	2,480489E+22	2,480551E+22	3,091009E+21	3,091445E+21	4,961040E+22	6,182454E+21	5,579286E+22
1118	2,480470E+22	2,480372E+22	3,091321E+21	3,091258E+21	4,960842E+22	6,182579E+21	5,579100E+22
1119	2,480321E+22	2,480420E+22	3,091692E+21	3,091326E+21	4,960741E+22	6,183018E+21	5,579043E+22
1120	2,480382E+22	2,480287E+22	3,091298E+21	3,091839E+21	4,960669E+22	6,183138E+21	5,578982E+22
1121	2,480305E+22	2,480248E+22	3,091717E+21	3,091402E+21	4,960554E+22	6,183119E+21	5,578866E+22
1122	2,480226E+22	2,480356E+22	3,091706E+21	3,091726E+21	4,960582E+22	6,183432E+21	5,578925E+22
1123	2,480340E+22	2,480242E+22	3,091392E+21	3,091772E+21	4,960582E+22	6,183165E+21	5,578899E+22
1124	2,480277E+22	2,480323E+22	3,091770E+21	3,091214E+21	4,960601E+22	6,182984E+21	5,578899E+22
1125	2,480323E+22	2,480393E+22	3,091377E+21	3,091574E+21	4,960717E+22	6,182951E+21	5,579012E+22
1126	2,480429E+22	2,480331E+22	3,091264E+21	3,091219E+21	4,960761E+22	6,182483E+21	5,579009E+22
1127	2,480352E+22	2,480493E+22	3,091494E+21	3,090947E+21	4,960845E+22	6,182441E+21	5,579089E+22
1128	2,480474E+22	2,480478E+22	3,090886E+21	3,091405E+21	4,960952E+22	6,182292E+21	5,579181E+22
1129	2,480514E+22	2,480450E+22	3,091046E+21	3,090866E+21	4,960964E+22	6,181912E+21	5,579155E+22
1130	2,480470E+22	2,480588E+22	3,091143E+21	3,090974E+21	4,961058E+22	6,182117E+21	5,579270E+22
1131	2,480606E+22	2,480496E+22	3,090726E+21	3,091182E+21	4,961102E+22	6,181908E+21	5,579292E+22
1132	2,480536E+22	2,480512E+22	3,091211E+21	3,090748E+21	4,961048E+22	6,181959E+21	5,579244E+22
1133	2,480451E+22	2,480562E+22	3,091158E+21	3,091298E+21	4,961013E+22	6,182456E+21	5,579259E+22
1134	2,480483E+22	2,480396E+22	3,091137E+21	3,091387E+21	4,960879E+22	6,182524E+21	5,579132E+22
1135	2,480315E+22	2,480407E+22	3,091745E+21	3,091235E+21	4,960722E+22	6,182980E+21	5,579020E+22
1136	2,480310E+22	2,480316E+22	3,091423E+21	3,091903E+21	4,960626E+22	6,183326E+21	5,578959E+22
1137	2,480299E+22	2,480158E+22	3,091691E+21	3,091653E+21	4,960457E+22	6,183344E+21	5,578792E+22
1138	2,480134E+22	2,480237E+22	3,092092E+21	3,091754E+21	4,960370E+22	6,183846E+21	5,578755E+22
1139	2,480191E+22	2,480136E+22	3,091695E+21	3,092234E+21	4,960326E+22	6,183929E+21	5,578719E+22
1140	2,480131E+22	2,480093E+22	3,092125E+21	3,091796E+21	4,960225E+22	6,183921E+21	5,578617E+22
1141	2,480041E+22	2,480186E+22	3,092124E+21	3,092075E+21	4,960227E+22	6,184199E+21	5,578647E+22
1142	2,480178E+22	2,480081E+22	3,091789E+21	3,092086E+21	4,960259E+22	6,183875E+21	5,578646E+22
1143	2,480116E+22	2,480158E+22	3,092174E+21	3,091537E+21	4,960274E+22	6,183712E+21	5,578645E+22
1144	2,480165E+22	2,480225E+22	3,091701E+21	3,091952E+21	4,960390E+22	6,183652E+21	5,578755E+22
1145	2,480269E+22	2,480175E+22	3,091537E+21	3,091610E+21	4,960444E+22	6,183147E+21	5,578759E+22
1146	2,480189E+22	2,480330E+22	3,091808E+21	3,091371E+21	4,960519E+22	6,183179E+21	5,578837E+22
1147	2,480332E+22	2,480325E+22	3,091213E+21	3,091747E+21	4,960657E+22	6,182960E+21	5,578953E+22
1148	2,480393E+22	2,480293E+22	3,091395E+21	3,091188E+21	4,960687E+22	6,182583E+21	5,578945E+22
1149	2,480309E+22	2,480424E+22	3,091551E+21	3,091300E+21	4,960733E+22	6,182851E+21	5,579018E+22
1150	2,480427E+22	2,480346E+22	3,091161E+21	3,091561E+21	4,960773E+22	6,182721E+21	5,579045E+22
1151	2,480329E+22	2,480338E+22	3,091690E+21	3,091203E+21	4,960667E+22	6,182892E+21	5,578957E+22
1152	2,480246E+22	2,480355E+22	3,091587E+21	3,091785E+21	4,960601E+22	6,183372E+21	5,578938E+22
1153	2,480296E+22	2,480184E+22	3,091519E+21	3,091830E+21	4,960480E+22	6,183349E+21	5,578814E+22
1154	2,480129E+22	2,480192E+22	3,092159E+21	3,091675E+21	4,960321E+22	6,183833E+21	5,578704E+22
1155	2,480133E+22	2,480129E+22	3,091845E+21	3,092287E+21	4,960262E+22	6,184132E+21	5,578675E+22
1156	2,480126E+22	2,479985E+22	3,092115E+21	3,092075E+21	4,960111E+22	6,184190E+21	5,578530E+22
1157	2,479922E+22	2,480061E+22	3,092542E+21	3,092201E+21	4,959983E+22	6,184744E+21	5,578457E+22
1158	2,479994E+22	2,479964E+22	3,092152E+21	3,092665E+21	4,959958E+22	6,184817E+21	5,578440E+22
1159	2,479948E+22	2,479908E+22	3,092577E+21	3,092193E+21	4,959856E+22	6,184770E+21	5,578333E+22
1160	2,479883E+22	2,479992E+22	3,092487E+21	3,092433E+21	4,959875E+22	6,184920E+21	5,578367E+22
1161	2,480025E+22	2,479910E+22	3,092093E+21	3,092410E+21	4,959934E+22	6,184503E+21	5,578385E+22
1162	2,479945E+22	2,480002E+22	3,092491E+21	3,091919E+21	4,959947E+22	6,184410E+21	5,578388E+22
1163	2,479998E+22	2,480087E+22	3,092014E+21	3,092307E+21	4,960085E+22	6,184321E+21	5,578517E+22
1164	2,480125E+22	2,480029E+22	3,091859E+21	3,091970E+21	4,960154E+22	6,183829E+21	5,578537E+22
1165	2,480038E+22	2,480169E+22	3,092160E+21	3,091702E+21	4,960207E+22	6,183862E+21	5,578593E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1166	2,480195E+22	2,480171E+22	3,091601E+21	3,092050E+21	4,960366E+22	6,183651E+21	5,578731E+22
1167	2,480242E+22	2,480136E+22	3,091821E+21	3,091534E+21	4,960378E+22	6,183355E+21	5,578714E+22
1168	2,480140E+22	2,480254E+22	3,091927E+21	3,091709E+21	4,960394E+22	6,183636E+21	5,578758E+22
1169	2,480235E+22	2,480172E+22	3,091526E+21	3,092004E+21	4,960407E+22	6,183529E+21	5,578760E+22
1170	2,480128E+22	2,480144E+22	3,092103E+21	3,091691E+21	4,960272E+22	6,183795E+21	5,578651E+22
1171	2,480061E+22	2,480160E+22	3,092006E+21	3,092190E+21	4,960221E+22	6,184196E+21	5,578641E+22
1172	2,480130E+22	2,479986E+22	3,091947E+21	3,092224E+21	4,960116E+22	6,184171E+21	5,578534E+22
1173	2,479932E+22	2,479994E+22	3,092613E+21	3,092079E+21	4,959926E+22	6,184692E+21	5,578395E+22
1174	2,479929E+22	2,479953E+22	3,092319E+21	3,092721E+21	4,959882E+22	6,185040E+21	5,578386E+22
1175	2,479913E+22	2,479805E+22	3,092601E+21	3,092552E+21	4,959718E+22	6,185152E+21	5,578233E+22
1176	2,479728E+22	2,479861E+22	3,092950E+21	3,092660E+21	4,959589E+22	6,185610E+21	5,578150E+22
1177	2,479824E+22	2,479775E+22	3,092512E+21	3,093053E+21	4,959599E+22	6,185565E+21	5,578155E+22
1178	2,479785E+22	2,479726E+22	3,092940E+21	3,092571E+21	4,959511E+22	6,185511E+21	5,578062E+22
1179	2,479727E+22	2,479837E+22	3,092832E+21	3,092748E+21	4,959563E+22	6,185580E+21	5,578121E+22
1180	2,479872E+22	2,479768E+22	3,092421E+21	3,092764E+21	4,959639E+22	6,185185E+21	5,578158E+22
1181	2,479764E+22	2,479847E+22	3,092841E+21	3,092299E+21	4,959611E+22	6,185140E+21	5,578125E+22
1182	2,479842E+22	2,479934E+22	3,092393E+21	3,092662E+21	4,959775E+22	6,185055E+21	5,578281E+22
1183	2,479985E+22	2,479865E+22	3,092248E+21	3,092305E+21	4,959850E+22	6,184552E+21	5,578305E+22
1184	2,479905E+22	2,479994E+22	3,092493E+21	3,092021E+21	4,959900E+22	6,184514E+21	5,578351E+22
1185	2,480049E+22	2,480017E+22	3,091923E+21	3,092371E+21	4,960067E+22	6,184294E+21	5,578496E+22
1186	2,480060E+22	2,479982E+22	3,092183E+21	3,091949E+21	4,960042E+22	6,184133E+21	5,578455E+22
1187	2,479947E+22	2,480098E+22	3,092316E+21	3,092112E+21	4,960045E+22	6,184428E+21	5,578488E+22
1188	2,480053E+22	2,479997E+22	3,091932E+21	3,092422E+21	4,960051E+22	6,184353E+21	5,578486E+22
1189	2,479930E+22	2,479943E+22	3,092544E+21	3,092107E+21	4,959873E+22	6,184651E+21	5,578338E+22
1190	2,479880E+22	2,479961E+22	3,092482E+21	3,092588E+21	4,959841E+22	6,185071E+21	5,578348E+22
1191	2,479940E+22	2,479789E+22	3,092438E+21	3,092676E+21	4,959729E+22	6,185114E+21	5,578240E+22
1192	2,479735E+22	2,479792E+22	3,093024E+21	3,092579E+21	4,959527E+22	6,185603E+21	5,578088E+22
1193	2,479732E+22	2,479759E+22	3,092716E+21	3,093216E+21	4,959491E+22	6,185933E+21	5,578085E+22
1194	2,479721E+22	2,479609E+22	3,093013E+21	3,093040E+21	4,959330E+22	6,186053E+21	5,577935E+22
1195	2,479563E+22	2,479678E+22	3,093342E+21	3,093020E+21	4,959241E+22	6,186363E+21	5,577877E+22
1196	2,479672E+22	2,479605E+22	3,092895E+21	3,093367E+21	4,959277E+22	6,186262E+21	5,577903E+22
1197	2,479600E+22	2,479563E+22	3,093334E+21	3,092902E+21	4,959163E+22	6,186237E+21	5,577787E+22
1198	2,479542E+22	2,479687E+22	3,093239E+21	3,093095E+21	4,959228E+22	6,186334E+21	5,577862E+22
1199	2,479687E+22	2,479613E+22	3,092829E+21	3,093157E+21	4,959300E+22	6,185986E+21	5,577899E+22
1200	2,479610E+22	2,479671E+22	3,093152E+21	3,092677E+21	4,959282E+22	6,185829E+21	5,577864E+22
1201	2,479710E+22	2,479766E+22	3,092691E+21	3,092986E+21	4,959476E+22	6,185677E+21	5,578044E+22
1202	2,479850E+22	2,479710E+22	3,092568E+21	3,092641E+21	4,959560E+22	6,185209E+21	5,578081E+22
1203	2,479766E+22	2,479857E+22	3,092822E+21	3,092329E+21	4,959622E+22	6,185151E+21	5,578138E+22
1204	2,479887E+22	2,479884E+22	3,092276E+21	3,092731E+21	4,959771E+22	6,185007E+21	5,578272E+22
1205	2,479857E+22	2,479820E+22	3,092592E+21	3,092378E+21	4,959676E+22	6,184970E+21	5,578173E+22
1206	2,479757E+22	2,479915E+22	3,092773E+21	3,092528E+21	4,959672E+22	6,185301E+21	5,578202E+22
1207	2,479872E+22	2,479798E+22	3,092405E+21	3,092849E+21	4,959669E+22	6,185254E+21	5,578195E+22
1208	2,479758E+22	2,479724E+22	3,092941E+21	3,092537E+21	4,959482E+22	6,185479E+21	5,578030E+22
1209	2,479702E+22	2,479761E+22	3,092879E+21	3,093029E+21	4,959463E+22	6,185908E+21	5,578054E+22
1210	2,479737E+22	2,479603E+22	3,092852E+21	3,093179E+21	4,959340E+22	6,186032E+21	5,577943E+22
1211	2,479541E+22	2,479613E+22	3,093439E+21	3,093031E+21	4,959154E+22	6,186470E+21	5,577801E+22
1212	2,479554E+22	2,479583E+22	3,093142E+21	3,093618E+21	4,959137E+22	6,186761E+21	5,577813E+22
1213	2,479527E+22	2,479423E+22	3,093465E+21	3,093416E+21	4,958950E+22	6,186881E+21	5,577638E+22
1214	2,479384E+22	2,479504E+22	3,093814E+21	3,093354E+21	4,958887E+22	6,187167E+21	5,577604E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1215	2,479484E+22	2,479437E+22	3,093351E+21	3,093748E+21	4,958920E+22	6,187099E+21	5,577630E+22
1216	2,479408E+22	2,479380E+22	3,093684E+21	3,093333E+21	4,958789E+22	6,187017E+21	5,577490E+22
1217	2,479370E+22	2,479509E+22	3,093566E+21	3,093519E+21	4,958878E+22	6,187086E+21	5,577587E+22
1218	2,479532E+22	2,479438E+22	3,093151E+21	3,093564E+21	4,958970E+22	6,186715E+21	5,577641E+22
1219	2,479490E+22	2,479514E+22	3,093446E+21	3,092979E+21	4,959004E+22	6,186425E+21	5,577646E+22
1220	2,479593E+22	2,479629E+22	3,093004E+21	3,093249E+21	4,959222E+22	6,186252E+21	5,577847E+22
1221	2,479681E+22	2,479577E+22	3,092927E+21	3,092956E+21	4,959258E+22	6,185883E+21	5,577846E+22
1222	2,479584E+22	2,479721E+22	3,093235E+21	3,092682E+21	4,959304E+22	6,185918E+21	5,577896E+22
1223	2,479691E+22	2,479724E+22	3,092723E+21	3,093145E+21	4,959415E+22	6,185867E+21	5,578002E+22
1224	2,479676E+22	2,479620E+22	3,092969E+21	3,092817E+21	4,959295E+22	6,185787E+21	5,577874E+22
1225	2,479598E+22	2,479707E+22	3,093153E+21	3,092945E+21	4,959305E+22	6,186097E+21	5,577915E+22
1226	2,479704E+22	2,479599E+22	3,092805E+21	3,093295E+21	4,959302E+22	6,186100E+21	5,577912E+22
1227	2,479592E+22	2,479544E+22	3,093320E+21	3,092965E+21	4,959136E+22	6,186285E+21	5,577765E+22
1228	2,479519E+22	2,479594E+22	3,093287E+21	3,093469E+21	4,959113E+22	6,186756E+21	5,577788E+22
1229	2,479521E+22	2,479424E+22	3,093323E+21	3,093646E+21	4,958946E+22	6,186969E+21	5,577643E+22
1230	2,479346E+22	2,479425E+22	3,093951E+21	3,093439E+21	4,958771E+22	6,187390E+21	5,577510E+22
1231	2,479359E+22	2,479392E+22	3,093663E+21	3,094007E+21	4,958751E+22	6,187670E+21	5,577518E+22
1232	2,479336E+22	2,479220E+22	3,093879E+21	3,093817E+21	4,958556E+22	6,187696E+21	5,577325E+22
1233	2,479192E+22	2,479310E+22	3,094192E+21	3,093771E+21	4,958502E+22	6,187964E+21	5,577299E+22
1234	2,479283E+22	2,479258E+22	3,093711E+21	3,094207E+21	4,958540E+22	6,187918E+21	5,577332E+22
1235	2,479245E+22	2,479211E+22	3,093989E+21	3,093730E+21	4,958456E+22	6,187718E+21	5,577228E+22
1236	2,479238E+22	2,479352E+22	3,093871E+21	3,093840E+21	4,958590E+22	6,187711E+21	5,577361E+22
1237	2,479390E+22	2,479290E+22	3,093496E+21	3,093859E+21	4,958680E+22	6,187354E+21	5,577415E+22
1238	2,479356E+22	2,479379E+22	3,093830E+21	3,093245E+21	4,958736E+22	6,187075E+21	5,577443E+22
1239	2,479432E+22	2,479500E+22	3,093413E+21	3,093577E+21	4,958932E+22	6,186990E+21	5,577631E+22
1240	2,479499E+22	2,479417E+22	3,093269E+21	3,093369E+21	4,958916E+22	6,186637E+21	5,577580E+22
1241	2,479410E+22	2,479537E+22	3,093597E+21	3,093122E+21	4,958947E+22	6,186719E+21	5,577619E+22
1242	2,479519E+22	2,479531E+22	3,093098E+21	3,093582E+21	4,959049E+22	6,186681E+21	5,577717E+22
1243	2,479531E+22	2,479429E+22	3,093317E+21	3,093195E+21	4,958960E+22	6,186512E+21	5,577612E+22
1244	2,479453E+22	2,479532E+22	3,093526E+21	3,093299E+21	4,958984E+22	6,186825E+21	5,577667E+22
1245	2,479506E+22	2,479430E+22	3,093243E+21	3,093709E+21	4,958936E+22	6,186952E+21	5,577631E+22
1246	2,479385E+22	2,479380E+22	3,093810E+21	3,093400E+21	4,958765E+22	6,187210E+21	5,577486E+22
1247	2,479305E+22	2,479415E+22	3,093810E+21	3,093928E+21	4,958720E+22	6,187738E+21	5,577494E+22
1248	2,479313E+22	2,479212E+22	3,093777E+21	3,094109E+21	4,958525E+22	6,187887E+21	5,577313E+22
1249	2,479160E+22	2,479209E+22	3,094394E+21	3,093878E+21	4,958369E+22	6,188271E+21	5,577196E+22
1250	2,479165E+22	2,479187E+22	3,094089E+21	3,094448E+21	4,958352E+22	6,188537E+21	5,577206E+22
1251	2,479155E+22	2,479034E+22	3,094233E+21	3,094250E+21	4,958189E+22	6,188483E+21	5,577037E+22
1252	2,479019E+22	2,479138E+22	3,094527E+21	3,094185E+21	4,958157E+22	6,188712E+21	5,577028E+22
1253	2,479099E+22	2,479087E+22	3,094085E+21	3,094612E+21	4,958186E+22	6,188697E+21	5,577056E+22
1254	2,479102E+22	2,479053E+22	3,094377E+21	3,094046E+21	4,958154E+22	6,188422E+21	5,576997E+22
1255	2,479102E+22	2,479206E+22	3,094275E+21	3,094125E+21	4,958308E+22	6,188401E+21	5,577148E+22
1256	2,479239E+22	2,479139E+22	3,093835E+21	3,094162E+21	4,958378E+22	6,187997E+21	5,577178E+22
1257	2,479196E+22	2,479230E+22	3,094171E+21	3,093603E+21	4,958426E+22	6,187775E+21	5,577203E+22
1258	2,479243E+22	2,479347E+22	3,093767E+21	3,093981E+21	4,958590E+22	6,187748E+21	5,577365E+22
1259	2,479337E+22	2,479251E+22	3,093585E+21	3,093765E+21	4,958588E+22	6,187349E+21	5,577323E+22
1260	2,479268E+22	2,479363E+22	3,093926E+21	3,093471E+21	4,958631E+22	6,187397E+21	5,577371E+22
1261	2,479357E+22	2,479358E+22	3,093495E+21	3,093943E+21	4,958715E+22	6,187437E+21	5,577459E+22
1262	2,479375E+22	2,479265E+22	3,093752E+21	3,093550E+21	4,958640E+22	6,187302E+21	5,577370E+22
1263	2,479264E+22	2,479372E+22	3,093994E+21	3,093726E+21	4,958635E+22	6,187720E+21	5,577407E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1264	2,479294E+22	2,479243E+22	3,093671E+21	3,094204E+21	4,958537E+22	6,187875E+21	5,577324E+22
1265	2,479188E+22	2,479167E+22	3,094263E+21	3,093911E+21	4,958355E+22	6,188173E+21	5,577173E+22
1266	2,479105E+22	2,479201E+22	3,094270E+21	3,094396E+21	4,958305E+22	6,188666E+21	5,577172E+22
1267	2,479141E+22	2,479004E+22	3,094179E+21	3,094526E+21	4,958145E+22	6,188705E+21	5,577016E+22
1268	2,478987E+22	2,479016E+22	3,094779E+21	3,094258E+21	4,958003E+22	6,189038E+21	5,576907E+22
1269	2,478952E+22	2,479010E+22	3,094508E+21	3,094865E+21	4,957962E+22	6,189373E+21	5,576899E+22
1270	2,478958E+22	2,478867E+22	3,094662E+21	3,094649E+21	4,957825E+22	6,189311E+21	5,576756E+22
1271	2,478841E+22	2,478973E+22	3,094957E+21	3,094575E+21	4,957814E+22	6,189532E+21	5,576767E+22
1272	2,478938E+22	2,478909E+22	3,094454E+21	3,094974E+21	4,957847E+22	6,189427E+21	5,576790E+22
1273	2,478968E+22	2,478882E+22	3,094737E+21	3,094387E+21	4,957850E+22	6,189123E+21	5,576762E+22
1274	2,478949E+22	2,479054E+22	3,094631E+21	3,094459E+21	4,958003E+22	6,189090E+21	5,576912E+22
1275	2,479084E+22	2,478998E+22	3,094131E+21	3,094521E+21	4,958082E+22	6,188652E+21	5,576947E+22
1276	2,479038E+22	2,479082E+22	3,094471E+21	3,093973E+21	4,958120E+22	6,188444E+21	5,576964E+22
1277	2,479064E+22	2,479182E+22	3,094136E+21	3,094359E+21	4,958246E+22	6,188495E+21	5,577096E+22
1278	2,479185E+22	2,479086E+22	3,093984E+21	3,094099E+21	4,958271E+22	6,188083E+21	5,577079E+22
1279	2,479120E+22	2,479198E+22	3,094339E+21	3,093819E+21	4,958319E+22	6,188158E+21	5,577134E+22
1280	2,479182E+22	2,479176E+22	3,093883E+21	3,094336E+21	4,958358E+22	6,188219E+21	5,577180E+22
1281	2,479192E+22	2,479084E+22	3,094154E+21	3,094010E+21	4,958276E+22	6,188164E+21	5,577092E+22
1282	2,479057E+22	2,479186E+22	3,094421E+21	3,094200E+21	4,958243E+22	6,188621E+21	5,577105E+22
1283	2,479110E+22	2,479048E+22	3,094069E+21	3,094661E+21	4,958158E+22	6,188730E+21	5,577031E+22
1284	2,479018E+22	2,478970E+22	3,094668E+21	3,094315E+21	4,957989E+22	6,188982E+21	5,576887E+22
1285	2,478909E+22	2,479007E+22	3,094733E+21	3,094791E+21	4,957915E+22	6,189524E+21	5,576868E+22
1286	2,478950E+22	2,478825E+22	3,094658E+21	3,094917E+21	4,957775E+22	6,189575E+21	5,576733E+22
1287	2,478782E+22	2,478842E+22	3,095241E+21	3,094706E+21	4,957624E+22	6,189947E+21	5,576619E+22
1288	2,478740E+22	2,478812E+22	3,094926E+21	3,095336E+21	4,957553E+22	6,190262E+21	5,576579E+22
1289	2,478786E+22	2,478666E+22	3,095066E+21	3,095100E+21	4,957452E+22	6,190166E+21	5,576468E+22
1290	2,478681E+22	2,478789E+22	3,095342E+21	3,094948E+21	4,957470E+22	6,190290E+21	5,576499E+22
1291	2,478807E+22	2,478747E+22	3,094777E+21	3,095297E+21	4,957554E+22	6,190074E+21	5,576561E+22
1292	2,478827E+22	2,478741E+22	3,095040E+21	3,094685E+21	4,957567E+22	6,189725E+21	5,576540E+22
1293	2,478762E+22	2,478922E+22	3,094984E+21	3,094796E+21	4,957684E+22	6,189780E+21	5,576662E+22
1294	2,478908E+22	2,478861E+22	3,094505E+21	3,094855E+21	4,957769E+22	6,189360E+21	5,576705E+22
1295	2,478873E+22	2,478927E+22	3,094854E+21	3,094331E+21	4,957800E+22	6,189185E+21	5,576718E+22
1296	2,478905E+22	2,479001E+22	3,094492E+21	3,094716E+21	4,957905E+22	6,189208E+21	5,576826E+22
1297	2,479048E+22	2,478902E+22	3,094353E+21	3,094479E+21	4,957949E+22	6,188832E+21	5,576833E+22
1298	2,478958E+22	2,479028E+22	3,094711E+21	3,094216E+21	4,957986E+22	6,188928E+21	5,576879E+22
1299	2,479016E+22	2,479011E+22	3,094226E+21	3,094774E+21	4,958027E+22	6,189000E+21	5,576927E+22
1300	2,479017E+22	2,478910E+22	3,094518E+21	3,094448E+21	4,957927E+22	6,188965E+21	5,576823E+22
1301	2,478859E+22	2,479000E+22	3,094871E+21	3,094624E+21	4,957859E+22	6,189494E+21	5,576809E+22
1302	2,478927E+22	2,478865E+22	3,094560E+21	3,095031E+21	4,957791E+22	6,189591E+21	5,576751E+22
1303	2,478830E+22	2,478786E+22	3,095168E+21	3,094717E+21	4,957616E+22	6,189885E+21	5,576604E+22
1304	2,478689E+22	2,478804E+22	3,095198E+21	3,095234E+21	4,957493E+22	6,190432E+21	5,576536E+22
1305	2,478736E+22	2,478621E+22	3,095109E+21	3,095423E+21	4,957357E+22	6,190532E+21	5,576410E+22
1306	2,478570E+22	2,478641E+22	3,095661E+21	3,095191E+21	4,957211E+22	6,190852E+21	5,576296E+22
1307	2,478574E+22	2,478616E+22	3,095289E+21	3,095772E+21	4,957189E+22	6,191062E+21	5,576295E+22
1308	2,478647E+22	2,478492E+22	3,095399E+21	3,095450E+21	4,957139E+22	6,190849E+21	5,576224E+22
1309	2,478526E+22	2,478632E+22	3,095720E+21	3,095263E+21	4,957158E+22	6,190982E+21	5,576256E+22
1310	2,478646E+22	2,478617E+22	3,095171E+21	3,095592E+21	4,957263E+22	6,190764E+21	5,576339E+22
1311	2,478650E+22	2,478612E+22	3,095413E+21	3,095052E+21	4,957262E+22	6,190465E+21	5,576309E+22
1312	2,478570E+22	2,478750E+22	3,095340E+21	3,095188E+21	4,957320E+22	6,190528E+21	5,576372E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1313	2,478751E+22	2,478676E+22	3,094867E+21	3,095250E+21	4,957428E+22	6,190116E+21	5,576439E+22
1314	2,478729E+22	2,478747E+22	3,095194E+21	3,094677E+21	4,957476E+22	6,189871E+21	5,576463E+22
1315	2,478781E+22	2,478830E+22	3,094801E+21	3,095057E+21	4,957611E+22	6,189858E+21	5,576597E+22
1316	2,478906E+22	2,478752E+22	3,094657E+21	3,094824E+21	4,957658E+22	6,189481E+21	5,576606E+22
1317	2,478770E+22	2,478880E+22	3,095092E+21	3,094607E+21	4,957650E+22	6,189699E+21	5,576620E+22
1318	2,478827E+22	2,478861E+22	3,094673E+21	3,095151E+21	4,957688E+22	6,189824E+21	5,576671E+22
1319	2,478830E+22	2,478742E+22	3,094987E+21	3,094867E+21	4,957573E+22	6,189854E+21	5,576558E+22
1320	2,478659E+22	2,478795E+22	3,095344E+21	3,095043E+21	4,957454E+22	6,190387E+21	5,576493E+22
1321	2,478739E+22	2,478653E+22	3,095045E+21	3,095489E+21	4,957392E+22	6,190534E+21	5,576446E+22
1322	2,478619E+22	2,478582E+22	3,095618E+21	3,095198E+21	4,957201E+22	6,190816E+21	5,576282E+22
1323	2,478492E+22	2,478598E+22	3,095586E+21	3,095749E+21	4,957091E+22	6,191335E+21	5,576224E+22
1324	2,478552E+22	2,478419E+22	3,095477E+21	3,095894E+21	4,956971E+22	6,191371E+21	5,576109E+22
1325	2,478391E+22	2,478450E+22	3,096065E+21	3,095606E+21	4,956840E+22	6,191672E+21	5,576007E+22
1326	2,478422E+22	2,478453E+22	3,095718E+21	3,096087E+21	4,956875E+22	6,191805E+21	5,576056E+22
1327	2,478488E+22	2,478347E+22	3,095815E+21	3,095773E+21	4,956835E+22	6,191588E+21	5,575993E+22
1328	2,478333E+22	2,478475E+22	3,096110E+21	3,095605E+21	4,956808E+22	6,191715E+21	5,575979E+22
1329	2,478458E+22	2,478454E+22	3,095557E+21	3,095980E+21	4,956912E+22	6,191537E+21	5,576066E+22
1330	2,478464E+22	2,478442E+22	3,095768E+21	3,095434E+21	4,956906E+22	6,191202E+21	5,576026E+22
1331	2,478429E+22	2,478570E+22	3,095640E+21	3,095555E+21	4,956999E+22	6,191195E+21	5,576119E+22
1332	2,478629E+22	2,478511E+22	3,095149E+21	3,095568E+21	4,957141E+22	6,190718E+21	5,576212E+22
1333	2,478591E+22	2,478597E+22	3,095525E+21	3,095002E+21	4,957187E+22	6,190527E+21	5,576240E+22
1334	2,478630E+22	2,478703E+22	3,095183E+21	3,095381E+21	4,957332E+22	6,190564E+21	5,576389E+22
1335	2,478729E+22	2,478621E+22	3,095059E+21	3,095234E+21	4,957350E+22	6,190293E+21	5,576379E+22
1336	2,478568E+22	2,478698E+22	3,095527E+21	3,095042E+21	4,957266E+22	6,190569E+21	5,576323E+22
1337	2,478644E+22	2,478660E+22	3,095144E+21	3,095592E+21	4,957304E+22	6,190736E+21	5,576378E+22
1338	2,478643E+22	2,478538E+22	3,095444E+21	3,095297E+21	4,957181E+22	6,190741E+21	5,576255E+22
1339	2,478481E+22	2,478584E+22	3,095757E+21	3,095497E+21	4,957065E+22	6,191254E+21	5,576190E+22
1340	2,478545E+22	2,478459E+22	3,095429E+21	3,095950E+21	4,957005E+22	6,191379E+21	5,576143E+22
1341	2,478406E+22	2,478388E+22	3,096027E+21	3,095675E+21	4,956794E+22	6,191702E+21	5,575964E+22
1342	2,478299E+22	2,478415E+22	3,096037E+21	3,096160E+21	4,956714E+22	6,192197E+21	5,575934E+22
1343	2,478378E+22	2,478250E+22	3,095918E+21	3,096295E+21	4,956628E+22	6,192213E+21	5,575849E+22
1344	2,478212E+22	2,478261E+22	3,096505E+21	3,095970E+21	4,956473E+22	6,192476E+21	5,575720E+22
1345	2,478254E+22	2,478278E+22	3,096172E+21	3,096455E+21	4,956532E+22	6,192628E+21	5,575795E+22
1346	2,478295E+22	2,478189E+22	3,096213E+21	3,096160E+21	4,956484E+22	6,192373E+21	5,575721E+22
1347	2,478154E+22	2,478301E+22	3,096436E+21	3,096029E+21	4,956455E+22	6,192465E+21	5,575702E+22
1348	2,478295E+22	2,478280E+22	3,095853E+21	3,096358E+21	4,956575E+22	6,192211E+21	5,575796E+22
1349	2,478313E+22	2,478271E+22	3,096082E+21	3,095777E+21	4,956585E+22	6,191859E+21	5,575770E+22
1350	2,478305E+22	2,478424E+22	3,095994E+21	3,095827E+21	4,956730E+22	6,191821E+21	5,575912E+22
1351	2,478494E+22	2,478386E+22	3,095507E+21	3,095884E+21	4,956880E+22	6,191391E+21	5,576019E+22
1352	2,478414E+22	2,478450E+22	3,095895E+21	3,095368E+21	4,956864E+22	6,191263E+21	5,575990E+22
