

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	7,610989E+22	7,610836E+22	6,302571E+22	6,302606E+22	1,522182E+23	1,260518E+23	2,782700E+23
-2999	7,610562E+22	7,610879E+22	6,302752E+22	6,302649E+22	1,522144E+23	1,260540E+23	2,782684E+23
-2998	7,610869E+22	7,610912E+22	6,302744E+22	6,302888E+22	1,522178E+23	1,260563E+23	2,782741E+23
-2997	7,610858E+22	7,610823E+22	6,302821E+22	6,302652E+22	1,522168E+23	1,260547E+23	2,782715E+23
-2996	7,610650E+22	7,610764E+22	6,302978E+22	6,302890E+22	1,522141E+23	1,260587E+23	2,782728E+23
-2995	7,611024E+22	7,610822E+22	6,302886E+22	6,303007E+22	1,522185E+23	1,260589E+23	2,782774E+23
-2994	7,610741E+22	7,610844E+22	6,302936E+22	6,302829E+22	1,522159E+23	1,260577E+23	2,782735E+23
-2993	7,610773E+22	7,610846E+22	6,302942E+22	6,303099E+22	1,522162E+23	1,260604E+23	2,782766E+23
-2992	7,611059E+22	7,610877E+22	6,302848E+22	6,302937E+22	1,522194E+23	1,260578E+23	2,782772E+23
-2991	7,610674E+22	7,610856E+22	6,302989E+22	6,302787E+22	1,522153E+23	1,260578E+23	2,782731E+23
-2990	7,610923E+22	7,610897E+22	6,302922E+22	6,302976E+22	1,522182E+23	1,260590E+23	2,782772E+23
-2989	7,610957E+22	7,610879E+22	6,302846E+22	6,302716E+22	1,522184E+23	1,260556E+23	2,782740E+23
-2988	7,610579E+22	7,610832E+22	6,302896E+22	6,302828E+22	1,522141E+23	1,260572E+23	2,782713E+23
-2987	7,610908E+22	7,610864E+22	6,302757E+22	6,302917E+22	1,522177E+23	1,260567E+23	2,782745E+23
-2986	7,610720E+22	7,610807E+22	6,302756E+22	6,302602E+22	1,522153E+23	1,260536E+23	2,782688E+23
-2985	7,610688E+22	7,610732E+22	6,302749E+22	6,302775E+22	1,522142E+23	1,260552E+23	2,782694E+23
-2984	7,611063E+22	7,610772E+22	6,302620E+22	6,302710E+22	1,522183E+23	1,260533E+23	2,782716E+23
-2983	7,610668E+22	7,610779E+22	6,302723E+22	6,302571E+22	1,522145E+23	1,260529E+23	2,782674E+23
-2982	7,610780E+22	7,610867E+22	6,302700E+22	6,302839E+22	1,522165E+23	1,260554E+23	2,782719E+23
-2981	7,610940E+22	7,610890E+22	6,302690E+22	6,302687E+22	1,522183E+23	1,260538E+23	2,782721E+23
-2980	7,610560E+22	7,610799E+22	6,302873E+22	6,302753E+22	1,522136E+23	1,260563E+23	2,782698E+23
-2979	7,610908E+22	7,610829E+22	6,302896E+22	6,302958E+22	1,522174E+23	1,260585E+23	2,782759E+23
-2978	7,610856E+22	7,610812E+22	6,302953E+22	6,302775E+22	1,522167E+23	1,260573E+23	2,782740E+23
-2977	7,610668E+22	7,610771E+22	6,303008E+22	6,303023E+22	1,522144E+23	1,260603E+23	2,782747E+23
-2976	7,611040E+22	7,610878E+22	6,302913E+22	6,303129E+22	1,522192E+23	1,260604E+23	2,782796E+23
-2975	7,610715E+22	7,610851E+22	6,303029E+22	6,302936E+22	1,522157E+23	1,260597E+23	2,782753E+23
-2974	7,610761E+22	7,610892E+22	6,303034E+22	6,303116E+22	1,522165E+23	1,260615E+23	2,782780E+23
-2973	7,611086E+22	7,610903E+22	6,302988E+22	6,302963E+22	1,522199E+23	1,260595E+23	2,782794E+23
-2972	7,610679E+22	7,610792E+22	6,303085E+22	6,302886E+22	1,522147E+23	1,260597E+23	2,782744E+23
-2971	7,610878E+22	7,610872E+22	6,303010E+22	6,303075E+22	1,522175E+23	1,260609E+23	2,782784E+23
-2970	7,610877E+22	7,610894E+22	6,302919E+22	6,302845E+22	1,522177E+23	1,260576E+23	2,782753E+23
-2969	7,610572E+22	7,610776E+22	6,302900E+22	6,302901E+22	1,522135E+23	1,260580E+23	2,782715E+23
-2968	7,610969E+22	7,610823E+22	6,302785E+22	6,302949E+22	1,522179E+23	1,260573E+23	2,782753E+23
-2967	7,610770E+22	7,610739E+22	6,302835E+22	6,302651E+22	1,522151E+23	1,260549E+23	2,782699E+23
-2966	7,610697E+22	7,610783E+22	6,302796E+22	6,302802E+22	1,522148E+23	1,260560E+23	2,782708E+23
-2965	7,611053E+22	7,610873E+22	6,302704E+22	6,302787E+22	1,522193E+23	1,260549E+23	2,782742E+23
-2964	7,610628E+22	7,610785E+22	6,302805E+22	6,302703E+22	1,522141E+23	1,260551E+23	2,782692E+23
-2963	7,610737E+22	7,610861E+22	6,302843E+22	6,302919E+22	1,522160E+23	1,260576E+23	2,782736E+23
-2962	7,610906E+22	7,610880E+22	6,302857E+22	6,302782E+22	1,522179E+23	1,260564E+23	2,782743E+23
-2961	7,610602E+22	7,610723E+22	6,302970E+22	6,302854E+22	1,522133E+23	1,260582E+23	2,782715E+23
-2960	7,610955E+22	7,610807E+22	6,302966E+22	6,303087E+22	1,522176E+23	1,260605E+23	2,782781E+23
-2959	7,610825E+22	7,610796E+22	6,303027E+22	6,302948E+22	1,522162E+23	1,260597E+23	2,782760E+23
-2958	7,610628E+22	7,610842E+22	6,303042E+22	6,303123E+22	1,522147E+23	1,260617E+23	2,782764E+23
-2957	7,611051E+22	7,610931E+22	6,303007E+22	6,303185E+22	1,522198E+23	1,260619E+23	2,782817E+23
-2956	7,610754E+22	7,610799E+22	6,303133E+22	6,302995E+22	1,522155E+23	1,260613E+23	2,782768E+23
-2955	7,610805E+22	7,610858E+22	6,303176E+22	6,303132E+22	1,522166E+23	1,260631E+23	2,782797E+23
-2954	7,611055E+22	7,610928E+22	6,303112E+22	6,303040E+22	1,522198E+23	1,260615E+23	2,782813E+23
-2953	7,610657E+22	7,610790E+22	6,303120E+22	6,302999E+22	1,522145E+23	1,260612E+23	2,782757E+23
-2952	7,610853E+22	7,610877E+22	6,303037E+22	6,303174E+22	1,522173E+23	1,260621E+23	2,782794E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2951	7,610824E+22	7,610842E+22	6,302994E+22	6,302944E+22	1,522167E+23	1,260594E+23	2,782760E+23
-2950	7,610575E+22	7,610774E+22	6,302949E+22	6,302918E+22	1,522135E+23	1,260587E+23	2,782722E+23
-2949	7,611028E+22	7,610818E+22	6,302870E+22	6,302978E+22	1,522185E+23	1,260585E+23	2,782769E+23
-2948	7,610794E+22	7,610700E+22	6,302889E+22	6,302750E+22	1,522149E+23	1,260564E+23	2,782713E+23
-2947	7,610671E+22	7,610805E+22	6,302873E+22	6,302878E+22	1,522148E+23	1,260575E+23	2,782723E+23
-2946	7,610975E+22	7,610932E+22	6,302807E+22	6,302890E+22	1,522191E+23	1,260570E+23	2,782760E+23
-2945	7,610621E+22	7,610757E+22	6,302880E+22	6,302791E+22	1,522138E+23	1,260567E+23	2,782705E+23
-2944	7,610767E+22	7,610822E+22	6,302948E+22	6,302989E+22	1,522159E+23	1,260594E+23	2,782753E+23
-2943	7,610913E+22	7,610814E+22	6,302994E+22	6,302907E+22	1,522173E+23	1,260590E+23	2,782763E+23
-2942	7,610598E+22	7,610755E+22	6,303037E+22	6,302953E+22	1,522135E+23	1,260599E+23	2,782734E+23
-2941	7,610966E+22	7,610870E+22	6,303048E+22	6,303215E+22	1,522184E+23	1,260626E+23	2,782810E+23
-2940	7,610825E+22	7,610787E+22	6,303100E+22	6,303088E+22	1,522161E+23	1,260619E+23	2,782780E+23
-2939	7,610634E+22	7,610844E+22	6,303172E+22	6,303168E+22	1,522148E+23	1,260634E+23	2,782782E+23
-2938	7,611060E+22	7,610949E+22	6,303170E+22	6,303231E+22	1,522201E+23	1,260640E+23	2,782841E+23
-2937	7,610802E+22	7,610746E+22	6,303226E+22	6,303054E+22	1,522155E+23	1,260628E+23	2,782783E+23
-2936	7,610799E+22	7,610857E+22	6,303245E+22	6,303225E+22	1,522166E+23	1,260647E+23	2,782813E+23
-2935	7,610970E+22	7,610915E+22	6,303177E+22	6,303196E+22	1,522188E+23	1,260637E+23	2,782826E+23
-2934	7,610578E+22	7,610813E+22	6,303136E+22	6,303082E+22	1,522139E+23	1,260622E+23	2,782761E+23
-2933	7,610860E+22	7,610869E+22	6,303099E+22	6,303227E+22	1,522173E+23	1,260633E+23	2,782806E+23
-2932	7,610874E+22	7,610747E+22	6,303051E+22	6,302998E+22	1,522162E+23	1,260605E+23	2,782767E+23
-2931	7,610634E+22	7,610745E+22	6,303033E+22	6,302924E+22	1,522138E+23	1,260596E+23	2,782734E+23
-2930	7,611025E+22	7,610880E+22	6,302955E+22	6,303038E+22	1,522190E+23	1,260599E+23	2,782790E+23
-2929	7,610790E+22	7,610737E+22	6,302921E+22	6,302845E+22	1,522153E+23	1,260577E+23	2,782729E+23
-2928	7,610642E+22	7,610850E+22	6,302949E+22	6,302963E+22	1,522149E+23	1,260591E+23	2,782740E+23
-2927	7,610909E+22	7,610910E+22	6,302949E+22	6,302999E+22	1,522182E+23	1,260595E+23	2,782777E+23
-2926	7,610605E+22	7,610746E+22	6,302999E+22	6,302853E+22	1,522135E+23	1,260585E+23	2,782720E+23
-2925	7,610809E+22	7,610791E+22	6,303081E+22	6,303089E+22	1,522160E+23	1,260617E+23	2,782777E+23
-2924	7,610915E+22	7,610751E+22	6,303074E+22	6,303080E+22	1,522167E+23	1,260615E+23	2,782782E+23
-2923	7,610594E+22	7,610763E+22	6,303111E+22	6,303073E+22	1,522136E+23	1,260618E+23	2,782754E+23
-2922	7,610938E+22	7,610911E+22	6,303137E+22	6,303313E+22	1,522185E+23	1,260645E+23	2,782830E+23
-2921	7,610872E+22	7,610768E+22	6,303166E+22	6,303149E+22	1,522164E+23	1,260632E+23	2,782796E+23
-2920	7,610697E+22	7,610831E+22	6,303277E+22	6,303191E+22	1,522153E+23	1,260647E+23	2,782800E+23
-2919	7,611038E+22	7,610928E+22	6,303307E+22	6,303320E+22	1,522197E+23	1,260663E+23	2,782859E+23
-2918	7,610748E+22	7,610807E+22	6,303298E+22	6,303143E+22	1,522156E+23	1,260644E+23	2,782800E+23
-2917	7,610752E+22	7,610899E+22	6,303321E+22	6,303348E+22	1,522165E+23	1,260667E+23	2,782832E+23
-2916	7,610916E+22	7,610866E+22	6,303233E+22	6,303335E+22	1,522178E+23	1,260657E+23	2,782835E+23
-2915	7,610583E+22	7,610767E+22	6,303217E+22	6,303117E+22	1,522135E+23	1,260633E+23	2,782768E+23
-2914	7,610895E+22	7,610843E+22	6,303197E+22	6,303253E+22	1,522174E+23	1,260645E+23	2,782819E+23
-2913	7,610952E+22	7,610699E+22	6,303089E+22	6,303046E+22	1,522165E+23	1,260613E+23	2,782779E+23
-2912	7,610653E+22	7,610773E+22	6,303072E+22	6,302984E+22	1,522143E+23	1,260606E+23	2,782748E+23
-2911	7,610943E+22	7,610917E+22	6,303031E+22	6,303155E+22	1,522186E+23	1,260619E+23	2,782805E+23
-2910	7,610717E+22	7,610792E+22	6,302984E+22	6,302908E+22	1,522151E+23	1,260589E+23	2,782740E+23
-2909	7,610638E+22	7,610846E+22	6,303075E+22	6,303032E+22	1,522148E+23	1,260611E+23	2,782759E+23
-2908	7,610924E+22	7,610812E+22	6,303071E+22	6,303107E+22	1,522174E+23	1,260618E+23	2,782791E+23
-2907	7,610633E+22	7,610697E+22	6,303117E+22	6,302931E+22	1,522133E+23	1,260605E+23	2,782738E+23
-2906	7,610809E+22	7,610822E+22	6,303180E+22	6,303217E+22	1,522163E+23	1,260640E+23	2,782803E+23
-2905	7,610940E+22	7,610753E+22	6,303104E+22	6,303212E+22	1,522169E+23	1,260632E+23	2,782801E+23
-2904	7,610603E+22	7,610799E+22	6,303183E+22	6,303153E+22	1,522140E+23	1,260634E+23	2,782774E+23
-2903	7,610914E+22	7,610922E+22	6,303274E+22	6,303398E+22	1,522184E+23	1,260667E+23	2,782851E+23

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	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2902	7,610872E+22	7,610794E+22	6,303285E+22	6,303186E+22	1,522167E+23	1,260647E+23	2,782814E+23
-2901	7,610712E+22	7,610845E+22	6,303413E+22	6,303285E+22	1,522156E+23	1,260670E+23	2,782825E+23
-2900	7,610977E+22	7,610889E+22	6,303392E+22	6,303483E+22	1,522187E+23	1,260688E+23	2,782874E+23
-2899	7,610689E+22	7,610797E+22	6,303369E+22	6,303256E+22	1,522149E+23	1,260663E+23	2,782811E+23
-2898	7,610715E+22	7,610890E+22	6,303396E+22	6,303435E+22	1,522161E+23	1,260683E+23	2,782844E+23