1353	2,478451E+22	2,478543E+22	3,095599E+21	3,095791E+21	4,956994E+22	6,191390E+21	5,576133E+22
1354	2,478537E+22	2,478448E+22	3,095473E+21	3,095651E+21	4,956985E+22	6,191124E+21	5,576098E+22
1355	2,478406E+22	2,478500E+22	3,095910E+21	3,095475E+21	4,956906E+22	6,191385E+21	5,576044E+22
1356	2,478483E+22	2,478463E+22	3,095525E+21	3,095985E+21	4,956947E+22	6,191510E+21	5,576098E+22
1357	2,478458E+22	2,478348E+22	3,095862E+21	3,095728E+21	4,956805E+22	6,191590E+21	5,575964E+22
1358	2,478290E+22	2,478409E+22	3,096197E+21	3,095927E+21	4,956699E+22	6,192124E+21	5,575912E+22
1359	2,478339E+22	2,478282E+22	3,095876E+21	3,096433E+21	4,956622E+22	6,192309E+21	5,575852E+22
1360	2,478195E+22	2,478177E+22	3,096486E+21	3,096141E+21	4,956372E+22	6,192627E+21	5,575635E+22
1361	2,478122E+22	2,478208E+22	3,096525E+21	3,096581E+21	4,956330E+22	6,193106E+21	5,575641E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1362	2,478195E+22	2,478064E+22	3,096380E+21	3,096675E+21	4,956259E+22	6,193054E+21	5,575564E+22
1363	2,478039E+22	2,478078E+22	3,096897E+21	3,096374E+21	4,956118E+22	6,193271E+21	5,575445E+22
1364	2,478064E+22	2,478112E+22	3,096521E+21	3,096842E+21	4,956176E+22	6,193363E+21	5,575512E+22
1365	2,478095E+22	2,478022E+22	3,096563E+21	3,096570E+21	4,956118E+22	6,193133E+21	5,575431E+22
1366	2,477988E+22	2,478139E+22	3,096795E+21	3,096373E+21	4,956127E+22	6,193169E+21	5,575444E+22
1367	2,478151E+22	2,478131E+22	3,096199E+21	3,096695E+21	4,956282E+22	6,192894E+21	5,575571E+22
1368	2,478170E+22	2,478104E+22	3,096433E+21	3,096100E+21	4,956274E+22	6,192532E+21	5,575527E+22
1369	2,478171E+22	2,478271E+22	3,096378E+21	3,096169E+21	4,956442E+22	6,192547E+21	5,575697E+22
1370	2,478326E+22	2,478249E+22	3,095872E+21	3,096260E+21	4,956575E+22	6,192132E+21	5,575788E+22
1371	2,478253E+22	2,478281E+22	3,096228E+21	3,095804E+21	4,956534E+22	6,192033E+21	5,575737E+22
1372	2,478288E+22	2,478367E+22	3,095943E+21	3,096178E+21	4,956656E+22	6,192121E+21	5,575868E+22
1373	2,478373E+22	2,478266E+22	3,095851E+21	3,096035E+21	4,956639E+22	6,191885E+21	5,575827E+22
1374	2,478247E+22	2,478324E+22	3,096337E+21	3,095819E+21	4,956571E+22	6,192156E+21	5,575787E+22
1375	2,478299E+22	2,478302E+22	3,095959E+21	3,096384E+21	4,956602E+22	6,192343E+21	5,575836E+22
1376	2,478236E+22	2,478156E+22	3,096310E+21	3,096185E+21	4,956392E+22	6,192495E+21	5,575642E+22
1377	2,478082E+22	2,478206E+22	3,096685E+21	3,096405E+21	4,956288E+22	6,193090E+21	5,575597E+22
1378	2,478131E+22	2,478084E+22	3,096351E+21	3,096891E+21	4,956215E+22	6,193243E+21	5,575539E+22
1379	2,478024E+22	2,477965E+22	3,096903E+21	3,096600E+21	4,955989E+22	6,193504E+21	5,575339E+22
1380	2,477955E+22	2,478017E+22	3,096927E+21	3,096971E+21	4,955972E+22	6,193898E+21	5,575362E+22
1381	2,478008E+22	2,477892E+22	3,096784E+21	3,097087E+21	4,955900E+22	6,193871E+21	5,575287E+22
1382	2,477851E+22	2,477922E+22	3,097295E+21	3,096771E+21	4,955773E+22	6,194066E+21	5,575180E+22
1383	2,477872E+22	2,477955E+22	3,096901E+21	3,097252E+21	4,955827E+22	6,194154E+21	5,575243E+22
1384	2,477910E+22	2,477833E+22	3,096942E+21	3,096959E+21	4,955743E+22	6,193901E+21	5,575133E+22
1385	2,477850E+22	2,477956E+22	3,097184E+21	3,096717E+21	4,955806E+22	6,193901E+21	5,575196E+22
1386	2,478009E+22	2,477974E+22	3,096572E+21	3,097008E+21	4,955983E+22	6,193580E+21	5,575341E+22
1387	2,478037E+22	2,477951E+22	3,096737E+21	3,096461E+21	4,955988E+22	6,193198E+21	5,575308E+22
1388	2,478019E+22	2,478128E+22	3,096672E+21	3,096511E+21	4,956147E+22	6,193183E+21	5,575465E+22
1389	2,478151E+22	2,478101E+22	3,096207E+21	3,096629E+21	4,956252E+22	6,192837E+21	5,575536E+22
1390	2,478096E+22	2,478129E+22	3,096599E+21	3,096142E+21	4,956226E+22	6,192741E+21	5,575500E+22
1391	2,478127E+22	2,478211E+22	3,096340E+21	3,096518E+21	4,956338E+22	6,192858E+21	5,575624E+22
1392	2,478190E+22	2,478080E+22	3,096290E+21	3,096417E+21	4,956270E+22	6,192707E+21	5,575541E+22
1393	2,478067E+22	2,478136E+22	3,096804E+21	3,096250E+21	4,956203E+22	6,193054E+21	5,575508E+22
1394	2,478084E+22	2,478119E+22	3,096417E+21	3,096865E+21	4,956203E+22	6,193282E+21	5,575531E+22
1395	2,478041E+22	2,477940E+22	3,096713E+21	3,096721E+21	4,955981E+22	6,193434E+21	5,575324E+22
1396	2,477901E+22	2,477992E+22	3,097079E+21	3,096866E+21	4,955892E+22	6,193945E+21	5,575287E+22
1397	2,477954E+22	2,477884E+22	3,096777E+21	3,097325E+21	4,955838E+22	6,194102E+21	5,575248E+22
1398	2,477856E+22	2,477789E+22	3,097347E+21	3,096985E+21	4,955646E+22	6,194332E+21	5,575079E+22
1399	2,477762E+22	2,477862E+22	3,097361E+21	3,097362E+21	4,955624E+22	6,194723E+21	5,575097E+22
1400	2,477786E+22	2,477711E+22	3,097219E+21	3,097515E+21	4,955497E+22	6,194734E+21	5,574970E+22
1401	2,477656E+22	2,477731E+22	3,097732E+21	3,097188E+21	4,955387E+22	6,194920E+21	5,574878E+22
1402	2,477689E+22	2,477775E+22	3,097305E+21	3,097626E+21	4,955464E+22	6,194931E+21	5,574957E+22
1403	2,477774E+22	2,477642E+22	3,097266E+21	3,097335E+21	4,955416E+22	6,194601E+21	5,574876E+22
1404	2,477725E+22	2,477793E+22	3,097485E+21	3,097033E+21	4,955519E+22	6,194518E+21	5,574970E+22
1405	2,477865E+22	2,477839E+22	3,096885E+21	3,097351E+21	4,955704E+22	6,194236E+21	5,575127E+22
1406	2,477885E+22	2,477826E+22	3,097061E+21	3,096804E+21	4,955711E+22	6,193865E+21	5,575097E+22
1407	2,477854E+22	2,477997E+22	3,097019E+21	3,096851E+21	4,955850E+22	6,193870E+21	5,575237E+22
1408	2,477974E+22	2,477929E+22	3,096599E+21	3,096975E+21	4,955903E+22	6,193574E+21	5,575260E+22
1409	2,477942E+22	2,477948E+22	3,097033E+21	3,096492E+21	4,955890E+22	6,193525E+21	5,575243E+22
1410	2,477947E+22	2,478041E+22	3,096781E+21	3,096888E+21	4,955987E+22	6,193669E+21	5,575354E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,478009E+22	2,477888E+22	3,096669E+21	3,096890E+21	4,955897E+22	6,193559E+21	5,575253E+22
1412	2,477877E+22	2,477943E+22	3,097164E+21	3,096721E+21	4,955820E+22	6,193885E+21	5,575208E+22
1413	2,477889E+22	2,477922E+22	3,096815E+21	3,097346E+21	4,955811E+22	6,194161E+21	5,575227E+22
1414	2,477871E+22	2,477753E+22	3,097130E+21	3,097148E+21	4,955624E+22	6,194278E+21	5,575052E+22
1415	2,477733E+22	2,477816E+22	3,097515E+21	3,097249E+21	4,955549E+22	6,194764E+21	5,575026E+22
1416	2,477759E+22	2,477696E+22	3,097265E+21	3,097725E+21	4,955455E+22	6,194991E+21	5,574954E+22
1417	2,477660E+22	2,477609E+22	3,097843E+21	3,097420E+21	4,955269E+22	6,195263E+21	5,574796E+22
1418	2,477536E+22	2,477684E+22	3,097833E+21	3,097810E+21	4,955220E+22	6,195643E+21	5,574784E+22
1419	2,477590E+22	2,477500E+22	3,097609E+21	3,097998E+21	4,955090E+22	6,195607E+21	5,574651E+22
1420	2,477496E+22	2,477524E+22	3,098064E+21	3,097577E+21	4,955020E+22	6,195641E+21	5,574584E+22
1421	2,477542E+22	2,477594E+22	3,097650E+21	3,097974E+21	4,955136E+22	6,195623E+21	5,574698E+22
1422	2,477642E+22	2,477503E+22	3,097595E+21	3,097640E+21	4,955145E+22	6,195235E+21	5,574668E+22
1423	2,477574E+22	2,477676E+22	3,097807E+21	3,097338E+21	4,955250E+22	6,195145E+21	5,574764E+22
1424	2,477678E+22	2,477699E+22	3,097259E+21	3,097692E+21	4,955378E+22	6,194952E+21	5,574873E+22
1425	2,477717E+22	2,477673E+22	3,097460E+21	3,097157E+21	4,955390E+22	6,194617E+21	5,574851E+22
1426	2,477678E+22	2,477837E+22	3,097423E+21	3,097190E+21	4,955515E+22	6,194613E+21	5,574976E+22
1427	2,477823E+22	2,477739E+22	3,096953E+21	3,097370E+21	4,955562E+22	6,194324E+21	5,574995E+22
1428	2,477793E+22	2,477762E+22	3,097369E+21	3,096883E+21	4,955555E+22	6,194252E+21	5,574980E+22
1429	2,477773E+22	2,477867E+22	3,097143E+21	3,097335E+21	4,955640E+22	6,194478E+21	5,575088E+22
1430	2,477833E+22	2,477720E+22	3,097039E+21	3,097350E+21	4,955553E+22	6,194389E+21	5,574992E+22
1431	2,477700E+22	2,477768E+22	3,097554E+21	3,097151E+21	4,955468E+22	6,194705E+21	5,574938E+22
1432	2,477702E+22	2,477723E+22	3,097283E+21	3,097756E+21	4,955425E+22	6,195039E+21	5,574929E+22
1433	2,477698E+22	2,477562E+22	3,097640E+21	3,097542E+21	4,955260E+22	6,195183E+21	5,574779E+22
1434	2,477528E+22	2,477643E+22	3,098033E+21	3,097648E+21	4,955171E+22	6,195681E+21	5,574739E+22
1435	2,477547E+22	2,477497E+22	3,097714E+21	3,098205E+21	4,955044E+22	6,195920E+21	5,574636E+22
1436	2,477446E+22	2,477406E+22	3,098244E+21	3,097888E+21	4,954852E+22	6,196132E+21	5,574465E+22
1437	2,477333E+22	2,477482E+22	3,098223E+21	3,098259E+21	4,954815E+22	6,196482E+21	5,574463E+22
1438	2,477426E+22	2,477315E+22	3,097969E+21	3,098384E+21	4,954741E+22	6,196353E+21	5,574376E+22
1439	2,477355E+22	2,477364E+22	3,098402E+21	3,097897E+21	4,954719E+22	6,196299E+21	5,574349E+22
1440	2,477386E+22	2,477437E+22	3,098041E+21	3,098300E+21	4,954824E+22	6,196341E+21	5,574458E+22
1441	2,477484E+22	2,477369E+22	3,097987E+21	3,097988E+21	4,954853E+22	6,195975E+21	5,574451E+22
1442	2,477390E+22	2,477542E+22	3,098195E+21	3,097698E+21	4,954933E+22	6,195894E+21	5,574522E+22
1443	2,477513E+22	2,477522E+22	3,097598E+21	3,098088E+21	4,955035E+22	6,195686E+21	5,574604E+22
1444	2,477573E+22	2,477491E+22	3,097770E+21	3,097511E+21	4,955064E+22	6,195281E+21	5,574592E+22
1445	2,477532E+22	2,477662E+22	3,097762E+21	3,097545E+21	4,955194E+22	6,195308E+21	5,574724E+22
1446	2,477676E+22	2,477586E+22	3,097295E+21	3,097736E+21	4,955262E+22	6,195031E+21	5,574766E+22
1447	2,477628E+22	2,477616E+22	3,097705E+21	3,097262E+21	4,955243E+22	6,194967E+21	5,574740E+22
1448	2,477577E+22	2,477692E+22	3,097568E+21	3,097750E+21	4,955269E+22	6,195318E+21	5,574801E+22
1449	2,477653E+22	2,477543E+22	3,097502E+21	3,097764E+21	4,955196E+22	6,195266E+21	5,574722E+22
1450	2,477510E+22	2,477588E+22	3,098044E+21	3,097549E+21	4,955098E+22	6,195592E+21	5,574658E+22
1451	2,477520E+22	2,477518E+22	3,097753E+21	3,098200E+21	4,955038E+22	6,195953E+21	5,574633E+22
1452	2,477511E+22	2,477363E+22	3,098079E+21	3,097998E+21	4,954874E+22	6,196078E+21	5,574482E+22
1453	2,477309E+22	2,477448E+22	3,098472E+21	3,098146E+21	4,954757E+22	6,196618E+21	5,574419E+22
1454	2,477335E+22	2,477306E+22	3,098124E+21	3,098697E+21	4,954641E+22	6,196821E+21	5,574323E+22
1455	2,477257E+22	2,477208E+22	3,098619E+21	3,098312E+21	4,954466E+22	6,196930E+21	5,574159E+22
1456	2,477154E+22	2,477276E+22	3,098650E+21	3,098639E+21	4,954430E+22	6,197290E+21	5,574159E+22
1457	2,477274E+22	2,477144E+22	3,098400E+21	3,098726E+21	4,954419E+22	6,197126E+21	5,574131E+22
1458	2,477185E+22	2,477222E+22	3,098815E+21	3,098238E+21	4,954407E+22	6,197053E+21	5,574112E+22
1459	2,477214E+22	2,477279E+22	3,098401E+21	3,098697E+21	4,954493E+22	6,197097E+21	5,574203E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,477316E+22	2,477209E+22	3,098304E+21	3,098365E+21	4,954525E+22	6,196669E+21	5,574192E+22
1461	2,477227E+22	2,477378E+22	3,098520E+21	3,098058E+21	4,954605E+22	6,196577E+21	5,574263E+22
1462	2,477373E+22	2,477367E+22	3,097911E+21	3,098408E+21	4,954740E+22	6,196318E+21	5,574372E+22
1463	2,477441E+22	2,477342E+22	3,098083E+21	3,097810E+21	4,954782E+22	6,195893E+21	5,574372E+22
1464	2,477372E+22	2,477503E+22	3,098157E+21	3,097898E+21	4,954876E+22	6,196054E+21	5,574481E+22
1465	2,477504E+22	2,477440E+22	3,097716E+21	3,098136E+21	4,954944E+22	6,195852E+21	5,574529E+22
1466	2,477436E+22	2,477459E+22	3,098136E+21	3,097692E+21	4,954895E+22	6,195828E+21	5,574478E+22
1467	2,477401E+22	2,477486E+22	3,097985E+21	3,098203E+21	4,954887E+22	6,196188E+21	5,574506E+22
1468	2,477486E+22	2,477339E+22	3,097911E+21	3,098182E+21	4,954825E+22	6,196093E+21	5,574435E+22
1469	2,477330E+22	2,477394E+22	3,098481E+21	3,097977E+21	4,954725E+22	6,196458E+21	5,574370E+22
1470	2,477325E+22	2,477340E+22	3,098186E+21	3,098639E+21	4,954665E+22	6,196825E+21	5,574347E+22
1471	2,477299E+22	2,477186E+22	3,098491E+21	3,098448E+21	4,954485E+22	6,196939E+21	5,574179E+22
1472	2,477085E+22	2,477240E+22	3,098940E+21	3,098610E+21	4,954325E+22	6,197550E+21	5,574080E+22
1473	2,477138E+22	2,477107E+22	3,098592E+21	3,099121E+21	4,954245E+22	6,197713E+21	5,574017E+22
1474	2,477076E+22	2,477022E+22	3,099060E+21	3,098701E+21	4,954098E+22	6,197761E+21	5,573874E+22
1475	2,476997E+22	2,477077E+22	3,099056E+21	3,099039E+21	4,954074E+22	6,198095E+21	5,573883E+22
1476	2,477119E+22	2,476978E+22	3,098762E+21	3,099118E+21	4,954097E+22	6,197880E+21	5,573885E+22
1477	2,477010E+22	2,477070E+22	3,099163E+21	3,098650E+21	4,954081E+22	6,197813E+21	5,573862E+22
1478	2,477048E+22	2,477129E+22	3,098733E+21	3,099075E+21	4,954177E+22	6,197808E+21	5,573958E+22
1479	2,477167E+22	2,477054E+22	3,098607E+21	3,098677E+21	4,954221E+22	6,197285E+21	5,573949E+22
1480	2,477075E+22	2,477206E+22	3,098895E+21	3,098361E+21	4,954281E+22	6,197256E+21	5,574007E+22
1481	2,477225E+22	2,477222E+22	3,098311E+21	3,098708E+21	4,954447E+22	6,197019E+21	5,574149E+22
1482	2,477270E+22	2,477204E+22	3,098479E+21	3,098167E+21	4,954473E+22	6,196645E+21	5,574138E+22
1483	2,477194E+22	2,477328E+22	3,098536E+21	3,098335E+21	4,954522E+22	6,196870E+21	5,574209E+22
1484	2,477332E+22	2,477259E+22	3,098076E+21	3,098575E+21	4,954591E+22	6,196651E+21	5,574256E+22
1485	2,477263E+22	2,477269E+22	3,098512E+21	3,098125E+21	4,954532E+22	6,196637E+21	5,574196E+22
1486	2,477242E+22	2,477305E+22	3,098373E+21	3,098597E+21	4,954548E+22	6,196970E+21	5,574245E+22
1487	2,477323E+22	2,477165E+22	3,098306E+21	3,098559E+21	4,954488E+22	6,196865E+21	5,574175E+22
1488	2,477129E+22	2,477208E+22	3,098961E+21	3,098417E+21	4,954337E+22	6,197378E+21	5,574075E+22
1489	2,477107E+22	2,477165E+22	3,098681E+21	3,099101E+21	4,954271E+22	6,197782E+21	5,574050E+22
1490	2,477075E+22	2,476992E+22	3,098976E+21	3,098933E+21	4,954067E+22	6,197909E+21	5,573858E+22
1491	2,476892E+22	2,477003E+22	3,099384E+21	3,099087E+21	4,953895E+22	6,198472E+21	5,573742E+22
1492	2,476973E+22	2,476892E+22	3,099001E+21	3,099541E+21	4,953864E+22	6,198542E+21	5,573719E+22
1493	2,476911E+22	2,476837E+22	3,099454E+21	3,099105E+21	4,953748E+22	6,198559E+21	5,573604E+22
1494	2,476831E+22	2,476924E+22	3,099421E+21	3,099424E+21	4,953755E+22	6,198846E+21	5,573639E+22
1495	2,476944E+22	2,476839E+22	3,099097E+21	3,099469E+21	4,953782E+22	6,198567E+21	5,573639E+22
1496	2,476827E+22	2,476910E+22	3,099555E+21	3,099007E+21	4,953737E+22	6,198563E+21	5,573593E+22
1497	2,476879E+22	2,476980E+22	3,099136E+21	3,099377E+21	4,953859E+22	6,198512E+21	5,573711E+22
1498	2,477007E+22	2,476906E+22	3,098997E+21	3,098994E+21	4,953913E+22	6,197991E+21	5,573712E+22
1499	2,476930E+22	2,477024E+22	3,099255E+21	3,098726E+21	4,953954E+22	6,197981E+21	5,573752E+22
1500	2,477072E+22	2,477058E+22	3,098646E+21	3,099107E+21	4,954130E+22	6,197754E+21	5,573906E+22
1501	2,477101E+22	2,477044E+22	3,098800E+21	3,098609E+21	4,954145E+22	6,197409E+21	5,573885E+22
1502	2,477038E+22	2,477158E+22	3,098857E+21	3,098751E+21	4,954197E+22	6,197609E+21	5,573957E+22
1503	2,477186E+22	2,477089E+22	3,098408E+21	3,098919E+21	4,954275E+22	6,197327E+21	5,574007E+22
1504	2,477104E+22	2,477087E+22	3,098944E+21	3,098485E+21	4,954191E+22	6,197429E+21	5,573934E+22
1505	2,477061E+22	2,477147E+22	3,098858E+21	3,098948E+21	4,954209E+22	6,197807E+21	5,573990E+22
1506	2,477110E+22	2,477005E+22	3,098797E+21	3,098996E+21	4,954115E+22	6,197793E+21	5,573894E+22
1507	2,476907E+22	2,476993E+22	3,099430E+21	3,098924E+21	4,953900E+22	6,198355E+21	5,573736E+22
1508	2,476897E+22	2,476944E+22	3,099125E+21	3,099595E+21	4,953841E+22	6,198720E+21	5,573713E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1509	2,476880E+22	2,476773E+22	3,099395E+21	3,099408E+21	4,953654E+22	6,198803E+21	5,573534E+22
1510	2,476729E+22	2,476802E+22	3,099777E+21	3,099510E+21	4,953530E+22	6,199287E+21	5,573459E+22
1511	2,476817E+22	2,476720E+22	3,099380E+21	3,099912E+21	4,953537E+22	6,199292E+21	5,573466E+22
1512	2,476728E+22	2,476675E+22	3,099884E+21	3,099516E+21	4,953403E+22	6,199400E+21	5,573343E+22
1513	2,476637E+22	2,476785E+22	3,099861E+21	3,099803E+21	4,953422E+22	6,199665E+21	5,573389E+22
1514	2,476753E+22	2,476683E+22	3,099517E+21	3,099851E+21	4,953436E+22	6,199368E+21	5,573373E+22
1515	2,476659E+22	2,476709E+22	3,099933E+21	3,099382E+21	4,953368E+22	6,199315E+21	5,573300E+22
1516	2,476732E+22	2,476798E+22	3,099477E+21	3,099716E+21	4,953530E+22	6,199193E+21	5,573449E+22
1517	2,476852E+22	2,476741E+22	3,099319E+21	3,099359E+21	4,953593E+22	6,198679E+21	5,573461E+22
1518	2,476782E+22	2,476873E+22	3,099545E+21	3,099108E+21	4,953656E+22	6,198653E+21	5,573521E+22
1519	2,476922E+22	2,476913E+22	3,098934E+21	3,099454E+21	4,953836E+22	6,198388E+21	5,573675E+22
1520	2,476941E+22	2,476882E+22	3,099165E+21	3,098972E+21	4,953824E+22	6,198137E+21	5,573637E+22
1521	2,476882E+22	2,477012E+22	3,099268E+21	3,099053E+21	4,953895E+22	6,198321E+21	5,573727E+22
1522	2,477020E+22	2,476938E+22	3,098853E+21	3,099261E+21	4,953957E+22	6,198115E+21	5,573769E+22
1523	2,476925E+22	2,476895E+22	3,099402E+21	3,098913E+21	4,953820E+22	6,198315E+21	5,573651E+22
1524	2,476860E+22	2,476961E+22	3,099307E+21	3,099424E+21	4,953821E+22	6,198731E+21	5,573694E+22
1525	2,476888E+22	2,476805E+22	3,099236E+21	3,099530E+21	4,953693E+22	6,198766E+21	5,573570E+22
1526	2,476716E+22	2,476772E+22	3,099829E+21	3,099430E+21	4,953488E+22	6,199259E+21	5,573414E+22
1527	2,476727E+22	2,476732E+22	3,099509E+21	3,100003E+21	4,953458E+22	6,199512E+21	5,573410E+22
1528	2,476709E+22	2,476574E+22	3,099838E+21	3,099815E+21	4,953283E+22	6,199652E+21	5,573249E+22
1529	2,476547E+22	2,476645E+22	3,100246E+21	3,099873E+21	4,953192E+22	6,200118E+21	5,573204E+22
1530	2,476614E+22	2,476577E+22	3,099852E+21	3,100326E+21	4,953190E+22	6,200177E+21	5,573208E+22
1531	2,476525E+22	2,476487E+22	3,100315E+21	3,099962E+21	4,953012E+22	6,200276E+21	5,573040E+22
1532	2,476449E+22	2,476595E+22	3,100255E+21	3,100197E+21	4,953044E+22	6,200452E+21	5,573089E+22
1533	2,476580E+22	2,476500E+22	3,099868E+21	3,100223E+21	4,953079E+22	6,200091E+21	5,573088E+22
1534	2,476524E+22	2,476529E+22	3,100231E+21	3,099725E+21	4,953053E+22	6,199957E+21	5,573049E+22
1535	2,476601E+22	2,476646E+22	3,099762E+21	3,100018E+21	4,953247E+22	6,199780E+21	5,573225E+22
1536	2,476698E+22	2,476601E+22	3,099655E+21	3,099727E+21	4,953299E+22	6,199382E+21	5,573237E+22
1537	2,476620E+22	2,476748E+22	3,099911E+21	3,099448E+21	4,953368E+22	6,199359E+21	5,573304E+22
1538	2,476762E+22	2,476772E+22	3,099333E+21	3,099805E+21	4,953534E+22	6,199138E+21	5,573448E+22
1539	2,476787E+22	2,476695E+22	3,099562E+21	3,099338E+21	4,953482E+22	6,198900E+21	5,573372E+22
1540	2,476723E+22	2,476835E+22	3,099682E+21	3,099410E+21	4,953558E+22	6,199092E+21	5,573468E+22
1541	2,476829E+22	2,476766E+22	3,099275E+21	3,099685E+21	4,953594E+22	6,198960E+21	5,573490E+22
1542	2,476730E+22	2,476710E+22	3,099794E+21	3,099399E+21	4,953440E+22	6,199192E+21	5,573359E+22
1543	2,476662E+22	2,476767E+22	3,099692E+21	3,099875E+21	4,953429E+22	6,199567E+21	5,573386E+22
1544	2,476689E+22	2,476596E+22	3,099678E+21	3,100001E+21	4,953285E+22	6,199679E+21	5,573253E+22
1545	2,476534E+22	2,476585E+22	3,100283E+21	3,099823E+21	4,953120E+22	6,200105E+21	5,573130E+22
1546	2,476552E+22	2,476552E+22	3,099991E+21	3,100409E+21	4,953104E+22	6,200400E+21	5,573144E+22
1547	2,476521E+22	2,476376E+22	3,100307E+21	3,100267E+21	4,952897E+22	6,200574E+21	5,572954E+22
1548	2,476348E+22	2,476468E+22	3,100686E+21	3,100328E+21	4,952817E+22	6,201014E+21	5,572918E+22
1549	2,476402E+22	2,476393E+22	3,100275E+21	3,100788E+21	4,952795E+22	6,201063E+21	5,572901E+22
1550	2,476349E+22	2,476289E+22	3,100671E+21	3,100384E+21	4,952638E+22	6,201055E+21	5,572744E+22
1551	2,476299E+22	2,476410E+22	3,100573E+21	3,100504E+21	4,952709E+22	6,201077E+21	5,572816E+22
1552	2,476426E+22	2,476332E+22	3,100227E+21	3,100546E+21	4,952758E+22	6,200772E+21	5,572835E+22
1553	2,476368E+22	2,476402E+22	3,100588E+21	3,100019E+21	4,952770E+22	6,200608E+21	5,572830E+22
1554	2,476435E+22	2,476522E+22	3,100140E+21	3,100369E+21	4,952958E+22	6,200509E+21	5,573008E+22
1555	2,476529E+22	2,476438E+22	3,100022E+21	3,100115E+21	4,952967E+22	6,200137E+21	5,572981E+22
1556	2,476466E+22	2,476585E+22	3,100271E+21	3,099802E+21	4,953051E+22	6,200074E+21	5,573058E+22
1557	2,476603E+22	2,476608E+22	3,099707E+21	3,100157E+21	4,953211E+22	6,199864E+21	5,573197E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1558	2,476645E+22	2,476520E+22	3,099909E+21	3,099725E+21	4,953165E+22	6,199635E+21	5,573128E+22
1559	2,476562E+22	2,476669E+22	3,100035E+21	3,099784E+21	4,953231E+22	6,199820E+21	5,573213E+22
1560	2,476632E+22	2,476597E+22	3,099688E+21	3,100153E+21	4,953229E+22	6,199841E+21	5,573213E+22
1561	2,476531E+22	2,476536E+22	3,100228E+21	3,099838E+21	4,953066E+22	6,200066E+21	5,573073E+22
1562	2,476474E+22	2,476573E+22	3,100160E+21	3,100316E+21	4,953047E+22	6,200477E+21	5,573095E+22
1563	2,476509E+22	2,476372E+22	3,100135E+21	3,100441E+21	4,952881E+22	6,200576E+21	5,572939E+22
1564	2,476356E+22	2,476383E+22	3,100739E+21	3,100241E+21	4,952739E+22	6,200980E+21	5,572837E+22
1565	2,476346E+22	2,476371E+22	3,100459E+21	3,100858E+21	4,952717E+22	6,201317E+21	5,572849E+22
1566	2,476322E+22	2,476191E+22	3,100716E+21	3,100749E+21	4,952512E+22	6,201465E+21	5,572659E+22
1567	2,476153E+22	2,476283E+22	3,101068E+21	3,100725E+21	4,952437E+22	6,201792E+21	5,572616E+22
1568	2,476210E+22	2,476208E+22	3,100684E+21	3,101179E+21	4,952418E+22	6,201863E+21	5,572604E+22
1569	2,476178E+22	2,476126E+22	3,101064E+21	3,100698E+21	4,952303E+22	6,201762E+21	5,572480E+22
1570	2,476142E+22	2,476253E+22	3,100981E+21	3,100839E+21	4,952395E+22	6,201819E+21	5,572577E+22
1571	2,476259E+22	2,476164E+22	3,100608E+21	3,100938E+21	4,952423E+22	6,201546E+21	5,572577E+22
1572	2,476204E+22	2,476250E+22	3,100937E+21	3,100425E+21	4,952454E+22	6,201362E+21	5,572591E+22
1573	2,476267E+22	2,476363E+22	3,100498E+21	3,100773E+21	4,952630E+22	6,201271E+21	5,572758E+22
1574	2,476393E+22	2,476264E+22	3,100324E+21	3,100495E+21	4,952657E+22	6,200818E+21	5,572739E+22
1575	2,476341E+22	2,476420E+22	3,100570E+21	3,100091E+21	4,952761E+22	6,200661E+21	5,572827E+22
1576	2,476447E+22	2,476453E+22	3,100085E+21	3,100491E+21	4,952900E+22	6,200576E+21	5,572958E+22
1577	2,476466E+22	2,476387E+22	3,100312E+21	3,100079E+21	4,952853E+22	6,200391E+21	5,572892E+22
1578	2,476370E+22	2,476514E+22	3,100476E+21	3,100211E+21	4,952883E+22	6,200686E+21	5,572952E+22
1579	2,476426E+22	2,476392E+22	3,100137E+21	3,100621E+21	4,952818E+22	6,200757E+21	5,572893E+22
1580	2,476348E+22	2,476329E+22	3,100654E+21	3,100274E+21	4,952677E+22	6,200928E+21	5,572770E+22
1581	2,476291E+22	2,476367E+22	3,100611E+21	3,100740E+21	4,952658E+22	6,201351E+21	5,572793E+22
1582	2,476342E+22	2,476170E+22	3,100550E+21	3,100895E+21	4,952513E+22	6,201446E+21	5,572657E+22
1583	2,476176E+22	2,476205E+22	3,101141E+21	3,100665E+21	4,952381E+22	6,201807E+21	5,572561E+22
1584	2,476132E+22	2,476198E+22	3,100918E+21	3,101335E+21	4,952330E+22	6,202253E+21	5,572555E+22
1585	2,476113E+22	2,476022E+22	3,101169E+21	3,101170E+21	4,952134E+22	6,202339E+21	5,572368E+22
1586	2,475968E+22	2,476096E+22	3,101518E+21	3,101120E+21	4,952063E+22	6,202638E+21	5,572327E+22
1587	2,476028E+22	2,476002E+22	3,101110E+21	3,101560E+21	4,952030E+22	6,202670E+21	5,572297E+22
1588	2,476012E+22	2,475946E+22	3,101449E+21	3,101067E+21	4,951958E+22	6,202515E+21	5,572210E+22
1589	2,475964E+22	2,476092E+22	3,101363E+21	3,101235E+21	4,952056E+22	6,202598E+21	5,572316E+22
1590	2,476102E+22	2,476002E+22	3,100917E+21	3,101363E+21	4,952104E+22	6,202280E+21	5,572332E+22
1591	2,476063E+22	2,476094E+22	3,101217E+21	3,100759E+21	4,952157E+22	6,201976E+21	5,572354E+22
1592	2,476124E+22	2,476214E+22	3,100834E+21	3,101093E+21	4,952339E+22	6,201926E+21	5,572531E+22
1593	2,476256E+22	2,476133E+22	3,100674E+21	3,100757E+21	4,952388E+22	6,201431E+21	5,572531E+22
1594	2,476194E+22	2,476281E+22	3,100972E+21	3,100409E+21	4,952474E+22	6,201381E+21	5,572612E+22
1595	2,476260E+22	2,476291E+22	3,100499E+21	3,100893E+21	4,952550E+22	6,201392E+21	5,572689E+22
1596	2,476271E+22	2,476213E+22	3,100723E+21	3,100534E+21	4,952484E+22	6,201257E+21	5,572610E+22
1597	2,476172E+22	2,476314E+22	3,100917E+21	3,100676E+21	4,952486E+22	6,201593E+21	5,572645E+22
1598	2,476263E+22	2,476173E+22	3,100520E+21	3,101082E+21	4,952436E+22	6,201602E+21	5,572596E+22
1599	2,476194E+22	2,476127E+22	3,101020E+21	3,100657E+21	4,952321E+22	6,201677E+21	5,572488E+22
1600	2,476108E+22	2,476188E+22	3,101054E+21	3,101163E+21	4,952296E+22	6,202217E+21	5,572518E+22
1601	2,476135E+22	2,476019E+22	3,101010E+21	3,101318E+21	4,952154E+22	6,202329E+21	5,572387E+22
1602	2,475963E+22	2,476035E+22	3,101634E+21	3,101132E+21	4,951998E+22	6,202766E+21	5,572275E+22
1603	2,475907E+22	2,475990E+22	3,101409E+21	3,101796E+21	4,951897E+22	6,203205E+21	5,572217E+22
1604	2,475918E+22	2,475815E+22	3,101615E+21	3,101597E+21	4,951732E+22	6,203212E+21	5,572054E+22
1605	2,475785E+22	2,475890E+22	3,101951E+21	3,101522E+21	4,951675E+22	6,203473E+21	5,572022E+22
1606	2,475872E+22	2,475806E+22	3,101462E+21	3,101984E+21	4,951678E+22	6,203445E+21	5,572023E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1607	2,475862E+22	2,475785E+22	3,101740E+21	3,101449E+21	4,951647E+22	6,203189E+21	5,571966E+22
1608	2,475800E+22	2,475943E+22	3,101706E+21	3,101637E+21	4,951743E+22	6,203343E+21	5,572078E+22
1609	2,475949E+22	2,475871E+22	3,101266E+21	3,101680E+21	4,951820E+22	6,202946E+21	5,572114E+22
1610	2,475933E+22	2,475950E+22	3,101581E+21	3,101050E+21	4,951883E+22	6,202631E+21	5,572146E+22
1611	2,475967E+22	2,476051E+22	3,101228E+21	3,101379E+21	4,952018E+22	6,202606E+21	5,572279E+22
1612	2,476090E+22	2,475984E+22	3,101061E+21	3,101088E+21	4,952075E+22	6,202148E+21	5,572289E+22
1613	2,476002E+22	2,476120E+22	3,101382E+21	3,100813E+21	4,952122E+22	6,202194E+21	5,572342E+22
1614	2,476077E+22	2,476105E+22	3,100857E+21	3,101359E+21	4,952182E+22	6,202216E+21	5,572404E+22
1615	2,476106E+22	2,476023E+22	3,101049E+21	3,100947E+21	4,952129E+22	6,201995E+21	5,572328E+22
1616	2,476006E+22	2,476124E+22	3,101303E+21	3,101091E+21	4,952130E+22	6,202395E+21	5,572370E+22
1617	2,476100E+22	2,476008E+22	3,100938E+21	3,101449E+21	4,952108E+22	6,202387E+21	5,572347E+22
1618	2,476026E+22	2,475960E+22	3,101480E+21	3,101076E+21	4,951987E+22	6,202556E+21	5,572242E+22
1619	2,475892E+22	2,476006E+22	3,101548E+21	3,101635E+21	4,951898E+22	6,203183E+21	5,572216E+22
1620	2,475916E+22	2,475830E+22	3,101500E+21	3,101818E+21	4,951746E+22	6,203318E+21	5,572078E+22
1621	2,475747E+22	2,475819E+22	3,102129E+21	3,101616E+21	4,951567E+22	6,203745E+21	5,571941E+22
1622	2,475727E+22	2,475761E+22	3,101816E+21	3,102249E+21	4,951488E+22	6,204065E+21	5,571894E+22
1623	2,475756E+22	2,475609E+22	3,101967E+21	3,101972E+21	4,951365E+22	6,203939E+21	5,571759E+22
1624	2,475613E+22	2,475715E+22	3,102333E+21	3,101921E+21	4,951328E+22	6,204254E+21	5,571754E+22
1625	2,475697E+22	2,475669E+22	3,101834E+21	3,102346E+21	4,951366E+22	6,204181E+21	5,571784E+22
1626	2,475698E+22	2,475643E+22	3,102120E+21	3,101814E+21	4,951341E+22	6,203934E+21	5,571735E+22
1627	2,475628E+22	2,475782E+22	3,102096E+21	3,101967E+21	4,951410E+22	6,204063E+21	5,571817E+22
1628	2,475795E+22	2,475717E+22	3,101641E+21	3,101980E+21	4,951512E+22	6,203621E+21	5,571874E+22
1629	2,475775E+22	2,475789E+22	3,101979E+21	3,101370E+21	4,951564E+22	6,203349E+21	5,571899E+22
1630	2,475811E+22	2,475884E+22	3,101564E+21	3,101760E+21	4,951695E+22	6,203324E+21	5,572028E+22
1631	2,475925E+22	2,475825E+22	3,101358E+21	3,101493E+21	4,951750E+22	6,202851E+21	5,572035E+22
1632	2,475826E+22	2,475948E+22	3,101731E+21	3,101271E+21	4,951774E+22	6,203002E+21	5,572074E+22
1633	2,475915E+22	2,475936E+22	3,101224E+21	3,101748E+21	4,951851E+22	6,202972E+21	5,572149E+22
1634	2,475966E+22	2,475846E+22	3,101437E+21	3,101319E+21	4,951812E+22	6,202757E+21	5,572087E+22
1635	2,475834E+22	2,475938E+22	3,101745E+21	3,101465E+21	4,951772E+22	6,203210E+21	5,572093E+22
1636	2,475911E+22	2,475840E+22	3,101408E+21	3,101865E+21	4,951752E+22	6,203273E+21	5,572079E+22
1637	2,475809E+22	2,475779E+22	3,101986E+21	3,101560E+21	4,951588E+22	6,203546E+21	5,571943E+22
1638	2,475679E+22	2,475796E+22	3,102000E+21	3,102141E+21	4,951475E+22	6,204140E+21	5,571889E+22
1639	2,475724E+22	2,475619E+22	3,101900E+21	3,102267E+21	4,951343E+22	6,204166E+21	5,571759E+22
1640	2,475563E+22	2,475607E+22	3,102548E+21	3,102050E+21	4,951169E+22	6,204599E+21	5,571629E+22
1641	2,475551E+22	2,475581E+22	3,102234E+21	3,102615E+21	4,951131E+22	6,204848E+21	5,571616E+22
1642	2,475591E+22	2,475445E+22	3,102371E+21	3,102365E+21	4,951036E+22	6,204737E+21	5,571510E+22
1643	2,475415E+22	2,475548E+22	3,102750E+21	3,102337E+21	4,950963E+22	6,205087E+21	5,571472E+22
1644	2,475514E+22	2,475511E+22	3,102254E+21	3,102749E+21	4,951025E+22	6,205003E+21	5,571525E+22
1645	2,475530E+22	2,475471E+22	3,102531E+21	3,102185E+21	4,951001E+22	6,204716E+21	5,571473E+22
1646	2,475485E+22	2,475601E+22	3,102429E+21	3,102302E+21	4,951086E+22	6,204731E+21	5,571559E+22
1647	2,475656E+22	2,475557E+22	3,101929E+21	3,102279E+21	4,951213E+22	6,204208E+21	5,571634E+22
1648	2,475611E+22	2,475639E+22	3,102302E+21	3,101744E+21	4,951250E+22	6,204046E+21	5,571655E+22
1649	2,475638E+22	2,475749E+22	3,101900E+21	3,102124E+21	4,951387E+22	6,204025E+21	5,571789E+22
1650	2,475767E+22	2,475671E+22	3,101711E+21	3,101883E+21	4,951439E+22	6,203595E+21	5,571798E+22
1651	2,475658E+22	2,475769E+22	3,102116E+21	3,101645E+21	4,951427E+22	6,203761E+21	5,571803E+22
1652	2,475764E+22	2,475763E+22	3,101640E+21	3,102102E+21	4,951527E+22	6,203742E+21	5,571901E+22
1653	2,475802E+22	2,475669E+22	3,101893E+21	3,101710E+21	4,951470E+22	6,203603E+21	5,571831E+22
1654	2,475658E+22	2,475754E+22	3,102159E+21	3,101914E+21	4,951412E+22	6,204073E+21	5,571819E+22
1655	2,475715E+22	2,475660E+22	3,101813E+21	3,102337E+21	4,951374E+22	6,204150E+21	5,571789E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1656	2,475597E+22	2,475581E+22	3,102442E+21	3,102079E+21	4,951178E+22	6,204521E+21	5,571630E+22
1657	2,475482E+22	2,475598E+22	3,102448E+21	3,102566E+21	4,951080E+22	6,205014E+21	5,571582E+22
1658	2,475548E+22	2,475415E+22	3,102343E+21	3,102669E+21	4,950962E+22	6,205012E+21	5,571464E+22
1659	2,475364E+22	2,475405E+22	3,102999E+21	3,102448E+21	4,950768E+22	6,205447E+21	5,571313E+22
1660	2,475353E+22	2,475404E+22	3,102689E+21	3,103029E+21	4,950758E+22	6,205719E+21	5,571329E+22
1661	2,475386E+22	2,475273E+22	3,102826E+21	3,102815E+21	4,950660E+22	6,205641E+21	5,571224E+22
1662	2,475237E+22	2,475361E+22	3,103121E+21	3,102769E+21	4,950598E+22	6,205891E+21	5,571187E+22
1663	2,475361E+22	2,475336E+22	3,102576E+21	3,103103E+21	4,950697E+22	6,205680E+21	5,571265E+22
1664	2,475382E+22	2,475305E+22	3,102863E+21	3,102534E+21	4,950687E+22	6,205397E+21	5,571227E+22
1665	2,475340E+22	2,475459E+22	3,102759E+21	3,102588E+21	4,950799E+22	6,205347E+21	5,571334E+22
1666	2,475509E+22	2,475424E+22	3,102258E+21	3,102616E+21	4,950933E+22	6,204874E+21	5,571420E+22
1667	2,475430E+22	2,475486E+22	3,102660E+21	3,102131E+21	4,950916E+22	6,204791E+21	5,571395E+22
1668	2,475472E+22	2,475589E+22	3,102296E+21	3,102508E+21	4,951060E+22	6,204804E+21	5,571541E+22
1669	2,475613E+22	2,475496E+22	3,102122E+21	3,102264E+21	4,951108E+22	6,204386E+21	5,571547E+22
1670	2,475519E+22	2,475578E+22	3,102473E+21	3,102014E+21	4,951097E+22	6,204488E+21	5,571546E+22
1671	2,475613E+22	2,475595E+22	3,102002E+21	3,102464E+21	4,951208E+22	6,204466E+21	5,571655E+22
1672	2,475615E+22	2,475504E+22	3,102300E+21	3,102162E+21	4,951118E+22	6,204461E+21	5,571565E+22
1673	2,475451E+22	2,475592E+22	3,102595E+21	3,102346E+21	4,951042E+22	6,204940E+21	5,571536E+22
1674	2,475516E+22	2,475478E+22	3,102260E+21	3,102780E+21	4,950994E+22	6,205040E+21	5,571498E+22
1675	2,475384E+22	2,475369E+22	3,102913E+21	3,102515E+21	4,950752E+22	6,205428E+21	5,571295E+22
1676	2,475289E+22	2,475391E+22	3,102939E+21	3,102974E+21	4,950680E+22	6,205912E+21	5,571271E+22
1677	2,475354E+22	2,475214E+22	3,102834E+21	3,103114E+21	4,950567E+22	6,205948E+21	5,571162E+22
1678	2,475175E+22	2,475204E+22	3,103394E+21	3,102931E+21	4,950379E+22	6,206325E+21	5,571012E+22
1679	2,475170E+22	2,475222E+22	3,103059E+21	3,103497E+21	4,950392E+22	6,206556E+21	5,571048E+22
1680	2,475207E+22	2,475092E+22	3,103203E+21	3,103274E+21	4,950299E+22	6,206477E+21	5,570947E+22
1681	2,475084E+22	2,475197E+22	3,103479E+21	3,103097E+21	4,950281E+22	6,206576E+21	5,570938E+22
1682	2,475224E+22	2,475182E+22	3,102929E+21	3,103383E+21	4,950407E+22	6,206312E+21	5,571038E+22
1683	2,475210E+22	2,475153E+22	3,103237E+21	3,102838E+21	4,950364E+22	6,206075E+21	5,570971E+22
1684	2,475163E+22	2,475318E+22	3,103154E+21	3,102925E+21	4,950481E+22	6,206079E+21	5,571089E+22
1685	2,475323E+22	2,475272E+22	3,102666E+21	3,103012E+21	4,950595E+22	6,205678E+21	5,571163E+22
1686	2,475272E+22	2,475307E+22	3,102984E+21	3,102535E+21	4,950579E+22	6,205519E+21	5,571131E+22
1687	2,475336E+22	2,475412E+22	3,102614E+21	3,102865E+21	4,950748E+22	6,205478E+21	5,571296E+22
1688	2,475469E+22	2,475328E+22	3,102473E+21	3,102643E+21	4,950797E+22	6,205117E+21	5,571309E+22
1689	2,475370E+22	2,475429E+22	3,102839E+21	3,102361E+21	4,950798E+22	6,205200E+21	5,571318E+22
1690	2,475439E+22	2,475447E+22	3,102402E+21	3,102861E+21	4,950886E+22	6,205263E+21	5,571412E+22
1691	2,475395E+22	2,475330E+22	3,102756E+21	3,102630E+21	4,950725E+22	6,205386E+21	5,571263E+22
1692	2,475243E+22	2,475394E+22	3,103093E+21	3,102800E+21	4,950638E+22	6,205892E+21	5,571227E+22
1693	2,475315E+22	2,475264E+22	3,102766E+21	3,103235E+21	4,950580E+22	6,206001E+21	5,571180E+22
1694	2,475202E+22	2,475139E+22	3,103330E+21	3,102966E+21	4,950341E+22	6,206296E+21	5,570971E+22
1695	2,475108E+22	2,475184E+22	3,103342E+21	3,103416E+21	4,950292E+22	6,206758E+21	5,570968E+22
1696	2,475153E+22	2,475028E+22	3,103245E+21	3,103611E+21	4,950181E+22	6,206857E+21	5,570866E+22
1697	2,474986E+22	2,475034E+22	3,103789E+21	3,103363E+21	4,950020E+22	6,207152E+21	5,570735E+22
1698	2,475002E+22	2,475056E+22	3,103461E+21	3,103872E+21	4,950058E+22	6,207333E+21	5,570792E+22
1699	2,475028E+22	2,474922E+22	3,103616E+21	3,103617E+21	4,949950E+22	6,207233E+21	5,570673E+22
1700	2,474921E+22	2,475037E+22	3,103910E+21	3,103394E+21	4,949957E+22	6,207305E+21	5,570688E+22
1701	2,475050E+22	2,475031E+22	3,103358E+21	3,103727E+21	4,950080E+22	6,207085E+21	5,570789E+22
1702	2,475035E+22	2,474986E+22	3,103571E+21	3,103248E+21	4,950021E+22	6,206819E+21	5,570703E+22
1703	2,475000E+22	2,475151E+22	3,103477E+21	3,103344E+21	4,950151E+22	6,206822E+21	5,570834E+22
1704	2,475169E+22	2,475099E+22	3,102992E+21	3,103436E+21	4,950269E+22	6,206428E+21	5,570912E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1705	2,475146E+22	2,475143E+22	3,103288E+21	3,102859E+21	4,950289E+22	6,206147E+21	5,570904E+22
1706	2,475215E+22	2,475264E+22	3,102945E+21	3,103153E+21	4,950479E+22	6,206098E+21	5,571089E+22
1707	2,475294E+22	2,475181E+22	3,102863E+21	3,102986E+21	4,950476E+22	6,205850E+21	5,571060E+22
1708	2,475176E+22	2,475281E+22	3,103295E+21	3,102747E+21	4,950457E+22	6,206042E+21	5,571061E+22
1709	2,475226E+22	2,475276E+22	3,102898E+21	3,103307E+21	4,950502E+22	6,206205E+21	5,571123E+22
1710	2,475197E+22	2,475116E+22	3,103181E+21	3,103108E+21	4,950313E+22	6,206288E+21	5,570941E+22
1711	2,475067E+22	2,475174E+22	3,103507E+21	3,103247E+21	4,950241E+22	6,206754E+21	5,570917E+22
1712	2,475133E+22	2,475051E+22	3,103192E+21	3,103705E+21	4,950184E+22	6,206896E+21	5,570874E+22
1713	2,475027E+22	2,474951E+22	3,103725E+21	3,103401E+21	4,949977E+22	6,207126E+21	5,570690E+22
1714	2,474925E+22	2,475013E+22	3,103753E+21	3,103857E+21	4,949939E+22	6,207611E+21	5,570700E+22
1715	2,474939E+22	2,474852E+22	3,103706E+21	3,104074E+21	4,949791E+22	6,207780E+21	5,570569E+22
1716	2,474798E+22	2,474855E+22	3,104275E+21	3,103762E+21	4,949653E+22	6,208037E+21	5,570457E+22
1717	2,474821E+22	2,474877E+22	3,103951E+21	3,104236E+21	4,949697E+22	6,208186E+21	5,570516E+22
1718	2,474856E+22	2,474734E+22	3,104001E+21	3,103987E+21	4,949590E+22	6,207987E+21	5,570389E+22
1719	2,474750E+22	2,474861E+22	3,104264E+21	3,103775E+21	4,949611E+22	6,208039E+21	5,570415E+22
1720	2,474859E+22	2,474867E+22	3,103701E+21	3,104163E+21	4,949725E+22	6,207864E+21	5,570512E+22
1721	2,474875E+22	2,474827E+22	3,103863E+21	3,103634E+21	4,949702E+22	6,207497E+21	5,570451E+22
1722	2,474868E+22	2,474992E+22	3,103781E+21	3,103670E+21	4,949861E+22	6,207451E+21	5,570606E+22
1723	2,475024E+22	2,474946E+22	3,103342E+21	3,103747E+21	4,949969E+22	6,207089E+21	5,570678E+22
1724	2,475011E+22	2,474999E+22	3,103683E+21	3,103146E+21	4,950010E+22	6,206829E+21	5,570693E+22
1725	2,475049E+22	2,475125E+22	3,103383E+21	3,103500E+21	4,950174E+22	6,206883E+21	5,570862E+22
1726	2,475107E+22	2,475015E+22	3,103243E+21	3,103428E+21	4,950122E+22	6,206672E+21	5,570789E+22
1727	2,474988E+22	2,475090E+22	3,103700E+21	3,103223E+21	4,950078E+22	6,206923E+21	5,570771E+22
1728	2,475033E+22	2,475071E+22	3,103321E+21	3,103788E+21	4,950104E+22	6,207109E+21	5,570815E+22
1729	2,475032E+22	2,474911E+22	3,103569E+21	3,103523E+21	4,949943E+22	6,207092E+21	5,570652E+22
1730	2,474906E+22	2,474981E+22	3,103914E+21	3,103632E+21	4,949887E+22	6,207546E+21	5,570642E+22
1731	2,474926E+22	2,474871E+22	3,103649E+21	3,104143E+21	4,949797E+22	6,207792E+21	5,570576E+22
1732	2,474817E+22	2,474779E+22	3,104217E+21	3,103847E+21	4,949596E+22	6,208064E+21	5,570403E+22
1733	2,474713E+22	2,474836E+22	3,104273E+21	3,104316E+21	4,949549E+22	6,208589E+21	5,570408E+22
1734	2,474743E+22	2,474649E+22	3,104147E+21	3,104522E+21	4,949392E+22	6,208669E+21	5,570259E+22
1735	2,474627E+22	2,474655E+22	3,104693E+21	3,104171E+21	4,949282E+22	6,208864E+21	5,570168E+22
1736	2,474642E+22	2,474689E+22	3,104348E+21	3,104637E+21	4,949331E+22	6,208986E+21	5,570230E+22
1737	2,474687E+22	2,474565E+22	3,104328E+21	3,104373E+21	4,949252E+22	6,208701E+21	5,570122E+22
1738	2,474588E+22	2,474704E+22	3,104574E+21	3,104155E+21	4,949292E+22	6,208729E+21	5,570165E+22
1739	2,474682E+22	2,474706E+22	3,104053E+21	3,104551E+21	4,949388E+22	6,208604E+21	5,570248E+22
1740	2,474734E+22	2,474671E+22	3,104235E+21	3,103949E+21	4,949405E+22	6,208184E+21	5,570224E+22
1741	2,474736E+22	2,474844E+22	3,104178E+21	3,103961E+21	4,949580E+22	6,208139E+21	5,570394E+22
1742	2,474879E+22	2,474788E+22	3,103688E+21	3,104065E+21	4,949667E+22	6,207753E+21	5,570443E+22
1743	2,474852E+22	2,474846E+22	3,104045E+21	3,103524E+21	4,949698E+22	6,207570E+21	5,570455E+22
1744	2,474852E+22	2,474965E+22	3,103774E+21	3,103934E+21	4,949817E+22	6,207708E+21	5,570588E+22
1745	2,474926E+22	2,474840E+22	3,103607E+21	3,103859E+21	4,949767E+22	6,207466E+21	5,570513E+22
1746	2,474826E+22	2,474901E+22	3,104076E+21	3,103617E+21	4,949728E+22	6,207693E+21	5,570497E+22
1747	2,474848E+22	2,474879E+22	3,103757E+21	3,104193E+21	4,949727E+22	6,207950E+21	5,570522E+22
1748	2,474856E+22	2,474728E+22	3,104040E+21	3,103922E+21	4,949584E+22	6,207962E+21	5,570380E+22
1749	2,474709E+22	2,474805E+22	3,104412E+21	3,104090E+21	4,949514E+22	6,208502E+21	5,570364E+22
1750	2,474714E+22	2,474676E+22	3,104101E+21	3,104663E+21	4,949390E+22	6,208764E+21	5,570266E+22
1751	2,474623E+22	2,474569E+22	3,104673E+21	3,104367E+21	4,949192E+22	6,209040E+21	5,570096E+22
1752	2,474517E+22	2,474626E+22	3,104727E+21	3,104780E+21	4,949142E+22	6,209507E+21	5,570093E+22
1753	2,474578E+22	2,474453E+22	3,104527E+21	3,104910E+21	4,949031E+22	6,209437E+21	5,569974E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1754	2,474464E+22	2,474474E+22	3,105055E+21	3,104513E+21	4,948938E+22	6,209568E+21	5,569895E+22
1755	2,474438E+22	2,474527E+22	3,104743E+21	3,105014E+21	4,948965E+22	6,209757E+21	5,569941E+22
1756	2,474499E+22	2,474412E+22	3,104731E+21	3,104741E+21	4,948912E+22	6,209471E+21	5,569859E+22
1757	2,474418E+22	2,474547E+22	3,104981E+21	3,104522E+21	4,948965E+22	6,209504E+21	5,569916E+22
1758	2,474533E+22	2,474534E+22	3,104399E+21	3,104900E+21	4,949067E+22	6,209299E+21	5,569997E+22
1759	2,474609E+22	2,474506E+22	3,104572E+21	3,104283E+21	4,949115E+22	6,208855E+21	5,570001E+22
1760	2,474589E+22	2,474694E+22	3,104529E+21	3,104298E+21	4,949283E+22	6,208827E+21	5,570165E+22
1761	2,474726E+22	2,474649E+22	3,103997E+21	3,104427E+21	4,949375E+22	6,208424E+21	5,570218E+22
1762	2,474687E+22	2,474697E+22	3,104378E+21	3,103916E+21	4,949384E+22	6,208294E+21	5,570213E+22
1763	2,474658E+22	2,474795E+22	3,104181E+21	3,104352E+21	4,949452E+22	6,208533E+21	5,570306E+22
1764	2,474756E+22	2,474660E+22	3,104048E+21	3,104240E+21	4,949417E+22	6,208288E+21	5,570245E+22
1765	2,474662E+22	2,474717E+22	3,104535E+21	3,104008E+21	4,949379E+22	6,208544E+21	5,570233E+22
1766	2,474665E+22	2,474678E+22	3,104186E+21	3,104626E+21	4,949344E+22	6,208812E+21	5,570225E+22
1767	2,474664E+22	2,474534E+22	3,104476E+21	3,104414E+21	4,949198E+22	6,208890E+21	5,570087E+22
1768	2,474494E+22	2,474611E+22	3,104859E+21	3,104594E+21	4,949106E+22	6,209454E+21	5,570051E+22
1769	2,474522E+22	2,474477E+22	3,104516E+21	3,105130E+21	4,948998E+22	6,209646E+21	5,569963E+22
1770	2,474451E+22	2,474374E+22	3,105080E+21	3,104768E+21	4,948825E+22	6,209848E+21	5,569810E+22
1771	2,474323E+22	2,474437E+22	3,105178E+21	3,105153E+21	4,948761E+22	6,210331E+21	5,569794E+22
1772	2,474393E+22	2,474283E+22	3,104987E+21	3,105266E+21	4,948675E+22	6,210253E+21	5,569701E+22
1773	2,474270E+22	2,474313E+22	3,105496E+21	3,104922E+21	4,948582E+22	6,210418E+21	5,569624E+22
1774	2,474238E+22	2,474343E+22	3,105132E+21	3,105456E+21	4,948581E+22	6,210588E+21	5,569640E+22
1775	2,474337E+22	2,474226E+22	3,105102E+21	3,105172E+21	4,948562E+22	6,210275E+21	5,569590E+22
1776	2,474270E+22	2,474370E+22	3,105332E+21	3,104888E+21	4,948640E+22	6,210221E+21	5,569662E+22
1777	2,474412E+22	2,474376E+22	3,104701E+21	3,105212E+21	4,948788E+22	6,209913E+21	5,569779E+22
1778	2,474479E+22	2,474369E+22	3,104865E+21	3,104578E+21	4,948848E+22	6,209443E+21	5,569792E+22
1779	2,474405E+22	2,474562E+22	3,104888E+21	3,104643E+21	4,948967E+22	6,209531E+21	5,569920E+22
1780	2,474543E+22	2,474511E+22	3,104399E+21	3,104786E+21	4,949054E+22	6,209184E+21	5,569973E+22
1781	2,474511E+22	2,474533E+22	3,104806E+21	3,104312E+21	4,949044E+22	6,209119E+21	5,569956E+22
1782	2,474484E+22	2,474600E+22	3,104585E+21	3,104753E+21	4,949084E+22	6,209338E+21	5,570018E+22
1783	2,474604E+22	2,474460E+22	3,104456E+21	3,104665E+21	4,949064E+22	6,209122E+21	5,569976E+22
1784	2,474484E+22	2,474525E+22	3,104945E+21	3,104448E+21	4,949009E+22	6,209393E+21	5,569948E+22
1785	2,474487E+22	2,474499E+22	3,104561E+21	3,105094E+21	4,948985E+22	6,209656E+21	5,569951E+22
1786	2,474479E+22	2,474351E+22	3,104866E+21	3,104879E+21	4,948830E+22	6,209745E+21	5,569805E+22
1787	2,474287E+22	2,474420E+22	3,105328E+21	3,105039E+21	4,948707E+22	6,210367E+21	5,569743E+22
1788	2,474335E+22	2,474292E+22	3,105016E+21	3,105506E+21	4,948627E+22	6,210522E+21	5,569679E+22
1789	2,474263E+22	2,474192E+22	3,105581E+21	3,105157E+21	4,948455E+22	6,210737E+21	5,569529E+22
1790	2,474112E+22	2,474242E+22	3,105630E+21	3,105570E+21	4,948354E+22	6,211200E+21	5,569474E+22
1791	2,474187E+22	2,474091E+22	3,105413E+21	3,105737E+21	4,948278E+22	6,211150E+21	5,569394E+22
1792	2,474066E+22	2,474123E+22	3,105885E+21	3,105378E+21	4,948190E+22	6,211263E+21	5,569316E+22
1793	2,474084E+22	2,474159E+22	3,105458E+21	3,105861E+21	4,948243E+22	6,211319E+21	5,569375E+22
1794	2,474211E+22	2,474063E+22	3,105399E+21	3,105495E+21	4,948274E+22	6,210894E+21	5,569364E+22
1795	2,474128E+22	2,474225E+22	3,105678E+21	3,105184E+21	4,948353E+22	6,210861E+21	5,569439E+22
1796	2,474265E+22	2,474255E+22	3,105081E+21	3,105489E+21	4,948520E+22	6,210570E+21	5,569577E+22
1797	2,474313E+22	2,474247E+22	3,105250E+21	3,104942E+21	4,948560E+22	6,210192E+21	5,569579E+22
1798	2,474217E+22	2,474395E+22	3,105268E+21	3,105049E+21	4,948612E+22	6,210316E+21	5,569643E+22
1799	2,474377E+22	2,474323E+22	3,104792E+21	3,105211E+21	4,948700E+22	6,210003E+21	5,569700E+22
1800	2,474352E+22	2,474340E+22	3,105179E+21	3,104703E+21	4,948692E+22	6,209882E+21	5,569680E+22
1801	2,474343E+22	2,474408E+22	3,104930E+21	3,105133E+21	4,948751E+22	6,210063E+21	5,569757E+22
1802	2,474445E+22	2,474291E+22	3,104804E+21	3,105052E+21	4,948736E+22	6,209855E+21	5,569722E+22

1	14	15	16	17	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	2,474281E+22	2,474360E+22	3,105361E+21	3,104881E+21	4,948641E+22	6,210242E+21	5,569665E+22
1804	2,474283E+22	2,474334E+22	3,105045E+21	3,105511E+21	4,948617E+22	6,210556E+21	5,569672E+22
1805	2,474281E+22	2,474174E+22	3,105369E+21	3,105325E+21	4,948455E+22	6,210694E+21	5,569525E+22
1806	2,474081E+22	2,474210E+22	3,105817E+21	3,105471E+21	4,948291E+22	6,211289E+21	5,569419E+22
1807	2,474143E+22	2,474081E+22	3,105506E+21	3,105960E+21	4,948225E+22	6,211466E+21	5,569372E+22
1808	2,474054E+22	2,473989E+22	3,106025E+21	3,105625E+21	4,948043E+22	6,211650E+21	5,569208E+22
1809	2,473919E+22	2,474044E+22	3,106002E+21	3,106059E+21	4,947963E+22	6,212061E+21	5,569169E+22
1810	2,474011E+22	2,473902E+22	3,105752E+21	3,106191E+21	4,947914E+22	6,211943E+21	5,569108E+22
1811	2,473898E+22	2,473942E+22	3,106248E+21	3,105775E+21	4,947840E+22	6,212023E+21	5,569043E+22
1812	2,473949E+22	2,474006E+22	3,105850E+21	3,106154E+21	4,947956E+22	6,212004E+21	5,569156E+22
1813	2,474073E+22	2,473930E+22	3,105787E+21	3,105792E+21	4,948004E+22	6,211578E+21	5,569162E+22
1814	2,473955E+22	2,474080E+22	3,106054E+21	3,105505E+21	4,948035E+22	6,211559E+21	5,569191E+22
1815	2,474088E+22	2,474105E+22	3,105463E+21	3,105866E+21	4,948192E+22	6,211330E+21	5,569325E+22
1816	2,474123E+22	2,474080E+22	3,105618E+21	3,105335E+21	4,948203E+22	6,210953E+21	5,569298E+22
1817	2,474066E+22	2,474212E+22	3,105588E+21	3,105433E+21	4,948278E+22	6,211022E+21	5,569380E+22
1818	2,474241E+22	2,474148E+22	3,105101E+21	3,105559E+21	4,948389E+22	6,210660E+21	5,569455E+22
1819	2,474197E+22	2,474173E+22	3,105540E+21	3,105063E+21	4,948370E+22	6,210603E+21	5,569430E+22
1820	2,474180E+22	2,474263E+22	3,105350E+21	3,105492E+21	4,948443E+22	6,210841E+21	5,569527E+22
1821	2,474256E+22	2,474145E+22	3,105246E+21	3,105500E+21	4,948401E+22	6,210746E+21	5,569476E+22
1822	2,474069E+22	2,474168E+22	3,105832E+21	3,105357E+21	4,948237E+22	6,211189E+21	5,569356E+22
1823	2,474090E+22	2,474124E+22	3,105548E+21	3,105985E+21	4,948214E+22	6,211533E+21	5,569367E+22