-2897	7,610973E+22	7,610789E+22	6,303263E+22	6,303383E+22	1,522176E+23	1,260665E+23	2,782841E+23
-2896	7,610675E+22	7,610733E+22	6,303269E+22	6,303119E+22	1,522141E+23	1,260639E+23	2,782780E+23
-2895	7,610906E+22	7,610849E+22	6,303274E+22	6,303309E+22	1,522176E+23	1,260658E+23	2,782834E+23
-2894	7,610923E+22	7,610796E+22	6,303127E+22	6,303094E+22	1,522172E+23	1,260622E+23	2,782794E+23
-2893	7,610623E+22	7,610852E+22	6,303157E+22	6,303073E+22	1,522148E+23	1,260623E+23	2,782771E+23
-2892	7,610859E+22	7,610896E+22	6,303139E+22	6,303271E+22	1,522176E+23	1,260641E+23	2,782816E+23
-2891	7,610699E+22	7,610757E+22	6,303126E+22	6,302968E+22	1,522146E+23	1,260609E+23	2,782755E+23
-2890	7,610646E+22	7,610788E+22	6,303217E+22	6,303110E+22	1,522143E+23	1,260633E+23	2,782776E+23
-2889	7,610968E+22	7,610732E+22	6,303128E+22	6,303234E+22	1,522170E+23	1,260636E+23	2,782806E+23
-2888	7,610658E+22	7,610695E+22	6,303150E+22	6,303051E+22	1,522135E+23	1,260620E+23	2,782755E+23
-2887	7,610756E+22	7,610846E+22	6,303237E+22	6,303362E+22	1,522160E+23	1,260660E+23	2,782820E+23
-2886	7,610916E+22	7,610817E+22	6,303163E+22	6,303274E+22	1,522173E+23	1,260644E+23	2,782817E+23
-2885	7,610648E+22	7,610822E+22	6,303313E+22	6,303203E+22	1,522147E+23	1,260652E+23	2,782799E+23
-2884	7,610917E+22	7,610875E+22	6,303418E+22	6,303483E+22	1,522179E+23	1,260690E+23	2,782869E+23
-2883	7,610871E+22	7,610796E+22	6,303422E+22	6,303263E+22	1,522167E+23	1,260669E+23	2,782835E+23
-2882	7,610667E+22	7,610876E+22	6,303530E+22	6,303413E+22	1,522154E+23	1,260694E+23	2,782849E+23
-2881	7,610957E+22	7,610863E+22	6,303436E+22	6,303624E+22	1,522182E+23	1,260706E+23	2,782888E+23
-2880	7,610697E+22	7,610775E+22	6,303429E+22	6,303331E+22	1,522147E+23	1,260676E+23	2,782823E+23
-2879	7,610718E+22	7,610854E+22	6,303488E+22	6,303504E+22	1,522157E+23	1,260699E+23	2,782856E+23
-2878	7,611015E+22	7,610790E+22	6,303323E+22	6,303392E+22	1,522180E+23	1,260672E+23	2,782852E+23
-2877	7,610723E+22	7,610766E+22	6,303343E+22	6,303180E+22	1,522149E+23	1,260652E+23	2,782801E+23
-2876	7,610849E+22	7,610863E+22	6,303329E+22	6,303425E+22	1,522171E+23	1,260675E+23	2,782847E+23
-2875	7,610853E+22	7,610830E+22	6,303195E+22	6,303165E+22	1,522168E+23	1,260636E+23	2,782804E+23
-2874	7,610573E+22	7,610856E+22	6,303268E+22	6,303148E+22	1,522143E+23	1,260642E+23	2,782784E+23
-2873	7,610879E+22	7,610802E+22	6,303210E+22	6,303339E+22	1,522168E+23	1,260655E+23	2,782823E+23
-2872	7,610748E+22	7,610688E+22	6,303211E+22	6,303025E+22	1,522144E+23	1,260624E+23	2,782767E+23
-2871	7,610641E+22	7,610773E+22	6,303297E+22	6,303236E+22	1,522141E+23	1,260653E+23	2,782795E+23
-2870	7,610952E+22	7,610790E+22	6,303157E+22	6,303334E+22	1,522174E+23	1,260649E+23	2,782823E+23
-2869	7,610672E+22	7,610767E+22	6,303219E+22	6,303164E+22	1,522144E+23	1,260638E+23	2,782782E+23
-2868	7,610723E+22	7,610847E+22	6,303344E+22	6,303462E+22	1,522157E+23	1,260681E+23	2,782838E+23
-2867	7,610929E+22	7,610822E+22	6,303317E+22	6,303311E+22	1,522175E+23	1,260663E+23	2,782838E+23
-2866	7,610669E+22	7,610811E+22	6,303496E+22	6,303279E+22	1,522148E+23	1,260677E+23	2,782825E+23
-2865	7,610917E+22	7,610828E+22	6,303517E+22	6,303615E+22	1,522174E+23	1,260713E+23	2,782888E+23
-2864	7,610848E+22	7,610792E+22	6,303496E+22	6,303403E+22	1,522164E+23	1,260690E+23	2,782854E+23
-2863	7,610596E+22	7,610865E+22	6,303599E+22	6,303566E+22	1,522146E+23	1,260716E+23	2,782863E+23
-2862	7,610944E+22	7,610863E+22	6,303478E+22	6,303685E+22	1,522181E+23	1,260716E+23	2,782897E+23
-2861	7,610781E+22	7,610762E+22	6,303501E+22	6,303371E+22	1,522154E+23	1,260687E+23	2,782841E+23
-2860	7,610743E+22	7,610812E+22	6,303562E+22	6,303558E+22	1,522155E+23	1,260712E+23	2,782867E+23
-2859	7,611028E+22	7,610835E+22	6,303397E+22	6,303430E+22	1,522186E+23	1,260683E+23	2,782869E+23
-2858	7,610687E+22	7,610829E+22	6,303428E+22	6,303255E+22	1,522152E+23	1,260668E+23	2,782820E+23
-2857	7,610792E+22	7,610859E+22	6,303378E+22	6,303519E+22	1,522165E+23	1,260690E+23	2,782855E+23
-2856	7,610833E+22	7,610807E+22	6,303283E+22	6,303224E+22	1,522164E+23	1,260651E+23	2,782815E+23
-2855	7,610544E+22	7,610790E+22	6,303383E+22	6,303234E+22	1,522133E+23	1,260662E+23	2,782795E+23
-2854	7,610895E+22	7,610763E+22	6,303283E+22	6,303402E+22	1,522166E+23	1,260668E+23	2,782834E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2853	7,610794E+22	7,610685E+22	6,303268E+22	6,303145E+22	1,522148E+23	1,260641E+23	2,782789E+23
-2852	7,610600E+22	7,610769E+22	6,303335E+22	6,303383E+22	1,522137E+23	1,260672E+23	2,782809E+23
-2851	7,610936E+22	7,610830E+22	6,303224E+22	6,303409E+22	1,522177E+23	1,260663E+23	2,782840E+23
-2850	7,610685E+22	7,610792E+22	6,303352E+22	6,303221E+22	1,522148E+23	1,260657E+23	2,782805E+23
-2849	7,610767E+22	7,610803E+22	6,303463E+22	6,303518E+22	1,522157E+23	1,260698E+23	2,782855E+23
-2848	7,610974E+22	7,610802E+22	6,303458E+22	6,303378E+22	1,522178E+23	1,260684E+23	2,782861E+23
-2847	7,610629E+22	7,610823E+22	6,303628E+22	6,303435E+22	1,522145E+23	1,260706E+23	2,782852E+23
-2846	7,610861E+22	7,610871E+22	6,303585E+22	6,303747E+22	1,522173E+23	1,260733E+23	2,782906E+23
-2845	7,610840E+22	7,610821E+22	6,303572E+22	6,303548E+22	1,522166E+23	1,260712E+23	2,782878E+23
-2844	7,610573E+22	7,610827E+22	6,303680E+22	6,303678E+22	1,522140E+23	1,260736E+23	2,782876E+23
-2843	7,610984E+22	7,610835E+22	6,303570E+22	6,303705E+22	1,522182E+23	1,260727E+23	2,782909E+23
-2842	7,610834E+22	7,610757E+22	6,303610E+22	6,303412E+22	1,522159E+23	1,260702E+23	2,782861E+23
-2841	7,610756E+22	7,610794E+22	6,303597E+22	6,303632E+22	1,522155E+23	1,260723E+23	2,782878E+23
-2840	7,610991E+22	7,610858E+22	6,303441E+22	6,303502E+22	1,522185E+23	1,260694E+23	2,782879E+23
-2839	7,610603E+22	7,610840E+22	6,303503E+22	6,303361E+22	1,522144E+23	1,260686E+23	2,782831E+23
-2838	7,610750E+22	7,610840E+22	6,303442E+22	6,303552E+22	1,522159E+23	1,260699E+23	2,782858E+23
-2837	7,610884E+22	7,610766E+22	6,303370E+22	6,303285E+22	1,522165E+23	1,260665E+23	2,782830E+23
-2836	7,610552E+22	7,610722E+22	6,303457E+22	6,303329E+22	1,522127E+23	1,260679E+23	2,782806E+23
-2835	7,610906E+22	7,610778E+22	6,303342E+22	6,303479E+22	1,522168E+23	1,260682E+23	2,782851E+23
-2834	7,610798E+22	7,610741E+22	6,303347E+22	6,303250E+22	1,522154E+23	1,260660E+23	2,782814E+23
-2833	7,610595E+22	7,610776E+22	6,303396E+22	6,303476E+22	1,522137E+23	1,260687E+23	2,782824E+23
-2832	7,610957E+22	7,610838E+22	6,303350E+22	6,303460E+22	1,522179E+23	1,260681E+23	2,782860E+23
-2831	7,610683E+22	7,610778E+22	6,303519E+22	6,303313E+22	1,522146E+23	1,260683E+23	2,782829E+23
-2830	7,610757E+22	7,610802E+22	6,303591E+22	6,303607E+22	1,522156E+23	1,260720E+23	2,782876E+23
-2829	7,610975E+22	7,610826E+22	6,303556E+22	6,303548E+22	1,522180E+23	1,260710E+23	2,782890E+23
-2828	7,610542E+22	7,610800E+22	6,303696E+22	6,303623E+22	1,522134E+23	1,260732E+23	2,782866E+23
-2827	7,610829E+22	7,610866E+22	6,303657E+22	6,303848E+22	1,522170E+23	1,260750E+23	2,782920E+23
-2826	7,610881E+22	7,610791E+22	6,303671E+22	6,303604E+22	1,522167E+23	1,260728E+23	2,782895E+23
-2825	7,610642E+22	7,610758E+22	6,303739E+22	6,303712E+22	1,522140E+23	1,260745E+23	2,782885E+23
-2824	7,611054E+22	7,610825E+22	6,303648E+22	6,303729E+22	1,522188E+23	1,260738E+23	2,782926E+23
-2823	7,610805E+22	7,610804E+22	6,303688E+22	6,303502E+22	1,522161E+23	1,260719E+23	2,782880E+23
-2822	7,610692E+22	7,610860E+22	6,303648E+22	6,303693E+22	1,522155E+23	1,260734E+23	2,782889E+23
-2821	7,610964E+22	7,610893E+22	6,303516E+22	6,303591E+22	1,522186E+23	1,260711E+23	2,782896E+23
-2820	7,610545E+22	7,610780E+22	6,303605E+22	6,303448E+22	1,522133E+23	1,260705E+23	2,782838E+23
-2819	7,610761E+22	7,610783E+22	6,303548E+22	6,303589E+22	1,522154E+23	1,260714E+23	2,782868E+23
-2818	7,610923E+22	7,610728E+22	6,303475E+22	6,303370E+22	1,522165E+23	1,260684E+23	2,782849E+23
-2817	7,610563E+22	7,610695E+22	6,303474E+22	6,303449E+22	1,522126E+23	1,260692E+23	2,782818E+23
-2816	7,610907E+22	7,610796E+22	6,303379E+22	6,303571E+22	1,522170E+23	1,260695E+23	2,782865E+23
-2815	7,610768E+22	7,610776E+22	6,303432E+22	6,303353E+22	1,522154E+23	1,260678E+23	2,782833E+23
-2814	7,610602E+22	7,610790E+22	6,303498E+22	6,303502E+22	1,522139E+23	1,260700E+23	2,782839E+23
-2813	7,611007E+22	7,610847E+22	6,303485E+22	6,303535E+22	1,522185E+23	1,260702E+23	2,782887E+23
-2812	7,610658E+22	7,610757E+22	6,303658E+22	6,303452E+22	1,522141E+23	1,260711E+23	2,782852E+23
-2811	7,610712E+22	7,610823E+22	6,303696E+22	6,303728E+22	1,522154E+23	1,260742E+23	2,782896E+23
-2810	7,610942E+22	7,610849E+22	6,303666E+22	6,303698E+22	1,522179E+23	1,260736E+23	2,782915E+23
-2809	7,610539E+22	7,610756E+22	6,303754E+22	6,303741E+22	1,522130E+23	1,260749E+23	2,782879E+23
-2808	7,610878E+22	7,610814E+22	6,303753E+22	6,303893E+22	1,522169E+23	1,260765E+23	2,782934E+23
-2807	7,610923E+22	7,610769E+22	6,303787E+22	6,303670E+22	1,522169E+23	1,260746E+23	2,782915E+23
-2806	7,610669E+22	7,610768E+22	6,303810E+22	6,303747E+22	1,522144E+23	1,260756E+23	2,782899E+23
-2805	7,611053E+22	7,610888E+22	6,303702E+22	6,303831E+22	1,522194E+23	1,260753E+23	2,782947E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2804	7,610707E+22	7,610820E+22	6,303751E+22	6,303625E+22	1,522153E+23	1,260738E+23	2,782890E+23
-2803	7,610624E+22	7,610865E+22	6,303728E+22	6,303742E+22	1,522149E+23	1,260747E+23	2,782896E+23
-2802	7,610966E+22	7,610858E+22	6,303633E+22	6,303642E+22	1,522182E+23	1,260727E+23	2,782910E+23
-2801	7,610583E+22	7,610684E+22	6,303666E+22	6,303511E+22	1,522127E+23	1,260718E+23	2,782844E+23
-2800	7,610813E+22	7,610737E+22	6,303614E+22	6,303655E+22	1,522155E+23	1,260727E+23	2,782882E+23
-2799	7,610909E+22	7,610762E+22	6,303531E+22	6,303492E+22	1,522167E+23	1,260702E+23	2,782869E+23
-2798	7,610540E+22	7,610756E+22	6,303511E+22	6,303521E+22	1,522130E+23	1,260703E+23	2,782833E+23
-2797	7,610922E+22	7,610860E+22	6,303456E+22	6,303655E+22	1,522178E+23	1,260711E+23	2,782889E+23
-2796	7,610734E+22	7,610757E+22	6,303564E+22	6,303432E+22	1,522149E+23	1,260700E+23	2,782849E+23
-2795	7,610602E+22	7,610775E+22	6,303655E+22	6,303554E+22	1,522138E+23	1,260721E+23	2,782859E+23
-2794	7,611008E+22	7,610832E+22	6,303637E+22	6,303653E+22	1,522184E+23	1,260729E+23	2,782913E+23