1824	2,474084E+22	2,473962E+22	3,105847E+21	3,105774E+21	4,948047E+22	6,211622E+21	5,569209E+22
1825	2,473900E+22	2,473996E+22	3,106235E+21	3,105923E+21	4,947896E+22	6,212158E+21	5,569112E+22
1826	2,473948E+22	2,473889E+22	3,105890E+21	3,106408E+21	4,947837E+22	6,212298E+21	5,569066E+22
1827	2,473840E+22	2,473802E+22	3,106424E+21	3,106091E+21	4,947642E+22	6,212514E+21	5,568894E+22
1828	2,473733E+22	2,473868E+22	3,106437E+21	3,106454E+21	4,947601E+22	6,212891E+21	5,568890E+22
1829	2,473850E+22	2,473743E+22	3,106173E+21	3,106570E+21	4,947593E+22	6,212744E+21	5,568867E+22
1830	2,473740E+22	2,473767E+22	3,106649E+21	3,106111E+21	4,947508E+22	6,212760E+21	5,568784E+22
1831	2,473800E+22	2,473845E+22	3,106270E+21	3,106489E+21	4,947645E+22	6,212759E+21	5,568921E+22
1832	2,473897E+22	2,473786E+22	3,106156E+21	3,106146E+21	4,947683E+22	6,212302E+21	5,568913E+22
1833	2,473786E+22	2,473919E+22	3,106366E+21	3,105908E+21	4,947704E+22	6,212273E+21	5,568932E+22
1834	2,473922E+22	2,473940E+22	3,105766E+21	3,106245E+21	4,947862E+22	6,212011E+21	5,569063E+22
1835	2,473965E+22	2,473907E+22	3,105950E+21	3,105701E+21	4,947872E+22	6,211651E+21	5,569037E+22
1836	2,473931E+22	2,474053E+22	3,105968E+21	3,105737E+21	4,947984E+22	6,211705E+21	5,569155E+22
1837	2,474095E+22	2,474006E+22	3,105494E+21	3,105912E+21	4,948101E+22	6,211406E+21	5,569241E+22
1838	2,474011E+22	2,474008E+22	3,105941E+21	3,105469E+21	4,948019E+22	6,211410E+21	5,569159E+22
1839	2,473988E+22	2,474088E+22	3,105802E+21	3,105948E+21	4,948076E+22	6,211751E+21	5,569251E+22
1840	2,474050E+22	2,473957E+22	3,105699E+21	3,105964E+21	4,948007E+22	6,211663E+21	5,569173E+22
1841	2,473893E+22	2,473958E+22	3,106249E+21	3,105822E+21	4,947850E+22	6,212072E+21	5,569057E+22
1842	2,473917E+22	2,473921E+22	3,105957E+21	3,106401E+21	4,947838E+22	6,212359E+21	5,569074E+22
1843	2,473891E+22	2,473765E+22	3,106286E+21	3,106216E+21	4,947657E+22	6,212502E+21	5,568907E+22
1844	2,473706E+22	2,473819E+22	3,106692E+21	3,106350E+21	4,947525E+22	6,213042E+21	5,568829E+22
1845	2,473745E+22	2,473715E+22	3,106342E+21	3,106884E+21	4,947461E+22	6,213226E+21	5,568783E+22
1846	2,473635E+22	2,473599E+22	3,106869E+21	3,106547E+21	4,947234E+22	6,213416E+21	5,568576E+22
1847	2,473568E+22	2,473671E+22	3,106893E+21	3,106859E+21	4,947239E+22	6,213753E+21	5,568614E+22
1848	2,473682E+22	2,473566E+22	3,106595E+21	3,106919E+21	4,947248E+22	6,213513E+21	5,568599E+22
1849	2,473588E+22	2,473600E+22	3,106999E+21	3,106470E+21	4,947187E+22	6,213468E+21	5,568534E+22
1850	2,473629E+22	2,473697E+22	3,106588E+21	3,106832E+21	4,947327E+22	6,213420E+21	5,568669E+22
1851	2,473706E+22	2,473636E+22	3,106488E+21	3,106528E+21	4,947342E+22	6,213016E+21	5,568644E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1852	2,473623E+22	2,473767E+22	3,106725E+21	3,106242E+21	4,947390E+22	6,212966E+21	5,568687E+22
1853	2,473776E+22	2,473791E+22	3,106123E+21	3,106587E+21	4,947567E+22	6,212709E+21	5,568838E+22
1854	2,473815E+22	2,473735E+22	3,106314E+21	3,106044E+21	4,947550E+22	6,212357E+21	5,568786E+22
1855	2,473791E+22	2,473886E+22	3,106373E+21	3,106107E+21	4,947677E+22	6,212480E+21	5,568925E+22
1856	2,473919E+22	2,473852E+22	3,105889E+21	3,106322E+21	4,947770E+22	6,212212E+21	5,568992E+22
1857	2,473840E+22	2,473829E+22	3,106301E+21	3,105945E+21	4,947669E+22	6,212246E+21	5,568894E+22
1858	2,473812E+22	2,473901E+22	3,106182E+21	3,106381E+21	4,947714E+22	6,212563E+21	5,568970E+22
1859	2,473871E+22	2,473763E+22	3,106119E+21	3,106392E+21	4,947635E+22	6,212511E+21	5,568886E+22
1860	2,473723E+22	2,473771E+22	3,106719E+21	3,106197E+21	4,947494E+22	6,212916E+21	5,568786E+22
1861	2,473723E+22	2,473752E+22	3,106434E+21	3,106819E+21	4,947475E+22	6,213253E+21	5,568800E+22
1862	2,473663E+22	2,473568E+22	3,106758E+21	3,106685E+21	4,947231E+22	6,213443E+21	5,568576E+22
1863	2,473490E+22	2,473611E+22	3,107188E+21	3,106838E+21	4,947101E+22	6,214026E+21	5,568503E+22
1864	2,473535E+22	2,473515E+22	3,106807E+21	3,107340E+21	4,947050E+22	6,214147E+21	5,568465E+22
1865	2,473472E+22	2,473392E+22	3,107252E+21	3,106986E+21	4,946864E+22	6,214238E+21	5,568288E+22
1866	2,473415E+22	2,473491E+22	3,107257E+21	3,107218E+21	4,946906E+22	6,214475E+21	5,568354E+22
1867	2,473513E+22	2,473409E+22	3,106962E+21	3,107288E+21	4,946922E+22	6,214250E+21	5,568347E+22
1868	2,473416E+22	2,473461E+22	3,107369E+21	3,106824E+21	4,946878E+22	6,214193E+21	5,568297E+22
1869	2,473449E+22	2,473559E+22	3,106953E+21	3,107215E+21	4,947008E+22	6,214168E+21	5,568425E+22
1870	2,473526E+22	2,473457E+22	3,106855E+21	3,106909E+21	4,946984E+22	6,213763E+21	5,568360E+22
1871	2,473486E+22	2,473584E+22	3,107109E+21	3,106594E+21	4,947070E+22	6,213703E+21	5,568440E+22
1872	2,473632E+22	2,473628E+22	3,106495E+21	3,106915E+21	4,947260E+22	6,213410E+21	5,568601E+22
1873	2,473679E+22	2,473571E+22	3,106625E+21	3,106425E+21	4,947251E+22	6,213050E+21	5,568556E+22
1874	2,473632E+22	2,473736E+22	3,106688E+21	3,106484E+21	4,947368E+22	6,213171E+21	5,568685E+22
1875	2,473734E+22	2,473694E+22	3,106261E+21	3,106735E+21	4,947429E+22	6,212995E+21	5,568728E+22
1876	2,473672E+22	2,473667E+22	3,106725E+21	3,106327E+21	4,947339E+22	6,213051E+21	5,568644E+22
1877	2,473640E+22	2,473735E+22	3,106630E+21	3,106760E+21	4,947376E+22	6,213390E+21	5,568715E+22
1878	2,473674E+22	2,473566E+22	3,106601E+21	3,106805E+21	4,947240E+22	6,213406E+21	5,568581E+22
1879	2,473531E+22	2,473571E+22	3,107220E+21	3,106651E+21	4,947102E+22	6,213870E+21	5,568489E+22
1880	2,473496E+22	2,473556E+22	3,106912E+21	3,107310E+21	4,947052E+22	6,214222E+21	5,568475E+22
1881	2,473459E+22	2,473349E+22	3,107167E+21	3,107227E+21	4,946808E+22	6,214395E+21	5,568248E+22
1882	2,473309E+22	2,473397E+22	3,107575E+21	3,107301E+21	4,946707E+22	6,214876E+21	5,568194E+22
1883	2,473365E+22	2,473319E+22	3,107214E+21	3,107759E+21	4,946684E+22	6,214973E+21	5,568181E+22
1884	2,473319E+22	2,473228E+22	3,107665E+21	3,107333E+21	4,946547E+22	6,214998E+21	5,568047E+22
1885	2,473241E+22	2,473351E+22	3,107660E+21	3,107563E+21	4,946593E+22	6,215223E+21	5,568115E+22
1886	2,473306E+22	2,473249E+22	3,107366E+21	3,107670E+21	4,946555E+22	6,215036E+21	5,568059E+22
1887	2,473232E+22	2,473286E+22	3,107782E+21	3,107214E+21	4,946518E+22	6,214996E+21	5,568018E+22
1888	2,473270E+22	2,473388E+22	3,107339E+21	3,107571E+21	4,946658E+22	6,214910E+21	5,568149E+22
1889	2,473394E+22	2,473274E+22	3,107161E+21	3,107282E+21	4,946667E+22	6,214442E+21	5,568111E+22
1890	2,473365E+22	2,473420E+22	3,107400E+21	3,106919E+21	4,946785E+22	6,214319E+21	5,568217E+22
1891	2,473490E+22	2,473486E+22	3,106819E+21	3,107276E+21	4,946976E+22	6,214095E+21	5,568385E+22
1892	2,473527E+22	2,473442E+22	3,106975E+21	3,106792E+21	4,946969E+22	6,213767E+21	5,568346E+22
1893	2,473460E+22	2,473598E+22	3,107078E+21	3,106866E+21	4,947058E+22	6,213943E+21	5,568452E+22
1894	2,473545E+22	2,473513E+22	3,106698E+21	3,107128E+21	4,947058E+22	6,213825E+21	5,568441E+22
1895	2,473501E+22	2,473468E+22	3,107208E+21	3,106727E+21	4,946969E+22	6,213935E+21	5,568362E+22
1896	2,473442E+22	2,473547E+22	3,107114E+21	3,107165E+21	4,946988E+22	6,214279E+21	5,568416E+22
1897	2,473478E+22	2,473359E+22	3,107014E+21	3,107303E+21	4,946837E+22	6,214318E+21	5,568268E+22
1898	2,473325E+22	2,473365E+22	3,107606E+21	3,107147E+21	4,946691E+22	6,214754E+21	5,568166E+22
1899	2,473289E+22	2,473349E+22	3,107329E+21	3,107812E+21	4,946639E+22	6,215141E+21	5,568153E+22
1900	2,473284E+22	2,473158E+22	3,107590E+21	3,107660E+21	4,946442E+22	6,215250E+21	5,567967E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1901	2,473146E+22	2,473226E+22	3,108002E+21	3,107678E+21	4,946372E+22	6,215679E+21	5,567940E+22
1902	2,473181E+22	2,473139E+22	3,107679E+21	3,108133E+21	4,946320E+22	6,215812E+21	5,567901E+22
1903	2,473138E+22	2,473061E+22	3,108132E+21	3,107729E+21	4,946199E+22	6,215861E+21	5,567785E+22
1904	2,473030E+22	2,473192E+22	3,108095E+21	3,107967E+21	4,946222E+22	6,216062E+21	5,567828E+22
1905	2,473122E+22	2,473058E+22	3,107719E+21	3,108120E+21	4,946179E+22	6,215839E+21	5,567763E+22
1906	2,473081E+22	2,473096E+22	3,108087E+21	3,107589E+21	4,946178E+22	6,215676E+21	5,567745E+22
1907	2,473134E+22	2,473214E+22	3,107664E+21	3,107911E+21	4,946347E+22	6,215575E+21	5,567905E+22
1908	2,473271E+22	2,473138E+22	3,107487E+21	3,107582E+21	4,946409E+22	6,215069E+21	5,567916E+22
1909	2,473223E+22	2,473303E+22	3,107727E+21	3,107231E+21	4,946526E+22	6,214958E+21	5,568022E+22
1910	2,473302E+22	2,473343E+22	3,107210E+21	3,107634E+21	4,946646E+22	6,214844E+21	5,568130E+22
1911	2,473353E+22	2,473282E+22	3,107400E+21	3,107177E+21	4,946635E+22	6,214577E+21	5,568093E+22
1912	2,473272E+22	2,473427E+22	3,107515E+21	3,107234E+21	4,946699E+22	6,214749E+21	5,568174E+22
1913	2,473379E+22	2,473313E+22	3,107090E+21	3,107554E+21	4,946692E+22	6,214644E+21	5,568156E+22
1914	2,473336E+22	2,473271E+22	3,107587E+21	3,107150E+21	4,946607E+22	6,214738E+21	5,568080E+22
1915	2,473252E+22	2,473356E+22	3,107518E+21	3,107638E+21	4,946608E+22	6,215156E+21	5,568123E+22
1916	2,473286E+22	2,473180E+22	3,107422E+21	3,107789E+21	4,946466E+22	6,215211E+21	5,567987E+22
1917	2,473136E+22	2,473180E+22	3,108021E+21	3,107607E+21	4,946316E+22	6,215628E+21	5,567879E+22
1918	2,473096E+22	2,473143E+22	3,107808E+21	3,108243E+21	4,946239E+22	6,216051E+21	5,567844E+22
1919	2,473114E+22	2,472964E+22	3,108093E+21	3,108058E+21	4,946078E+22	6,216151E+21	5,567693E+22
1920	2,472948E+22	2,473055E+22	3,108499E+21	3,108054E+21	4,946003E+22	6,216553E+21	5,567658E+22
1921	2,472982E+22	2,472955E+22	3,108100E+21	3,108581E+21	4,945936E+22	6,216681E+21	5,567604E+22
1922	2,472936E+22	2,472877E+22	3,108504E+21	3,108167E+21	4,945813E+22	6,216671E+21	5,567480E+22
1923	2,472838E+22	2,473006E+22	3,108462E+21	3,108391E+21	4,945843E+22	6,216853E+21	5,567529E+22
1924	2,472969E+22	2,472888E+22	3,108059E+21	3,108482E+21	4,945857E+22	6,216541E+21	5,567511E+22
1925	2,472950E+22	2,472946E+22	3,108407E+21	3,107897E+21	4,945895E+22	6,216304E+21	5,567526E+22
1926	2,472988E+22	2,473061E+22	3,108037E+21	3,108227E+21	4,946049E+22	6,216265E+21	5,567675E+22
1927	2,473121E+22	2,473001E+22	3,107873E+21	3,107929E+21	4,946122E+22	6,215802E+21	5,567702E+22
1928	2,473040E+22	2,473168E+22	3,108120E+21	3,107600E+21	4,946208E+22	6,215719E+21	5,567780E+22
1929	2,473134E+22	2,473164E+22	3,107566E+21	3,108054E+21	4,946298E+22	6,215620E+21	5,567860E+22
1930	2,473199E+22	2,473094E+22	3,107743E+21	3,107567E+21	4,946293E+22	6,215310E+21	5,567824E+22
1931	2,473114E+22	2,473240E+22	3,107894E+21	3,107623E+21	4,946354E+22	6,215517E+21	5,567906E+22
1932	2,473215E+22	2,473147E+22	3,107478E+21	3,107946E+21	4,946362E+22	6,215424E+21	5,567904E+22
1933	2,473152E+22	2,473110E+22	3,107972E+21	3,107565E+21	4,946262E+22	6,215537E+21	5,567816E+22
1934	2,473037E+22	2,473165E+22	3,107982E+21	3,108091E+21	4,946202E+22	6,216073E+21	5,567809E+22
1935	2,473090E+22	2,472986E+22	3,107917E+21	3,108241E+21	4,946076E+22	6,216159E+21	5,567692E+22
1936	2,472939E+22	2,472991E+22	3,108516E+21	3,108028E+21	4,945929E+22	6,216545E+21	5,567584E+22
1937	2,472916E+22	2,472935E+22	3,108270E+21	3,108694E+21	4,945851E+22	6,216964E+21	5,567548E+22
1938	2,472934E+22	2,472773E+22	3,108521E+21	3,108502E+21	4,945707E+22	6,217023E+21	5,567409E+22
1939	2,472745E+22	2,472872E+22	3,108921E+21	3,108519E+21	4,945617E+22	6,217440E+21	5,567361E+22
1940	2,472782E+22	2,472784E+22	3,108495E+21	3,109031E+21	4,945566E+22	6,217527E+21	5,567319E+22
1941	2,472758E+22	2,472699E+22	3,108858E+21	3,108564E+21	4,945457E+22	6,217422E+21	5,567199E+22
1942	2,472668E+22	2,472811E+22	3,108863E+21	3,108747E+21	4,945478E+22	6,217610E+21	5,567239E+22
1943	2,472829E+22	2,472724E+22	3,108458E+21	3,108802E+21	4,945554E+22	6,217260E+21	5,567279E+22
1944	2,472794E+22	2,472807E+22	3,108785E+21	3,108212E+21	4,945601E+22	6,216997E+21	5,567301E+22
1945	2,472827E+22	2,472908E+22	3,108377E+21	3,108610E+21	4,945735E+22	6,216987E+21	5,567434E+22
1946	2,472958E+22	2,472848E+22	3,108187E+21	3,108310E+21	4,945806E+22	6,216497E+21	5,567455E+22
1947	2,472875E+22	2,473002E+22	3,108461E+21	3,107975E+21	4,945877E+22	6,216437E+21	5,567521E+22
1948	2,472986E+22	2,473007E+22	3,107913E+21	3,108392E+21	4,945993E+22	6,216306E+21	5,567623E+22
1949	2,473054E+22	2,472936E+22	3,108097E+21	3,107900E+21	4,945990E+22	6,215997E+21	5,567590E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1950	2,472938E+22	2,473065E+22	3,108333E+21	3,108009E+21	4,946003E+22	6,216342E+21	5,567637E+22
1951	2,473027E+22	2,472980E+22	3,107939E+21	3,108389E+21	4,946008E+22	6,216328E+21	5,567640E+22
1952	2,472941E+22	2,472933E+22	3,108435E+21	3,108038E+21	4,945875E+22	6,216473E+21	5,567522E+22
1953	2,472846E+22	2,472945E+22	3,108425E+21	3,108596E+21	4,945791E+22	6,217022E+21	5,567493E+22
1954	2,472917E+22	2,472771E+22	3,108348E+21	3,108701E+21	4,945688E+22	6,217049E+21	5,567393E+22
1955	2,472760E+22	2,472791E+22	3,108968E+21	3,108475E+21	4,945551E+22	6,217443E+21	5,567295E+22
1956	2,472728E+22	2,472761E+22	3,108712E+21	3,109123E+21	4,945489E+22	6,217835E+21	5,567272E+22
1957	2,472728E+22	2,472605E+22	3,108933E+21	3,108933E+21	4,945332E+22	6,217865E+21	5,567119E+22
1958	2,472523E+22	2,472677E+22	3,109373E+21	3,108958E+21	4,945200E+22	6,218331E+21	5,567033E+22
1959	2,472589E+22	2,472593E+22	3,108940E+21	3,109429E+21	4,945182E+22	6,218370E+21	5,567019E+22
1960	2,472583E+22	2,472522E+22	3,109267E+21	3,108920E+21	4,945105E+22	6,218187E+21	5,566924E+22
1961	2,472526E+22	2,472622E+22	3,109230E+21	3,109117E+21	4,945148E+22	6,218347E+21	5,566983E+22
1962	2,472691E+22	2,472567E+22	3,108788E+21	3,109164E+21	4,945258E+22	6,217952E+21	5,567054E+22
1963	2,472636E+22	2,472666E+22	3,109108E+21	3,108600E+21	4,945302E+22	6,217707E+21	5,567073E+22
1964	2,472669E+22	2,472771E+22	3,108700E+21	3,108977E+21	4,945440E+22	6,217677E+21	5,567208E+22
1965	2,472809E+22	2,472700E+22	3,108503E+21	3,108633E+21	4,945509E+22	6,217136E+21	5,567223E+22
1966	2,472718E+22	2,472828E+22	3,108858E+21	3,108300E+21	4,945546E+22	6,217158E+21	5,567262E+22
1967	2,472828E+22	2,472850E+22	3,108346E+21	3,108719E+21	4,945678E+22	6,217065E+21	5,567385E+22
1968	2,472869E+22	2,472785E+22	3,108527E+21	3,108287E+21	4,945654E+22	6,216814E+21	5,567335E+22
1969	2,472746E+22	2,472873E+22	3,108744E+21	3,108489E+21	4,945619E+22	6,217232E+21	5,567342E+22
1970	2,472839E+22	2,472784E+22	3,108339E+21	3,108879E+21	4,945623E+22	6,217218E+21	5,567345E+22
1971	2,472758E+22	2,472728E+22	3,108846E+21	3,108515E+21	4,945486E+22	6,217361E+21	5,567222E+22
1972	2,472679E+22	2,472755E+22	3,108846E+21	3,109020E+21	4,945435E+22	6,217866E+21	5,567221E+22
1973	2,472750E+22	2,472594E+22	3,108767E+21	3,109094E+21	4,945344E+22	6,217861E+21	5,567130E+22
1974	2,472556E+22	2,472601E+22	3,109461E+21	3,108909E+21	4,945158E+22	6,218370E+21	5,566995E+22
1975	2,472510E+22	2,472588E+22	3,109212E+21	3,109567E+21	4,945098E+22	6,218779E+21	5,566976E+22
1976	2,472503E+22	2,472419E+22	3,109405E+21	3,109394E+21	4,944922E+22	6,218799E+21	5,566802E+22
1977	2,472334E+22	2,472449E+22	3,109793E+21	3,109419E+21	4,944782E+22	6,219212E+21	5,566704E+22
1978	2,472434E+22	2,472387E+22	3,109316E+21	3,109828E+21	4,944821E+22	6,219144E+21	5,566736E+22
1979	2,472433E+22	2,472346E+22	3,109619E+21	3,109293E+21	4,944779E+22	6,218912E+21	5,566671E+22
1980	2,472378E+22	2,472482E+22	3,109563E+21	3,109467E+21	4,944860E+22	6,219030E+21	5,566763E+22
1981	2,472530E+22	2,472441E+22	3,109101E+21	3,109492E+21	4,944971E+22	6,218592E+21	5,566830E+22
1982	2,472459E+22	2,472514E+22	3,109489E+21	3,108948E+21	4,944973E+22	6,218437E+21	5,566817E+22
1983	2,472504E+22	2,472624E+22	3,109104E+21	3,109286E+21	4,945128E+22	6,218390E+21	5,566967E+22
1984	2,472644E+22	2,472549E+22	3,108901E+21	3,108965E+21	4,945194E+22	6,217866E+21	5,566980E+22
1985	2,472566E+22	2,472639E+22	3,109240E+21	3,108698E+21	4,945205E+22	6,217938E+21	5,566999E+22
1986	2,472668E+22	2,472674E+22	3,108716E+21	3,109152E+21	4,945342E+22	6,217868E+21	5,567129E+22
1987	2,472689E+22	2,472610E+22	3,108891E+21	3,108772E+21	4,945299E+22	6,217663E+21	5,567066E+22
1988	2,472577E+22	2,472691E+22	3,109108E+21	3,108953E+21	4,945267E+22	6,218062E+21	5,567073E+22
1989	2,472677E+22	2,472598E+22	3,108716E+21	3,109278E+21	4,945275E+22	6,217994E+21	5,567074E+22
1990	2,472586E+22	2,472532E+22	3,109308E+21	3,108913E+21	4,945118E+22	6,218220E+21	5,566940E+22
1991	2,472493E+22	2,472584E+22	3,109356E+21	3,109392E+21	4,945077E+22	6,218748E+21	5,566952E+22
1992	2,472530E+22	2,472428E+22	3,109277E+21	3,109529E+21	4,944958E+22	6,218806E+21	5,566839E+22
1993	2,472331E+22	2,472389E+22	3,109937E+21	3,109413E+21	4,944720E+22	6,219350E+21	5,566655E+22
1994	2,472296E+22	2,472373E+22	3,109653E+21	3,110051E+21	4,944669E+22	6,219704E+21	5,566639E+22
1995	2,472310E+22	2,472207E+22	3,109807E+21	3,109852E+21	4,944517E+22	6,219660E+21	5,566483E+22
1996	2,472180E+22	2,472257E+22	3,110155E+21	3,109813E+21	4,944437E+22	6,219968E+21	5,566433E+22
1997	2,472293E+22	2,472228E+22	3,109661E+21	3,110164E+21	4,944521E+22	6,219826E+21	5,566503E+22
1998	2,472271E+22	2,472197E+22	3,110006E+21	3,109660E+21	4,944468E+22	6,219666E+21	5,566435E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1999	2,472203E+22	2,472356E+22	3,109966E+21	3,109812E+21	4,944560E+22	6,219778E+21	5,566538E+22
2000	2,472350E+22	2,472304E+22	3,109495E+21	3,109852E+21	4,944654E+22	6,219346E+21	5,566588E+22
2001	2,472302E+22	2,472324E+22	3,109856E+21	3,109325E+21	4,944626E+22	6,219181E+21	5,566544E+22
2002	2,472362E+22	2,472446E+22	3,109455E+21	3,109634E+21	4,944808E+22	6,219089E+21	5,566717E+22
2003	2,472491E+22	2,472381E+22	3,109244E+21	3,109346E+21	4,944873E+22	6,218590E+21	5,566732E+22
2004	2,472411E+22	2,472481E+22	3,109565E+21	3,109102E+21	4,944892E+22	6,218667E+21	5,566759E+22
2005	2,472504E+22	2,472518E+22	3,109041E+21	3,109539E+21	4,945022E+22	6,218579E+21	5,566880E+22
2006	2,472509E+22	2,472430E+22	3,109293E+21	3,109180E+21	4,944939E+22	6,218474E+21	5,566786E+22
2007	2,472403E+22	2,472525E+22	3,109559E+21	3,109304E+21	4,944928E+22	6,218863E+21	5,566814E+22
2008	2,472497E+22	2,472432E+22	3,109198E+21	3,109656E+21	4,944929E+22	6,218854E+21	5,566814E+22
2009	2,472398E+22	2,472328E+22	3,109798E+21	3,109369E+21	4,944727E+22	6,219167E+21	5,566643E+22
2010	2,472285E+22	2,472392E+22	3,109831E+21	3,109879E+21	4,944677E+22	6,219710E+21	5,566648E+22
2011	2,472301E+22	2,472227E+22	3,109731E+21	3,110066E+21	4,944529E+22	6,219797E+21	5,566508E+22
2012	2,472131E+22	2,472172E+22	3,110345E+21	3,109920E+21	4,944303E+22	6,220265E+21	5,566330E+22
2013	2,472124E+22	2,472163E+22	3,110032E+21	3,110457E+21	4,944286E+22	6,220489E+21	5,566335E+22
2014	2,472143E+22	2,472010E+22	3,110226E+21	3,110242E+21	4,944153E+22	6,220468E+21	5,566200E+22
2015	2,472015E+22	2,472106E+22	3,110585E+21	3,110151E+21	4,944121E+22	6,220736E+21	5,566195E+22
2016	2,472108E+22	2,472096E+22	3,110090E+21	3,110541E+21	4,944204E+22	6,220632E+21	5,566267E+22
2017	2,472086E+22	2,472027E+22	3,110399E+21	3,110080E+21	4,944113E+22	6,220479E+21	5,566161E+22
2018	2,472033E+22	2,472183E+22	3,110336E+21	3,110184E+21	4,944216E+22	6,220520E+21	5,566268E+22
2019	2,472188E+22	2,472133E+22	3,109836E+21	3,110209E+21	4,944321E+22	6,220045E+21	5,566325E+22
2020	2,472171E+22	2,472154E+22	3,110158E+21	3,109665E+21	4,944326E+22	6,219823E+21	5,566308E+22
2021	2,472227E+22	2,472293E+22	3,109759E+21	3,109943E+21	4,944520E+22	6,219701E+21	5,566490E+22
2022	2,472329E+22	2,472234E+22	3,109601E+21	3,109729E+21	4,944562E+22	6,219330E+21	5,566495E+22
2023	2,472239E+22	2,472342E+22	3,109954E+21	3,109476E+21	4,944581E+22	6,219430E+21	5,566524E+22
2024	2,472327E+22	2,472362E+22	3,109473E+21	3,109935E+21	4,944688E+22	6,219408E+21	5,566629E+22
2025	2,472344E+22	2,472227E+22	3,109724E+21	3,109598E+21	4,944571E+22	6,219323E+21	5,566503E+22
2026	2,472236E+22	2,472333E+22	3,110006E+21	3,109701E+21	4,944568E+22	6,219707E+21	5,566539E+22
2027	2,472299E+22	2,472249E+22	3,109655E+21	3,110104E+21	4,944548E+22	6,219758E+21	5,566524E+22
2028	2,472194E+22	2,472139E+22	3,110223E+21	3,109869E+21	4,944332E+22	6,220092E+21	5,566342E+22
2029	2,472074E+22	2,472196E+22	3,110243E+21	3,110341E+21	4,944270E+22	6,220584E+21	5,566328E+22
2030	2,472092E+22	2,472014E+22	3,110182E+21	3,110543E+21	4,944106E+22	6,220725E+21	5,566178E+22
2031	2,471946E+22	2,471981E+22	3,110790E+21	3,110313E+21	4,943927E+22	6,221103E+21	5,566038E+22
2032	2,471953E+22	2,471986E+22	3,110493E+21	3,110847E+21	4,943939E+22	6,221340E+21	5,566073E+22
2033	2,471974E+22	2,471821E+22	3,110663E+21	3,110667E+21	4,943794E+22	6,221330E+21	5,565927E+22
2034	2,471840E+22	2,471945E+22	3,110992E+21	3,110569E+21	4,943785E+22	6,221560E+21	5,565942E+22
2035	2,471919E+22	2,471934E+22	3,110478E+21	3,110966E+21	4,943853E+22	6,221444E+21	5,565998E+22
2036	2,471924E+22	2,471850E+22	3,110729E+21	3,110475E+21	4,943775E+22	6,221205E+21	5,565895E+22
2037	2,471892E+22	2,472014E+22	3,110636E+21	3,110474E+21	4,943906E+22	6,221109E+21	5,566017E+22
2038	2,472038E+22	2,471970E+22	3,110184E+21	3,110518E+21	4,944008E+22	6,220702E+21	5,566078E+22
2039	2,472015E+22	2,472024E+22	3,110522E+21	3,109960E+21	4,944040E+22	6,220482E+21	5,566088E+22
2040	2,472055E+22	2,472163E+22	3,110151E+21	3,110307E+21	4,944219E+22	6,220458E+21	5,566265E+22
2041	2,472150E+22	2,472060E+22	3,109991E+21	3,110155E+21	4,944209E+22	6,220147E+21	5,566224E+22
2042	2,472074E+22	2,472165E+22	3,110342E+21	3,109878E+21	4,944238E+22	6,220219E+21	5,566260E+22
2043	2,472156E+22	2,472181E+22	3,109877E+21	3,110334E+21	4,944337E+22	6,220211E+21	5,566359E+22
2044	2,472189E+22	2,472041E+22	3,110111E+21	3,110026E+21	4,944230E+22	6,220136E+21	5,566244E+22
2045	2,472064E+22	2,472155E+22	3,110401E+21	3,110103E+21	4,944219E+22	6,220504E+21	5,566269E+22
2046	2,472088E+22	2,472069E+22	3,110106E+21	3,110589E+21	4,944158E+22	6,220696E+21	5,566227E+22
2047	2,471980E+22	2,471958E+22	3,110687E+21	3,110334E+21	4,943937E+22	6,221022E+21	5,566040E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2048	2,471873E+22	2,471994E+22	3,110728E+21	3,110804E+21	4,943867E+22	6,221532E+21	5,566020E+22
2049	2,471909E+22	2,471785E+22	3,110646E+21	3,111002E+21	4,943694E+22	6,221647E+21	5,565859E+22
2050	2,471779E+22	2,471779E+22	3,111233E+21	3,110727E+21	4,943558E+22	6,221960E+21	5,565754E+22
2051	2,471764E+22	2,471813E+22	3,110938E+21	3,111272E+21	4,943576E+22	6,222210E+21	5,565797E+22
2052	2,471791E+22	2,471654E+22	3,111038E+21	3,111111E+21	4,943446E+22	6,222149E+21	5,565661E+22
2053	2,471658E+22	2,471779E+22	3,111341E+21	3,110927E+21	4,943437E+22	6,222267E+21	5,565664E+22
2054	2,471738E+22	2,471766E+22	3,110858E+21	3,111316E+21	4,943504E+22	6,222174E+21	5,565721E+22
2055	2,471764E+22	2,471701E+22	3,111097E+21	3,110760E+21	4,943465E+22	6,221857E+21	5,565651E+22
2056	2,471741E+22	2,471867E+22	3,111026E+21	3,110787E+21	4,943608E+22	6,221814E+21	5,565789E+22
2057	2,471878E+22	2,471806E+22	3,110560E+21	3,110902E+21	4,943684E+22	6,221462E+21	5,565830E+22
2058	2,471855E+22	2,471872E+22	3,110869E+21	3,110370E+21	4,943727E+22	6,221239E+21	5,565851E+22
2059	2,471884E+22	2,472001E+22	3,110520E+21	3,110732E+21	4,943885E+22	6,221252E+21	5,566010E+22
2060	2,472006E+22	2,471878E+22	3,110316E+21	3,110571E+21	4,943885E+22	6,220887E+21	5,565973E+22
2061	2,471938E+22	2,471989E+22	3,110672E+21	3,110206E+21	4,943928E+22	6,220878E+21	5,566015E+22
2062	2,471992E+22	2,472014E+22	3,110290E+21	3,110702E+21	4,944006E+22	6,220992E+21	5,566105E+22
2063	2,471999E+22	2,471895E+22	3,110555E+21	3,110411E+21	4,943893E+22	6,220967E+21	5,565990E+22
2064	2,471855E+22	2,471990E+22	3,110885E+21	3,110561E+21	4,943845E+22	6,221445E+21	5,565989E+22
2065	2,471867E+22	2,471853E+22	3,110595E+21	3,111091E+21	4,943720E+22	6,221687E+21	5,565889E+22
2066	2,471784E+22	2,471740E+22	3,111146E+21	3,110801E+21	4,943525E+22	6,221948E+21	5,565719E+22
2067	2,471686E+22	2,471780E+22	3,111190E+21	3,111244E+21	4,943465E+22	6,222434E+21	5,565709E+22
2068	2,471742E+22	2,471582E+22	3,111058E+21	3,111455E+21	4,943324E+22	6,222513E+21	5,565575E+22
2069	2,471608E+22	2,471607E+22	3,111614E+21	3,111130E+21	4,943215E+22	6,222743E+21	5,565489E+22
2070	2,471563E+22	2,471650E+22	3,111367E+21	3,111715E+21	4,943213E+22	6,223082E+21	5,565521E+22
2071	2,471593E+22	2,471502E+22	3,111460E+21	3,111499E+21	4,943095E+22	6,222959E+21	5,565391E+22
2072	2,471483E+22	2,471609E+22	3,111761E+21	3,111291E+21	4,943092E+22	6,223051E+21	5,565397E+22
2073	2,471568E+22	2,471572E+22	3,111256E+21	3,111671E+21	4,943141E+22	6,222927E+21	5,565433E+22
2074	2,471611E+22	2,471532E+22	3,111459E+21	3,111108E+21	4,943142E+22	6,222568E+21	5,565399E+22
2075	2,471573E+22	2,471710E+22	3,111391E+21	3,111171E+21	4,943283E+22	6,222562E+21	5,565539E+22
2076	2,471723E+22	2,471647E+22	3,110864E+21	3,111331E+21	4,943370E+22	6,222195E+21	5,565590E+22
2077	2,471712E+22	2,471713E+22	3,111150E+21	3,110724E+21	4,943424E+22	6,221874E+21	5,565612E+22
2078	2,471735E+22	2,471841E+22	3,110869E+21	3,111079E+21	4,943576E+22	6,221949E+21	5,565771E+22
2079	2,471860E+22	2,471739E+22	3,110693E+21	3,110870E+21	4,943599E+22	6,221563E+21	5,565755E+22
2080	2,471783E+22	2,471840E+22	3,111114E+21	3,110556E+21	4,943623E+22	6,221670E+21	5,565790E+22
2081	2,471797E+22	2,471841E+22	3,110758E+21	3,111134E+21	4,943638E+22	6,221891E+21	5,565827E+22
2082	2,471794E+22	2,471712E+22	3,111015E+21	3,110902E+21	4,943506E+22	6,221917E+21	5,565698E+22
2083	2,471639E+22	2,471779E+22	3,111365E+21	3,111066E+21	4,943418E+22	6,222432E+21	5,565662E+22
2084	2,471687E+22	2,471624E+22	3,111005E+21	3,111590E+21	4,943312E+22	6,222595E+21	5,565571E+22
2085	2,471621E+22	2,471526E+22	3,111522E+21	3,111204E+21	4,943147E+22	6,222726E+21	5,565419E+22
2086	2,471503E+22	2,471593E+22	3,111632E+21	3,111666E+21	4,943096E+22	6,223298E+21	5,565426E+22
2087	2,471543E+22	2,471434E+22	3,111509E+21	3,111858E+21	4,942977E+22	6,223367E+21	5,565313E+22
2088	2,471403E+22	2,471449E+22	3,112084E+21	3,111566E+21	4,942853E+22	6,223650E+21	5,565218E+22
2089	2,471351E+22	2,471457E+22	3,111833E+21	3,112143E+21	4,942808E+22	6,223976E+21	5,565205E+22
2090	2,471411E+22	2,471312E+22	3,111873E+21	3,111889E+21	4,942723E+22	6,223762E+21	5,565099E+22
2091	2,471314E+22	2,471419E+22	3,112159E+21	3,111657E+21	4,942733E+22	6,223815E+21	5,565115E+22
2092	2,471425E+22	2,471391E+22	3,111577E+21	3,112062E+21	4,942816E+22	6,223638E+21	5,565180E+22
2093	2,471471E+22	2,471379E+22	3,111729E+21	3,111464E+21	4,942851E+22	6,223192E+21	5,565170E+22
2094	2,471417E+22	2,471566E+22	3,111716E+21	3,111566E+21	4,942983E+22	6,223283E+21	5,565312E+22
2095	2,471571E+22	2,471516E+22	3,111211E+21	3,111664E+21	4,943088E+22	6,222875E+21	5,565375E+22
2096	2,471579E+22	2,471566E+22	3,111528E+21	3,111045E+21	4,943145E+22	6,222573E+21	5,565402E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2097	2,471579E+22	2,471670E+22	3,111291E+21	3,111400E+21	4,943249E+22	6,222691E+21	5,565518E+22
2098	2,471692E+22	2,471581E+22	3,111122E+21	3,111234E+21	4,943274E+22	6,222357E+21	5,565509E+22
2099	2,471582E+22	2,471669E+22	3,111569E+21	3,110994E+21	4,943251E+22	6,222563E+21	5,565507E+22
2100	2,471593E+22	2,471643E+22	3,111163E+21	3,111639E+21	4,943235E+22	6,222802E+21	5,565516E+22
2101	2,471605E+22	2,471506E+22	3,111384E+21	3,111357E+21	4,943111E+22	6,222741E+21	5,565385E+22
2102	2,471455E+22	2,471568E+22	3,111782E+21	3,111521E+21	4,943024E+22	6,223302E+21	5,565354E+22
2103	2,471512E+22	2,471443E+22	3,111445E+21	3,111987E+21	4,942955E+22	6,223432E+21	5,565298E+22
2104	2,471450E+22	2,471351E+22	3,111991E+21	3,111631E+21	4,942802E+22	6,223622E+21	5,565164E+22
2105	2,471294E+22	2,471410E+22	3,112124E+21	3,112129E+21	4,942704E+22	6,224253E+21	5,565129E+22
2106	2,471333E+22	2,471256E+22	3,111985E+21	3,112338E+21	4,942589E+22	6,224322E+21	5,565021E+22
2107	2,471196E+22	2,471248E+22	3,112554E+21	3,112024E+21	4,942444E+22	6,224578E+21	5,564902E+22
2108	2,471179E+22	2,471244E+22	3,112211E+21	3,112566E+21	4,942424E+22	6,224776E+21	5,564901E+22
2109	2,471262E+22	2,471122E+22	3,112186E+21	3,112229E+21	4,942384E+22	6,224415E+21	5,564826E+22
2110	2,471156E+22	2,471254E+22	3,112504E+21	3,112022E+21	4,942410E+22	6,224526E+21	5,564863E+22
2111	2,471262E+22	2,471266E+22	3,111923E+21	3,112401E+21	4,942528E+22	6,224324E+21	5,564961E+22
2112	2,471317E+22	2,471247E+22	3,112089E+21	3,111820E+21	4,942565E+22	6,223910E+21	5,564955E+22
2113	2,471253E+22	2,471409E+22	3,112104E+21	3,111904E+21	4,942663E+22	6,224009E+21	5,565063E+22
2114	2,471425E+22	2,471363E+22	3,111592E+21	3,111978E+21	4,942789E+22	6,223570E+21	5,565146E+22
2115	2,471421E+22	2,471402E+22	3,111942E+21	3,111386E+21	4,942823E+22	6,223328E+21	5,565156E+22
2116	2,471419E+22	2,471499E+22	3,111656E+21	3,111800E+21	4,942919E+22	6,223456E+21	5,565264E+22
2117	2,471517E+22	2,471413E+22	3,111455E+21	3,111660E+21	4,942930E+22	6,223115E+21	5,565242E+22
2118	2,471388E+22	2,471484E+22	3,111960E+21	3,111485E+21	4,942872E+22	6,223445E+21	5,565217E+22
2119	2,471409E+22	2,471460E+22	3,111573E+21	3,112071E+21	4,942869E+22	6,223644E+21	5,565233E+22
2120	2,471445E+22	2,471311E+22	3,111810E+21	3,111773E+21	4,942756E+22	6,223582E+21	5,565114E+22
2121	2,471275E+22	2,471366E+22	3,112248E+21	3,111928E+21	4,942641E+22	6,224177E+21	5,565058E+22
2122	2,471322E+22	2,471265E+22	3,111932E+21	3,112419E+21	4,942587E+22	6,224351E+21	5,565022E+22
2123	2,471234E+22	2,471170E+22	3,112498E+21	3,112114E+21	4,942404E+22	6,224613E+21	5,564865E+22
2124	2,471084E+22	2,471208E+22	3,112566E+21	3,112625E+21	4,942292E+22	6,225191E+21	5,564811E+22
2125	2,471143E+22	2,471054E+22	3,112368E+21	3,112762E+21	4,942197E+22	6,225131E+21	5,564710E+22
2126	2,471016E+22	2,471048E+22	3,112945E+21	3,112433E+21	4,942064E+22	6,225378E+21	5,564602E+22
2127	2,471012E+22	2,471078E+22	3,112598E+21	3,112899E+21	4,942090E+22	6,225498E+21	5,564640E+22
2128	2,471110E+22	2,470972E+22	3,112566E+21	3,112592E+21	4,942082E+22	6,225158E+21	5,564598E+22
2129	2,470979E+22	2,471098E+22	3,112895E+21	3,112413E+21	4,942077E+22	6,225308E+21	5,564608E+22
2130	2,471094E+22	2,471119E+22	3,112321E+21	3,112793E+21	4,942212E+22	6,225115E+21	5,564724E+22
2131	2,471158E+22	2,471083E+22	3,112479E+21	3,112192E+21	4,942241E+22	6,224671E+21	5,564708E+22
2132	2,471116E+22	2,471228E+22	3,112429E+21	3,112249E+21	4,942344E+22	6,224678E+21	5,564812E+22
2133	2,471288E+22	2,471203E+22	3,111888E+21	3,112284E+21	4,942491E+22	6,224173E+21	5,564908E+22
2134	2,471255E+22	2,471246E+22	3,112290E+21	3,111775E+21	4,942502E+22	6,224065E+21	5,564908E+22
2135	2,471232E+22	2,471358E+22	3,112032E+21	3,112188E+21	4,942590E+22	6,224221E+21	5,565012E+22
2136	2,471339E+22	2,471249E+22	3,111855E+21	3,112090E+21	4,942588E+22	6,223945E+21	5,564982E+22
2137	2,471200E+22	2,471285E+22	3,112390E+21	3,111905E+21	4,942485E+22	6,224295E+21	5,564915E+22
2138	2,471241E+22	2,471267E+22	3,112026E+21	3,112470E+21	4,942508E+22	6,224497E+21	5,564957E+22
2139	2,471268E+22	2,471118E+22	3,112291E+21	3,112196E+21	4,942386E+22	6,224487E+21	5,564834E+22
2140	2,471094E+22	2,471172E+22	3,112682E+21	3,112397E+21	4,942266E+22	6,225079E+21	5,564774E+22
2141	2,471125E+22	2,471085E+22	3,112344E+21	3,112896E+21	4,942210E+22	6,225241E+21	5,564734E+22
2142	2,471021E+22	2,470977E+22	3,112950E+21	3,112634E+21	4,941998E+22	6,225584E+21	5,564556E+22
2143	2,470886E+22	2,471020E+22	3,113009E+21	3,113042E+21	4,941906E+22	6,226052E+21	5,564511E+22
2144	2,470974E+22	2,470861E+22	3,112797E+21	3,113145E+21	4,941835E+22	6,225942E+21	5,564429E+22
2145	2,470833E+22	2,470856E+22	3,113377E+21	3,112801E+21	4,941689E+22	6,226179E+21	5,564307E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2146	2,470835E+22	2,470914E+22	3,113024E+21	3,113277E+21	4,941749E+22	6,226301E+21	5,564379E+22
2147	2,470920E+22	2,470813E+22	3,112983E+21	3,113006E+21	4,941733E+22	6,225990E+21	5,564332E+22
2148	2,470814E+22	2,470926E+22	3,113228E+21	3,112824E+21	4,941740E+22	6,226052E+21	5,564345E+22
2149	2,470952E+22	2,470954E+22	3,112614E+21	3,113128E+21	4,941906E+22	6,225742E+21	5,564480E+22
2150	2,471018E+22	2,470923E+22	3,112795E+21	3,112531E+21	4,941941E+22	6,225326E+21	5,564474E+22
2151	2,470975E+22	2,471092E+22	3,112764E+21	3,112529E+21	4,942067E+22	6,225294E+21	5,564596E+22
2152	2,471139E+22	2,471069E+22	3,112243E+21	3,112624E+21	4,942208E+22	6,224867E+21	5,564694E+22
2153	2,471067E+22	2,471089E+22	3,112685E+21	3,112184E+21	4,942156E+22	6,224869E+21	5,564643E+22
2154	2,471050E+22	2,471185E+22	3,112466E+21	3,112613E+21	4,942235E+22	6,225079E+21	5,564743E+22
2155	2,471162E+22	2,471056E+22	3,112305E+21	3,112522E+21	4,942218E+22	6,224827E+21	5,564700E+22
2156	2,471045E+22	2,471074E+22	3,112773E+21	3,112330E+21	4,942119E+22	6,225104E+21	5,564630E+22
2157	2,471080E+22	2,471079E+22	3,112414E+21	3,112873E+21	4,942159E+22	6,225287E+21	5,564687E+22
2158	2,471074E+22	2,470942E+22	3,112722E+21	3,112679E+21	4,942015E+22	6,225401E+21	5,564555E+22
2159	2,470881E+22	2,471006E+22	3,113139E+21	3,112848E+21	4,941887E+22	6,225988E+21	5,564486E+22
2160	2,470922E+22	2,470904E+22	3,112817E+21	3,113352E+21	4,941825E+22	6,226169E+21	5,564442E+22
2161	2,470808E+22	2,470767E+22	3,113432E+21	3,113073E+21	4,941575E+22	6,226505E+21	5,564226E+22
2162	2,470695E+22	2,470817E+22	3,113492E+21	3,113440E+21	4,941512E+22	6,226933E+21	5,564205E+22
2163	2,470786E+22	2,470667E+22	3,113262E+21	3,113563E+21	4,941453E+22	6,226825E+21	5,564135E+22
2164	2,470658E+22	2,470662E+22	3,113736E+21	3,113249E+21	4,941321E+22	6,226985E+21	5,564019E+22
2165	2,470668E+22	2,470745E+22	3,113354E+21	3,113705E+21	4,941413E+22	6,227058E+21	5,564118E+22
2166	2,470756E+22	2,470648E+22	3,113321E+21	3,113435E+21	4,941403E+22	6,226756E+21	5,564079E+22
2167	2,470673E+22	2,470775E+22	3,113556E+21	3,113130E+21	4,941448E+22	6,226686E+21	5,564116E+22
2168	2,470827E+22	2,470811E+22	3,112952E+21	3,113391E+21	4,941639E+22	6,226343E+21	5,564273E+22
2169	2,470857E+22	2,470777E+22	3,113169E+21	3,112828E+21	4,941634E+22	6,225997E+21	5,564233E+22
2170	2,470801E+22	2,470953E+22	3,113174E+21	3,112869E+21	4,941754E+22	6,226043E+21	5,564358E+22
2171	2,470944E+22	2,470915E+22	3,112672E+21	3,113037E+21	4,941858E+22	6,225709E+21	5,564429E+22
2172	2,470894E+22	2,470897E+22	3,113039E+21	3,112627E+21	4,941791E+22	6,225667E+21	5,564358E+22
2173	2,470899E+22	2,470993E+22	3,112811E+21	3,113012E+21	4,941892E+22	6,225823E+21	5,564474E+22
2174	2,471005E+22	2,470869E+22	3,112682E+21	3,112950E+21	4,941874E+22	6,225632E+21	5,564437E+22
2175	2,470885E+22	2,470911E+22	3,113173E+21	3,112716E+21	4,941797E+22	6,225889E+21	5,564386E+22
2176	2,470904E+22	2,470921E+22	3,112855E+21	3,113299E+21	4,941825E+22	6,226153E+21	5,564440E+22
2177	2,470851E+22	2,470764E+22	3,113215E+21	3,113169E+21	4,941615E+22	6,226384E+21	5,564254E+22
2178	2,470668E+22	2,470810E+22	3,113659E+21	3,113316E+21	4,941478E+22	6,226976E+21	5,564175E+22
2179	2,470712E+22	2,470688E+22	3,113333E+21	3,113806E+21	4,941400E+22	6,227139E+21	5,564114E+22
2180	2,470625E+22	2,470539E+22	3,113842E+21	3,113515E+21	4,941163E+22	6,227357E+21	5,563899E+22
2181	2,470521E+22	2,470614E+22	3,113874E+21	3,113855E+21	4,941135E+22	6,227729E+21	5,563908E+22
2182	2,470596E+22	2,470490E+22	3,113644E+21	3,114029E+21	4,941085E+22	6,227673E+21	5,563853E+22
2183	2,470481E+22	2,470509E+22	3,114094E+21	3,113647E+21	4,940990E+22	6,227741E+21	5,563764E+22
2184	2,470514E+22	2,470593E+22	3,113723E+21	3,114050E+21	4,941107E+22	6,227773E+21	5,563884E+22
2185	2,470592E+22	2,470492E+22	3,113704E+21	3,113749E+21	4,941083E+22	6,227453E+21	5,563828E+22
2186	2,470524E+22	2,470627E+22	3,113962E+21	3,113404E+21	4,941150E+22	6,227366E+21	5,563887E+22
2187	2,470660E+22	2,470667E+22	3,113372E+21	3,113714E+21	4,941328E+22	6,227086E+21	5,564036E+22
2188	2,470687E+22	2,470614E+22	3,113503E+21	3,113240E+21	4,941301E+22	6,226743E+21	5,563975E+22
2189	2,470633E+22	2,470785E+22	3,113506E+21	3,113307E+21	4,941417E+22	6,226814E+21	5,564099E+22
2190	2,470776E+22	2,470734E+22	3,113022E+21	3,113506E+21	4,941510E+22	6,226528E+21	5,564163E+22
2191	2,470754E+22	2,470720E+22	3,113373E+21	3,113000E+21	4,941474E+22	6,226373E+21	5,564111E+22
2192	2,470768E+22	2,470827E+22	3,113184E+21	3,113350E+21	4,941596E+22	6,226534E+21	5,564249E+22
2193	2,470826E+22	2,470706E+22	3,113114E+21	3,113335E+21	4,941533E+22	6,226449E+21	5,564177E+22
2194	2,470684E+22	2,470751E+22	3,113669E+21	3,113137E+21	4,941435E+22	6,226806E+21	5,564115E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2195	2,470677E+22	2,470743E+22	3,113385E+21	3,113771E+21	4,941421E+22	6,227155E+21	5,564136E+22
2196	2,470640E+22	2,470542E+22	3,113666E+21	3,113669E+21	4,941182E+22	6,227335E+21	5,563916E+22
2197	2,470481E+22	2,470585E+22	3,114086E+21	3,113770E+21	4,941065E+22	6,227856E+21	5,563851E+22
2198	2,470524E+22	2,470474E+22	3,113758E+21	3,114271E+21	4,940998E+22	6,228029E+21	5,563801E+22
2199	2,470450E+22	2,470353E+22	3,114229E+21	3,113927E+21	4,940803E+22	6,228156E+21	5,563619E+22
2200	2,470351E+22	2,470451E+22	3,114267E+21	3,114267E+21	4,940801E+22	6,228534E+21	5,563655E+22
2201	2,470397E+22	2,470328E+22	3,114073E+21	3,114462E+21	4,940724E+22	6,228535E+21	5,563578E+22
2202	2,470309E+22	2,470345E+22	3,114538E+21	3,114019E+21	4,940655E+22	6,228557E+21	5,563510E+22
2203	2,470350E+22	2,470428E+22	3,114167E+21	3,114383E+21	4,940777E+22	6,228550E+21	5,563632E+22
2204	2,470439E+22	2,470316E+22	3,114050E+21	3,114089E+21	4,940755E+22	6,228139E+21	5,563569E+22
2205	2,470370E+22	2,470465E+22	3,114289E+21	3,113759E+21	4,940834E+22	6,228048E+21	5,563639E+22
2206	2,470478E+22	2,470513E+22	3,113707E+21	3,114139E+21	4,940991E+22	6,227846E+21	5,563776E+22
2207	2,470523E+22	2,470462E+22	3,113811E+21	3,113637E+21	4,940985E+22	6,227447E+21	5,563729E+22
2208	2,470496E+22	2,470621E+22	3,113837E+21	3,113662E+21	4,941117E+22	6,227500E+21	5,563867E+22
2209	2,470622E+22	2,470567E+22	3,113403E+21	3,113857E+21	4,941189E+22	6,227260E+21	5,563915E+22
2210	2,470610E+22	2,470561E+22	3,113793E+21	3,113327E+21	4,941172E+22	6,227120E+21	5,563884E+22
2211	2,470593E+22	2,470670E+22	3,113655E+21	3,113729E+21	4,941263E+22	6,227384E+21	5,564001E+22
2212	2,470630E+22	2,470529E+22	3,113533E+21	3,113808E+21	4,941158E+22	6,227340E+21	5,563892E+22
2213	2,470485E+22	2,470554E+22	3,114108E+21	3,113641E+21	4,941038E+22	6,227749E+21	5,563813E+22
2214	2,470468E+22	2,470530E+22	3,113842E+21	3,114282E+21	4,940998E+22	6,228125E+21	5,563811E+22
2215	2,470461E+22	2,470331E+22	3,114080E+21	3,114104E+21	4,940791E+22	6,228185E+21	5,563610E+22
2216	2,470314E+22	2,470383E+22	3,114505E+21	3,114164E+21	4,940697E+22	6,228669E+21	5,563564E+22
2217	2,470318E+22	2,470290E+22	3,114216E+21	3,114703E+21	4,940608E+22	6,228919E+21	5,563500E+22
2218	2,470247E+22	2,470185E+22	3,114699E+21	3,114359E+21	4,940432E+22	6,229058E+21	5,563338E+22
2219	2,470146E+22	2,470281E+22	3,114757E+21	3,114703E+21	4,940427E+22	6,229460E+21	5,563373E+22
2220	2,470216E+22	2,470137E+22	3,114471E+21	3,114886E+21	4,940353E+22	6,229357E+21	5,563288E+22
2221	2,470155E+22	2,470161E+22	3,114906E+21	3,114395E+21	4,940316E+22	6,229301E+21	5,563246E+22
2222	2,470188E+22	2,470257E+22	3,114530E+21	3,114754E+21	4,940446E+22	6,229284E+21	5,563374E+22
2223	2,470287E+22	2,470165E+22	3,114359E+21	3,114442E+21	4,940452E+22	6,228801E+21	5,563332E+22
2224	2,470220E+22	2,470321E+22	3,114600E+21	3,114123E+21	4,940541E+22	6,228723E+21	5,563413E+22
2225	2,470304E+22	2,470360E+22	3,114066E+21	3,114532E+21	4,940663E+22	6,228598E+21	5,563523E+22
2226	2,470375E+22	2,470301E+22	3,114195E+21	3,113978E+21	4,940676E+22	6,228173E+21	5,563493E+22
2227	2,470354E+22	2,470460E+22	3,114250E+21	3,113985E+21	4,940814E+22	6,228235E+21	5,563638E+22
2228	2,470473E+22	2,470394E+22	3,113770E+21	3,114211E+21	4,940867E+22	6,227981E+21	5,563665E+22
2229	2,470445E+22	2,470396E+22	3,114184E+21	3,113735E+21	4,940841E+22	6,227919E+21	5,563633E+22
2230	2,470386E+22	2,470502E+22	3,114084E+21	3,114197E+21	4,940888E+22	6,228281E+21	5,563716E+22
2231	2,470432E+22	2,470347E+22	3,113941E+21	3,114269E+21	4,940779E+22	6,228211E+21	5,563600E+22
2232	2,470306E+22	2,470356E+22	3,114529E+21	3,114066E+21	4,940662E+22	6,228595E+21	5,563521E+22
2233	2,470268E+22	2,470328E+22	3,114307E+21	3,114708E+21	4,940595E+22	6,229015E+21	5,563497E+22
2234	2,470275E+22	2,470138E+22	3,114568E+21	3,114515E+21	4,940413E+22	6,229083E+21	5,563321E+22
2235	2,470116E+22	2,470200E+22	3,115003E+21	3,114617E+21	4,940316E+22	6,229620E+21	5,563278E+22
2236	2,470113E+22	2,470096E+22	3,114651E+21	3,115213E+21	4,940209E+22	6,229864E+21	5,563195E+22
2237	2,470063E+22	2,469988E+22	3,115120E+21	3,114859E+21	4,940051E+22	6,229979E+21	5,563049E+22
2238	2,469966E+22	2,470085E+22	3,115172E+21	3,115145E+21	4,940051E+22	6,230317E+21	5,563083E+22
2239	2,470069E+22	2,469961E+22	3,114818E+21	3,115236E+21	4,940030E+22	6,230054E+21	5,563035E+22
2240	2,470016E+22	2,470000E+22	3,115240E+21	3,114697E+21	4,940017E+22	6,229937E+21	5,563010E+22
2241	2,470001E+22	2,470112E+22	3,114906E+21	3,115093E+21	4,940113E+22	6,229999E+21	5,563113E+22
2242	2,470107E+22	2,470026E+22	3,114745E+21	3,114790E+21	4,940133E+22	6,229535E+21	5,563086E+22
2243	2,470049E+22	2,470165E+22	3,115001E+21	3,114489E+21	4,940214E+22	6,229490E+21	5,563163E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2244	2,470151E+22	2,470182E+22	3,114412E+21	3,114898E+21	4,940333E+22	6,229310E+21	5,563264E+22
2245	2,470247E+22	2,470128E+22	3,114534E+21	3,114332E+21	4,940375E+22	6,228866E+21	5,563262E+22
2246	2,470203E+22	2,470298E+22	3,114616E+21	3,114352E+21	4,940501E+22	6,228969E+21	5,563398E+22
2247	2,470314E+22	2,470246E+22	3,114115E+21	3,114600E+21	4,940560E+22	6,228716E+21	5,563432E+22
2248	2,470271E+22	2,470238E+22	3,114562E+21	3,114163E+21	4,940510E+22	6,228725E+21	5,563382E+22
2249	2,470175E+22	2,470322E+22	3,114539E+21	3,114656E+21	4,940497E+22	6,229196E+21	5,563417E+22
2250	2,470243E+22	2,470152E+22	3,114423E+21	3,114694E+21	4,940395E+22	6,229117E+21	5,563307E+22
2251	2,470124E+22	2,470152E+22	3,115020E+21	3,114490E+21	4,940276E+22	6,229511E+21	5,563227E+22
2252	2,470077E+22	2,470113E+22	3,114751E+21	3,115165E+21	4,940189E+22	6,229915E+21	5,563181E+22
2253	2,470080E+22	2,469938E+22	3,115004E+21	3,115015E+21	4,940018E+22	6,230019E+21	5,563020E+22
2254	2,469904E+22	2,470008E+22	3,115444E+21	3,115129E+21	4,939912E+22	6,230573E+21	5,562969E+22
2255	2,469930E+22	2,469906E+22	3,115057E+21	3,115668E+21	4,939836E+22	6,230725E+21	5,562909E+22
2256	2,469905E+22	2,469807E+22	3,115509E+21	3,115235E+21	4,939712E+22	6,230743E+21	5,562786E+22
2257	2,469789E+22	2,469915E+22	3,115590E+21	3,115478E+21	4,939704E+22	6,231068E+21	5,562811E+22
2258	2,469898E+22	2,469806E+22	3,115245E+21	3,115543E+21	4,939704E+22	6,230788E+21	5,562783E+22
2259	2,469835E+22	2,469854E+22	3,115654E+21	3,115059E+21	4,939689E+22	6,230714E+21	5,562761E+22
2260	2,469813E+22	2,469943E+22	3,115268E+21	3,115508E+21	4,939756E+22	6,230777E+21	5,562834E+22
2261	2,469948E+22	2,469850E+22	3,115096E+21	3,115215E+21	4,939798E+22	6,230310E+21	5,562829E+22
2262	2,469904E+22	2,469989E+22	3,115338E+21	3,114868E+21	4,939893E+22	6,230206E+21	5,562914E+22
2263	2,470033E+22	2,470021E+22	3,114714E+21	3,115219E+21	4,940053E+22	6,229933E+21	5,563047E+22
2264	2,470121E+22	2,469986E+22	3,114843E+21	3,114641E+21	4,940107E+22	6,229484E+21	5,563055E+22
2265	2,470018E+22	2,470160E+22	3,115002E+21	3,114714E+21	4,940178E+22	6,229717E+21	5,563150E+22
2266	2,470120E+22	2,470102E+22	3,114556E+21	3,114987E+21	4,940222E+22	6,229543E+21	5,563176E+22
2267	2,470077E+22	2,470065E+22	3,115035E+21	3,114599E+21	4,940142E+22	6,229634E+21	5,563105E+22
2268	2,469984E+22	2,470111E+22	3,114980E+21	3,115099E+21	4,940094E+22	6,230079E+21	5,563102E+22
2269	2,470073E+22	2,469938E+22	3,114862E+21	3,115156E+21	4,940012E+22	6,230019E+21	5,563013E+22
2270	2,469938E+22	2,469945E+22	3,115456E+21	3,114959E+21	4,939883E+22	6,230415E+21	5,562924E+22
2271	2,469896E+22	2,469925E+22	3,115152E+21	3,115645E+21	4,939821E+22	6,230796E+21	5,562901E+22
2272	2,469898E+22	2,469758E+22	3,115405E+21	3,115485E+21	4,939656E+22	6,230890E+21	5,562745E+22
2273	2,469698E+22	2,469822E+22	3,115908E+21	3,115573E+21	4,939520E+22	6,231481E+21	5,562668E+22
2274	2,469749E+22	2,469730E+22	3,115538E+21	3,116029E+21	4,939479E+22	6,231567E+21	5,562636E+22
2275	2,469727E+22	2,469634E+22	3,115978E+21	3,115592E+21	4,939361E+22	6,231570E+21	5,562518E+22
2276	2,469593E+22	2,469732E+22	3,116009E+21	3,115854E+21	4,939325E+22	6,231863E+21	5,562511E+22
2277	2,469707E+22	2,469633E+22	3,115635E+21	3,115973E+21	4,939339E+22	6,231608E+21	5,562500E+22
2278	2,469641E+22	2,469678E+22	3,116013E+21	3,115495E+21	4,939319E+22	6,231508E+21	5,562470E+22
2279	2,469665E+22	2,469768E+22	3,115574E+21	3,115898E+21	4,939433E+22	6,231473E+21	5,562581E+22
2280	2,469828E+22	2,469691E+22	3,115377E+21	3,115536E+21	4,939519E+22	6,230913E+21	5,562611E+22
2281	2,469767E+22	2,469844E+22	3,115674E+21	3,115169E+21	4,939610E+22	6,230843E+21	5,562695E+22
2282	2,469890E+22	2,469895E+22	3,115099E+21	3,115506E+21	4,939785E+22	6,230606E+21	5,562846E+22
2283	2,469952E+22	2,469858E+22	3,115250E+21	3,115021E+21	4,939811E+22	6,230271E+21	5,562838E+22
2284	2,469823E+22	2,469990E+22	3,115412E+21	3,115151E+21	4,939813E+22	6,230563E+21	5,562869E+22
2285	2,469939E+22	2,469907E+22	3,114987E+21	3,115452E+21	4,939846E+22	6,230439E+21	5,562890E+22
2286	2,469901E+22	2,469858E+22	3,115454E+21	3,115041E+21	4,939759E+22	6,230495E+21	5,562808E+22
2287	2,469829E+22	2,469905E+22	3,115368E+21	3,115515E+21	4,939735E+22	6,230884E+21	5,562823E+22
2288	2,469905E+22	2,469755E+22	3,115250E+21	3,115574E+21	4,939660E+22	6,230824E+21	5,562742E+22
2289	2,469727E+22	2,469771E+22	3,115892E+21	3,115415E+21	4,939498E+22	6,231307E+21	5,562629E+22
2290	2,469685E+22	2,469754E+22	3,115648E+21	3,116076E+21	4,939439E+22	6,231724E+21	5,562611E+22
2291	2,469697E+22	2,469580E+22	3,115909E+21	3,115929E+21	4,939277E+22	6,231838E+21	5,562461E+22
2292	2,469499E+22	2,469619E+22	3,116377E+21	3,115986E+21	4,939117E+22	6,232363E+21	5,562354E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2293	2,469567E+22	2,469532E+22	3,116000E+21	3,116446E+21	4,939099E+22	6,232446E+21	5,562344E+22