-2793	7,610615E+22	7,610713E+22	6,303723E+22	6,303619E+22	1,522133E+23	1,260734E+23	2,782867E+23
-2792	7,610695E+22	7,610791E+22	6,303770E+22	6,303860E+22	1,522149E+23	1,260763E+23	2,782912E+23
-2791	7,610926E+22	7,610828E+22	6,303757E+22	6,303815E+22	1,522175E+23	1,260757E+23	2,782933E+23
-2790	7,610593E+22	7,610733E+22	6,303826E+22	6,303768E+22	1,522133E+23	1,260759E+23	2,782892E+23
-2789	7,610973E+22	7,610828E+22	6,303832E+22	6,303945E+22	1,522180E+23	1,260778E+23	2,782958E+23
-2788	7,610909E+22	7,610791E+22	6,303879E+22	6,303763E+22	1,522170E+23	1,260764E+23	2,782934E+23
-2787	7,610622E+22	7,610846E+22	6,303896E+22	6,303817E+22	1,522147E+23	1,260771E+23	2,782918E+23
-2786	7,610993E+22	7,610944E+22	6,303817E+22	6,303926E+22	1,522194E+23	1,260774E+23	2,782968E+23
-2785	7,610657E+22	7,610782E+22	6,303830E+22	6,303720E+22	1,522144E+23	1,260755E+23	2,782899E+23
-2784	7,610637E+22	7,610782E+22	6,303837E+22	6,303788E+22	1,522142E+23	1,260762E+23	2,782904E+23
-2783	7,610979E+22	7,610801E+22	6,303736E+22	6,303734E+22	1,522178E+23	1,260747E+23	2,782925E+23
-2782	7,610611E+22	7,610662E+22	6,303696E+22	6,303582E+22	1,522127E+23	1,260728E+23	2,782855E+23
-2781	7,610828E+22	7,610782E+22	6,303616E+22	6,303770E+22	1,522161E+23	1,260739E+23	2,782900E+23
-2780	7,610854E+22	7,610786E+22	6,303575E+22	6,303603E+22	1,522164E+23	1,260718E+23	2,782882E+23
-2779	7,610521E+22	7,610779E+22	6,303597E+22	6,303538E+22	1,522130E+23	1,260713E+23	2,782843E+23
-2778	7,610939E+22	7,610858E+22	6,303609E+22	6,303682E+22	1,522180E+23	1,260729E+23	2,782909E+23
-2777	7,610755E+22	7,610703E+22	6,303679E+22	6,303514E+22	1,522146E+23	1,260719E+23	2,782865E+23
-2776	7,610605E+22	7,610739E+22	6,303778E+22	6,303660E+22	1,522134E+23	1,260744E+23	2,782878E+23
-2775	7,610950E+22	7,610856E+22	6,303743E+22	6,303828E+22	1,522181E+23	1,260757E+23	2,782938E+23
-2774	7,610592E+22	7,610718E+22	6,303784E+22	6,303740E+22	1,522131E+23	1,260752E+23	2,782883E+23
-2773	7,610730E+22	7,610804E+22	6,303840E+22	6,303970E+22	1,522153E+23	1,260781E+23	2,782934E+23
-2772	7,610938E+22	7,610795E+22	6,303872E+22	6,303903E+22	1,522173E+23	1,260778E+23	2,782951E+23
-2771	7,610631E+22	7,610744E+22	6,303945E+22	6,303804E+22	1,522137E+23	1,260775E+23	2,782912E+23
-2770	7,610981E+22	7,610876E+22	6,303955E+22	6,304033E+22	1,522186E+23	1,260799E+23	2,782984E+23
-2769	7,610852E+22	7,610806E+22	6,303934E+22	6,303893E+22	1,522166E+23	1,260783E+23	2,782949E+23
-2768	7,610576E+22	7,610831E+22	6,303984E+22	6,303910E+22	1,522141E+23	1,260789E+23	2,782930E+23
-2767	7,610941E+22	7,610918E+22	6,303923E+22	6,304015E+22	1,522186E+23	1,260794E+23	2,782980E+23
-2766	7,610683E+22	7,610715E+22	6,303900E+22	6,303755E+22	1,522140E+23	1,260765E+23	2,782905E+23
-2765	7,610716E+22	7,610755E+22	6,303880E+22	6,303862E+22	1,522147E+23	1,260774E+23	2,782921E+23
-2764	7,610962E+22	7,610785E+22	6,303779E+22	6,303834E+22	1,522175E+23	1,260761E+23	2,782936E+23
-2763	7,610591E+22	7,610725E+22	6,303731E+22	6,303639E+22	1,522132E+23	1,260737E+23	2,782869E+23
-2762	7,610816E+22	7,610843E+22	6,303698E+22	6,303827E+22	1,522166E+23	1,260752E+23	2,782918E+23
-2761	7,610829E+22	7,610771E+22	6,303656E+22	6,303661E+22	1,522160E+23	1,260732E+23	2,782892E+23
-2760	7,610548E+22	7,610726E+22	6,303748E+22	6,303576E+22	1,522127E+23	1,260732E+23	2,782860E+23
-2759	7,610919E+22	7,610829E+22	6,303766E+22	6,303786E+22	1,522175E+23	1,260755E+23	2,782930E+23
-2758	7,610736E+22	7,610687E+22	6,303760E+22	6,303644E+22	1,522142E+23	1,260740E+23	2,782883E+23
-2757	7,610592E+22	7,610761E+22	6,303816E+22	6,303836E+22	1,522135E+23	1,260765E+23	2,782900E+23
-2756	7,610885E+22	7,610839E+22	6,303814E+22	6,303987E+22	1,522172E+23	1,260780E+23	2,782953E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2755	7,610607E+22	7,610721E+22	6,303872E+22	6,303795E+22	1,522133E+23	1,260767E+23	2,782900E+23
-2754	7,610801E+22	7,610807E+22	6,303969E+22	6,304015E+22	1,522161E+23	1,260798E+23	2,782959E+23
-2753	7,610980E+22	7,610782E+22	6,303968E+22	6,303982E+22	1,522176E+23	1,260795E+23	2,782971E+23
-2752	7,610649E+22	7,610760E+22	6,304062E+22	6,303885E+22	1,522141E+23	1,260795E+23	2,782936E+23
-2751	7,610906E+22	7,610941E+22	6,304073E+22	6,304160E+22	1,522185E+23	1,260823E+23	2,783008E+23
-2750	7,610809E+22	7,610821E+22	6,304013E+22	6,303987E+22	1,522163E+23	1,260800E+23	2,782963E+23
-2749	7,610575E+22	7,610811E+22	6,304056E+22	6,303998E+22	1,522139E+23	1,260805E+23	2,782944E+23
-2748	7,610923E+22	7,610840E+22	6,304025E+22	6,304100E+22	1,522176E+23	1,260812E+23	2,782989E+23
-2747	7,610715E+22	7,610672E+22	6,303965E+22	6,303795E+22	1,522139E+23	1,260776E+23	2,782915E+23
-2746	7,610728E+22	7,610771E+22	6,303928E+22	6,303943E+22	1,522150E+23	1,260787E+23	2,782937E+23
-2745	7,610930E+22	7,610792E+22	6,303781E+22	6,303936E+22	1,522172E+23	1,260772E+23	2,782944E+23
-2744	7,610587E+22	7,610716E+22	6,303795E+22	6,303683E+22	1,522130E+23	1,260748E+23	2,782878E+23
-2743	7,610787E+22	7,610856E+22	6,303815E+22	6,303868E+22	1,522164E+23	1,260768E+23	2,782933E+23
-2742	7,610859E+22	7,610740E+22	6,303755E+22	6,303693E+22	1,522160E+23	1,260745E+23	2,782905E+23
-2741	7,610583E+22	7,610722E+22	6,303834E+22	6,303683E+22	1,522131E+23	1,260752E+23	2,782882E+23
-2740	7,610849E+22	7,610828E+22	6,303865E+22	6,303949E+22	1,522168E+23	1,260781E+23	2,782949E+23
-2739	7,610688E+22	7,610724E+22	6,303838E+22	6,303773E+22	1,522141E+23	1,260761E+23	2,782902E+23
-2738	7,610588E+22	7,610791E+22	6,303917E+22	6,303956E+22	1,522138E+23	1,260787E+23	2,782925E+23
-2737	7,610898E+22	7,610798E+22	6,303904E+22	6,304081E+22	1,522170E+23	1,260798E+23	2,782968E+23
-2736	7,610691E+22	7,610668E+22	6,304015E+22	6,303845E+22	1,522136E+23	1,260786E+23	2,782922E+23
-2735	7,610820E+22	7,610822E+22	6,304114E+22	6,304102E+22	1,522164E+23	1,260822E+23	2,782986E+23
-2734	7,610969E+22	7,610811E+22	6,304045E+22	6,304091E+22	1,522178E+23	1,260814E+23	2,782992E+23
-2733	7,610627E+22	7,610809E+22	6,304119E+22	6,304031E+22	1,522144E+23	1,260815E+23	2,782959E+23
-2732	7,610809E+22	7,610916E+22	6,304168E+22	6,304276E+22	1,522172E+23	1,260844E+23	2,783017E+23
-2731	7,610793E+22	7,610789E+22	6,304105E+22	6,304026E+22	1,522158E+23	1,260813E+23	2,782971E+23
-2730	7,610631E+22	7,610769E+22	6,304152E+22	6,304043E+22	1,522140E+23	1,260819E+23	2,782960E+23
-2729	7,610942E+22	7,610781E+22	6,304064E+22	6,304180E+22	1,522172E+23	1,260824E+23	2,782997E+23
-2728	7,610746E+22	7,610669E+22	6,304013E+22	6,303865E+22	1,522142E+23	1,260788E+23	2,782929E+23
-2727	7,610688E+22	7,610835E+22	6,303988E+22	6,304024E+22	1,522152E+23	1,260801E+23	2,782953E+23
-2726	7,610915E+22	7,610823E+22	6,303831E+22	6,303983E+22	1,522174E+23	1,260781E+23	2,782955E+23
-2725	7,610612E+22	7,610732E+22	6,303874E+22	6,303738E+22	1,522134E+23	1,260761E+23	2,782896E+23
-2724	7,610746E+22	7,610814E+22	6,303957E+22	6,303943E+22	1,522156E+23	1,260790E+23	2,782946E+23
-2723	7,610844E+22	7,610733E+22	6,303868E+22	6,303780E+22	1,522158E+23	1,260765E+23	2,782922E+23
-2722	7,610561E+22	7,610737E+22	6,303924E+22	6,303830E+22	1,522130E+23	1,260775E+23	2,782905E+23
-2721	7,610795E+22	7,610797E+22	6,303911E+22	6,304114E+22	1,522159E+23	1,260802E+23	2,782962E+23
-2720	7,610717E+22	7,610673E+22	6,303927E+22	6,303864E+22	1,522139E+23	1,260779E+23	2,782918E+23
-2719	7,610618E+22	7,610784E+22	6,304040E+22	6,304018E+22	1,522140E+23	1,260806E+23	2,782946E+23
-2718	7,610984E+22	7,610781E+22	6,304000E+22	6,304129E+22	1,522177E+23	1,260813E+23	2,782989E+23
-2717	7,610753E+22	7,610707E+22	6,304097E+22	6,303939E+22	1,522146E+23	1,260804E+23	2,782949E+23
-2716	7,610745E+22	7,610870E+22	6,304232E+22	6,304235E+22	1,522161E+23	1,260847E+23	2,783008E+23
-2715	7,610906E+22	7,610866E+22	6,304144E+22	6,304192E+22	1,522177E+23	1,260834E+23	2,783011E+23
-2714	7,610586E+22	7,610821E+22	6,304239E+22	6,304135E+22	1,522141E+23	1,260837E+23	2,782978E+23
-2713	7,610780E+22	7,610838E+22	6,304263E+22	6,304369E+22	1,522162E+23	1,260863E+23	2,783025E+23
-2712	7,610854E+22	7,610685E+22	6,304213E+22	6,304084E+22	1,522154E+23	1,260830E+23	2,782984E+23
-2711	7,610643E+22	7,610758E+22	6,304226E+22	6,304130E+22	1,522140E+23	1,260836E+23	2,782976E+23
-2710	7,610950E+22	7,610793E+22	6,304060E+22	6,304269E+22	1,522174E+23	1,260833E+23	2,783007E+23
-2709	7,610750E+22	7,610721E+22	6,304008E+22	6,303954E+22	1,522147E+23	1,260796E+23	2,782943E+23
-2708	7,610625E+22	7,610843E+22	6,304069E+22	6,304076E+22	1,522147E+23	1,260815E+23	2,782961E+23
-2707	7,610911E+22	7,610827E+22	6,303936E+22	6,303982E+22	1,522174E+23	1,260792E+23	2,782966E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2706	7,610646E+22	7,610726E+22	6,304006E+22	6,303794E+22	1,522137E+23	1,260780E+23	2,782917E+23
-2705	7,610712E+22	7,610770E+22	6,304047E+22	6,304060E+22	1,522148E+23	1,260811E+23	2,782959E+23
-2704	7,610838E+22	7,610709E+22	6,303964E+22	6,303910E+22	1,522155E+23	1,260787E+23	2,782942E+23
-2703	7,610525E+22	7,610763E+22	6,304016E+22	6,303963E+22	1,522129E+23	1,260798E+23	2,782927E+23
-2702	7,610813E+22	7,610776E+22	6,303973E+22	6,304205E+22	1,522159E+23	1,260818E+23	2,782977E+23
-2701	7,610799E+22	7,610672E+22	6,304008E+22	6,303942E+22	1,522147E+23	1,260795E+23	2,782942E+23
-2700	7,610630E+22	7,610757E+22	6,304179E+22	6,304092E+22	1,522139E+23	1,260827E+23	2,782966E+23
-2699	7,610977E+22	7,610821E+22	6,304114E+22	6,304208E+22	1,522180E+23	1,260832E+23	2,783012E+23
-2698	7,610723E+22	7,610777E+22	6,304203E+22	6,304081E+22	1,522150E+23	1,260828E+23	2,782978E+23
-2697	7,610644E+22	7,610859E+22	6,304314E+22	6,304383E+22	1,522150E+23	1,260870E+23	2,783020E+23
-2696	7,610895E+22	7,610807E+22	6,304263E+22	6,304283E+22	1,522170E+23	1,260855E+23	2,783025E+23
-2695	7,610597E+22	7,610773E+22	6,304358E+22	6,304201E+22	1,522137E+23	1,260856E+23	2,782993E+23
-2694	7,610848E+22	7,610769E+22	6,304319E+22	6,304429E+22	1,522162E+23	1,260875E+23	2,783036E+23
-2693	7,610922E+22	7,610701E+22	6,304231E+22	6,304172E+22	1,522162E+23	1,260840E+23	2,783003E+23
-2692	7,610597E+22	7,610802E+22	6,304278E+22	6,304221E+22	1,522140E+23	1,260850E+23	2,782990E+23
-2691	7,610914E+22	7,610869E+22	6,304114E+22	6,304312E+22	1,522178E+23	1,260843E+23	2,783021E+23
-2690	7,610741E+22	7,610773E+22	6,304110E+22	6,303998E+22	1,522151E+23	1,260811E+23	2,782962E+23