2294	2,469532E+22	2,469447E+22	3,116393E+21	3,116018E+21	4,938979E+22	6,232411E+21	5,562220E+22
2295	2,469415E+22	2,469552E+22	3,116350E+21	3,116294E+21	4,938968E+22	6,232644E+21	5,562232E+22
2296	2,469543E+22	2,469464E+22	3,115947E+21	3,116391E+21	4,939007E+22	6,232338E+21	5,562241E+22
2297	2,469483E+22	2,469509E+22	3,116345E+21	3,115871E+21	4,938992E+22	6,232216E+21	5,562214E+22
2298	2,469539E+22	2,469620E+22	3,115941E+21	3,116179E+21	4,939160E+22	6,232120E+21	5,562372E+22
2299	2,469701E+22	2,469561E+22	3,115747E+21	3,115825E+21	4,939261E+22	6,231573E+21	5,562419E+22
2300	2,469603E+22	2,469699E+22	3,116045E+21	3,115493E+21	4,939302E+22	6,231538E+21	5,562456E+22
2301	2,469714E+22	2,469747E+22	3,115500E+21	3,115898E+21	4,939461E+22	6,231398E+21	5,562601E+22
2302	2,469757E+22	2,469689E+22	3,115654E+21	3,115450E+21	4,939446E+22	6,231104E+21	5,562556E+22
2303	2,469658E+22	2,469799E+22	3,115782E+21	3,115573E+21	4,939458E+22	6,231355E+21	5,562593E+22
2304	2,469788E+22	2,469720E+22	3,115342E+21	3,115840E+21	4,939508E+22	6,231182E+21	5,562626E+22
2305	2,469726E+22	2,469671E+22	3,115856E+21	3,115441E+21	4,939397E+22	6,231297E+21	5,562527E+22
2306	2,469650E+22	2,469739E+22	3,115824E+21	3,115908E+21	4,939390E+22	6,231732E+21	5,562563E+22
2307	2,469704E+22	2,469593E+22	3,115722E+21	3,116051E+21	4,939297E+22	6,231773E+21	5,562475E+22
2308	2,469508E+22	2,469572E+22	3,116376E+21	3,115919E+21	4,939079E+22	6,232294E+21	5,562309E+22
2309	2,469490E+22	2,469542E+22	3,116155E+21	3,116567E+21	4,939032E+22	6,232722E+21	5,562304E+22
2310	2,469502E+22	2,469369E+22	3,116380E+21	3,116377E+21	4,938871E+22	6,232756E+21	5,562147E+22
2311	2,469327E+22	2,469414E+22	3,116777E+21	3,116406E+21	4,938741E+22	6,233183E+21	5,562059E+22
2312	2,469385E+22	2,469353E+22	3,116361E+21	3,116850E+21	4,938737E+22	6,233212E+21	5,562059E+22
2313	2,469327E+22	2,469276E+22	3,116764E+21	3,116446E+21	4,938604E+22	6,233210E+21	5,561925E+22
2314	2,469238E+22	2,469390E+22	3,116752E+21	3,116662E+21	4,938629E+22	6,233414E+21	5,561970E+22
2315	2,469391E+22	2,469312E+22	3,116335E+21	3,116749E+21	4,938703E+22	6,233084E+21	5,562012E+22
2316	2,469338E+22	2,469344E+22	3,116707E+21	3,116192E+21	4,938682E+22	6,232899E+21	5,561972E+22
2317	2,469407E+22	2,469466E+22	3,116334E+21	3,116500E+21	4,938873E+22	6,232834E+21	5,562157E+22
2318	2,469538E+22	2,469423E+22	3,116115E+21	3,116174E+21	4,938961E+22	6,232289E+21	5,562190E+22
2319	2,469444E+22	2,469547E+22	3,116370E+21	3,115896E+21	4,938990E+22	6,232267E+21	5,562217E+22
2320	2,469544E+22	2,469586E+22	3,115835E+21	3,116296E+21	4,939131E+22	6,232131E+21	5,562344E+22
2321	2,469585E+22	2,469510E+22	3,116020E+21	3,115854E+21	4,939095E+22	6,231874E+21	5,562283E+22
2322	2,469506E+22	2,469622E+22	3,116197E+21	3,115916E+21	4,939128E+22	6,232113E+21	5,562340E+22
2323	2,469625E+22	2,469556E+22	3,115773E+21	3,116229E+21	4,939181E+22	6,232002E+21	5,562381E+22
2324	2,469529E+22	2,469488E+22	3,116286E+21	3,115878E+21	4,939018E+22	6,232164E+21	5,562234E+22
2325	2,469448E+22	2,469551E+22	3,116303E+21	3,116398E+21	4,938999E+22	6,232701E+21	5,562269E+22
2326	2,469489E+22	2,469398E+22	3,116201E+21	3,116545E+21	4,938887E+22	6,232746E+21	5,562161E+22
2327	2,469327E+22	2,469359E+22	3,116806E+21	3,116394E+21	4,938686E+22	6,233200E+21	5,562006E+22
2328	2,469316E+22	2,469344E+22	3,116570E+21	3,116976E+21	4,938660E+22	6,233546E+21	5,562014E+22
2329	2,469312E+22	2,469178E+22	3,116808E+21	3,116796E+21	4,938490E+22	6,233605E+21	5,561851E+22
2330	2,469139E+22	2,469244E+22	3,117218E+21	3,116799E+21	4,938382E+22	6,234016E+21	5,561784E+22
2331	2,469189E+22	2,469193E+22	3,116786E+21	3,117294E+21	4,938383E+22	6,234080E+21	5,561791E+22
2332	2,469133E+22	2,469088E+22	3,117171E+21	3,116879E+21	4,938220E+22	6,234050E+21	5,561625E+22
2333	2,469088E+22	2,469205E+22	3,117173E+21	3,117053E+21	4,938293E+22	6,234226E+21	5,561715E+22
2334	2,469243E+22	2,469145E+22	3,116723E+21	3,117083E+21	4,938389E+22	6,233806E+21	5,561769E+22
2335	2,469207E+22	2,469187E+22	3,117031E+21	3,116529E+21	4,938394E+22	6,233560E+21	5,561750E+22
2336	2,469252E+22	2,469331E+22	3,116639E+21	3,116827E+21	4,938583E+22	6,233467E+21	5,561930E+22
2337	2,469350E+22	2,469278E+22	3,116450E+21	3,116557E+21	4,938628E+22	6,233007E+21	5,561928E+22
2338	2,469272E+22	2,469393E+22	3,116753E+21	3,116248E+21	4,938666E+22	6,233001E+21	5,561966E+22
2339	2,469384E+22	2,469428E+22	3,116223E+21	3,116666E+21	4,938812E+22	6,232889E+21	5,562101E+22
2340	2,469419E+22	2,469324E+22	3,116415E+21	3,116235E+21	4,938742E+22	6,232650E+21	5,562007E+22
2341	2,469353E+22	2,469436E+22	3,116637E+21	3,116326E+21	4,938789E+22	6,232962E+21	5,562085E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2342	2,469438E+22	2,469382E+22	3,116205E+21	3,116679E+21	4,938820E+22	6,232884E+21	5,562108E+22
2343	2,469349E+22	2,469299E+22	3,116676E+21	3,116386E+21	4,938648E+22	6,233062E+21	5,561955E+22
2344	2,469264E+22	2,469359E+22	3,116710E+21	3,116863E+21	4,938623E+22	6,233573E+21	5,561980E+22
2345	2,469299E+22	2,469199E+22	3,116644E+21	3,116996E+21	4,938499E+22	6,233640E+21	5,561863E+22
2346	2,469152E+22	2,469171E+22	3,117285E+21	3,116775E+21	4,938323E+22	6,234059E+21	5,561729E+22
2347	2,469122E+22	2,469173E+22	3,117047E+21	3,117381E+21	4,938295E+22	6,234428E+21	5,561738E+22
2348	2,469089E+22	2,468988E+22	3,117269E+21	3,117246E+21	4,938077E+22	6,234516E+21	5,561528E+22
2349	2,468933E+22	2,469046E+22	3,117692E+21	3,117268E+21	4,937978E+22	6,234961E+21	5,561475E+22
2350	2,468991E+22	2,469004E+22	3,117227E+21	3,117730E+21	4,937995E+22	6,234957E+21	5,561491E+22
2351	2,468988E+22	2,468896E+22	3,117512E+21	3,117285E+21	4,937885E+22	6,234796E+21	5,561364E+22
2352	2,468955E+22	2,469040E+22	3,117494E+21	3,117377E+21	4,937995E+22	6,234871E+21	5,561482E+22
2353	2,469092E+22	2,469003E+22	3,117055E+21	3,117413E+21	4,938096E+22	6,234468E+21	5,561542E+22
2354	2,469051E+22	2,469061E+22	3,117381E+21	3,116851E+21	4,938111E+22	6,234232E+21	5,561535E+22
2355	2,469078E+22	2,469203E+22	3,117005E+21	3,117196E+21	4,938281E+22	6,234200E+21	5,561702E+22
2356	2,469168E+22	2,469106E+22	3,116827E+21	3,116947E+21	4,938274E+22	6,233774E+21	5,561651E+22
2357	2,469127E+22	2,469204E+22	3,117158E+21	3,116628E+21	4,938331E+22	6,233787E+21	5,561710E+22
2358	2,469229E+22	2,469251E+22	3,116621E+21	3,117027E+21	4,938481E+22	6,233648E+21	5,561845E+22
2359	2,469273E+22	2,469144E+22	3,116755E+21	3,116647E+21	4,938417E+22	6,233402E+21	5,561758E+22
2360	2,469183E+22	2,469272E+22	3,116985E+21	3,116740E+21	4,938455E+22	6,233725E+21	5,561828E+22
2361	2,469239E+22	2,469211E+22	3,116611E+21	3,117137E+21	4,938451E+22	6,233748E+21	5,561825E+22
2362	2,469165E+22	2,469124E+22	3,117136E+21	3,116807E+21	4,938289E+22	6,233943E+21	5,561683E+22
2363	2,469079E+22	2,469184E+22	3,117188E+21	3,117272E+21	4,938263E+22	6,234460E+21	5,561709E+22
2364	2,469096E+22	2,468997E+22	3,117142E+21	3,117423E+21	4,938093E+22	6,234565E+21	5,561549E+22
2365	2,468958E+22	2,468968E+22	3,117800E+21	3,117233E+21	4,937926E+22	6,235033E+21	5,561430E+22
2366	2,468899E+22	2,468980E+22	3,117528E+21	3,117862E+21	4,937880E+22	6,235390E+21	5,561419E+22
2367	2,468890E+22	2,468779E+22	3,117666E+21	3,117775E+21	4,937668E+22	6,235441E+21	5,561212E+22
2368	2,468761E+22	2,468844E+22	3,118050E+21	3,117717E+21	4,937605E+22	6,235767E+21	5,561181E+22
2369	2,468833E+22	2,468815E+22	3,117593E+21	3,118126E+21	4,937648E+22	6,235719E+21	5,561220E+22
2370	2,468852E+22	2,468743E+22	3,117880E+21	3,117592E+21	4,937596E+22	6,235472E+21	5,561143E+22
2371	2,468803E+22	2,468914E+22	3,117859E+21	3,117679E+21	4,937717E+22	6,235538E+21	5,561271E+22
2372	2,468901E+22	2,468860E+22	3,117432E+21	3,117759E+21	4,937761E+22	6,235191E+21	5,561280E+22
2373	2,468875E+22	2,468900E+22	3,117787E+21	3,117230E+21	4,937775E+22	6,235016E+21	5,561276E+22
2374	2,468898E+22	2,469036E+22	3,117398E+21	3,117555E+21	4,937934E+22	6,234953E+21	5,561430E+22
2375	2,469030E+22	2,468921E+22	3,117146E+21	3,117334E+21	4,937951E+22	6,234480E+21	5,561399E+22
2376	2,469000E+22	2,469031E+22	3,117465E+21	3,116978E+21	4,938031E+22	6,234443E+21	5,561475E+22
2377	2,469077E+22	2,469093E+22	3,116971E+21	3,117415E+21	4,938170E+22	6,234386E+21	5,561609E+22
2378	2,469111E+22	2,469003E+22	3,117133E+21	3,117046E+21	4,938113E+22	6,234179E+21	5,561531E+22
2379	2,468999E+22	2,469124E+22	3,117407E+21	3,117167E+21	4,938123E+22	6,234574E+21	5,561581E+22
2380	2,469038E+22	2,469022E+22	3,117088E+21	3,117578E+21	4,938060E+22	6,234666E+21	5,561526E+22
2381	2,468987E+22	2,468916E+22	3,117657E+21	3,117247E+21	4,937904E+22	6,234904E+21	5,561394E+22
2382	2,468877E+22	2,468987E+22	3,117703E+21	3,117694E+21	4,937864E+22	6,235396E+21	5,561403E+22
2383	2,468899E+22	2,468788E+22	3,117570E+21	3,117919E+21	4,937687E+22	6,235489E+21	5,561236E+22
2384	2,468750E+22	2,468764E+22	3,118191E+21	3,117721E+21	4,937513E+22	6,235912E+21	5,561105E+22
2385	2,468689E+22	2,468778E+22	3,117936E+21	3,118351E+21	4,937467E+22	6,236287E+21	5,561095E+22
2386	2,468717E+22	2,468594E+22	3,118067E+21	3,118184E+21	4,937311E+22	6,236250E+21	5,560936E+22
2387	2,468608E+22	2,468682E+22	3,118442E+21	3,118065E+21	4,937290E+22	6,236507E+21	5,560941E+22
2388	2,468668E+22	2,468650E+22	3,118017E+21	3,118459E+21	4,937318E+22	6,236476E+21	5,560966E+22
2389	2,468693E+22	2,468591E+22	3,118310E+21	3,117943E+21	4,937285E+22	6,236253E+21	5,560910E+22
2390	2,468610E+22	2,468773E+22	3,118264E+21	3,118040E+21	4,937384E+22	6,236305E+21	5,561014E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2391	2,468727E+22	2,468688E+22	3,117763E+21	3,118184E+21	4,937415E+22	6,235947E+21	5,561010E+22
2392	2,468725E+22	2,468720E+22	3,118089E+21	3,117608E+21	4,937445E+22	6,235697E+21	5,561015E+22
2393	2,468758E+22	2,468861E+22	3,117724E+21	3,117912E+21	4,937618E+22	6,235636E+21	5,561182E+22
2394	2,468901E+22	2,468775E+22	3,117484E+21	3,117657E+21	4,937676E+22	6,235141E+21	5,561190E+22
2395	2,468851E+22	2,468902E+22	3,117813E+21	3,117325E+21	4,937753E+22	6,235137E+21	5,561267E+22
2396	2,468884E+22	2,468938E+22	3,117391E+21	3,117817E+21	4,937822E+22	6,235208E+21	5,561343E+22
2397	2,468927E+22	2,468831E+22	3,117602E+21	3,117484E+21	4,937757E+22	6,235086E+21	5,561266E+22
2398	2,468802E+22	2,468941E+22	3,117887E+21	3,117580E+21	4,937743E+22	6,235467E+21	5,561290E+22
2399	2,468860E+22	2,468812E+22	3,117519E+21	3,118037E+21	4,937672E+22	6,235556E+21	5,561228E+22
2400	2,468811E+22	2,468711E+22	3,118067E+21	3,117694E+21	4,937522E+22	6,235761E+21	5,561098E+22
2401	2,468675E+22	2,468786E+22	3,118129E+21	3,118175E+21	4,937461E+22	6,236303E+21	5,561091E+22
2402	2,468698E+22	2,468605E+22	3,117993E+21	3,118401E+21	4,937303E+22	6,236394E+21	5,560942E+22
2403	2,468557E+22	2,468580E+22	3,118604E+21	3,118181E+21	4,937137E+22	6,236785E+21	5,560816E+22
2404	2,468498E+22	2,468574E+22	3,118400E+21	3,118775E+21	4,937072E+22	6,237174E+21	5,560790E+22
2405	2,468560E+22	2,468408E+22	3,118539E+21	3,118562E+21	4,936968E+22	6,237101E+21	5,560678E+22
2406	2,468431E+22	2,468523E+22	3,118897E+21	3,118400E+21	4,936954E+22	6,237297E+21	5,560684E+22
2407	2,468491E+22	2,468485E+22	3,118397E+21	3,118857E+21	4,936977E+22	6,237254E+21	5,560702E+22
2408	2,468509E+22	2,468430E+22	3,118643E+21	3,118343E+21	4,936939E+22	6,236986E+21	5,560638E+22
2409	2,468426E+22	2,468602E+22	3,118607E+21	3,118438E+21	4,937028E+22	6,237045E+21	5,560733E+22
2410	2,468577E+22	2,468530E+22	3,118088E+21	3,118530E+21	4,937107E+22	6,236617E+21	5,560769E+22
2411	2,468596E+22	2,468573E+22	3,118401E+21	3,117918E+21	4,937169E+22	6,236319E+21	5,560801E+22
2412	2,468613E+22	2,468705E+22	3,118105E+21	3,118239E+21	4,937318E+22	6,236344E+21	5,560952E+22
2413	2,468755E+22	2,468630E+22	3,117892E+21	3,118027E+21	4,937385E+22	6,235918E+21	5,560977E+22
2414	2,468666E+22	2,468759E+22	3,118232E+21	3,117723E+21	4,937426E+22	6,235955E+21	5,561021E+22
2415	2,468709E+22	2,468754E+22	3,117779E+21	3,118276E+21	4,937463E+22	6,236055E+21	5,561069E+22
2416	2,468760E+22	2,468632E+22	3,117983E+21	3,117918E+21	4,937392E+22	6,235901E+21	5,560983E+22
2417	2,468629E+22	2,468740E+22	3,118304E+21	3,118000E+21	4,937369E+22	6,236304E+21	5,561000E+22
2418	2,468683E+22	2,468634E+22	3,117944E+21	3,118444E+21	4,937317E+22	6,236387E+21	5,560955E+22
2419	2,468614E+22	2,468540E+22	3,118488E+21	3,118125E+21	4,937154E+22	6,236613E+21	5,560815E+22
2420	2,468449E+22	2,468588E+22	3,118615E+21	3,118642E+21	4,937037E+22	6,237258E+21	5,560763E+22
2421	2,468495E+22	2,468403E+22	3,118500E+21	3,118869E+21	4,936898E+22	6,237369E+21	5,560635E+22
2422	2,468361E+22	2,468389E+22	3,119087E+21	3,118599E+21	4,936750E+22	6,237686E+21	5,560518E+22
2423	2,468331E+22	2,468373E+22	3,118830E+21	3,119207E+21	4,936703E+22	6,238037E+21	5,560507E+22
2424	2,468395E+22	2,468230E+22	3,118929E+21	3,118969E+21	4,936625E+22	6,237898E+21	5,560415E+22
2425	2,468246E+22	2,468358E+22	3,119276E+21	3,118820E+21	4,936604E+22	6,238096E+21	5,560413E+22
2426	2,468306E+22	2,468336E+22	3,118756E+21	3,119262E+21	4,936642E+22	6,238018E+21	5,560444E+22
2427	2,468341E+22	2,468273E+22	3,118976E+21	3,118720E+21	4,936614E+22	6,237696E+21	5,560383E+22
2428	2,468266E+22	2,468418E+22	3,118992E+21	3,118787E+21	4,936684E+22	6,237780E+21	5,560462E+22
2429	2,468447E+22	2,468368E+22	3,118483E+21	3,118853E+21	4,936815E+22	6,237336E+21	5,560549E+22
2430	2,468449E+22	2,468432E+22	3,118773E+21	3,118235E+21	4,936881E+22	6,237008E+21	5,560582E+22
2431	2,468457E+22	2,468547E+22	3,118449E+21	3,118634E+21	4,937003E+22	6,237084E+21	5,560712E+22
2432	2,468587E+22	2,468474E+22	3,118223E+21	3,118434E+21	4,937060E+22	6,236657E+21	5,560726E+22
2433	2,468490E+22	2,468584E+22	3,118604E+21	3,118132E+21	4,937074E+22	6,236736E+21	5,560748E+22
2434	2,468546E+22	2,468587E+22	3,118170E+21	3,118644E+21	4,937132E+22	6,236814E+21	5,560814E+22
2435	2,468600E+22	2,468465E+22	3,118383E+21	3,118284E+21	4,937065E+22	6,236667E+21	5,560732E+22
2436	2,468438E+22	2,468551E+22	3,118784E+21	3,118410E+21	4,936989E+22	6,237194E+21	5,560708E+22
2437	2,468483E+22	2,468454E+22	3,118443E+21	3,118908E+21	4,936937E+22	6,237350E+21	5,560672E+22
2438	2,468391E+22	2,468354E+22	3,118972E+21	3,118615E+21	4,936745E+22	6,237587E+21	5,560504E+22
2439	2,468252E+22	2,468363E+22	3,119067E+21	3,119166E+21	4,936615E+22	6,238233E+21	5,560438E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2440	2,468323E+22	2,468189E+22	3,118920E+21	3,119338E+21	4,936511E+22	6,238258E+21	5,560337E+22
2441	2,468190E+22	2,468191E+22	3,119510E+21	3,119030E+21	4,936382E+22	6,238540E+21	5,560236E+22
2442	2,468159E+22	2,468211E+22	3,119241E+21	3,119596E+21	4,936370E+22	6,238837E+21	5,560254E+22
2443	2,468208E+22	2,468082E+22	3,119307E+21	3,119355E+21	4,936290E+22	6,238661E+21	5,560156E+22
2444	2,468040E+22	2,468185E+22	3,119701E+21	3,119218E+21	4,936225E+22	6,238919E+21	5,560117E+22
2445	2,468128E+22	2,468163E+22	3,119181E+21	3,119630E+21	4,936291E+22	6,238811E+21	5,560172E+22
2446	2,468176E+22	2,468108E+22	3,119364E+21	3,119053E+21	4,936284E+22	6,238417E+21	5,560125E+22
2447	2,468135E+22	2,468237E+22	3,119333E+21	3,119146E+21	4,936372E+22	6,238479E+21	5,560220E+22
2448	2,468316E+22	2,468211E+22	3,118799E+21	3,119211E+21	4,936527E+22	6,238009E+21	5,560328E+22
2449	2,468295E+22	2,468288E+22	3,119091E+21	3,118624E+21	4,936583E+22	6,237715E+21	5,560354E+22
2450	2,468297E+22	2,468410E+22	3,118785E+21	3,119014E+21	4,936707E+22	6,237798E+21	5,560487E+22
2451	2,468428E+22	2,468323E+22	3,118571E+21	3,118793E+21	4,936751E+22	6,237364E+21	5,560488E+22
2452	2,468321E+22	2,468401E+22	3,119042E+21	3,118497E+21	4,936722E+22	6,237539E+21	5,560476E+22
2453	2,468376E+22	2,468414E+22	3,118650E+21	3,119008E+21	4,936790E+22	6,237658E+21	5,560556E+22
2454	2,468401E+22	2,468297E+22	3,118857E+21	3,118702E+21	4,936698E+22	6,237560E+21	5,560453E+22
2455	2,468232E+22	2,468344E+22	3,119226E+21	3,118925E+21	4,936576E+22	6,238152E+21	5,560391E+22
2456	2,468277E+22	2,468244E+22	3,118867E+21	3,119435E+21	4,936521E+22	6,238303E+21	5,560352E+22
2457	2,468195E+22	2,468138E+22	3,119390E+21	3,119122E+21	4,936334E+22	6,238512E+21	5,560185E+22
2458	2,468082E+22	2,468169E+22	3,119484E+21	3,119600E+21	4,936251E+22	6,239085E+21	5,560160E+22
2459	2,468161E+22	2,468016E+22	3,119334E+21	3,119725E+21	4,936178E+22	6,239059E+21	5,560084E+22
2460	2,468003E+22	2,468013E+22	3,119988E+21	3,119434E+21	4,936016E+22	6,239421E+21	5,559958E+22
2461	2,467959E+22	2,468054E+22	3,119725E+21	3,120001E+21	4,936013E+22	6,239726E+21	5,559986E+22
2462	2,467998E+22	2,467918E+22	3,119749E+21	3,119774E+21	4,935916E+22	6,239523E+21	5,559869E+22
2463	2,467862E+22	2,467973E+22	3,120087E+21	3,119650E+21	4,935835E+22	6,239738E+21	5,559809E+22
2464	2,467982E+22	2,467971E+22	3,119521E+21	3,120005E+21	4,935954E+22	6,239526E+21	5,559906E+22
2465	2,468038E+22	2,467939E+22	3,119680E+21	3,119403E+21	4,935976E+22	6,239083E+21	5,559885E+22
2466	2,467999E+22	2,468103E+22	3,119646E+21	3,119475E+21	4,936102E+22	6,239121E+21	5,560014E+22
2467	2,468163E+22	2,468092E+22	3,119108E+21	3,119535E+21	4,936255E+22	6,238642E+21	5,560119E+22
2468	2,468119E+22	2,468138E+22	3,119481E+21	3,118982E+21	4,936257E+22	6,238464E+21	5,560103E+22
2469	2,468129E+22	2,468259E+22	3,119216E+21	3,119343E+21	4,936389E+22	6,238559E+21	5,560244E+22
2470	2,468256E+22	2,468166E+22	3,118999E+21	3,119146E+21	4,936421E+22	6,238145E+21	5,560236E+22
2471	2,468158E+22	2,468203E+22	3,119460E+21	3,118924E+21	4,936361E+22	6,238384E+21	5,560199E+22
2472	2,468201E+22	2,468226E+22	3,119053E+21	3,119471E+21	4,936427E+22	6,238524E+21	5,560280E+22
2473	2,468204E+22	2,468107E+22	3,119253E+21	3,119219E+21	4,936311E+22	6,238472E+21	5,560158E+22
2474	2,468047E+22	2,468151E+22	3,119623E+21	3,119425E+21	4,936198E+22	6,239048E+21	5,560103E+22
2475	2,468106E+22	2,468049E+22	3,119274E+21	3,119872E+21	4,936155E+22	6,239146E+21	5,560070E+22
2476	2,468022E+22	2,467937E+22	3,119867E+21	3,119538E+21	4,935959E+22	6,239405E+21	5,559899E+22
2477	2,467905E+22	2,467997E+22	3,119996E+21	3,119971E+21	4,935902E+22	6,239967E+21	5,559899E+22
2478	2,467950E+22	2,467858E+22	3,119837E+21	3,120133E+21	4,935808E+22	6,239969E+21	5,559805E+22
2479	2,467787E+22	2,467816E+22	3,120440E+21	3,119908E+21	4,935603E+22	6,240348E+21	5,559638E+22
2480	2,467751E+22	2,467853E+22	3,120138E+21	3,120453E+21	4,935604E+22	6,240590E+21	5,559663E+22
2481	2,467811E+22	2,467718E+22	3,120119E+21	3,120201E+21	4,935529E+22	6,240320E+21	5,559561E+22
2482	2,467719E+22	2,467794E+22	3,120413E+21	3,120013E+21	4,935513E+22	6,240426E+21	5,559556E+22
2483	2,467854E+22	2,467821E+22	3,119835E+21	3,120315E+21	4,935675E+22	6,240151E+21	5,559690E+22
2484	2,467889E+22	2,467798E+22	3,120041E+21	3,119745E+21	4,935687E+22	6,239786E+21	5,559666E+22
2485	2,467837E+22	2,467982E+22	3,120034E+21	3,119811E+21	4,935819E+22	6,239845E+21	5,559804E+22
2486	2,467986E+22	2,467959E+22	3,119504E+21	3,119898E+21	4,935945E+22	6,239402E+21	5,559885E+22
2487	2,467961E+22	2,467948E+22	3,119860E+21	3,119387E+21	4,935909E+22	6,239248E+21	5,559834E+22
2488	2,467980E+22	2,468074E+22	3,119589E+21	3,119721E+21	4,936053E+22	6,239310E+21	5,559984E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2489	2,468093E+22	2,467986E+22	3,119368E+21	3,119558E+21	4,936079E+22	6,238926E+21	5,559972E+22
2490	2,467991E+22	2,468032E+22	3,119820E+21	3,119358E+21	4,936023E+22	6,239179E+21	5,559940E+22
2491	2,468021E+22	2,468058E+22	3,119424E+21	3,119900E+21	4,936079E+22	6,239324E+21	5,560011E+22
2492	2,468010E+22	2,467913E+22	3,119698E+21	3,119670E+21	4,935923E+22	6,239369E+21	5,559860E+22
2493	2,467864E+22	2,467970E+22	3,120109E+21	3,119818E+21	4,935835E+22	6,239927E+21	5,559827E+22
2494	2,467921E+22	2,467875E+22	3,119775E+21	3,120270E+21	4,935796E+22	6,240045E+21	5,559801E+22
2495	2,467835E+22	2,467729E+22	3,120359E+21	3,119998E+21	4,935564E+22	6,240357E+21	5,559600E+22
2496	2,467702E+22	2,467809E+22	3,120464E+21	3,120436E+21	4,935511E+22	6,240900E+21	5,559601E+22
2497	2,467728E+22	2,467668E+22	3,120269E+21	3,120637E+21	4,935396E+22	6,240906E+21	5,559487E+22
2498	2,467592E+22	2,467616E+22	3,120825E+21	3,120383E+21	4,935208E+22	6,241208E+21	5,559329E+22
2499	2,467587E+22	2,467660E+22	3,120492E+21	3,120830E+21	4,935247E+22	6,241322E+21	5,559379E+22
2500	2,467657E+22	2,467533E+22	3,120503E+21	3,120555E+21	4,935190E+22	6,241058E+21	5,559296E+22
2501	2,467574E+22	2,467653E+22	3,120806E+21	3,120315E+21	4,935228E+22	6,241121E+21	5,559340E+22
2502	2,467688E+22	2,467700E+22	3,120229E+21	3,120654E+21	4,935389E+22	6,240883E+21	5,559477E+22
2503	2,467718E+22	2,467640E+22	3,120406E+21	3,120146E+21	4,935358E+22	6,240552E+21	5,559413E+22
2504	2,467673E+22	2,467819E+22	3,120388E+21	3,120181E+21	4,935493E+22	6,240569E+21	5,559550E+22
2505	2,467825E+22	2,467790E+22	3,119846E+21	3,120262E+21	4,935615E+22	6,240108E+21	5,559626E+22
2506	2,467826E+22	2,467779E+22	3,120185E+21	3,119747E+21	4,935605E+22	6,239932E+21	5,559598E+22
2507	2,467839E+22	2,467915E+22	3,119932E+21	3,120055E+21	4,935753E+22	6,239988E+21	5,559752E+22
2508	2,467919E+22	2,467827E+22	3,119774E+21	3,119971E+21	4,935746E+22	6,239745E+21	5,559721E+22
2509	2,467807E+22	2,467878E+22	3,120251E+21	3,119774E+21	4,935685E+22	6,240024E+21	5,559687E+22
2510	2,467826E+22	2,467885E+22	3,119895E+21	3,120342E+21	4,935710E+22	6,240238E+21	5,559734E+22
2511	2,467829E+22	2,467696E+22	3,120157E+21	3,120137E+21	4,935525E+22	6,240294E+21	5,559555E+22
2512	2,467689E+22	2,467766E+22	3,120571E+21	3,120247E+21	4,935454E+22	6,240818E+21	5,559536E+22
2513	2,467720E+22	2,467685E+22	3,120244E+21	3,120728E+21	4,935405E+22	6,240972E+21	5,559502E+22
2514	2,467631E+22	2,467544E+22	3,120790E+21	3,120489E+21	4,935174E+22	6,241279E+21	5,559302E+22
2515	2,467491E+22	2,467621E+22	3,120875E+21	3,120883E+21	4,935112E+22	6,241758E+21	5,559287E+22
2516	2,467519E+22	2,467464E+22	3,120710E+21	3,121090E+21	4,934983E+22	6,241800E+21	5,559163E+22
2517	2,467413E+22	2,467433E+22	3,121247E+21	3,120750E+21	4,934846E+22	6,241997E+21	5,559046E+22
2518	2,467426E+22	2,467493E+22	3,120917E+21	3,121185E+21	4,934920E+22	6,242102E+21	5,559130E+22
2519	2,467505E+22	2,467356E+22	3,120894E+21	3,120946E+21	4,934861E+22	6,241841E+21	5,559045E+22
2520	2,467419E+22	2,467504E+22	3,121167E+21	3,120699E+21	4,934924E+22	6,241867E+21	5,559110E+22
2521	2,467516E+22	2,467554E+22	3,120581E+21	3,121054E+21	4,935070E+22	6,241636E+21	5,559233E+22
2522	2,467569E+22	2,467479E+22	3,120720E+21	3,120532E+21	4,935047E+22	6,241252E+21	5,559173E+22
2523	2,467539E+22	2,467660E+22	3,120698E+21	3,120475E+21	4,935198E+22	6,241173E+21	5,559316E+22
2524	2,467678E+22	2,467630E+22	3,120214E+21	3,120581E+21	4,935307E+22	6,240795E+21	5,559387E+22
2525	2,467666E+22	2,467642E+22	3,120583E+21	3,120064E+21	4,935308E+22	6,240647E+21	5,559372E+22
2526	2,467655E+22	2,467775E+22	3,120358E+21	3,120445E+21	4,935430E+22	6,240803E+21	5,559510E+22
2527	2,467724E+22	2,467636E+22	3,120196E+21	3,120441E+21	4,935360E+22	6,240638E+21	5,559424E+22
2528	2,467625E+22	2,467682E+22	3,120669E+21	3,120221E+21	4,935307E+22	6,240890E+21	5,559396E+22
2529	2,467644E+22	2,467688E+22	3,120326E+21	3,120780E+21	4,935332E+22	6,241106E+21	5,559442E+22