-2689	7,610590E+22	7,610793E+22	6,304187E+22	6,304127E+22	1,522138E+23	1,260831E+23	2,782970E+23
-2688	7,610942E+22	7,610747E+22	6,304079E+22	6,304041E+22	1,522169E+23	1,260812E+23	2,782981E+23
-2687	7,610613E+22	7,610713E+22	6,304119E+22	6,303917E+22	1,522133E+23	1,260804E+23	2,782936E+23
-2686	7,610693E+22	7,610747E+22	6,304076E+22	6,304208E+22	1,522144E+23	1,260828E+23	2,782972E+23
-2685	7,610846E+22	7,610706E+22	6,303978E+22	6,304040E+22	1,522155E+23	1,260802E+23	2,782957E+23
-2684	7,610501E+22	7,610742E+22	6,304101E+22	6,304044E+22	1,522124E+23	1,260814E+23	2,782939E+23
-2683	7,610863E+22	7,610778E+22	6,304066E+22	6,304225E+22	1,522164E+23	1,260829E+23	2,782993E+23
-2682	7,610857E+22	7,610706E+22	6,304128E+22	6,304008E+22	1,522156E+23	1,260814E+23	2,782970E+23
-2681	7,610594E+22	7,610773E+22	6,304290E+22	6,304211E+22	1,522137E+23	1,260850E+23	2,782987E+23
-2680	7,610948E+22	7,610837E+22	6,304246E+22	6,304332E+22	1,522179E+23	1,260858E+23	2,783036E+23
-2679	7,610652E+22	7,610813E+22	6,304344E+22	6,304214E+22	1,522147E+23	1,260856E+23	2,783002E+23
-2678	7,610632E+22	7,610811E+22	6,304407E+22	6,304485E+22	1,522144E+23	1,260889E+23	2,783033E+23
-2677	7,610951E+22	7,610753E+22	6,304344E+22	6,304371E+22	1,522170E+23	1,260872E+23	2,783042E+23
-2676	7,610611E+22	7,610718E+22	6,304460E+22	6,304290E+22	1,522133E+23	1,260875E+23	2,783008E+23
-2675	7,610860E+22	7,610788E+22	6,304364E+22	6,304499E+22	1,522165E+23	1,260886E+23	2,783051E+23
-2674	7,610920E+22	7,610776E+22	6,304269E+22	6,304272E+22	1,522170E+23	1,260854E+23	2,783024E+23
-2673	7,610536E+22	7,610806E+22	6,304330E+22	6,304293E+22	1,522134E+23	1,260862E+23	2,782997E+23
-2672	7,610920E+22	7,610839E+22	6,304231E+22	6,304329E+22	1,522176E+23	1,260856E+23	2,783032E+23
-2671	7,610746E+22	7,610762E+22	6,304250E+22	6,304030E+22	1,522151E+23	1,260828E+23	2,782979E+23
-2670	7,610604E+22	7,610735E+22	6,304265E+22	6,304198E+22	1,522134E+23	1,260846E+23	2,782980E+23
-2669	7,610948E+22	7,610752E+22	6,304122E+22	6,304169E+22	1,522170E+23	1,260829E+23	2,782999E+23
-2668	7,610547E+22	7,610713E+22	6,304182E+22	6,304055E+22	1,522126E+23	1,260824E+23	2,782950E+23
-2667	7,610661E+22	7,610768E+22	6,304126E+22	6,304291E+22	1,522143E+23	1,260842E+23	2,782985E+23
-2666	7,610877E+22	7,610737E+22	6,304066E+22	6,304115E+22	1,522161E+23	1,260818E+23	2,782979E+23
-2665	7,610513E+22	7,610697E+22	6,304214E+22	6,304104E+22	1,522121E+23	1,260832E+23	2,782953E+23
-2664	7,610913E+22	7,610749E+22	6,304215E+22	6,304287E+22	1,522166E+23	1,260850E+23	2,783016E+23
-2663	7,610828E+22	7,610756E+22	6,304264E+22	6,304130E+22	1,522158E+23	1,260839E+23	2,782998E+23
-2662	7,610546E+22	7,610779E+22	6,304366E+22	6,304362E+22	1,522133E+23	1,260873E+23	2,783005E+23
-2661	7,610925E+22	7,610838E+22	6,304321E+22	6,304467E+22	1,522176E+23	1,260879E+23	2,783055E+23
-2660	7,610617E+22	7,610761E+22	6,304473E+22	6,304315E+22	1,522138E+23	1,260879E+23	2,783017E+23
-2659	7,610674E+22	7,610771E+22	6,304505E+22	6,304535E+22	1,522144E+23	1,260904E+23	2,783048E+23
-2658	7,611017E+22	7,610766E+22	6,304426E+22	6,304455E+22	1,522178E+23	1,260888E+23	2,783066E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2657	7,610596E+22	7,610728E+22	6,304518E+22	6,304393E+22	1,522132E+23	1,260891E+23	2,783024E+23
-2656	7,610863E+22	7,610819E+22	6,304441E+22	6,304574E+22	1,522168E+23	1,260902E+23	2,783070E+23
-2655	7,610869E+22	7,610842E+22	6,304376E+22	6,304335E+22	1,522171E+23	1,260871E+23	2,783042E+23
-2654	7,610532E+22	7,610784E+22	6,304416E+22	6,304344E+22	1,522132E+23	1,260876E+23	2,783008E+23
-2653	7,610945E+22	7,610792E+22	6,304320E+22	6,304376E+22	1,522174E+23	1,260870E+23	2,783043E+23
-2652	7,610704E+22	7,610710E+22	6,304363E+22	6,304129E+22	1,522141E+23	1,260849E+23	2,782991E+23
-2651	7,610567E+22	7,610733E+22	6,304304E+22	6,304306E+22	1,522130E+23	1,260861E+23	2,782991E+23
-2650	7,610915E+22	7,610783E+22	6,304147E+22	6,304306E+22	1,522170E+23	1,260845E+23	2,783015E+23
-2649	7,610504E+22	7,610680E+22	6,304225E+22	6,304154E+22	1,522118E+23	1,260838E+23	2,782956E+23
-2648	7,610719E+22	7,610719E+22	6,304223E+22	6,304317E+22	1,522144E+23	1,260854E+23	2,782998E+23
-2647	7,610925E+22	7,610748E+22	6,304201E+22	6,304147E+22	1,522167E+23	1,260835E+23	2,783002E+23
-2646	7,610559E+22	7,610690E+22	6,304311E+22	6,304182E+22	1,522125E+23	1,260849E+23	2,782974E+23
-2645	7,610909E+22	7,610798E+22	6,304308E+22	6,304406E+22	1,522171E+23	1,260871E+23	2,783042E+23
-2644	7,610742E+22	7,610794E+22	6,304401E+22	6,304286E+22	1,522154E+23	1,260869E+23	2,783022E+23
-2643	7,610493E+22	7,610794E+22	6,304479E+22	6,304474E+22	1,522129E+23	1,260895E+23	2,783024E+23
-2642	7,610934E+22	7,610837E+22	6,304443E+22	6,304581E+22	1,522177E+23	1,260902E+23	2,783080E+23
-2641	7,610634E+22	7,610675E+22	6,304589E+22	6,304416E+22	1,522131E+23	1,260900E+23	2,783031E+23
-2640	7,610735E+22	7,610723E+22	6,304610E+22	6,304623E+22	1,522146E+23	1,260923E+23	2,783069E+23
-2639	7,611010E+22	7,610826E+22	6,304507E+22	6,304566E+22	1,522184E+23	1,260907E+23	2,783091E+23
-2638	7,610576E+22	7,610745E+22	6,304539E+22	6,304493E+22	1,522132E+23	1,260903E+23	2,783035E+23
-2637	7,610853E+22	7,610840E+22	6,304493E+22	6,304627E+22	1,522169E+23	1,260912E+23	2,783081E+23
-2636	7,610839E+22	7,610816E+22	6,304490E+22	6,304373E+22	1,522165E+23	1,260886E+23	2,783052E+23
-2635	7,610533E+22	7,610750E+22	6,304505E+22	6,304369E+22	1,522128E+23	1,260887E+23	2,783016E+23
-2634	7,610945E+22	7,610809E+22	6,304391E+22	6,304470E+22	1,522175E+23	1,260886E+23	2,783062E+23
-2633	7,610646E+22	7,610682E+22	6,304415E+22	6,304257E+22	1,522133E+23	1,260867E+23	2,783000E+23
-2632	7,610560E+22	7,610721E+22	6,304363E+22	6,304403E+22	1,522128E+23	1,260877E+23	2,783005E+23
-2631	7,610901E+22	7,610810E+22	6,304237E+22	6,304375E+22	1,522171E+23	1,260861E+23	2,783032E+23
-2630	7,610552E+22	7,610641E+22	6,304296E+22	6,304202E+22	1,522119E+23	1,260850E+23	2,782969E+23
-2629	7,610790E+22	7,610702E+22	6,304322E+22	6,304357E+22	1,522149E+23	1,260868E+23	2,783017E+23
-2628	7,610906E+22	7,610757E+22	6,304339E+22	6,304252E+22	1,522166E+23	1,260859E+23	2,783025E+23
-2627	7,610511E+22	7,610737E+22	6,304403E+22	6,304312E+22	1,522125E+23	1,260872E+23	2,782996E+23
-2626	7,610846E+22	7,610857E+22	6,304399E+22	6,304564E+22	1,522170E+23	1,260896E+23	2,783067E+23
-2625	7,610677E+22	7,610747E+22	6,304517E+22	6,304427E+22	1,522142E+23	1,260894E+23	2,783037E+23
-2624	7,610539E+22	7,610719E+22	6,304609E+22	6,304554E+22	1,522126E+23	1,260916E+23	2,783042E+23
-2623	7,610972E+22	7,610816E+22	6,304574E+22	6,304659E+22	1,522179E+23	1,260923E+23	2,783102E+23
-2622	7,610694E+22	7,610655E+22	6,304642E+22	6,304524E+22	1,522135E+23	1,260917E+23	2,783051E+23
-2621	7,610762E+22	7,610762E+22	6,304646E+22	6,304714E+22	1,522152E+23	1,260936E+23	2,783088E+23
-2620	7,610947E+22	7,610878E+22	6,304596E+22	6,304664E+22	1,522183E+23	1,260926E+23	2,783109E+23
-2619	7,610544E+22	7,610783E+22	6,304623E+22	6,304538E+22	1,522133E+23	1,260916E+23	2,783049E+23
-2618	7,610841E+22	7,610854E+22	6,304599E+22	6,304673E+22	1,522170E+23	1,260927E+23	2,783097E+23
-2617	7,610815E+22	7,610736E+22	6,304608E+22	6,304450E+22	1,522155E+23	1,260906E+23	2,783061E+23
-2616	7,610544E+22	7,610686E+22	6,304593E+22	6,304458E+22	1,522123E+23	1,260905E+23	2,783028E+23
-2615	7,610897E+22	7,610826E+22	6,304453E+22	6,304588E+22	1,522172E+23	1,260904E+23	2,783076E+23
-2614	7,610641E+22	7,610650E+22	6,304416E+22	6,304370E+22	1,522129E+23	1,260879E+23	2,783008E+23
-2613	7,610598E+22	7,610701E+22	6,304397E+22	6,304446E+22	1,522130E+23	1,260884E+23	2,783014E+23
-2612	7,610924E+22	7,610797E+22	6,304347E+22	6,304411E+22	1,522172E+23	1,260876E+23	2,783048E+23
-2611	7,610597E+22	7,610656E+22	6,304390E+22	6,304233E+22	1,522125E+23	1,260862E+23	2,782988E+23
-2610	7,610789E+22	7,610783E+22	6,304423E+22	6,304458E+22	1,522157E+23	1,260888E+23	2,783045E+23
-2609	7,610830E+22	7,610780E+22	6,304453E+22	6,304409E+22	1,522161E+23	1,260886E+23	2,783047E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2608	7,610468E+22	7,610738E+22	6,304533E+22	6,304453E+22	1,522121E+23	1,260899E+23	2,783019E+23
-2607	7,610804E+22	7,610869E+22	6,304551E+22	6,304685E+22	1,522167E+23	1,260924E+23	2,783091E+23
-2606	7,610719E+22	7,610655E+22	6,304613E+22	6,304533E+22	1,522137E+23	1,260915E+23	2,783052E+23
-2605	7,610620E+22	7,610658E+22	6,304697E+22	6,304636E+22	1,522128E+23	1,260933E+23	2,783061E+23
-2604	7,610980E+22	7,610814E+22	6,304668E+22	6,304777E+22	1,522179E+23	1,260944E+23	2,783124E+23
-2603	7,610676E+22	7,610707E+22	6,304677E+22	6,304623E+22	1,522138E+23	1,260930E+23	2,783068E+23
-2602	7,610732E+22	7,610846E+22	6,304699E+22	6,304804E+22	1,522158E+23	1,260950E+23	2,783108E+23
-2601	7,610900E+22	7,610850E+22	6,304702E+22	6,304728E+22	1,522175E+23	1,260943E+23	2,783118E+23
-2600	7,610572E+22	7,610729E+22	6,304752E+22	6,304565E+22	1,522130E+23	1,260932E+23	2,783062E+23
-2599	7,610834E+22	7,610842E+22	6,304730E+22	6,304724E+22	1,522168E+23	1,260945E+23	2,783113E+23
-2598	7,610818E+22	7,610691E+22	6,304651E+22	6,304564E+22	1,522151E+23	1,260922E+23	2,783072E+23
-2597	7,610547E+22	7,610683E+22	6,304618E+22	6,304562E+22	1,522123E+23	1,260918E+23	2,783041E+23
-2596	7,610852E+22	7,610837E+22	6,304518E+22	6,304692E+22	1,522169E+23	1,260921E+23	2,783090E+23
-2595	7,610652E+22	7,610665E+22	6,304466E+22	6,304415E+22	1,522132E+23	1,260888E+23	2,783020E+23
-2594	7,610642E+22	7,610732E+22	6,304479E+22	6,304480E+22	1,522137E+23	1,260896E+23	2,783033E+23
-2593	7,610923E+22	7,610765E+22	6,304473E+22	6,304489E+22	1,522169E+23	1,260896E+23	2,783065E+23
-2592	7,610599E+22	7,610665E+22	6,304507E+22	6,304343E+22	1,522126E+23	1,260885E+23	2,783011E+23
-2591	7,610697E+22	7,610836E+22	6,304542E+22	6,304594E+22	1,522153E+23	1,260914E+23	2,783067E+23
-2590	7,610788E+22	7,610741E+22	6,304524E+22	6,304565E+22	1,522153E+23	1,260909E+23	2,783062E+23
-2589	7,610499E+22	7,610663E+22	6,304622E+22	6,304537E+22	1,522116E+23	1,260916E+23	2,783032E+23
-2588	7,610825E+22	7,610800E+22	6,304680E+22	6,304769E+22	1,522163E+23	1,260945E+23	2,783107E+23
-2587	7,610786E+22	7,610641E+22	6,304685E+22	6,304607E+22	1,522143E+23	1,260929E+23	2,783072E+23
-2586	7,610654E+22	7,610732E+22	6,304752E+22	6,304738E+22	1,522139E+23	1,260949E+23	2,783088E+23
-2585	7,610937E+22	7,610852E+22	6,304758E+22	6,304901E+22	1,522179E+23	1,260966E+23	2,783145E+23
-2584	7,610660E+22	7,610747E+22	6,304790E+22	6,304702E+22	1,522141E+23	1,260949E+23	2,783090E+23
-2583	7,610683E+22	7,610885E+22	6,304855E+22	6,304852E+22	1,522157E+23	1,260971E+23	2,783127E+23
-2582	7,610917E+22	7,610776E+22	6,304810E+22	6,304804E+22	1,522169E+23	1,260961E+23	2,783131E+23
-2581	7,610608E+22	7,610652E+22	6,304848E+22	6,304642E+22	1,522126E+23	1,260949E+23	2,783075E+23
-2580	7,610787E+22	7,610822E+22	6,304810E+22	6,304857E+22	1,522161E+23	1,260967E+23	2,783128E+23
-2579	7,610786E+22	7,610705E+22	6,304651E+22	6,304678E+22	1,522149E+23	1,260933E+23	2,783082E+23
-2578	7,610542E+22	7,610731E+22	6,304624E+22	6,304645E+22	1,522127E+23	1,260927E+23	2,783054E+23
-2577	7,610853E+22	7,610797E+22	6,304592E+22	6,304741E+22	1,522165E+23	1,260933E+23	2,783098E+23
-2576	7,610712E+22	7,610646E+22	6,304568E+22	6,304425E+22	1,522136E+23	1,260899E+23	2,783035E+23
-2575	7,610649E+22	7,610776E+22	6,304616E+22	6,304519E+22	1,522142E+23	1,260914E+23	2,783056E+23
-2574	7,610911E+22	7,610757E+22	6,304548E+22	6,304603E+22	1,522167E+23	1,260915E+23	2,783082E+23
-2573	7,610570E+22	7,610666E+22	6,304600E+22	6,304465E+22	1,522124E+23	1,260906E+23	2,783030E+23
-2572	7,610623E+22	7,610830E+22	6,304672E+22	6,304730E+22	1,522145E+23	1,260940E+23	2,783086E+23
-2571	7,610783E+22	7,610706E+22	6,304616E+22	6,304659E+22	1,522149E+23	1,260928E+23	2,783076E+23
-2570	7,610558E+22	7,610651E+22	6,304712E+22	6,304625E+22	1,522121E+23	1,260934E+23	2,783055E+23
-2569	7,610853E+22	7,610740E+22	6,304791E+22	6,304886E+22	1,522159E+23	1,260968E+23	2,783127E+23
-2568	7,610808E+22	7,610671E+22	6,304768E+22	6,304721E+22	1,522148E+23	1,260949E+23	2,783097E+23
-2567	7,610606E+22	7,610822E+22	6,304856E+22	6,304840E+22	1,522143E+23	1,260970E+23	2,783112E+23
-2566	7,610912E+22	7,610844E+22	6,304839E+22	6,305003E+22	1,522176E+23	1,260984E+23	2,783160E+23
-2565	7,610684E+22	7,610708E+22	6,304913E+22	6,304751E+22	1,522139E+23	1,260966E+23	2,783106E+23
-2564	7,610665E+22	7,610843E+22	6,305004E+22	6,304922E+22	1,522151E+23	1,260993E+23	2,783143E+23
-2563	7,610923E+22	7,610757E+22	6,304877E+22	6,304894E+22	1,522168E+23	1,260977E+23	2,783145E+23
-2562	7,610607E+22	7,610694E+22	6,304873E+22	6,304761E+22	1,522130E+23	1,260963E+23	2,783093E+23
-2561	7,610737E+22	7,610806E+22	6,304863E+22	6,304987E+22	1,522154E+23	1,260985E+23	2,783139E+23
-2560	7,610793E+22	7,610721E+22	6,304712E+22	6,304742E+22	1,522151E+23	1,260945E+23	2,783097E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2559	7,610542E+22	7,610757E+22	6,304733E+22	6,304650E+22	1,522130E+23	1,260938E+23	2,783068E+23
-2558	7,610899E+22	7,610740E+22	6,304678E+22	6,304779E+22	1,522164E+23	1,260946E+23	2,783110E+23
-2557	7,610759E+22	7,610606E+22	6,304670E+22	6,304477E+22	1,522137E+23	1,260915E+23	2,783051E+23
-2556	7,610568E+22	7,610790E+22	6,304726E+22	6,304645E+22	1,522136E+23	1,260937E+23	2,783073E+23
-2555	7,610842E+22	7,610777E+22	6,304599E+22	6,304737E+22	1,522162E+23	1,260934E+23	2,783095E+23
-2554	7,610549E+22	7,610676E+22	6,304660E+22	6,304581E+22	1,522123E+23	1,260924E+23	2,783047E+23
-2553	7,610620E+22	7,610744E+22	6,304791E+22	6,304832E+22	1,522136E+23	1,260962E+23	2,783099E+23
-2552	7,610852E+22	7,610669E+22	6,304725E+22	6,304727E+22	1,522152E+23	1,260945E+23	2,783097E+23
-2551	7,610586E+22	7,610699E+22	6,304831E+22	6,304702E+22	1,522128E+23	1,260953E+23	2,783082E+23
-2550	7,610865E+22	7,610763E+22	6,304855E+22	6,305019E+22	1,522163E+23	1,260987E+23	2,783150E+23
-2549	7,610809E+22	7,610708E+22	6,304870E+22	6,304826E+22	1,522152E+23	1,260970E+23	2,783121E+23
-2548	7,610541E+22	7,610861E+22	6,305011E+22	6,304944E+22	1,522140E+23	1,260996E+23	2,783136E+23
-2547	7,610899E+22	7,610833E+22	6,304956E+22	6,305071E+22	1,522173E+23	1,261003E+23	2,783176E+23
-2546	7,610712E+22	7,610695E+22	6,305022E+22	6,304839E+22	1,522141E+23	1,260986E+23	2,783127E+23
-2545	7,610643E+22	7,610770E+22	6,305113E+22	6,305056E+22	1,522141E+23	1,261017E+23	2,783158E+23
-2544	7,610895E+22	7,610759E+22	6,304922E+22	6,305016E+22	1,522165E+23	1,260994E+23	2,783159E+23
-2543	7,610569E+22	7,610740E+22	6,304922E+22	6,304848E+22	1,522131E+23	1,260977E+23	2,783108E+23
-2542	7,610755E+22	7,610750E+22	6,304882E+22	6,305045E+22	1,522150E+23	1,260993E+23	2,783143E+23
-2541	7,610858E+22	7,610667E+22	6,304790E+22	6,304733E+22	1,522153E+23	1,260952E+23	2,783105E+23
-2540	7,610557E+22	7,610752E+22	6,304855E+22	6,304673E+22	1,522131E+23	1,260953E+23	2,783084E+23
-2539	7,610890E+22	7,610761E+22	6,304746E+22	6,304835E+22	1,522165E+23	1,260958E+23	2,783123E+23
-2538	7,610726E+22	7,610682E+22	6,304727E+22	6,304598E+22	1,522141E+23	1,260933E+23	2,783073E+23
-2537	7,610478E+22	7,610771E+22	6,304833E+22	6,304800E+22	1,522125E+23	1,260963E+23	2,783088E+23
-2536	7,610801E+22	7,610774E+22	6,304701E+22	6,304845E+22	1,522157E+23	1,260955E+23	2,783112E+23
-2535	7,610557E+22	7,610668E+22	6,304794E+22	6,304652E+22	1,522122E+23	1,260945E+23	2,783067E+23
-2534	7,610686E+22	7,610654E+22	6,304880E+22	6,304934E+22	1,522134E+23	1,260981E+23	2,783115E+23
-2533	7,610918E+22	7,610641E+22	6,304825E+22	6,304826E+22	1,522156E+23	1,260965E+23	2,783121E+23
-2532	7,610545E+22	7,610755E+22	6,304938E+22	6,304837E+22	1,522130E+23	1,260978E+23	2,783107E+23
-2531	7,610825E+22	7,610818E+22	6,304922E+22	6,305131E+22	1,522164E+23	1,261005E+23	2,783170E+23
-2530	7,610808E+22	7,610752E+22	6,304963E+22	6,304915E+22	1,522156E+23	1,260988E+23	2,783144E+23
-2529	7,610521E+22	7,610792E+22	6,305170E+22	6,305036E+22	1,522131E+23	1,261021E+23	2,783152E+23
-2528	7,610917E+22	7,610809E+22	6,305081E+22	6,305147E+22	1,522173E+23	1,261023E+23	2,783195E+23
-2527	7,610704E+22	7,610709E+22	6,305126E+22	6,304928E+22	1,522141E+23	1,261005E+23	2,783147E+23
-2526	7,610633E+22	7,610734E+22	6,305143E+22	6,305191E+22	1,522137E+23	1,261033E+23	2,783170E+23
-2525	7,610912E+22	7,610740E+22	6,304975E+22	6,305093E+22	1,522165E+23	1,261007E+23	2,783172E+23
-2524	7,610540E+22	7,610753E+22	6,305013E+22	6,304897E+22	1,522129E+23	1,260991E+23	2,783120E+23
-2523	7,610782E+22	7,610746E+22	6,304942E+22	6,305058E+22	1,522153E+23	1,261000E+23	2,783153E+23
-2522	7,610905E+22	7,610687E+22	6,304860E+22	6,304774E+22	1,522159E+23	1,260963E+23	2,783122E+23
-2521	7,610510E+22	7,610727E+22	6,304964E+22	6,304790E+22	1,522124E+23	1,260975E+23	2,783099E+23
-2520	7,610810E+22	7,610805E+22	6,304814E+22	6,304955E+22	1,522162E+23	1,260977E+23	2,783138E+23
-2519	7,610650E+22	7,610719E+22	6,304822E+22	6,304711E+22	1,522137E+23	1,260953E+23	2,783090E+23
-2518	7,610476E+22	7,610684E+22	6,304902E+22	6,304912E+22	1,522116E+23	1,260981E+23	2,783097E+23
-2517	7,610874E+22	7,610682E+22	6,304812E+22	6,304899E+22	1,522156E+23	1,260971E+23	2,783127E+23
-2516	7,610596E+22	7,610655E+22	6,304916E+22	6,304733E+22	1,522125E+23	1,260965E+23	2,783090E+23
-2515	7,610722E+22	7,610688E+22	6,304933E+22	6,305027E+22	1,522141E+23	1,260996E+23	2,783137E+23
-2514	7,610926E+22	7,610744E+22	6,304887E+22	6,304950E+22	1,522167E+23	1,260984E+23	2,783151E+23
-2513	7,610490E+22	7,610779E+22	6,305082E+22	6,304977E+22	1,522127E+23	1,261006E+23	2,783133E+23
-2512	7,610774E+22	7,610849E+22	6,305067E+22	6,305208E+22	1,522162E+23	1,261027E+23	2,783190E+23
-2511	7,610801E+22	7,610754E+22	6,305140E+22	6,304987E+22	1,522155E+23	1,261013E+23	2,783168E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2510	7,610549E+22	7,610677E+22	6,305277E+22	6,305156E+22	1,522123E+23	1,261043E+23	2,783166E+23
-2509	7,610928E+22	7,610742E+22	6,305166E+22	6,305263E+22	1,522167E+23	1,261043E+23	2,783210E+23
-2508	7,610655E+22	7,610728E+22	6,305182E+22	6,305066E+22	1,522138E+23	1,261025E+23	2,783163E+23
-2507	7,610623E+22	7,610738E+22	6,305139E+22	6,305271E+22	1,522136E+23	1,261041E+23	2,783177E+23
-2506	7,610951E+22	7,610769E+22	6,305004E+22	6,305128E+22	1,522172E+23	1,261013E+23	2,783185E+23
-2505	7,610558E+22	7,610710E+22	6,305121E+22	6,304931E+22	1,522127E+23	1,261005E+23	2,783132E+23
-2504	7,610779E+22	7,610777E+22	6,305035E+22	6,305079E+22	1,522156E+23	1,261011E+23	2,783167E+23
-2503	7,610869E+22	7,610757E+22	6,304965E+22	6,304848E+22	1,522163E+23	1,260981E+23	2,783144E+23
-2502	7,610459E+22	7,610698E+22	6,305026E+22	6,304934E+22	1,522116E+23	1,260996E+23	2,783112E+23
-2501	7,610779E+22	7,610768E+22	6,304914E+22	6,305060E+22	1,522155E+23	1,260997E+23	2,783152E+23
-2500	7,610621E+22	7,610694E+22	6,304945E+22	6,304804E+22	1,522132E+23	1,260975E+23	2,783106E+23
-2499	7,610532E+22	7,610628E+22	6,304971E+22	6,304977E+22	1,522116E+23	1,260995E+23	2,783111E+23
-2498	7,610960E+22	7,610681E+22	6,304879E+22	6,304986E+22	1,522164E+23	1,260986E+23	2,783151E+23
-2497	7,610585E+22	7,610652E+22	6,305018E+22	6,304872E+22	1,522124E+23	1,260989E+23	2,783113E+23
-2496	7,610673E+22	7,610778E+22	6,305011E+22	6,305139E+22	1,522145E+23	1,261015E+23	2,783160E+23
-2495	7,610883E+22	7,610810E+22	6,305011E+22	6,305041E+22	1,522169E+23	1,261005E+23	2,783175E+23
-2494	7,610482E+22	7,610706E+22	6,305206E+22	6,305082E+22	1,522119E+23	1,261029E+23	2,783148E+23
-2493	7,610809E+22	7,610770E+22	6,305223E+22	6,305272E+22	1,522158E+23	1,261049E+23	2,783207E+23
-2492	7,610791E+22	7,610730E+22	6,305277E+22	6,305100E+22	1,522152E+23	1,261038E+23	2,783190E+23
-2491	7,610554E+22	7,610676E+22	6,305309E+22	6,305285E+22	1,522123E+23	1,261059E+23	2,783182E+23
-2490	7,610938E+22	7,610790E+22	6,305183E+22	6,305388E+22	1,522173E+23	1,261057E+23	2,783230E+23
-2489	7,610626E+22	7,610725E+22	6,305262E+22	6,305174E+22	1,522135E+23	1,261044E+23	2,783179E+23
-2488	7,610617E+22	7,610780E+22	6,305215E+22	6,305287E+22	1,522140E+23	1,261050E+23	2,783190E+23
-2487	7,610978E+22	7,610796E+22	6,305131E+22	6,305136E+22	1,522177E+23	1,261027E+23	2,783204E+23
-2486	7,610577E+22	7,610647E+22	6,305216E+22	6,305014E+22	1,522122E+23	1,261023E+23	2,783145E+23
-2485	7,610747E+22	7,610754E+22	6,305132E+22	6,305166E+22	1,522150E+23	1,261030E+23	2,783180E+23
-2484	7,610779E+22	7,610781E+22	6,305052E+22	6,304984E+22	1,522156E+23	1,261004E+23	2,783160E+23
-2483	7,610437E+22	7,610659E+22	6,305054E+22	6,305035E+22	1,522110E+23	1,261009E+23	2,783119E+23
-2482	7,610823E+22	7,610735E+22	6,304967E+22	6,305129E+22	1,522156E+23	1,261010E+23	2,783165E+23
-2481	7,610670E+22	7,610625E+22	6,305054E+22	6,304888E+22	1,522129E+23	1,260994E+23	2,783124E+23