2530	2,467665E+22	2,467502E+22	3,120569E+21	3,120587E+21	4,935167E+22	6,241156E+21	5,559283E+22
2531	2,467514E+22	2,467586E+22	3,120992E+21	3,120655E+21	4,935099E+22	6,241647E+21	5,559264E+22
2532	2,467508E+22	2,467505E+22	3,120715E+21	3,121203E+21	4,935012E+22	6,241917E+21	5,559204E+22
2533	2,467414E+22	2,467368E+22	3,121265E+21	3,120945E+21	4,934782E+22	6,242210E+21	5,559003E+22
2534	2,467287E+22	2,467426E+22	3,121353E+21	3,121332E+21	4,934713E+22	6,242685E+21	5,558981E+22
2535	2,467340E+22	2,467240E+22	3,121149E+21	3,121534E+21	4,934580E+22	6,242683E+21	5,558848E+22
2536	2,467259E+22	2,467239E+22	3,121643E+21	3,121139E+21	4,934499E+22	6,242783E+21	5,558777E+22
2537	2,467258E+22	2,467329E+22	3,121313E+21	3,121574E+21	4,934587E+22	6,242887E+21	5,558876E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2538	2,467343E+22	2,467209E+22	3,121230E+21	3,121353E+21	4,934552E+22	6,242582E+21	5,558810E+22
2539	2,467258E+22	2,467358E+22	3,121491E+21	3,121031E+21	4,934616E+22	6,242522E+21	5,558868E+22
2540	2,467347E+22	2,467400E+22	3,120953E+21	3,121386E+21	4,934747E+22	6,242339E+21	5,558981E+22
2541	2,467416E+22	2,467339E+22	3,121087E+21	3,120814E+21	4,934755E+22	6,241901E+21	5,558945E+22
2542	2,467386E+22	2,467512E+22	3,121097E+21	3,120793E+21	4,934898E+22	6,241890E+21	5,559087E+22
2543	2,467511E+22	2,467459E+22	3,120608E+21	3,120981E+21	4,934971E+22	6,241588E+21	5,559129E+22
2544	2,467496E+22	2,467478E+22	3,120951E+21	3,120500E+21	4,934974E+22	6,241451E+21	5,559119E+22
2545	2,467470E+22	2,467597E+22	3,120754E+21	3,120910E+21	4,935067E+22	6,241664E+21	5,559233E+22
2546	2,467566E+22	2,467442E+22	3,120556E+21	3,120906E+21	4,935008E+22	6,241463E+21	5,559155E+22
2547	2,467478E+22	2,467493E+22	3,121034E+21	3,120595E+21	4,934970E+22	6,241629E+21	5,559133E+22
2548	2,467473E+22	2,467508E+22	3,120774E+21	3,121177E+21	4,934981E+22	6,241952E+21	5,559176E+22
2549	2,467471E+22	2,467347E+22	3,121045E+21	3,120990E+21	4,934817E+22	6,242035E+21	5,559021E+22
2550	2,467295E+22	2,467418E+22	3,121498E+21	3,121117E+21	4,934712E+22	6,242615E+21	5,558974E+22
2551	2,467279E+22	2,467289E+22	3,121212E+21	3,121709E+21	4,934568E+22	6,242920E+21	5,558860E+22
2552	2,467213E+22	2,467150E+22	3,121719E+21	3,121411E+21	4,934363E+22	6,243130E+21	5,558676E+22
2553	2,467102E+22	2,467215E+22	3,121795E+21	3,121761E+21	4,934317E+22	6,243556E+21	5,558672E+22
2554	2,467187E+22	2,467047E+22	3,121531E+21	3,121962E+21	4,934234E+22	6,243493E+21	5,558584E+22
2555	2,467110E+22	2,467082E+22	3,121991E+21	3,121503E+21	4,934192E+22	6,243493E+21	5,558542E+22
2556	2,467084E+22	2,467186E+22	3,121702E+21	3,121971E+21	4,934270E+22	6,243673E+21	5,558637E+22
2557	2,467163E+22	2,467078E+22	3,121619E+21	3,121704E+21	4,934241E+22	6,243323E+21	5,558573E+22
2558	2,467094E+22	2,467207E+22	3,121886E+21	3,121366E+21	4,934301E+22	6,243252E+21	5,558626E+22
2559	2,467186E+22	2,467216E+22	3,121335E+21	3,121724E+21	4,934403E+22	6,243059E+21	5,558709E+22
2560	2,467267E+22	2,467172E+22	3,121446E+21	3,121157E+21	4,934440E+22	6,242603E+21	5,558700E+22
2561	2,467219E+22	2,467352E+22	3,121468E+21	3,121180E+21	4,934571E+22	6,242648E+21	5,558836E+22
2562	2,467349E+22	2,467295E+22	3,120930E+21	3,121429E+21	4,934645E+22	6,242359E+21	5,558881E+22
2563	2,467341E+22	2,467310E+22	3,121260E+21	3,120888E+21	4,934651E+22	6,242147E+21	5,558866E+22
2564	2,467308E+22	2,467422E+22	3,121137E+21	3,121297E+21	4,934731E+22	6,242434E+21	5,558974E+22
2565	2,467407E+22	2,467289E+22	3,120973E+21	3,121246E+21	4,934697E+22	6,242220E+21	5,558918E+22
2566	2,467311E+22	2,467331E+22	3,121512E+21	3,120976E+21	4,934643E+22	6,242488E+21	5,558891E+22
2567	2,467268E+22	2,467322E+22	3,121277E+21	3,121632E+21	4,934590E+22	6,242909E+21	5,558881E+22
2568	2,467257E+22	2,467159E+22	3,121529E+21	3,121499E+21	4,934415E+22	6,243028E+21	5,558718E+22
2569	2,467070E+22	2,467203E+22	3,121990E+21	3,121639E+21	4,934273E+22	6,243630E+21	5,558636E+22
2570	2,467092E+22	2,467061E+22	3,121631E+21	3,122220E+21	4,934153E+22	6,243851E+21	5,558538E+22
2571	2,467054E+22	2,466938E+22	3,122089E+21	3,121813E+21	4,933992E+22	6,243903E+21	5,558382E+22
2572	2,466932E+22	2,467031E+22	3,122219E+21	3,122165E+21	4,933963E+22	6,244385E+21	5,558401E+22
2573	2,467006E+22	2,466911E+22	3,121951E+21	3,122333E+21	4,933916E+22	6,244284E+21	5,558345E+22
2574	2,466921E+22	2,466939E+22	3,122419E+21	3,121899E+21	4,933860E+22	6,244319E+21	5,558292E+22
2575	2,466886E+22	2,467009E+22	3,122130E+21	3,122364E+21	4,933896E+22	6,244494E+21	5,558345E+22
2576	2,466995E+22	2,466903E+22	3,121997E+21	3,122062E+21	4,933899E+22	6,244059E+21	5,558304E+22
2577	2,466934E+22	2,467029E+22	3,122258E+21	3,121709E+21	4,933964E+22	6,243968E+21	5,558360E+22
2578	2,467049E+22	2,467046E+22	3,121648E+21	3,122099E+21	4,934095E+22	6,243747E+21	5,558470E+22
2579	2,467130E+22	2,467022E+22	3,121721E+21	3,121508E+21	4,934153E+22	6,243230E+21	5,558476E+22
2580	2,467061E+22	2,467205E+22	3,121808E+21	3,121587E+21	4,934266E+22	6,243394E+21	5,558605E+22
2581	2,467190E+22	2,467156E+22	3,121300E+21	3,121795E+21	4,934346E+22	6,243096E+21	5,558656E+22
2582	2,467195E+22	2,467151E+22	3,121664E+21	3,121250E+21	4,934347E+22	6,242914E+21	5,558638E+22
2583	2,467144E+22	2,467239E+22	3,121584E+21	3,121661E+21	4,934383E+22	6,243245E+21	5,558707E+22
2584	2,467232E+22	2,467119E+22	3,121433E+21	3,121646E+21	4,934351E+22	6,243079E+21	5,558658E+22
2585	2,467101E+22	2,467152E+22	3,122003E+21	3,121442E+21	4,934253E+22	6,243446E+21	5,558598E+22
2586	2,467055E+22	2,467121E+22	3,121721E+21	3,122159E+21	4,934176E+22	6,243879E+21	5,558564E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2587	2,467057E+22	2,466948E+22	3,121934E+21	3,121973E+21	4,934005E+22	6,243907E+21	5,558396E+22
2588	2,466881E+22	2,466987E+22	3,122421E+21	3,122103E+21	4,933868E+22	6,244524E+21	5,558320E+22
2589	2,466914E+22	2,466876E+22	3,122071E+21	3,122615E+21	4,933790E+22	6,244686E+21	5,558259E+22
2590	2,466888E+22	2,466768E+22	3,122537E+21	3,122217E+21	4,933656E+22	6,244754E+21	5,558131E+22
2591	2,466739E+22	2,466856E+22	3,122677E+21	3,122593E+21	4,933595E+22	6,245270E+21	5,558122E+22
2592	2,466813E+22	2,466749E+22	3,122389E+21	3,122769E+21	4,933562E+22	6,245158E+21	5,558078E+22
2593	2,466731E+22	2,466759E+22	3,122849E+21	3,122317E+21	4,933490E+22	6,245165E+21	5,558007E+22
2594	2,466730E+22	2,466817E+22	3,122476E+21	3,122750E+21	4,933547E+22	6,245226E+21	5,558069E+22
2595	2,466860E+22	2,466730E+22	3,122284E+21	3,122370E+21	4,933591E+22	6,244655E+21	5,558056E+22
2596	2,466788E+22	2,466872E+22	3,122586E+21	3,122053E+21	4,933660E+22	6,244639E+21	5,558124E+22
2597	2,466889E+22	2,466925E+22	3,121992E+21	3,122432E+21	4,933814E+22	6,244424E+21	5,558256E+22
2598	2,466972E+22	2,466890E+22	3,122084E+21	3,121879E+21	4,933862E+22	6,243963E+21	5,558258E+22
2599	2,466890E+22	2,467037E+22	3,122207E+21	3,121958E+21	4,933927E+22	6,244166E+21	5,558344E+22
2600	2,467036E+22	2,466992E+22	3,121705E+21	3,122152E+21	4,934028E+22	6,243857E+21	5,558414E+22
2601	2,467032E+22	2,466976E+22	3,122105E+21	3,121632E+21	4,934008E+22	6,243736E+21	5,558382E+22
2602	2,466979E+22	2,467058E+22	3,121993E+21	3,122097E+21	4,934037E+22	6,244090E+21	5,558446E+22
2603	2,467051E+22	2,466944E+22	3,121813E+21	3,122100E+21	4,933995E+22	6,243912E+21	5,558386E+22
2604	2,466893E+22	2,466959E+22	3,122439E+21	3,121963E+21	4,933852E+22	6,244401E+21	5,558292E+22
2605	2,466853E+22	2,466931E+22	3,122165E+21	3,122620E+21	4,933783E+22	6,244785E+21	5,558262E+22
2606	2,466880E+22	2,466742E+22	3,122380E+21	3,122413E+21	4,933622E+22	6,244793E+21	5,558101E+22
2607	2,466696E+22	2,466773E+22	3,122891E+21	3,122521E+21	4,933470E+22	6,245412E+21	5,558011E+22
2608	2,466732E+22	2,466695E+22	3,122546E+21	3,123037E+21	4,933428E+22	6,245583E+21	5,557986E+22
2609	2,466683E+22	2,466595E+22	3,123015E+21	3,122671E+21	4,933278E+22	6,245686E+21	5,557846E+22
2610	2,466544E+22	2,466672E+22	3,123087E+21	3,123053E+21	4,933216E+22	6,246139E+21	5,557830E+22
2611	2,466637E+22	2,466567E+22	3,122739E+21	3,123149E+21	4,933205E+22	6,245888E+21	5,557793E+22
2612	2,466565E+22	2,466579E+22	3,123207E+21	3,122684E+21	4,933144E+22	6,245892E+21	5,557733E+22
2613	2,466575E+22	2,466668E+22	3,122833E+21	3,123048E+21	4,933242E+22	6,245881E+21	5,557830E+22
2614	2,466717E+22	2,466591E+22	3,122642E+21	3,122704E+21	4,933307E+22	6,245347E+21	5,557842E+22
2615	2,466621E+22	2,466722E+22	3,122957E+21	3,122432E+21	4,933343E+22	6,245389E+21	5,557882E+22
2616	2,466727E+22	2,466779E+22	3,122378E+21	3,122829E+21	4,933506E+22	6,245207E+21	5,558026E+22
2617	2,466813E+22	2,466725E+22	3,122478E+21	3,122272E+21	4,933538E+22	6,244750E+21	5,558013E+22
2618	2,466755E+22	2,466854E+22	3,122550E+21	3,122334E+21	4,933608E+22	6,244884E+21	5,558097E+22
2619	2,466898E+22	2,466826E+22	3,122035E+21	3,122487E+21	4,933724E+22	6,244522E+21	5,558176E+22
2620	2,466863E+22	2,466813E+22	3,122492E+21	3,122048E+21	4,933675E+22	6,244540E+21	5,558129E+22
2621	2,466777E+22	2,466907E+22	3,122414E+21	3,122512E+21	4,933684E+22	6,244926E+21	5,558177E+22
2622	2,466851E+22	2,466769E+22	3,122257E+21	3,122560E+21	4,933619E+22	6,244817E+21	5,558101E+22
2623	2,466687E+22	2,466743E+22	3,122905E+21	3,122416E+21	4,933430E+22	6,245321E+21	5,557962E+22
2624	2,466670E+22	2,466722E+22	3,122642E+21	3,123046E+21	4,933392E+22	6,245688E+21	5,557961E+22
2625	2,466697E+22	2,466540E+22	3,122869E+21	3,122848E+21	4,933237E+22	6,245717E+21	5,557809E+22
2626	2,466520E+22	2,466577E+22	3,123319E+21	3,122987E+21	4,933097E+22	6,246306E+21	5,557728E+22
2627	2,466546E+22	2,466524E+22	3,122944E+21	3,123491E+21	4,933070E+22	6,246435E+21	5,557714E+22
2628	2,466482E+22	2,466417E+22	3,123437E+21	3,123160E+21	4,932899E+22	6,246597E+21	5,557558E+22
2629	2,466355E+22	2,466502E+22	3,123500E+21	3,123436E+21	4,932857E+22	6,246936E+21	5,557551E+22
2630	2,466478E+22	2,466393E+22	3,123131E+21	3,123498E+21	4,932871E+22	6,246629E+21	5,557534E+22
2631	2,466395E+22	2,466398E+22	3,123603E+21	3,123024E+21	4,932793E+22	6,246627E+21	5,557456E+22
2632	2,466411E+22	2,466514E+22	3,123231E+21	3,123402E+21	4,932925E+22	6,246633E+21	5,557588E+22
2633	2,466539E+22	2,466441E+22	3,123037E+21	3,123104E+21	4,932980E+22	6,246141E+21	5,557594E+22
2634	2,466466E+22	2,466555E+22	3,123279E+21	3,122849E+21	4,933021E+22	6,246128E+21	5,557634E+22
2635	2,466592E+22	2,466616E+22	3,122672E+21	3,123175E+21	4,933208E+22	6,245847E+21	5,557793E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2636	2,466673E+22	2,466562E+22	3,122805E+21	3,122631E+21	4,933235E+22	6,245436E+21	5,557779E+22
2637	2,466609E+22	2,466714E+22	3,122910E+21	3,122633E+21	4,933323E+22	6,245543E+21	5,557877E+22
2638	2,466740E+22	2,466683E+22	3,122428E+21	3,122846E+21	4,933423E+22	6,245273E+21	5,557950E+22
2639	2,466661E+22	2,466644E+22	3,122934E+21	3,122486E+21	4,933305E+22	6,245420E+21	5,557847E+22
2640	2,466578E+22	2,466723E+22	3,122892E+21	3,122972E+21	4,933301E+22	6,245864E+21	5,557887E+22
2641	2,466653E+22	2,466561E+22	3,122744E+21	3,123031E+21	4,933213E+22	6,245775E+21	5,557791E+22
2642	2,466519E+22	2,466519E+22	3,123312E+21	3,122878E+21	4,933038E+22	6,246189E+21	5,557657E+22
2643	2,466505E+22	2,466523E+22	3,123042E+21	3,123467E+21	4,933028E+22	6,246509E+21	5,557679E+22
2644	2,466504E+22	2,466361E+22	3,123303E+21	3,123330E+21	4,932865E+22	6,246633E+21	5,557529E+22
2645	2,466311E+22	2,466420E+22	3,123765E+21	3,123423E+21	4,932731E+22	6,247188E+21	5,557450E+22
2646	2,466347E+22	2,466354E+22	3,123401E+21	3,123922E+21	4,932701E+22	6,247323E+21	5,557433E+22
2647	2,466278E+22	2,466222E+22	3,123893E+21	3,123569E+21	4,932500E+22	6,247461E+21	5,557246E+22
2648	2,466178E+22	2,466315E+22	3,123948E+21	3,123796E+21	4,932493E+22	6,247744E+21	5,557268E+22
2649	2,466305E+22	2,466216E+22	3,123563E+21	3,123875E+21	4,932521E+22	6,247438E+21	5,557265E+22
2650	2,466241E+22	2,466221E+22	3,123932E+21	3,123437E+21	4,932463E+22	6,247369E+21	5,557200E+22
2651	2,466261E+22	2,466359E+22	3,123536E+21	3,123800E+21	4,932620E+22	6,247336E+21	5,557354E+22
2652	2,466386E+22	2,466287E+22	3,123353E+21	3,123522E+21	4,932673E+22	6,246875E+21	5,557360E+22
2653	2,466328E+22	2,466409E+22	3,123597E+21	3,123157E+21	4,932737E+22	6,246754E+21	5,557412E+22
2654	2,466468E+22	2,466473E+22	3,123016E+21	3,123448E+21	4,932940E+22	6,246464E+21	5,557587E+22
2655	2,466513E+22	2,466410E+22	3,123197E+21	3,122945E+21	4,932923E+22	6,246142E+21	5,557537E+22
2656	2,466429E+22	2,466568E+22	3,123353E+21	3,122993E+21	4,932996E+22	6,246347E+21	5,557631E+22
2657	2,466530E+22	2,466521E+22	3,122897E+21	3,123286E+21	4,933051E+22	6,246183E+21	5,557669E+22
2658	2,466468E+22	2,466439E+22	3,123333E+21	3,122972E+21	4,932908E+22	6,246305E+21	5,557538E+22
2659	2,466407E+22	2,466514E+22	3,123277E+21	3,123412E+21	4,932921E+22	6,246689E+21	5,557590E+22
2660	2,466481E+22	2,466356E+22	3,123150E+21	3,123500E+21	4,932837E+22	6,246650E+21	5,557502E+22
2661	2,466348E+22	2,466342E+22	3,123729E+21	3,123291E+21	4,932691E+22	6,247020E+21	5,557393E+22
2662	2,466327E+22	2,466359E+22	3,123492E+21	3,123907E+21	4,932686E+22	6,247399E+21	5,557426E+22
2663	2,466285E+22	2,466184E+22	3,123793E+21	3,123819E+21	4,932469E+22	6,247613E+21	5,557230E+22
2664	2,466104E+22	2,466232E+22	3,124277E+21	3,123882E+21	4,932336E+22	6,248158E+21	5,557152E+22
2665	2,466147E+22	2,466150E+22	3,123903E+21	3,124352E+21	4,932297E+22	6,248255E+21	5,557122E+22
2666	2,466109E+22	2,466007E+22	3,124280E+21	3,123985E+21	4,932116E+22	6,248265E+21	5,556943E+22
2667	2,466023E+22	2,466128E+22	3,124294E+21	3,124173E+21	4,932150E+22	6,248467E+21	5,556997E+22
2668	2,466130E+22	2,466052E+22	3,123909E+21	3,124305E+21	4,932181E+22	6,248214E+21	5,557003E+22
2669	2,466075E+22	2,466083E+22	3,124253E+21	3,123802E+21	4,932158E+22	6,248055E+21	5,556963E+22
2670	2,466117E+22	2,466216E+22	3,123877E+21	3,124125E+21	4,932334E+22	6,248003E+21	5,557134E+22
2671	2,466229E+22	2,466136E+22	3,123721E+21	3,123826E+21	4,932366E+22	6,247547E+21	5,557120E+22
2672	2,466186E+22	2,466265E+22	3,123999E+21	3,123430E+21	4,932451E+22	6,247429E+21	5,557194E+22
2673	2,466302E+22	2,466329E+22	3,123450E+21	3,123770E+21	4,932631E+22	6,247221E+21	5,557353E+22
2674	2,466342E+22	2,466246E+22	3,123558E+21	3,123372E+21	4,932589E+22	6,246930E+21	5,557282E+22
2675	2,466252E+22	2,466394E+22	3,123716E+21	3,123453E+21	4,932646E+22	6,247169E+21	5,557363E+22
2676	2,466344E+22	2,466330E+22	3,123285E+21	3,123793E+21	4,932674E+22	6,247078E+21	5,557382E+22
2677	2,466308E+22	2,466249E+22	3,123700E+21	3,123387E+21	4,932556E+22	6,247087E+21	5,557265E+22
2678	2,466262E+22	2,466329E+22	3,123680E+21	3,123790E+21	4,932591E+22	6,247470E+21	5,557338E+22
2679	2,466295E+22	2,466179E+22	3,123609E+21	3,123916E+21	4,932474E+22	6,247526E+21	5,557226E+22
2680	2,466148E+22	2,466175E+22	3,124241E+21	3,123730E+21	4,932323E+22	6,247971E+21	5,557120E+22
2681	2,466101E+22	2,466183E+22	3,124038E+21	3,124384E+21	4,932284E+22	6,248422E+21	5,557126E+22
2682	2,466079E+22	2,465970E+22	3,124248E+21	3,124316E+21	4,932049E+22	6,248564E+21	5,556905E+22
2683	2,465920E+22	2,466016E+22	3,124692E+21	3,124314E+21	4,931937E+22	6,249006E+21	5,556837E+22
2684	2,465964E+22	2,465948E+22	3,124302E+21	3,124786E+21	4,931913E+22	6,249088E+21	5,556821E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2685	2,465941E+22	2,465834E+22	3,124636E+21	3,124357E+21	4,931775E+22	6,248993E+21	5,556675E+22
2686	2,465865E+22	2,465975E+22	3,124657E+21	3,124544E+21	4,931840E+22	6,249201E+21	5,556761E+22
2687	2,465947E+22	2,465903E+22	3,124301E+21	3,124705E+21	4,931850E+22	6,249006E+21	5,556750E+22
2688	2,465916E+22	2,465931E+22	3,124661E+21	3,124154E+21	4,931848E+22	6,248816E+21	5,556729E+22
2689	2,465965E+22	2,466061E+22	3,124298E+21	3,124444E+21	4,932026E+22	6,248742E+21	5,556900E+22
2690	2,466088E+22	2,465967E+22	3,124054E+21	3,124162E+21	4,932055E+22	6,248216E+21	5,556877E+22
2691	2,466039E+22	2,466107E+22	3,124331E+21	3,123784E+21	4,932146E+22	6,248115E+21	5,556957E+22
2692	2,466118E+22	2,466174E+22	3,123804E+21	3,124208E+21	4,932292E+22	6,248012E+21	5,557093E+22
2693	2,466163E+22	2,466088E+22	3,123898E+21	3,123796E+21	4,932251E+22	6,247694E+21	5,557021E+22
2694	2,466097E+22	2,466217E+22	3,124083E+21	3,123851E+21	4,932314E+22	6,247934E+21	5,557108E+22
2695	2,466174E+22	2,466144E+22	3,123699E+21	3,124192E+21	4,932318E+22	6,247891E+21	5,557107E+22
2696	2,466152E+22	2,466072E+22	3,124154E+21	3,123760E+21	4,932224E+22	6,247913E+21	5,557015E+22
2697	2,466081E+22	2,466158E+22	3,124185E+21	3,124202E+21	4,932239E+22	6,248387E+21	5,557078E+22
2698	2,466098E+22	2,465995E+22	3,124060E+21	3,124413E+21	4,932093E+22	6,248474E+21	5,556940E+22
2699	2,465947E+22	2,465981E+22	3,124696E+21	3,124242E+21	4,931928E+22	6,248938E+21	5,556822E+22
2700	2,465887E+22	2,465972E+22	3,124505E+21	3,124897E+21	4,931858E+22	6,249402E+21	5,556798E+22
2701	2,465894E+22	2,465765E+22	3,124659E+21	3,124738E+21	4,931659E+22	6,249397E+21	5,556599E+22
2702	2,465758E+22	2,465821E+22	3,125094E+21	3,124682E+21	4,931579E+22	6,249777E+21	5,556556E+22
2703	2,465768E+22	2,465772E+22	3,124734E+21	3,125182E+21	4,931540E+22	6,249916E+21	5,556532E+22
2704	2,465753E+22	2,465679E+22	3,125071E+21	3,124749E+21	4,931433E+22	6,249820E+21	5,556415E+22
2705	2,465676E+22	2,465820E+22	3,125108E+21	3,124942E+21	4,931496E+22	6,250051E+21	5,556501E+22
2706	2,465784E+22	2,465727E+22	3,124663E+21	3,125097E+21	4,931512E+22	6,249760E+21	5,556488E+22
2707	2,465781E+22	2,465762E+22	3,124990E+21	3,124499E+21	4,931543E+22	6,249490E+21	5,556492E+22
2708	2,465816E+22	2,465902E+22	3,124638E+21	3,124793E+21	4,931719E+22	6,249431E+21	5,556662E+22
2709	2,465943E+22	2,465827E+22	3,124357E+21	3,124500E+21	4,931769E+22	6,248857E+21	5,556655E+22
2710	2,465890E+22	2,465965E+22	3,124656E+21	3,124151E+21	4,931855E+22	6,248807E+21	5,556735E+22
2711	2,465935E+22	2,466018E+22	3,124191E+21	3,124623E+21	4,931953E+22	6,248814E+21	5,556835E+22
2712	2,466004E+22	2,465917E+22	3,124318E+21	3,124179E+21	4,931921E+22	6,248497E+21	5,556770E+22
2713	2,465943E+22	2,466039E+22	3,124535E+21	3,124221E+21	4,931983E+22	6,248756E+21	5,556858E+22
2714	2,466019E+22	2,465954E+22	3,124101E+21	3,124596E+21	4,931973E+22	6,248697E+21	5,556842E+22
2715	2,465980E+22	2,465892E+22	3,124573E+21	3,124202E+21	4,931872E+22	6,248776E+21	5,556749E+22
2716	2,465866E+22	2,465981E+22	3,124639E+21	3,124699E+21	4,931848E+22	6,249338E+21	5,556781E+22
2717	2,465887E+22	2,465809E+22	3,124495E+21	3,124891E+21	4,931697E+22	6,249386E+21	5,556635E+22
2718	2,465758E+22	2,465779E+22	3,125140E+21	3,124675E+21	4,931537E+22	6,249816E+21	5,556519E+22
2719	2,465681E+22	2,465768E+22	3,124977E+21	3,125317E+21	4,931449E+22	6,250293E+21	5,556478E+22
2720	2,465708E+22	2,465574E+22	3,125138E+21	3,125135E+21	4,931281E+22	6,250273E+21	5,556309E+22
2721	2,465567E+22	2,465642E+22	3,125572E+21	3,125109E+21	4,931209E+22	6,250681E+21	5,556278E+22
2722	2,465580E+22	2,465587E+22	3,125134E+21	3,125661E+21	4,931167E+22	6,250795E+21	5,556247E+22
2723	2,465586E+22	2,465499E+22	3,125445E+21	3,125213E+21	4,931085E+22	6,250658E+21	5,556151E+22
2724	2,465514E+22	2,465640E+22	3,125474E+21	3,125357E+21	4,931154E+22	6,250831E+21	5,556237E+22
2725	2,465651E+22	2,465567E+22	3,124972E+21	3,125413E+21	4,931219E+22	6,250385E+21	5,556257E+22
2726	2,465658E+22	2,465616E+22	3,125301E+21	3,124777E+21	4,931273E+22	6,250078E+21	5,556281E+22
2727	2,465642E+22	2,465767E+22	3,125006E+21	3,125116E+21	4,931409E+22	6,250122E+21	5,556421E+22
2728	2,465766E+22	2,465695E+22	3,124755E+21	3,124852E+21	4,931460E+22	6,249607E+21	5,556421E+22
2729	2,465715E+22	2,465808E+22	3,125081E+21	3,124537E+21	4,931523E+22	6,249619E+21	5,556485E+22
2730	2,465774E+22	2,465830E+22	3,124567E+21	3,125026E+21	4,931604E+22	6,249593E+21	5,556563E+22
2731	2,465864E+22	2,465733E+22	3,124678E+21	3,124570E+21	4,931597E+22	6,249249E+21	5,556522E+22
2732	2,465780E+22	2,465860E+22	3,124925E+21	3,124629E+21	4,931640E+22	6,249554E+21	5,556596E+22
2733	2,465849E+22	2,465794E+22	3,124483E+21	3,125012E+21	4,931643E+22	6,249495E+21	5,556592E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2734	2,465799E+22	2,465728E+22	3,124986E+21	3,124654E+21	4,931527E+22	6,249640E+21	5,556491E+22
2735	2,465645E+22	2,465797E+22	3,125128E+21	3,125177E+21	4,931442E+22	6,250305E+21	5,556473E+22
2736	2,465689E+22	2,465612E+22	3,125003E+21	3,125330E+21	4,931300E+22	6,250333E+21	5,556333E+22
2737	2,465568E+22	2,465572E+22	3,125646E+21	3,125102E+21	4,931140E+22	6,250747E+21	5,556214E+22
2738	2,465490E+22	2,465553E+22	3,125419E+21	3,125764E+21	4,931043E+22	6,251183E+21	5,556162E+22
2739	2,465520E+22	2,465379E+22	3,125553E+21	3,125611E+21	4,930899E+22	6,251164E+21	5,556015E+22
2740	2,465365E+22	2,465459E+22	3,125978E+21	3,125597E+21	4,930824E+22	6,251576E+21	5,555982E+22
2741	2,465408E+22	2,465414E+22	3,125499E+21	3,126085E+21	4,930823E+22	6,251584E+21	5,555981E+22
2742	2,465444E+22	2,465334E+22	3,125789E+21	3,125553E+21	4,930779E+22	6,251341E+21	5,555913E+22
2743	2,465356E+22	2,465487E+22	3,125854E+21	3,125654E+21	4,930843E+22	6,251508E+21	5,555994E+22
2744	2,465501E+22	2,465430E+22	3,125374E+21	3,125687E+21	4,930931E+22	6,251060E+21	5,556037E+22
2745	2,465490E+22	2,465483E+22	3,125711E+21	3,125118E+21	4,930973E+22	6,250828E+21	5,556056E+22
2746	2,465462E+22	2,465608E+22	3,125368E+21	3,125528E+21	4,931070E+22	6,250896E+21	5,556160E+22
2747	2,465602E+22	2,465519E+22	3,125113E+21	3,125294E+21	4,931121E+22	6,250407E+21	5,556162E+22
2748	2,465559E+22	2,465623E+22	3,125430E+21	3,124952E+21	4,931182E+22	6,250382E+21	5,556220E+22
2749	2,465644E+22	2,465655E+22	3,124888E+21	3,125382E+21	4,931299E+22	6,250269E+21	5,556326E+22
2750	2,465729E+22	2,465575E+22	3,125018E+21	3,124916E+21	4,931304E+22	6,249934E+21	5,556297E+22
2751	2,465588E+22	2,465710E+22	3,125347E+21	3,125025E+21	4,931298E+22	6,250372E+21	5,556336E+22
2752	2,465644E+22	2,465639E+22	3,124965E+21	3,125433E+21	4,931283E+22	6,250398E+21	5,556322E+22
2753	2,465590E+22	2,465546E+22	3,125502E+21	3,125120E+21	4,931136E+22	6,250622E+21	5,556198E+22
2754	2,465442E+22	2,465577E+22	3,125597E+21	3,125644E+21	4,931019E+22	6,251241E+21	5,556143E+22
2755	2,465507E+22	2,465392E+22	3,125456E+21	3,125802E+21	4,930900E+22	6,251257E+21	5,556025E+22
2756	2,465377E+22	2,465360E+22	3,126078E+21	3,125574E+21	4,930738E+22	6,251652E+21	5,555903E+22
2757	2,465311E+22	2,465366E+22	3,125808E+21	3,126227E+21	4,930677E+22	6,252034E+21	5,555880E+22
2758	2,465348E+22	2,465209E+22	3,125932E+21	3,126058E+21	4,930557E+22	6,251989E+21	5,555756E+22
2759	2,465176E+22	2,465288E+22	3,126407E+21	3,126015E+21	4,930464E+22	6,252422E+21	5,555706E+22
2760	2,465247E+22	2,465255E+22	3,125948E+21	3,126415E+21	4,930502E+22	6,252363E+21	5,555739E+22
2761	2,465290E+22	2,465181E+22	3,126220E+21	3,125871E+21	4,930470E+22	6,252091E+21	5,555679E+22
2762	2,465183E+22	2,465322E+22	3,126240E+21	3,125991E+21	4,930504E+22	6,252231E+21	5,555727E+22
2763	2,465324E+22	2,465275E+22	3,125736E+21	3,126080E+21	4,930599E+22	6,251816E+21	5,555780E+22
2764	2,465301E+22	2,465316E+22	3,126055E+21	3,125541E+21	4,930616E+22	6,251597E+21	5,555776E+22
2765	2,465310E+22	2,465436E+22	3,125677E+21	3,125916E+21	4,930746E+22	6,251592E+21	5,555905E+22