-2480	7,610560E+22	7,610661E+22	6,305039E+22	6,305027E+22	1,522122E+23	1,261007E+23	2,783129E+23
-2479	7,610959E+22	7,610776E+22	6,304976E+22	6,305077E+22	1,522174E+23	1,261005E+23	2,783179E+23
-2478	7,610563E+22	7,610660E+22	6,305103E+22	6,305013E+22	1,522122E+23	1,261012E+23	2,783134E+23
-2477	7,610632E+22	7,610775E+22	6,305159E+22	6,305225E+22	1,522141E+23	1,261038E+23	2,783179E+23
-2476	7,610840E+22	7,610814E+22	6,305187E+22	6,305144E+22	1,522165E+23	1,261033E+23	2,783198E+23
-2475	7,610513E+22	7,610633E+22	6,305315E+22	6,305183E+22	1,522115E+23	1,261050E+23	2,783164E+23
-2474	7,610846E+22	7,610743E+22	6,305305E+22	6,305401E+22	1,522159E+23	1,261071E+23	2,783229E+23
-2473	7,610760E+22	7,610702E+22	6,305358E+22	6,305275E+22	1,522146E+23	1,261063E+23	2,783210E+23
-2472	7,610511E+22	7,610733E+22	6,305336E+22	6,305389E+22	1,522124E+23	1,261073E+23	2,783197E+23
-2471	7,610940E+22	7,610838E+22	6,305259E+22	6,305445E+22	1,522178E+23	1,261070E+23	2,783248E+23
-2470	7,610666E+22	7,610662E+22	6,305342E+22	6,305218E+22	1,522133E+23	1,261056E+23	2,783189E+23
-2469	7,610669E+22	7,610738E+22	6,305344E+22	6,305284E+22	1,522141E+23	1,261063E+23	2,783203E+23
-2468	7,610959E+22	7,610823E+22	6,305254E+22	6,305197E+22	1,522178E+23	1,261045E+23	2,783223E+23
-2467	7,610552E+22	7,610658E+22	6,305262E+22	6,305123E+22	1,522121E+23	1,261038E+23	2,783159E+23
-2466	7,610712E+22	7,610784E+22	6,305179E+22	6,305288E+22	1,522150E+23	1,261047E+23	2,783196E+23
-2465	7,610717E+22	7,610737E+22	6,305153E+22	6,305112E+22	1,522145E+23	1,261027E+23	2,783172E+23
-2464	7,610434E+22	7,610656E+22	6,305125E+22	6,305085E+22	1,522109E+23	1,261021E+23	2,783130E+23
-2463	7,610884E+22	7,610717E+22	6,305067E+22	6,305175E+22	1,522160E+23	1,261024E+23	2,783184E+23
-2462	7,610708E+22	7,610564E+22	6,305119E+22	6,304998E+22	1,522127E+23	1,261012E+23	2,783139E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2461	7,610554E+22	7,610681E+22	6,305127E+22	6,305119E+22	1,522123E+23	1,261025E+23	2,783148E+23
-2460	7,610886E+22	7,610842E+22	6,305087E+22	6,305196E+22	1,522173E+23	1,261028E+23	2,783201E+23
-2459	7,610548E+22	7,610651E+22	6,305189E+22	6,305116E+22	1,522120E+23	1,261031E+23	2,783150E+23
-2458	7,610655E+22	7,610752E+22	6,305276E+22	6,305304E+22	1,522141E+23	1,261058E+23	2,783199E+23
-2457	7,610842E+22	7,610746E+22	6,305342E+22	6,305270E+22	1,522159E+23	1,261061E+23	2,783220E+23
-2456	7,610510E+22	7,610655E+22	6,305397E+22	6,305287E+22	1,522117E+23	1,261068E+23	2,783185E+23
-2455	7,610846E+22	7,610795E+22	6,305389E+22	6,305526E+22	1,522164E+23	1,261091E+23	2,783256E+23
-2454	7,610757E+22	7,610684E+22	6,305419E+22	6,305417E+22	1,522144E+23	1,261084E+23	2,783228E+23
-2453	7,610522E+22	7,610729E+22	6,305446E+22	6,305432E+22	1,522125E+23	1,261088E+23	2,783213E+23
-2452	7,610942E+22	7,610858E+22	6,305402E+22	6,305483E+22	1,522180E+23	1,261088E+23	2,783268E+23
-2451	7,610717E+22	7,610624E+22	6,305430E+22	6,305267E+22	1,522134E+23	1,261070E+23	2,783204E+23
-2450	7,610670E+22	7,610746E+22	6,305420E+22	6,305368E+22	1,522142E+23	1,261079E+23	2,783220E+23
-2449	7,610876E+22	7,610820E+22	6,305338E+22	6,305356E+22	1,522170E+23	1,261069E+23	2,783239E+23
-2448	7,610469E+22	7,610682E+22	6,305290E+22	6,305220E+22	1,522115E+23	1,261051E+23	2,783166E+23
-2447	7,610696E+22	7,610773E+22	6,305252E+22	6,305357E+22	1,522147E+23	1,261061E+23	2,783208E+23
-2446	7,610762E+22	7,610628E+22	6,305217E+22	6,305184E+22	1,522139E+23	1,261040E+23	2,783179E+23
-2445	7,610496E+22	7,610602E+22	6,305216E+22	6,305104E+22	1,522110E+23	1,261032E+23	2,783142E+23
-2444	7,610889E+22	7,610767E+22	6,305161E+22	6,305251E+22	1,522166E+23	1,261041E+23	2,783207E+23
-2443	7,610714E+22	7,610603E+22	6,305160E+22	6,305107E+22	1,522132E+23	1,261027E+23	2,783158E+23
-2442	7,610531E+22	7,610739E+22	6,305215E+22	6,305221E+22	1,522127E+23	1,261044E+23	2,783171E+23
-2441	7,610824E+22	7,610835E+22	6,305248E+22	6,305320E+22	1,522166E+23	1,261057E+23	2,783223E+23
-2440	7,610526E+22	7,610650E+22	6,305329E+22	6,305189E+22	1,522118E+23	1,261052E+23	2,783169E+23
-2439	7,610686E+22	7,610725E+22	6,305432E+22	6,305409E+22	1,522141E+23	1,261084E+23	2,783225E+23
-2438	7,610849E+22	7,610667E+22	6,305437E+22	6,305442E+22	1,522152E+23	1,261088E+23	2,783240E+23
-2437	7,610505E+22	7,610649E+22	6,305476E+22	6,305415E+22	1,522115E+23	1,261089E+23	2,783205E+23
-2436	7,610818E+22	7,610835E+22	6,305474E+22	6,305638E+22	1,522165E+23	1,261111E+23	2,783277E+23
-2435	7,610797E+22	7,610670E+22	6,305475E+22	6,305484E+22	1,522147E+23	1,261096E+23	2,783243E+23
-2434	7,610588E+22	7,610732E+22	6,305542E+22	6,305456E+22	1,522132E+23	1,261100E+23	2,783232E+23
-2433	7,610932E+22	7,610837E+22	6,305538E+22	6,305555E+22	1,522177E+23	1,261109E+23	2,783286E+23
-2432	7,610670E+22	7,610686E+22	6,305504E+22	6,305341E+22	1,522136E+23	1,261085E+23	2,783220E+23
-2431	7,610619E+22	7,610791E+22	6,305497E+22	6,305478E+22	1,522141E+23	1,261097E+23	2,783239E+23
-2430	7,610808E+22	7,610765E+22	6,305396E+22	6,305495E+22	1,522157E+23	1,261089E+23	2,783246E+23
-2429	7,610463E+22	7,610633E+22	6,305377E+22	6,305271E+22	1,522110E+23	1,261065E+23	2,783174E+23
-2428	7,610719E+22	7,610736E+22	6,305356E+22	6,305400E+22	1,522145E+23	1,261076E+23	2,783221E+23
-2427	7,610842E+22	7,610571E+22	6,305265E+22	6,305245E+22	1,522141E+23	1,261051E+23	2,783192E+23
-2426	7,610533E+22	7,610628E+22	6,305266E+22	6,305179E+22	1,522116E+23	1,261044E+23	2,783161E+23
-2425	7,610820E+22	7,610807E+22	6,305251E+22	6,305384E+22	1,522163E+23	1,261064E+23	2,783226E+23
-2424	7,610645E+22	7,610676E+22	6,305237E+22	6,305191E+22	1,522132E+23	1,261043E+23	2,783175E+23
-2423	7,610517E+22	7,610748E+22	6,305358E+22	6,305299E+22	1,522126E+23	1,261066E+23	2,783192E+23
-2422	7,610831E+22	7,610740E+22	6,305389E+22	6,305435E+22	1,522157E+23	1,261082E+23	2,783239E+23
-2421	7,610561E+22	7,610593E+22	6,305470E+22	6,305276E+22	1,522115E+23	1,261075E+23	2,783190E+23
-2420	7,610678E+22	7,610746E+22	6,305549E+22	6,305550E+22	1,522142E+23	1,261110E+23	2,783252E+23
-2419	7,610868E+22	7,610675E+22	6,305479E+22	6,305596E+22	1,522154E+23	1,261108E+23	2,783262E+23
-2418	7,610516E+22	7,610690E+22	6,305545E+22	6,305515E+22	1,522121E+23	1,261106E+23	2,783227E+23
-2417	7,610798E+22	7,610847E+22	6,305605E+22	6,305734E+22	1,522165E+23	1,261134E+23	2,783298E+23
-2416	7,610805E+22	7,610694E+22	6,305578E+22	6,305509E+22	1,522150E+23	1,261109E+23	2,783259E+23
-2415	7,610604E+22	7,610738E+22	6,305671E+22	6,305521E+22	1,522134E+23	1,261119E+23	2,783253E+23
-2414	7,610880E+22	7,610793E+22	6,305620E+22	6,305696E+22	1,522167E+23	1,261132E+23	2,783299E+23
-2413	7,610605E+22	7,610671E+22	6,305574E+22	6,305447E+22	1,522128E+23	1,261102E+23	2,783230E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2412	7,610559E+22	7,610784E+22	6,305574E+22	6,305577E+22	1,522134E+23	1,261115E+23	2,783249E+23
-2411	7,610846E+22	7,610682E+22	6,305427E+22	6,305557E+22	1,522153E+23	1,261098E+23	2,783251E+23
-2410	7,610549E+22	7,610587E+22	6,305431E+22	6,305287E+22	1,522114E+23	1,261072E+23	2,783185E+23
-2409	7,610746E+22	7,610724E+22	6,305441E+22	6,305468E+22	1,522147E+23	1,261091E+23	2,783238E+23
-2408	7,610826E+22	7,610661E+22	6,305310E+22	6,305301E+22	1,522149E+23	1,261061E+23	2,783210E+23
-2407	7,610509E+22	7,610719E+22	6,305363E+22	6,305277E+22	1,522123E+23	1,261064E+23	2,783187E+23
-2406	7,610746E+22	7,610797E+22	6,305373E+22	6,305510E+22	1,522154E+23	1,261088E+23	2,783243E+23
-2405	7,610621E+22	7,610655E+22	6,305400E+22	6,305268E+22	1,522128E+23	1,261067E+23	2,783194E+23
-2404	7,610517E+22	7,610708E+22	6,305531E+22	6,305401E+22	1,522122E+23	1,261093E+23	2,783216E+23
-2403	7,610870E+22	7,610662E+22	6,305479E+22	6,305581E+22	1,522153E+23	1,261106E+23	2,783259E+23
-2402	7,610591E+22	7,610594E+22	6,305532E+22	6,305425E+22	1,522119E+23	1,261096E+23	2,783214E+23
-2401	7,610633E+22	7,610760E+22	6,305618E+22	6,305717E+22	1,522139E+23	1,261133E+23	2,783273E+23
-2400	7,610842E+22	7,610734E+22	6,305534E+22	6,305672E+22	1,522158E+23	1,261121E+23	2,783278E+23
-2399	7,610564E+22	7,610711E+22	6,305661E+22	6,305557E+22	1,522127E+23	1,261122E+23	2,783249E+23
-2398	7,610806E+22	7,610788E+22	6,305735E+22	6,305795E+22	1,522159E+23	1,261153E+23	2,783312E+23
-2397	7,610812E+22	7,610694E+22	6,305709E+22	6,305563E+22	1,522151E+23	1,261127E+23	2,783278E+23
-2396	7,610554E+22	7,610770E+22	6,305784E+22	6,305633E+22	1,522132E+23	1,261142E+23	2,783274E+23
-2395	7,610843E+22	7,610773E+22	6,305661E+22	6,305830E+22	1,522162E+23	1,261149E+23	2,783311E+23
-2394	7,610600E+22	7,610654E+22	6,305631E+22	6,305531E+22	1,522125E+23	1,261116E+23	2,783242E+23
-2393	7,610546E+22	7,610737E+22	6,305666E+22	6,305657E+22	1,522128E+23	1,261132E+23	2,783261E+23
-2392	7,610883E+22	7,610675E+22	6,305487E+22	6,305577E+22	1,522156E+23	1,261106E+23	2,783262E+23
-2391	7,610606E+22	7,610604E+22	6,305508E+22	6,305345E+22	1,522121E+23	1,261085E+23	2,783206E+23
-2390	7,610704E+22	7,610729E+22	6,305502E+22	6,305587E+22	1,522143E+23	1,261109E+23	2,783252E+23
-2389	7,610773E+22	7,610706E+22	6,305391E+22	6,305387E+22	1,522148E+23	1,261078E+23	2,783226E+23
-2388	7,610452E+22	7,610741E+22	6,305495E+22	6,305374E+22	1,522119E+23	1,261087E+23	2,783206E+23
-2387	7,610757E+22	7,610728E+22	6,305476E+22	6,305604E+22	1,522148E+23	1,261108E+23	2,783256E+23
-2386	7,610668E+22	7,610594E+22	6,305516E+22	6,305349E+22	1,522126E+23	1,261087E+23	2,783213E+23
-2385	7,610515E+22	7,610678E+22	6,305645E+22	6,305550E+22	1,522119E+23	1,261120E+23	2,783239E+23
-2384	7,610858E+22	7,610707E+22	6,305524E+22	6,305698E+22	1,522156E+23	1,261122E+23	2,783279E+23
-2383	7,610600E+22	7,610651E+22	6,305605E+22	6,305548E+22	1,522125E+23	1,261115E+23	2,783241E+23
-2382	7,610609E+22	7,610755E+22	6,305718E+22	6,305828E+22	1,522136E+23	1,261155E+23	2,783291E+23
-2381	7,610860E+22	7,610737E+22	6,305679E+22	6,305706E+22	1,522160E+23	1,261139E+23	2,783298E+23
-2380	7,610583E+22	7,610707E+22	6,305838E+22	6,305620E+22	1,522129E+23	1,261146E+23	2,783275E+23
-2379	7,610814E+22	7,610742E+22	6,305833E+22	6,305906E+22	1,522156E+23	1,261174E+23	2,783330E+23
-2378	7,610786E+22	7,610696E+22	6,305781E+22	6,305692E+22	1,522148E+23	1,261147E+23	2,783295E+23
-2377	7,610473E+22	7,610760E+22	6,305854E+22	6,305790E+22	1,522123E+23	1,261164E+23	2,783288E+23
-2376	7,610807E+22	7,610771E+22	6,305695E+22	6,305894E+22	1,522158E+23	1,261159E+23	2,783317E+23
-2375	7,610666E+22	7,610633E+22	6,305699E+22	6,305573E+22	1,522130E+23	1,261127E+23	2,783257E+23
-2374	7,610583E+22	7,610676E+22	6,305735E+22	6,305710E+22	1,522126E+23	1,261144E+23	2,783270E+23
-2373	7,610908E+22	7,610706E+22	6,305564E+22	6,305614E+22	1,522161E+23	1,261118E+23	2,783279E+23
-2372	7,610581E+22	7,610682E+22	6,305605E+22	6,305433E+22	1,522126E+23	1,261104E+23	2,783230E+23
-2371	7,610656E+22	7,610746E+22	6,305568E+22	6,305695E+22	1,522140E+23	1,261126E+23	2,783266E+23
-2370	7,610755E+22	7,610711E+22	6,305503E+22	6,305472E+22	1,522147E+23	1,261097E+23	2,783244E+23
-2369	7,610422E+22	7,610682E+22	6,305638E+22	6,305482E+22	1,522110E+23	1,261112E+23	2,783222E+23
-2368	7,610760E+22	7,610688E+22	6,305576E+22	6,305681E+22	1,522145E+23	1,261126E+23	2,783270E+23
-2367	7,610716E+22	7,610580E+22	6,305601E+22	6,305481E+22	1,522130E+23	1,261108E+23	2,783238E+23
-2366	7,610476E+22	7,610655E+22	6,305698E+22	6,305716E+22	1,522113E+23	1,261141E+23	2,783255E+23
-2365	7,610841E+22	7,610742E+22	6,305597E+22	6,305799E+22	1,522158E+23	1,261140E+23	2,783298E+23
-2364	7,610610E+22	7,610677E+22	6,305733E+22	6,305620E+22	1,522129E+23	1,261135E+23	2,783264E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2363	7,610654E+22	7,610715E+22	6,305829E+22	6,305883E+22	1,522137E+23	1,261171E+23	2,783308E+23
-2362	7,610915E+22	7,610723E+22	6,305814E+22	6,305762E+22	1,522164E+23	1,261158E+23	2,783321E+23
-2361	7,610546E+22	7,610715E+22	6,305971E+22	6,305758E+22	1,522126E+23	1,261173E+23	2,783299E+23
-2360	7,610744E+22	7,610794E+22	6,305899E+22	6,306025E+22	1,522154E+23	1,261192E+23	2,783346E+23
-2359	7,610763E+22	7,610723E+22	6,305854E+22	6,305827E+22	1,522149E+23	1,261168E+23	2,783317E+23
-2358	7,610434E+22	7,610710E+22	6,305929E+22	6,305904E+22	1,522114E+23	1,261183E+23	2,783298E+23
-2357	7,610844E+22	7,610736E+22	6,305785E+22	6,305922E+22	1,522158E+23	1,261171E+23	2,783329E+23
-2356	7,610720E+22	7,610618E+22	6,305809E+22	6,305618E+22	1,522134E+23	1,261143E+23	2,783277E+23
-2355	7,610614E+22	7,610660E+22	6,305776E+22	6,305791E+22	1,522127E+23	1,261157E+23	2,783284E+23
-2354	7,610890E+22	7,610738E+22	6,305614E+22	6,305694E+22	1,522163E+23	1,261131E+23	2,783294E+23
-2353	7,610502E+22	7,610702E+22	6,305693E+22	6,305555E+22	1,522120E+23	1,261125E+23	2,783245E+23
-2352	7,610607E+22	7,610739E+22	6,305646E+22	6,305739E+22	1,522135E+23	1,261139E+23	2,783273E+23
-2351	7,610790E+22	7,610668E+22	6,305612E+22	6,305542E+22	1,522146E+23	1,261115E+23	2,783261E+23
-2350	7,610430E+22	7,610602E+22	6,305738E+22	6,305593E+22	1,522103E+23	1,261133E+23	2,783236E+23
-2349	7,610774E+22	7,610686E+22	6,305659E+22	6,305777E+22	1,522146E+23	1,261144E+23	2,783290E+23
-2348	7,610715E+22	7,610631E+22	6,305696E+22	6,305611E+22	1,522135E+23	1,261131E+23	2,783265E+23
-2347	7,610480E+22	7,610663E+22	6,305762E+22	6,305834E+22	1,522114E+23	1,261160E+23	2,783274E+23
-2346	7,610865E+22	7,610758E+22	6,305721E+22	6,305866E+22	1,522162E+23	1,261159E+23	2,783321E+23
-2345	7,610612E+22	7,610672E+22	6,305901E+22	6,305718E+22	1,522128E+23	1,261162E+23	2,783290E+23
-2344	7,610647E+22	7,610719E+22	6,305959E+22	6,305953E+22	1,522137E+23	1,261191E+23	2,783328E+23
-2343	7,610917E+22	7,610748E+22	6,305921E+22	6,305912E+22	1,522166E+23	1,261183E+23	2,783350E+23
-2342	7,610463E+22	7,610693E+22	6,306045E+22	6,305940E+22	1,522116E+23	1,261199E+23	2,783314E+23
-2341	7,610697E+22	7,610790E+22	6,305973E+22	6,306130E+22	1,522149E+23	1,261210E+23	2,783359E+23
-2340	7,610785E+22	7,610699E+22	6,305956E+22	6,305896E+22	1,522148E+23	1,261185E+23	2,783334E+23
-2339	7,610501E+22	7,610632E+22	6,305982E+22	6,305942E+22	1,522113E+23	1,261192E+23	2,783306E+23
-2338	7,610925E+22	7,610718E+22	6,305858E+22	6,305948E+22	1,522164E+23	1,261181E+23	2,783345E+23
-2337	7,610709E+22	7,610652E+22	6,305880E+22	6,305703E+22	1,522136E+23	1,261158E+23	2,783294E+23
-2336	7,610550E+22	7,610729E+22	6,305822E+22	6,305845E+22	1,522128E+23	1,261167E+23	2,783295E+23
-2335	7,610862E+22	7,610788E+22	6,305695E+22	6,305785E+22	1,522165E+23	1,261148E+23	2,783313E+23
-2334	7,610436E+22	7,610648E+22	6,305808E+22	6,305655E+22	1,522108E+23	1,261146E+23	2,783255E+23
-2333	7,610604E+22	7,610689E+22	6,305776E+22	6,305795E+22	1,522129E+23	1,261157E+23	2,783286E+23
-2332	7,610822E+22	7,610624E+22	6,305743E+22	6,305645E+22	1,522145E+23	1,261139E+23	2,783283E+23
-2331	7,610445E+22	7,610560E+22	6,305777E+22	6,305735E+22	1,522101E+23	1,261151E+23	2,783252E+23
-2330	7,610784E+22	7,610700E+22	6,305708E+22	6,305900E+22	1,522148E+23	1,261161E+23	2,783309E+23
-2329	7,610686E+22	7,610661E+22	6,305785E+22	6,305739E+22	1,522135E+23	1,261152E+23	2,783287E+23
-2328	7,610484E+22	7,610687E+22	6,305864E+22	6,305872E+22	1,522117E+23	1,261174E+23	2,783291E+23
-2327	7,610923E+22	7,610769E+22	6,305860E+22	6,305934E+22	1,522169E+23	1,261179E+23	2,783349E+23
-2326	7,610594E+22	7,610648E+22	6,306049E+22	6,305846E+22	1,522124E+23	1,261189E+23	2,783314E+23
-2325	7,610608E+22	7,610751E+22	6,306080E+22	6,306072E+22	1,522136E+23	1,261215E+23	2,783351E+23
-2324	7,610871E+22	7,610779E+22	6,306043E+22	6,306065E+22	1,522165E+23	1,261211E+23	2,783376E+23
-2323	7,610453E+22	7,610653E+22	6,306108E+22	6,306073E+22	1,522111E+23	1,261218E+23	2,783329E+23
-2322	7,610739E+22	7,610731E+22	6,306063E+22	6,306182E+22	1,522147E+23	1,261224E+23	2,783371E+23
-2321	7,610821E+22	7,610660E+22	6,306061E+22	6,305961E+22	1,522148E+23	1,261202E+23	2,783350E+23
-2320	7,610538E+22	7,610630E+22	6,306038E+22	6,305963E+22	1,522117E+23	1,261200E+23	2,783317E+23
-2319	7,610931E+22	7,610769E+22	6,305903E+22	6,306034E+22	1,522170E+23	1,261194E+23	2,783364E+23
-2318	7,610617E+22	7,610675E+22	6,305939E+22	6,305826E+22	1,522129E+23	1,261177E+23	2,783306E+23
-2317	7,610480E+22	7,610745E+22	6,305908E+22	6,305902E+22	1,522122E+23	1,261181E+23	2,783303E+23
-2316	7,610847E+22	7,610763E+22	6,305828E+22	6,305846E+22	1,522161E+23	1,261167E+23	2,783328E+23
-2315	7,610472E+22	7,610552E+22	6,305889E+22	6,305734E+22	1,522102E+23	1,261162E+23	2,783265E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2314	7,610654E+22	7,610634E+22	6,305864E+22	6,305878E+22	1,522129E+23	1,261174E+23	2,783303E+23
-2313	7,610808E+22	7,610647E+22	6,305819E+22	6,305792E+22	1,522146E+23	1,261161E+23	2,783307E+23
-2312	7,610424E+22	7,610618E+22	6,305821E+22	6,305826E+22	1,522104E+23	1,261165E+23	2,783269E+23
-2311	7,610801E+22	7,610764E+22	6,305793E+22	6,306002E+22	1,522156E+23	1,261180E+23	2,783336E+23
-2310	7,610665E+22	7,610653E+22	6,305927E+22	6,305835E+22	1,522132E+23	1,261176E+23	2,783308E+23
-2309	7,610493E+22	7,610685E+22	6,306037E+22	6,305928E+22	1,522118E+23	1,261196E+23	2,783314E+23
-2308	7,610931E+22	7,610771E+22	6,306041E+22	6,306054E+22	1,522170E+23	1,261209E+23	2,783380E+23
-2307	7,610559E+22	7,610611E+22	6,306134E+22	6,306017E+22	1,522117E+23	1,261215E+23	2,783332E+23
-2306	7,610580E+22	7,610725E+22	6,306163E+22	6,306217E+22	1,522131E+23	1,261238E+23	2,783369E+23
-2305	7,610841E+22	7,610749E+22	6,306127E+22	6,306193E+22	1,522159E+23	1,261232E+23	2,783391E+23
-2304	7,610484E+22	7,610615E+22	6,306163E+22	6,306097E+22	1,522110E+23	1,261226E+23	2,783336E+23
-2303	7,610833E+22	7,610727E+22	6,306126E+22	6,306224E+22	1,522156E+23	1,261235E+23	2,783391E+23
-2302	7,610818E+22	7,610661E+22	6,306136E+22	6,306038E+22	1,522148E+23	1,261217E+23	2,783365E+23
-2301	7,610499E+22	7,610707E+22	6,306113E+22	6,306020E+22	1,522121E+23	1,261213E+23	2,783334E+23
-2300	7,610871E+22	7,610834E+22	6,306014E+22	6,306121E+22	1,522170E+23	1,261214E+23	2,783384E+23
-2299	7,610564E+22	7,610647E+22	6,306021E+22	6,305924E+22	1,522121E+23	1,261195E+23	2,783316E+23
-2298	7,610482E+22	7,610675E+22	6,306028E+22	6,305963E+22	1,522116E+23	1,261199E+23	2,783315E+23
-2297	7,610846E+22	7,610698E+22	6,305948E+22	6,305950E+22	1,522154E+23	1,261190E+23	2,783344E+23
-2296	7,610495E+22	7,610521E+22	6,305939E+22	6,305817E+22	1,522102E+23	1,261176E+23	2,783277E+23
-2295	7,610679E+22	7,610665E+22	6,305887E+22	6,306012E+22	1,522134E+23	1,261190E+23	2,783324E+23
-2294	7,610757E+22	7,610667E+22	6,305877E+22	6,305933E+22	1,522142E+23	1,261181E+23	2,783323E+23
-2293	7,610413E+22	7,610656E+22	6,305925E+22	6,305875E+22	1,522107E+23	1,261180E+23	2,783287E+23
-2292	7,610821E+22	7,610774E+22	6,305966E+22	6,306048E+22	1,522160E+23	1,261201E+23	2,783361E+23
-2291	7,610701E+22	7,610609E+22	6,306063E+22	6,305927E+22	1,522131E+23	1,261199E+23	2,783330E+23
-2290	7,610509E+22	7,610651E+22	6,306178E+22	6,306034E+22	1,522116E+23	1,261221E+23	2,783337E+23
-2289	7,610863E+22	7,610792E+22	6,306159E+22	6,306231E+22	1,522166E+23	1,261239E+23	2,783405E+23
-2288	7,610524E+22	7,610620E+22	6,306198E+22	6,306143E+22	1,522114E+23	1,261234E+23	2,783349E+23
-2287	7,610596E+22	7,610726E+22	6,306231E+22	6,306333E+22	1,522132E+23	1,261256E+23	2,783389E+23
-2286	7,610841E+22	7,610710E+22	6,306232E+22	6,306287E+22	1,522155E+23	1,261252E+23	2,783407E+23
-2285	7,610528E+22	7,610613E+22	6,306266E+22	6,306125E+22	1,522114E+23	1,261239E+23	2,783353E+23
-2284	7,610851E+22	7,610763E+22	6,306238E+22	6,306294E+22	1,522161E+23	1,261253E+23	2,783415E+23
-2283	7,610779E+22	7,610679E+22	6,306179E+22	6,306154E+22	1,522146E+23	1,261233E+23	2,783379E+23
-2282	7,610452E+22	7,610704E+22	6,306196E+22	6,306105E+22	1,522116E+23	1,261230E+23	2,783346E+23
-2281	7,610804E+22	7,610820E+22	6,306123E+22	6,306212E+22	1,522162E+23	1,261233E+23	2,783396E+23
-2280	7,610575E+22	7,610584E+22	6,306099E+22	6,305957E+22	1,522116E+23	1,261206E+23	2,783322E+23
-2279	7,610549E+22	7,610636E+22	6,306092E+22	6,306043E+22	1,522118E+23	1,261214E+23	2,783332E+23
-2278	7,610835E+22	7,610674E+22	6,306015E+22	6,306073E+22	1,522151E+23	1,261209E+23	2,783360E+23
-2277	7,610479E+22	7,610582E+22	6,305994E+22	6,305902E+22	1,522106E+23	1,261190E+23	2,783296E+23
-2276	7,610674E+22	7,610735E+22	6,305990E+22	6,306104E+22	1,522141E+23	1,261209E+23	2,783350E+23
-2275	7,610747E+22	7,610658E+22	6,305971E+22	6,306017E+22	1,522141E+23	1,261199E+23	2,783339E+23
-2274	7,610445E+22	7,610615E+22	6,306091E+22	6,305929E+22	1,522106E+23	1,261202E+23	2,783308E+23
-2273	7,610810E+22	7,610748E+22	6,306139E+22	6,306155E+22	1,522156E+23	1,261229E+23	2,783385E+23