2766	2,465479E+22	2,465356E+22	3,125406E+21	3,125628E+21	4,930835E+22	6,251034E+21	5,555939E+22
2767	2,465417E+22	2,465467E+22	3,125779E+21	3,125278E+21	4,930884E+22	6,251057E+21	5,555990E+22
2768	2,465497E+22	2,465518E+22	3,125302E+21	3,125697E+21	4,931015E+22	6,250999E+21	5,556115E+22
2769	2,465555E+22	2,465436E+22	3,125462E+21	3,125322E+21	4,930991E+22	6,250784E+21	5,556069E+22
2770	2,465385E+22	2,465532E+22	3,125796E+21	3,125492E+21	4,930917E+22	6,251288E+21	5,556046E+22
2771	2,465450E+22	2,465437E+22	3,125432E+21	3,125929E+21	4,930887E+22	6,251362E+21	5,556023E+22
2772	2,465396E+22	2,465327E+22	3,125955E+21	3,125597E+21	4,930723E+22	6,251552E+21	5,555879E+22
2773	2,465274E+22	2,465363E+22	3,126004E+21	3,126080E+21	4,930636E+22	6,252084E+21	5,555845E+22
2774	2,465334E+22	2,465201E+22	3,125855E+21	3,126228E+21	4,930535E+22	6,252084E+21	5,555744E+22
2775	2,465168E+22	2,465185E+22	3,126514E+21	3,126031E+21	4,930353E+22	6,252545E+21	5,555607E+22
2776	2,465110E+22	2,465199E+22	3,126295E+21	3,126652E+21	4,930309E+22	6,252947E+21	5,555603E+22
2777	2,465157E+22	2,465041E+22	3,126418E+21	3,126482E+21	4,930198E+22	6,252900E+21	5,555488E+22
2778	2,464994E+22	2,465100E+22	3,126838E+21	3,126397E+21	4,930094E+22	6,253235E+21	5,555418E+22
2779	2,465082E+22	2,465073E+22	3,126365E+21	3,126790E+21	4,930155E+22	6,253156E+21	5,555471E+22
2780	2,465110E+22	2,465011E+22	3,126597E+21	3,126258E+21	4,930120E+22	6,252855E+21	5,555406E+22
2781	2,465018E+22	2,465159E+22	3,126552E+21	3,126391E+21	4,930177E+22	6,252943E+21	5,555472E+22
2782	2,465167E+22	2,465120E+22	3,126032E+21	3,126476E+21	4,930287E+22	6,252508E+21	5,555538E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2783	2,465145E+22	2,465153E+22	3,126380E+21	3,125918E+21	4,930298E+22	6,252298E+21	5,555528E+22
2784	2,465184E+22	2,465283E+22	3,126047E+21	3,126210E+21	4,930467E+22	6,252257E+21	5,555693E+22
2785	2,465350E+22	2,465218E+22	3,125789E+21	3,125938E+21	4,930568E+22	6,251726E+21	5,555741E+22
2786	2,465254E+22	2,465314E+22	3,126165E+21	3,125629E+21	4,930568E+22	6,251793E+21	5,555747E+22
2787	2,465315E+22	2,465363E+22	3,125730E+21	3,126119E+21	4,930678E+22	6,251848E+21	5,555863E+22
2788	2,465347E+22	2,465260E+22	3,125899E+21	3,125792E+21	4,930607E+22	6,251691E+21	5,555776E+22
2789	2,465204E+22	2,465331E+22	3,126204E+21	3,125946E+21	4,930535E+22	6,252150E+21	5,555750E+22
2790	2,465282E+22	2,465241E+22	3,125827E+21	3,126346E+21	4,930523E+22	6,252174E+21	5,555740E+22
2791	2,465211E+22	2,465130E+22	3,126389E+21	3,126022E+21	4,930341E+22	6,252411E+21	5,555582E+22
2792	2,465090E+22	2,465187E+22	3,126488E+21	3,126487E+21	4,930277E+22	6,252975E+21	5,555574E+22
2793	2,465136E+22	2,465037E+22	3,126338E+21	3,126708E+21	4,930173E+22	6,253046E+21	5,555477E+22
2794	2,464955E+22	2,464989E+22	3,126984E+21	3,126530E+21	4,929944E+22	6,253514E+21	5,555295E+22
2795	2,464923E+22	2,464998E+22	3,126775E+21	3,127125E+21	4,929922E+22	6,253900E+21	5,555312E+22
2796	2,464975E+22	2,464842E+22	3,126849E+21	3,126898E+21	4,929817E+22	6,253747E+21	5,555192E+22
2797	2,464839E+22	2,464912E+22	3,127198E+21	3,126765E+21	4,929751E+22	6,253964E+21	5,555147E+22
2798	2,464919E+22	2,464915E+22	3,126694E+21	3,127138E+21	4,929834E+22	6,253832E+21	5,555217E+22
2799	2,464919E+22	2,464859E+22	3,126940E+21	3,126645E+21	4,929777E+22	6,253585E+21	5,555136E+22
2800	2,464850E+22	2,465011E+22	3,126936E+21	3,126737E+21	4,929860E+22	6,253672E+21	5,555228E+22
2801	2,465019E+22	2,464973E+22	3,126408E+21	3,126827E+21	4,929992E+22	6,253235E+21	5,555316E+22
2802	2,465005E+22	2,464987E+22	3,126728E+21	3,126244E+21	4,929992E+22	6,252972E+21	5,555289E+22
2803	2,465055E+22	2,465126E+22	3,126431E+21	3,126544E+21	4,930181E+22	6,252976E+21	5,555478E+22
2804	2,465187E+22	2,465071E+22	3,126167E+21	3,126309E+21	4,930258E+22	6,252477E+21	5,555506E+22
2805	2,465090E+22	2,465158E+22	3,126517E+21	3,126054E+21	4,930248E+22	6,252570E+21	5,555505E+22
2806	2,465138E+22	2,465198E+22	3,126106E+21	3,126549E+21	4,930336E+22	6,252654E+21	5,555601E+22
2807	2,465160E+22	2,465073E+22	3,126316E+21	3,126242E+21	4,930233E+22	6,252559E+21	5,555489E+22
2808	2,465038E+22	2,465140E+22	3,126664E+21	3,126333E+21	4,930178E+22	6,252998E+21	5,555478E+22
2809	2,465105E+22	2,465060E+22	3,126298E+21	3,126771E+21	4,930165E+22	6,253069E+21	5,555472E+22
2810	2,465006E+22	2,464934E+22	3,126838E+21	3,126485E+21	4,929940E+22	6,253323E+21	5,555272E+22
2811	2,464882E+22	2,464989E+22	3,126972E+21	3,126993E+21	4,929871E+22	6,253966E+21	5,555267E+22
2812	2,464918E+22	2,464838E+22	3,126815E+21	3,127209E+21	4,929755E+22	6,254024E+21	5,555158E+22
2813	2,464779E+22	2,464782E+22	3,127396E+21	3,126988E+21	4,929561E+22	6,254384E+21	5,555000E+22
2814	2,464761E+22	2,464811E+22	3,127165E+21	3,127501E+21	4,929572E+22	6,254666E+21	5,555039E+22
2815	2,464799E+22	2,464669E+22	3,127245E+21	3,127274E+21	4,929467E+22	6,254519E+21	5,554919E+22
2816	2,464666E+22	2,464759E+22	3,127609E+21	3,127108E+21	4,929425E+22	6,254716E+21	5,554897E+22
2817	2,464737E+22	2,464775E+22	3,127091E+21	3,127536E+21	4,929511E+22	6,254627E+21	5,554974E+22
2818	2,464736E+22	2,464686E+22	3,127314E+21	3,127053E+21	4,929422E+22	6,254366E+21	5,554859E+22
2819	2,464708E+22	2,464833E+22	3,127327E+21	3,127119E+21	4,929540E+22	6,254446E+21	5,554985E+22
2820	2,464880E+22	2,464809E+22	3,126771E+21	3,127164E+21	4,929689E+22	6,253935E+21	5,555082E+22
2821	2,464883E+22	2,464831E+22	3,127034E+21	3,126581E+21	4,929714E+22	6,253615E+21	5,555075E+22
2822	2,464908E+22	2,464992E+22	3,126747E+21	3,126879E+21	4,929900E+22	6,253625E+21	5,555263E+22
2823	2,465001E+22	2,464929E+22	3,126531E+21	3,126711E+21	4,929929E+22	6,253242E+21	5,555253E+22
2824	2,464911E+22	2,465001E+22	3,126947E+21	3,126436E+21	4,929912E+22	6,253383E+21	5,555250E+22
2825	2,464963E+22	2,465031E+22	3,126542E+21	3,126951E+21	4,929994E+22	6,253493E+21	5,555343E+22
2826	2,464976E+22	2,464871E+22	3,126751E+21	3,126660E+21	4,929847E+22	6,253411E+21	5,555188E+22
2827	2,464868E+22	2,464937E+22	3,127134E+21	3,126776E+21	4,929805E+22	6,253910E+21	5,555196E+22
2828	2,464906E+22	2,464869E+22	3,126754E+21	3,127248E+21	4,929775E+22	6,254002E+21	5,555175E+22
2829	2,464819E+22	2,464737E+22	3,127241E+21	3,127004E+21	4,929556E+22	6,254245E+21	5,554981E+22
2830	2,464697E+22	2,464798E+22	3,127386E+21	3,127466E+21	4,929495E+22	6,254852E+21	5,554980E+22
2831	2,464730E+22	2,464643E+22	3,127255E+21	3,127656E+21	4,929373E+22	6,254911E+21	5,554864E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2832	2,464611E+22	2,464604E+22	3,127858E+21	3,127347E+21	4,929215E+22	6,255205E+21	5,554736E+22
2833	2,464579E+22	2,464653E+22	3,127620E+21	3,127868E+21	4,929232E+22	6,255488E+21	5,554780E+22
2834	2,464588E+22	2,464495E+22	3,127673E+21	3,127683E+21	4,929083E+22	6,255356E+21	5,554618E+22
2835	2,464472E+22	2,464578E+22	3,128042E+21	3,127546E+21	4,929050E+22	6,255588E+21	5,554609E+22
2836	2,464547E+22	2,464596E+22	3,127493E+21	3,127952E+21	4,929143E+22	6,255444E+21	5,554687E+22
2837	2,464602E+22	2,464505E+22	3,127619E+21	3,127439E+21	4,929107E+22	6,255058E+21	5,554613E+22
2838	2,464590E+22	2,464676E+22	3,127620E+21	3,127432E+21	4,929266E+22	6,255052E+21	5,554772E+22
2839	2,464742E+22	2,464672E+22	3,127096E+21	3,127491E+21	4,929414E+22	6,254588E+21	5,554873E+22
2840	2,464738E+22	2,464708E+22	3,127394E+21	3,126906E+21	4,929447E+22	6,254299E+21	5,554876E+22
2841	2,464734E+22	2,464866E+22	3,127138E+21	3,127261E+21	4,929600E+22	6,254398E+21	5,555040E+22
2842	2,464810E+22	2,464754E+22	3,126937E+21	3,127130E+21	4,929564E+22	6,254067E+21	5,554971E+22
2843	2,464750E+22	2,464799E+22	3,127388E+21	3,126856E+21	4,929549E+22	6,254244E+21	5,554974E+22
2844	2,464790E+22	2,464836E+22	3,126976E+21	3,127351E+21	4,929626E+22	6,254327E+21	5,555058E+22
2845	2,464817E+22	2,464675E+22	3,127123E+21	3,127103E+21	4,929492E+22	6,254226E+21	5,554915E+22
2846	2,464687E+22	2,464759E+22	3,127513E+21	3,127221E+21	4,929447E+22	6,254734E+21	5,554920E+22
2847	2,464699E+22	2,464690E+22	3,127187E+21	3,127735E+21	4,929388E+22	6,254921E+21	5,554880E+22
2848	2,464628E+22	2,464557E+22	3,127717E+21	3,127440E+21	4,929185E+22	6,255157E+21	5,554701E+22
2849	2,464512E+22	2,464623E+22	3,127869E+21	3,127874E+21	4,929135E+22	6,255743E+21	5,554710E+22
2850	2,464532E+22	2,464448E+22	3,127738E+21	3,128064E+21	4,928980E+22	6,255802E+21	5,554560E+22
2851	2,464425E+22	2,464410E+22	3,128350E+21	3,127773E+21	4,928835E+22	6,256123E+21	5,554448E+22
2852	2,464367E+22	2,464474E+22	3,128068E+21	3,128309E+21	4,928842E+22	6,256377E+21	5,554479E+22
2853	2,464404E+22	2,464304E+22	3,128030E+21	3,128169E+21	4,928708E+22	6,256199E+21	5,554328E+22
2854	2,464316E+22	2,464395E+22	3,128366E+21	3,127966E+21	4,928711E+22	6,256332E+21	5,554344E+22
2855	2,464408E+22	2,464421E+22	3,127827E+21	3,128324E+21	4,928829E+22	6,256151E+21	5,554444E+22
2856	2,464484E+22	2,464364E+22	3,127960E+21	3,127722E+21	4,928848E+22	6,255681E+21	5,554416E+22
2857	2,464455E+22	2,464560E+22	3,127966E+21	3,127715E+21	4,929015E+22	6,255681E+21	5,554584E+22
2858	2,464559E+22	2,464535E+22	3,127467E+21	3,127827E+21	4,929094E+22	6,255295E+21	5,554624E+22
2859	2,464560E+22	2,464551E+22	3,127812E+21	3,127297E+21	4,929112E+22	6,255109E+21	5,554622E+22
2860	2,464545E+22	2,464694E+22	3,127557E+21	3,127642E+21	4,929239E+22	6,255199E+21	5,554759E+22
2861	2,464658E+22	2,464561E+22	3,127287E+21	3,127545E+21	4,929218E+22	6,254833E+21	5,554702E+22
2862	2,464608E+22	2,464614E+22	3,127730E+21	3,127240E+21	4,929222E+22	6,254970E+21	5,554719E+22
2863	2,464623E+22	2,464659E+22	3,127363E+21	3,127775E+21	4,929282E+22	6,255139E+21	5,554796E+22
2864	2,464641E+22	2,464519E+22	3,127538E+21	3,127533E+21	4,929160E+22	6,255071E+21	5,554667E+22
2865	2,464494E+22	2,464600E+22	3,127961E+21	3,127684E+21	4,929095E+22	6,255645E+21	5,554659E+22
2866	2,464488E+22	2,464493E+22	3,127686E+21	3,128208E+21	4,928981E+22	6,255894E+21	5,554570E+22
2867	2,464447E+22	2,464347E+22	3,128241E+21	3,127901E+21	4,928793E+22	6,256142E+21	5,554408E+22
2868	2,464311E+22	2,464425E+22	3,128373E+21	3,128292E+21	4,928735E+22	6,256665E+21	5,554402E+22
2869	2,464343E+22	2,464246E+22	3,128151E+21	3,128536E+21	4,928589E+22	6,256687E+21	5,554258E+22
2870	2,464229E+22	2,464220E+22	3,128721E+21	3,128233E+21	4,928449E+22	6,256954E+21	5,554145E+22
2871	2,464168E+22	2,464287E+22	3,128454E+21	3,128771E+21	4,928454E+22	6,257224E+21	5,554177E+22
2872	2,464244E+22	2,464136E+22	3,128400E+21	3,128549E+21	4,928379E+22	6,256949E+21	5,554074E+22
2873	2,464179E+22	2,464244E+22	3,128719E+21	3,128287E+21	4,928423E+22	6,257007E+21	5,554124E+22
2874	2,464260E+22	2,464268E+22	3,128210E+21	3,128626E+21	4,928528E+22	6,256836E+21	5,554211E+22
2875	2,464342E+22	2,464221E+22	3,128358E+21	3,128046E+21	4,928562E+22	6,256404E+21	5,554203E+22
2876	2,464274E+22	2,464428E+22	3,128357E+21	3,128054E+21	4,928702E+22	6,256411E+21	5,554343E+22
2877	2,464391E+22	2,464374E+22	3,127800E+21	3,128244E+21	4,928765E+22	6,256044E+21	5,554369E+22
2878	2,464406E+22	2,464375E+22	3,128134E+21	3,127694E+21	4,928781E+22	6,255828E+21	5,554364E+22
2879	2,464394E+22	2,464512E+22	3,127911E+21	3,128029E+21	4,928906E+22	6,255940E+21	5,554500E+22
2880	2,464516E+22	2,464400E+22	3,127658E+21	3,127899E+21	4,928917E+22	6,255556E+21	5,554472E+22

1	14	15	16	17	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							
2881	2,464447E+22	2,464468E+22	3,128111E+21	3,127622E+21	4,928915E+22	6,255732E+21	5,554488E+22
2882	2,464419E+22	2,464489E+22	3,127811E+21	3,128214E+21	4,928908E+22	6,256025E+21	5,554511E+22
2883	2,464445E+22	2,464333E+22	3,128035E+21	3,128010E+21	4,928778E+22	6,256046E+21	5,554383E+22
2884	2,464288E+22	2,464408E+22	3,128464E+21	3,128125E+21	4,928696E+22	6,256589E+21	5,554355E+22
2885	2,464309E+22	2,464280E+22	3,128131E+21	3,128678E+21	4,928590E+22	6,256808E+21	5,554270E+22
2886	2,464272E+22	2,464146E+22	3,128664E+21	3,128347E+21	4,928418E+22	6,257011E+21	5,554119E+22
2887	2,464115E+22	2,464230E+22	3,128802E+21	3,128755E+21	4,928345E+22	6,257556E+21	5,554101E+22
2888	2,464146E+22	2,464074E+22	3,128567E+21	3,128987E+21	4,928220E+22	6,257554E+21	5,553976E+22
2889	2,464044E+22	2,464050E+22	3,129111E+21	3,128666E+21	4,928094E+22	6,257777E+21	5,553872E+22
2890	2,463987E+22	2,464093E+22	3,128881E+21	3,129167E+21	4,928079E+22	6,258048E+21	5,553884E+22
2891	2,464101E+22	2,463959E+22	3,128830E+21	3,128897E+21	4,928060E+22	6,257727E+21	5,553833E+22
2892	2,464022E+22	2,464096E+22	3,129126E+21	3,128587E+21	4,928118E+22	6,257713E+21	5,553889E+22
2893	2,464103E+22	2,464118E+22	3,128553E+21	3,128988E+21	4,928221E+22	6,257541E+21	5,553975E+22
2894	2,464172E+22	2,464077E+22	3,128672E+21	3,128425E+21	4,928248E+22	6,257097E+21	5,553958E+22
2895	2,464094E+22	2,464265E+22	3,128699E+21	3,128449E+21	4,928359E+22	6,257148E+21	5,554074E+22
2896	2,464235E+22	2,464218E+22	3,128143E+21	3,128597E+21	4,928453E+22	6,256739E+21	5,554127E+22
2897	2,464268E+22	2,464221E+22	3,128468E+21	3,128031E+21	4,928489E+22	6,256499E+21	5,554139E+22
2898	2,464236E+22	2,464341E+22	3,128317E+21	3,128389E+21	4,928577E+22	6,256706E+21	5,554248E+22
2899	2,464359E+22	2,464238E+22	3,128093E+21	3,128311E+21	4,928597E+22	6,256404E+21	5,554237E+22
2900	2,464254E+22	2,464308E+22	3,128552E+21	3,128060E+21	4,928562E+22	6,256612E+21	5,554224E+22
2901	2,464236E+22	2,464296E+22	3,128231E+21	3,128718E+21	4,928533E+22	6,256948E+21	5,554227E+22
2902	2,464274E+22	2,464130E+22	3,128450E+21	3,128484E+21	4,928403E+22	6,256935E+21	5,554097E+22
2903	2,464109E+22	2,464203E+22	3,128910E+21	3,128568E+21	4,928312E+22	6,257478E+21	5,554060E+22
2904	2,464129E+22	2,464102E+22	3,128575E+21	3,129083E+21	4,928231E+22	6,257658E+21	5,553997E+22
2905	2,464071E+22	2,463975E+22	3,129094E+21	3,128772E+21	4,928046E+22	6,257866E+21	5,553833E+22
2906	2,463886E+22	2,464037E+22	3,129281E+21	3,129207E+21	4,927923E+22	6,258488E+21	5,553772E+22
2907	2,463946E+22	2,463878E+22	3,129054E+21	3,129439E+21	4,927824E+22	6,258493E+21	5,553673E+22
2908	2,463856E+22	2,463866E+22	3,129557E+21	3,129055E+21	4,927722E+22	6,258611E+21	5,553583E+22
2909	2,463839E+22	2,463905E+22	3,129263E+21	3,129560E+21	4,927744E+22	6,258823E+21	5,553626E+22
2910	2,463959E+22	2,463799E+22	3,129171E+21	3,129259E+21	4,927758E+22	6,258430E+21	5,553601E+22
2911	2,463859E+22	2,463950E+22	3,129468E+21	3,128958E+21	4,927809E+22	6,258426E+21	5,553652E+22
2912	2,463935E+22	2,463989E+22	3,128889E+21	3,129350E+21	4,927924E+22	6,258239E+21	5,553748E+22
2913	2,464010E+22	2,463935E+22	3,128999E+21	3,128791E+21	4,927945E+22	6,257789E+21	5,553724E+22
2914	2,463933E+22	2,464087E+22	3,129083E+21	3,128805E+21	4,928021E+22	6,257888E+21	5,553809E+22
2915	2,464100E+22	2,464049E+22	3,128546E+21	3,128941E+21	4,928149E+22	6,257487E+21	5,553898E+22
2916	2,464115E+22	2,464069E+22	3,128856E+21	3,128370E+21	4,928184E+22	6,257227E+21	5,553906E+22
2917	2,464078E+22	2,464171E+22	3,128684E+21	3,128814E+21	4,928249E+22	6,257498E+21	5,553999E+22
2918	2,464184E+22	2,464074E+22	3,128461E+21	3,128762E+21	4,928258E+22	6,257223E+21	5,553980E+22
2919	2,464069E+22	2,464125E+22	3,128961E+21	3,128515E+21	4,928193E+22	6,257477E+21	5,553941E+22
2920	2,464061E+22	2,464119E+22	3,128665E+21	3,129120E+21	4,928180E+22	6,257785E+21	5,553958E+22
2921	2,464102E+22	2,463956E+22	3,128883E+21	3,128876E+21	4,928058E+22	6,257759E+21	5,553834E+22
2922	2,463908E+22	2,464005E+22	3,129410E+21	3,128987E+21	4,927913E+22	6,258397E+21	5,553752E+22
2923	2,463921E+22	2,463916E+22	3,129090E+21	3,129544E+21	4,927837E+22	6,258634E+21	5,553700E+22
2924	2,463845E+22	2,463790E+22	3,129576E+21	3,129252E+21	4,927635E+22	6,258829E+21	5,553518E+22
2925	2,463692E+22	2,463816E+22	3,129716E+21	3,129724E+21	4,927508E+22	6,259440E+21	5,553452E+22
2926	2,463783E+22	2,463672E+22	3,129445E+21	3,129895E+21	4,927455E+22	6,259340E+21	5,553389E+22
2927	2,463703E+22	2,463678E+22	3,129931E+21	3,129457E+21	4,927381E+22	6,259388E+21	5,553320E+22
2928	2,463689E+22	2,463759E+22	3,129630E+21	3,129903E+21	4,927448E+22	6,259533E+21	5,553401E+22
2929	2,463793E+22	2,463671E+22	3,129508E+21	3,129600E+21	4,927464E+22	6,259108E+21	5,553375E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2930	2,463667E+22	2,463794E+22	3,129861E+21	3,129323E+21	4,927461E+22	6,259184E+21	5,553380E+22
2931	2,463763E+22	2,463829E+22	3,129299E+21	3,129703E+21	4,927593E+22	6,259001E+21	5,553493E+22
2932	2,463848E+22	2,463775E+22	3,129379E+21	3,129121E+21	4,927624E+22	6,258500E+21	5,553474E+22
2933	2,463804E+22	2,463906E+22	3,129428E+21	3,129176E+21	4,927711E+22	6,258604E+21	5,553571E+22
2934	2,463971E+22	2,463887E+22	3,128877E+21	3,129321E+21	4,927858E+22	6,258198E+21	5,553678E+22
2935	2,463958E+22	2,463915E+22	3,129196E+21	3,128786E+21	4,927873E+22	6,257983E+21	5,553672E+22
2936	2,463912E+22	2,464029E+22	3,129048E+21	3,129222E+21	4,927940E+22	6,258270E+21	5,553767E+22
2937	2,464013E+22	2,463914E+22	3,128847E+21	3,129163E+21	4,927928E+22	6,258011E+21	5,553729E+22
2938	2,463885E+22	2,463931E+22	3,129439E+21	3,128916E+21	4,927816E+22	6,258355E+21	5,553652E+22
2939	2,463881E+22	2,463934E+22	3,129180E+21	3,129510E+21	4,927815E+22	6,258689E+21	5,553684E+22
2940	2,463893E+22	2,463777E+22	3,129385E+21	3,129304E+21	4,927670E+22	6,258689E+21	5,553539E+22
2941	2,463697E+22	2,463794E+22	3,129868E+21	3,129507E+21	4,927491E+22	6,259375E+21	5,553428E+22
2942	2,463710E+22	2,463705E+22	3,129519E+21	3,130074E+21	4,927415E+22	6,259593E+21	5,553375E+22
2943	2,463648E+22	2,463576E+22	3,129986E+21	3,129752E+21	4,927224E+22	6,259737E+21	5,553198E+22
2944	2,463530E+22	2,463629E+22	3,130109E+21	3,130134E+21	4,927159E+22	6,260243E+21	5,553183E+22
2945	2,463635E+22	2,463512E+22	3,129825E+21	3,130249E+21	4,927147E+22	6,260074E+21	5,553154E+22
2946	2,463535E+22	2,463517E+22	3,130362E+21	3,129813E+21	4,927052E+22	6,260175E+21	5,553069E+22
2947	2,463512E+22	2,463619E+22	3,130071E+21	3,130259E+21	4,927131E+22	6,260330E+21	5,553164E+22
2948	2,463599E+22	2,463529E+22	3,129916E+21	3,129977E+21	4,927129E+22	6,259893E+21	5,553118E+22
2949	2,463505E+22	2,463602E+22	3,130225E+21	3,129737E+21	4,927107E+22	6,259962E+21	5,553103E+22
2950	2,463626E+22	2,463649E+22	3,129630E+21	3,130075E+21	4,927274E+22	6,259705E+21	5,553245E+22
2951	2,463716E+22	2,463608E+22	3,129689E+21	3,129478E+21	4,927324E+22	6,259167E+21	5,553241E+22
2952	2,463668E+22	2,463766E+22	3,129747E+21	3,129517E+21	4,927435E+22	6,259264E+21	5,553361E+22
2953	2,463814E+22	2,463761E+22	3,129205E+21	3,129672E+21	4,927575E+22	6,258877E+21	5,553463E+22
2954	2,463773E+22	2,463755E+22	3,129609E+21	3,129179E+21	4,927528E+22	6,258788E+21	5,553406E+22
2955	2,463733E+22	2,463863E+22	3,129515E+21	3,129593E+21	4,927596E+22	6,259109E+21	5,553507E+22
2956	2,463828E+22	2,463745E+22	3,129313E+21	3,129550E+21	4,927573E+22	6,258863E+21	5,553459E+22
2957	2,463711E+22	2,463721E+22	3,129892E+21	3,129375E+21	4,927432E+22	6,259267E+21	5,553359E+22
2958	2,463694E+22	2,463737E+22	3,129617E+21	3,129994E+21	4,927431E+22	6,259611E+21	5,553392E+22
2959	2,463686E+22	2,463578E+22	3,129804E+21	3,129836E+21	4,927264E+22	6,259640E+21	5,553227E+22
2960	2,463503E+22	2,463597E+22	3,130277E+21	3,130016E+21	4,927100E+22	6,260294E+21	5,553129E+22
2961	2,463536E+22	2,463510E+22	3,129925E+21	3,130522E+21	4,927045E+22	6,260446E+21	5,553090E+22
2962	2,463478E+22	2,463375E+22	3,130439E+21	3,130159E+21	4,926853E+22	6,260598E+21	5,552912E+22
2963	2,463369E+22	2,463464E+22	3,130587E+21	3,130480E+21	4,926832E+22	6,261066E+21	5,552939E+22
2964	2,463446E+22	2,463369E+22	3,130288E+21	3,130609E+21	4,926815E+22	6,260897E+21	5,552904E+22
2965	2,463342E+22	2,463344E+22	3,130777E+21	3,130246E+21	4,926686E+22	6,261023E+21	5,552788E+22
2966	2,463323E+22	2,463444E+22	3,130453E+21	3,130676E+21	4,926766E+22	6,261128E+21	5,552879E+22
2967	2,463423E+22	2,463346E+22	3,130261E+21	3,130377E+21	4,926770E+22	6,260638E+21	5,552834E+22
2968	2,463370E+22	2,463436E+22	3,130528E+21	3,130077E+21	4,926806E+22	6,260605E+21	5,552866E+22
2969	2,463502E+22	2,463503E+22	3,129929E+21	3,130376E+21	4,927005E+22	6,260305E+21	5,553035E+22
2970	2,463569E+22	2,463465E+22	3,130046E+21	3,129814E+21	4,927034E+22	6,259859E+21	5,553020E+22
2971	2,463511E+22	2,463641E+22	3,130141E+21	3,129862E+21	4,927152E+22	6,260003E+21	5,553152E+22
2972	2,463633E+22	2,463624E+22	3,129622E+21	3,130056E+21	4,927258E+22	6,259677E+21	5,553226E+22
2973	2,463610E+22	2,463560E+22	3,130019E+21	3,129621E+21	4,927170E+22	6,259640E+21	5,553134E+22
2974	2,463574E+22	2,463669E+22	3,129924E+21	3,130006E+21	4,927243E+22	6,259931E+21	5,553236E+22
2975	2,463654E+22	2,463554E+22	3,129719E+21	3,129989E+21	4,927209E+22	6,259708E+21	5,553179E+22
2976	2,463531E+22	2,463540E+22	3,130287E+21	3,129829E+21	4,927071E+22	6,260116E+21	5,553083E+22
2977	2,463498E+22	2,463559E+22	3,130019E+21	3,130447E+21	4,927057E+22	6,260466E+21	5,553104E+22
2978	2,463476E+22	2,463376E+22	3,130268E+21	3,130311E+21	4,926852E+22	6,260579E+21	5,552910E+22

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude ☉	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2979	2,463315E+22	2,463407E+22	3,130768E+21	3,130429E+21	4,926722E+22	6,261196E+21	5,552842E+22
2980	2,463354E+22	2,463335E+22	3,130420E+21	3,130919E+21	4,926689E+22	6,261338E+21	5,552822E+22
2981	2,463307E+22	2,463176E+22	3,130907E+21	3,130600E+21	4,926484E+22	6,261507E+21	5,552635E+22
2982	2,463185E+22	2,463291E+22	3,131026E+21	3,130909E+21	4,926476E+22	6,261935E+21	5,552670E+22
2983	2,463243E+22	2,463200E+22	3,130681E+21	3,131067E+21	4,926444E+22	6,261749E+21	5,552619E+22
2984	2,463158E+22	2,463167E+22	3,131128E+21	3,130682E+21	4,926325E+22	6,261810E+21	5,552506E+22
2985	2,463166E+22	2,463268E+22	3,130779E+21	3,131028E+21	4,926434E+22	6,261807E+21	5,552614E+22
2986	2,463278E+22	2,463170E+22	3,130615E+21	3,130711E+21	4,926448E+22	6,261326E+21	5,552581E+22
2987	2,463237E+22	2,463295E+22	3,130896E+21	3,130368E+21	4,926532E+22	6,261264E+21	5,552658E+22
2988	2,463347E+22	2,463382E+22	3,130310E+21	3,130705E+21	4,926728E+22	6,261014E+21	5,552830E+22
2989	2,463405E+22	2,463307E+22	3,130406E+21	3,130225E+21	4,926712E+22	6,260631E+21	5,552775E+22
2990	2,463346E+22	2,463478E+22	3,130508E+21	3,130255E+21	4,926824E+22	6,260763E+21	5,552900E+22
2991	2,463466E+22	2,463450E+22	3,129989E+21	3,130449E+21	4,926916E+22	6,260438E+21	5,552960E+22
2992	2,463462E+22	2,463386E+22	3,130380E+21	3,130011E+21	4,926848E+22	6,260391E+21	5,552887E+22
2993	2,463419E+22	2,463502E+22	3,130305E+21	3,130371E+21	4,926920E+22	6,260677E+21	5,552988E+22
2994	2,463465E+22	2,463379E+22	3,130162E+21	3,130428E+21	4,926845E+22	6,260589E+21	5,552904E+22
2995	2,463334E+22	2,463373E+22	3,130752E+21	3,130274E+21	4,926707E+22	6,261026E+21	5,552809E+22
2996	2,463293E+22	2,463376E+22	3,130516E+21	3,130917E+21	4,926669E+22	6,261432E+21	5,552812E+22
2997	2,463292E+22	2,463154E+22	3,130743E+21	3,130806E+21	4,926447E+22	6,261549E+21	5,552602E+22
2998	2,463147E+22	2,463203E+22	3,131223E+21	3,130869E+21	4,926350E+22	6,262092E+21	5,552559E+22
2999	2,463165E+22	2,463148E+22	3,130872E+21	3,131360E+21	4,926313E+22	6,262233E+21	5,552536E+22