-2272	7,610678E+22	7,610591E+22	6,306161E+22	6,306053E+22	1,522127E+23	1,261221E+23	2,783348E+23
-2271	7,610488E+22	7,610675E+22	6,306234E+22	6,306221E+22	1,522116E+23	1,261245E+23	2,783362E+23
-2270	7,610785E+22	7,610772E+22	6,306235E+22	6,306406E+22	1,522156E+23	1,261264E+23	2,783420E+23
-2269	7,610526E+22	7,610617E+22	6,306284E+22	6,306211E+22	1,522114E+23	1,261250E+23	2,783364E+23
-2268	7,610663E+22	7,610715E+22	6,306353E+22	6,306377E+22	1,522138E+23	1,261273E+23	2,783411E+23
-2267	7,610894E+22	7,610677E+22	6,306312E+22	6,306352E+22	1,522157E+23	1,261266E+23	2,783423E+23
-2266	7,610560E+22	7,610624E+22	6,306369E+22	6,306188E+22	1,522118E+23	1,261256E+23	2,783374E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2265	7,610781E+22	7,610825E+22	6,306340E+22	6,306402E+22	1,522161E+23	1,261274E+23	2,783435E+23
-2264	7,610727E+22	7,610705E+22	6,306248E+22	6,306232E+22	1,522143E+23	1,261248E+23	2,783391E+23
-2263	7,610446E+22	7,610694E+22	6,306273E+22	6,306194E+22	1,522114E+23	1,261247E+23	2,783361E+23
-2262	7,610769E+22	7,610748E+22	6,306238E+22	6,306306E+22	1,522152E+23	1,261254E+23	2,783406E+23
-2261	7,610604E+22	7,610546E+22	6,306191E+22	6,306017E+22	1,522115E+23	1,261221E+23	2,783336E+23
-2260	7,610566E+22	7,610640E+22	6,306168E+22	6,306144E+22	1,522121E+23	1,261231E+23	2,783352E+23
-2259	7,610815E+22	7,610676E+22	6,306035E+22	6,306205E+22	1,522149E+23	1,261224E+23	2,783373E+23
-2258	7,610487E+22	7,610573E+22	6,306063E+22	6,305972E+22	1,522106E+23	1,261203E+23	2,783309E+23
-2257	7,610645E+22	7,610746E+22	6,306111E+22	6,306163E+22	1,522139E+23	1,261227E+23	2,783366E+23
-2256	7,610780E+22	7,610640E+22	6,306079E+22	6,306054E+22	1,522142E+23	1,261213E+23	2,783355E+23
-2255	7,610485E+22	7,610612E+22	6,306199E+22	6,306039E+22	1,522110E+23	1,261224E+23	2,783334E+23
-2254	7,610736E+22	7,610752E+22	6,306261E+22	6,306326E+22	1,522149E+23	1,261259E+23	2,783408E+23
-2253	7,610627E+22	7,610632E+22	6,306258E+22	6,306194E+22	1,522126E+23	1,261245E+23	2,783371E+23
-2252	7,610472E+22	7,610697E+22	6,306351E+22	6,306355E+22	1,522117E+23	1,261271E+23	2,783388E+23
-2251	7,610796E+22	7,610725E+22	6,306325E+22	6,306515E+22	1,522152E+23	1,261284E+23	2,783436E+23
-2250	7,610608E+22	7,610557E+22	6,306416E+22	6,306259E+22	1,522116E+23	1,261268E+23	2,783384E+23
-2249	7,610690E+22	7,610719E+22	6,306484E+22	6,306454E+22	1,522141E+23	1,261294E+23	2,783435E+23
-2248	7,610896E+22	7,610703E+22	6,306375E+22	6,306436E+22	1,522160E+23	1,261281E+23	2,783441E+23
-2247	7,610536E+22	7,610681E+22	6,306416E+22	6,306320E+22	1,522122E+23	1,261274E+23	2,783395E+23
-2246	7,610676E+22	7,610822E+22	6,306434E+22	6,306520E+22	1,522150E+23	1,261295E+23	2,783445E+23
-2245	7,610696E+22	7,610687E+22	6,306348E+22	6,306277E+22	1,522138E+23	1,261263E+23	2,783401E+23
-2244	7,610492E+22	7,610651E+22	6,306387E+22	6,306249E+22	1,522114E+23	1,261264E+23	2,783378E+23
-2243	7,610795E+22	7,610670E+22	6,306288E+22	6,306393E+22	1,522146E+23	1,261268E+23	2,783415E+23
-2242	7,610636E+22	7,610527E+22	6,306248E+22	6,306100E+22	1,522116E+23	1,261235E+23	2,783351E+23
-2241	7,610533E+22	7,610694E+22	6,306226E+22	6,306244E+22	1,522123E+23	1,261247E+23	2,783370E+23
-2240	7,610798E+22	7,610704E+22	6,306083E+22	6,306265E+22	1,522150E+23	1,261235E+23	2,783385E+23
-2239	7,610513E+22	7,610600E+22	6,306151E+22	6,306046E+22	1,522111E+23	1,261220E+23	2,783331E+23
-2238	7,610608E+22	7,610712E+22	6,306267E+22	6,306249E+22	1,522132E+23	1,261252E+23	2,783384E+23
-2237	7,610771E+22	7,610639E+22	6,306218E+22	6,306146E+22	1,522141E+23	1,261236E+23	2,783377E+23
-2236	7,610468E+22	7,610625E+22	6,306321E+22	6,306196E+22	1,522109E+23	1,261252E+23	2,783361E+23
-2235	7,610677E+22	7,610721E+22	6,306326E+22	6,306508E+22	1,522140E+23	1,261283E+23	2,783423E+23
-2234	7,610644E+22	7,610582E+22	6,306359E+22	6,306308E+22	1,522123E+23	1,261267E+23	2,783389E+23
-2233	7,610495E+22	7,610676E+22	6,306470E+22	6,306432E+22	1,522117E+23	1,261290E+23	2,783407E+23
-2232	7,610878E+22	7,610695E+22	6,306413E+22	6,306557E+22	1,522157E+23	1,261297E+23	2,783454E+23
-2231	7,610686E+22	7,610591E+22	6,306492E+22	6,306345E+22	1,522128E+23	1,261284E+23	2,783411E+23
-2230	7,610626E+22	7,610772E+22	6,306594E+22	6,306576E+22	1,522140E+23	1,261317E+23	2,783457E+23
-2229	7,610836E+22	7,610783E+22	6,306475E+22	6,306532E+22	1,522162E+23	1,261301E+23	2,783462E+23
-2228	7,610490E+22	7,610705E+22	6,306542E+22	6,306420E+22	1,522119E+23	1,261296E+23	2,783416E+23
-2227	7,610636E+22	7,610751E+22	6,306533E+22	6,306614E+22	1,522139E+23	1,261315E+23	2,783453E+23
-2226	7,610749E+22	7,610576E+22	6,306459E+22	6,306334E+22	1,522133E+23	1,261279E+23	2,783412E+23
-2225	7,610497E+22	7,610613E+22	6,306464E+22	6,306337E+22	1,522111E+23	1,261280E+23	2,783391E+23
-2224	7,610805E+22	7,610670E+22	6,306286E+22	6,306487E+22	1,522148E+23	1,261277E+23	2,783425E+23
-2223	7,610645E+22	7,610574E+22	6,306242E+22	6,306206E+22	1,522122E+23	1,261245E+23	2,783367E+23
-2222	7,610471E+22	7,610711E+22	6,306308E+22	6,306317E+22	1,522118E+23	1,261263E+23	2,783381E+23
-2221	7,610800E+22	7,610719E+22	6,306198E+22	6,306276E+22	1,522152E+23	1,261247E+23	2,783399E+23
-2220	7,610550E+22	7,610596E+22	6,306306E+22	6,306106E+22	1,522115E+23	1,261241E+23	2,783356E+23
-2219	7,610582E+22	7,610674E+22	6,306382E+22	6,306375E+22	1,522126E+23	1,261276E+23	2,783401E+23
-2218	7,610761E+22	7,610617E+22	6,306337E+22	6,306287E+22	1,522138E+23	1,261262E+23	2,783400E+23
-2217	7,610421E+22	7,610648E+22	6,306430E+22	6,306352E+22	1,522107E+23	1,261278E+23	2,783385E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2216	7,610688E+22	7,610698E+22	6,306399E+22	6,306617E+22	1,522139E+23	1,261302E+23	2,783440E+23
-2215	7,610716E+22	7,610578E+22	6,306445E+22	6,306406E+22	1,522129E+23	1,261285E+23	2,783415E+23
-2214	7,610514E+22	7,610656E+22	6,306611E+22	6,306521E+22	1,522117E+23	1,261313E+23	2,783430E+23
-2213	7,610887E+22	7,610736E+22	6,306531E+22	6,306634E+22	1,522162E+23	1,261316E+23	2,783479E+23
-2212	7,610668E+22	7,610665E+22	6,306603E+22	6,306480E+22	1,522133E+23	1,261308E+23	2,783442E+23
-2211	7,610533E+22	7,610766E+22	6,306667E+22	6,306712E+22	1,522130E+23	1,261338E+23	2,783468E+23
-2210	7,610809E+22	7,610726E+22	6,306587E+22	6,306612E+22	1,522153E+23	1,261320E+23	2,783473E+23
-2209	7,610486E+22	7,610651E+22	6,306655E+22	6,306482E+22	1,522114E+23	1,261314E+23	2,783427E+23
-2208	7,610685E+22	7,610664E+22	6,306585E+22	6,306664E+22	1,522135E+23	1,261325E+23	2,783460E+23
-2207	7,610810E+22	7,610576E+22	6,306478E+22	6,306427E+22	1,522139E+23	1,261290E+23	2,783429E+23
-2206	7,610455E+22	7,610645E+22	6,306510E+22	6,306439E+22	1,522110E+23	1,261295E+23	2,783405E+23
-2205	7,610774E+22	7,610744E+22	6,306339E+22	6,306542E+22	1,522152E+23	1,261288E+23	2,783440E+23
-2204	7,610645E+22	7,610629E+22	6,306349E+22	6,306262E+22	1,522127E+23	1,261261E+23	2,783388E+23
-2203	7,610444E+22	7,610670E+22	6,306435E+22	6,306375E+22	1,522111E+23	1,261281E+23	2,783392E+23
-2202	7,610835E+22	7,610650E+22	6,306364E+22	6,306340E+22	1,522149E+23	1,261270E+23	2,783419E+23
-2201	7,610524E+22	7,610582E+22	6,306446E+22	6,306238E+22	1,522111E+23	1,261268E+23	2,783379E+23
-2200	7,610551E+22	7,610655E+22	6,306439E+22	6,306537E+22	1,522121E+23	1,261298E+23	2,783418E+23
-2199	7,610760E+22	7,610626E+22	6,306376E+22	6,306455E+22	1,522139E+23	1,261283E+23	2,783422E+23
-2198	7,610389E+22	7,610630E+22	6,306531E+22	6,306471E+22	1,522102E+23	1,261300E+23	2,783402E+23
-2197	7,610741E+22	7,610703E+22	6,306507E+22	6,306664E+22	1,522144E+23	1,261317E+23	2,783462E+23
-2196	7,610791E+22	7,610601E+22	6,306574E+22	6,306475E+22	1,522139E+23	1,261305E+23	2,783444E+23
-2195	7,610496E+22	7,610669E+22	6,306720E+22	6,306631E+22	1,522116E+23	1,261335E+23	2,783452E+23
-2194	7,610871E+22	7,610754E+22	6,306657E+22	6,306740E+22	1,522162E+23	1,261340E+23	2,783502E+23
-2193	7,610588E+22	7,610701E+22	6,306734E+22	6,306600E+22	1,522129E+23	1,261333E+23	2,783462E+23
-2192	7,610501E+22	7,610728E+22	6,306754E+22	6,306804E+22	1,522123E+23	1,261356E+23	2,783479E+23
-2191	7,610845E+22	7,610674E+22	6,306661E+22	6,306698E+22	1,522152E+23	1,261336E+23	2,783488E+23
-2190	7,610489E+22	7,610585E+22	6,306754E+22	6,306570E+22	1,522107E+23	1,261332E+23	2,783440E+23
-2189	7,610702E+22	7,610667E+22	6,306631E+22	6,306734E+22	1,522137E+23	1,261337E+23	2,783474E+23
-2188	7,610810E+22	7,610636E+22	6,306516E+22	6,306529E+22	1,522145E+23	1,261304E+23	2,783449E+23
-2187	7,610399E+22	7,610654E+22	6,306554E+22	6,306523E+22	1,522105E+23	1,261308E+23	2,783413E+23
-2186	7,610782E+22	7,610716E+22	6,306453E+22	6,306563E+22	1,522150E+23	1,261302E+23	2,783451E+23
-2185	7,610648E+22	7,610621E+22	6,306496E+22	6,306299E+22	1,522127E+23	1,261280E+23	2,783406E+23
-2184	7,610464E+22	7,610619E+22	6,306534E+22	6,306448E+22	1,522108E+23	1,261298E+23	2,783407E+23
-2183	7,610837E+22	7,610663E+22	6,306436E+22	6,306484E+22	1,522150E+23	1,261292E+23	2,783442E+23
-2182	7,610452E+22	7,610597E+22	6,306542E+22	6,306411E+22	1,522105E+23	1,261295E+23	2,783400E+23
-2181	7,610515E+22	7,610677E+22	6,306519E+22	6,306656E+22	1,522119E+23	1,261317E+23	2,783437E+23
-2180	7,610787E+22	7,610651E+22	6,306488E+22	6,306563E+22	1,522144E+23	1,261305E+23	2,783449E+23
-2179	7,610412E+22	7,610576E+22	6,306646E+22	6,306548E+22	1,522099E+23	1,261319E+23	2,783418E+23
-2178	7,610802E+22	7,610659E+22	6,306656E+22	6,306726E+22	1,522146E+23	1,261338E+23	2,783484E+23
-2177	7,610777E+22	7,610647E+22	6,306708E+22	6,306590E+22	1,522142E+23	1,261330E+23	2,783472E+23
-2176	7,610450E+22	7,610679E+22	6,306791E+22	6,306768E+22	1,522113E+23	1,261356E+23	2,783469E+23
-2175	7,610835E+22	7,610769E+22	6,306729E+22	6,306873E+22	1,522160E+23	1,261360E+23	2,783521E+23
-2174	7,610539E+22	7,610655E+22	6,306859E+22	6,306700E+22	1,522119E+23	1,261356E+23	2,783475E+23
-2173	7,610527E+22	7,610680E+22	6,306853E+22	6,306848E+22	1,522121E+23	1,261370E+23	2,783491E+23
-2172	7,610905E+22	7,610669E+22	6,306744E+22	6,306777E+22	1,522157E+23	1,261352E+23	2,783510E+23
-2171	7,610476E+22	7,610577E+22	6,306799E+22	6,306668E+22	1,522105E+23	1,261347E+23	2,783452E+23
-2170	7,610709E+22	7,610690E+22	6,306697E+22	6,306808E+22	1,522140E+23	1,261351E+23	2,783490E+23
-2169	7,610768E+22	7,610699E+22	6,306613E+22	6,306593E+22	1,522147E+23	1,261321E+23	2,783467E+23
-2168	7,610392E+22	7,610642E+22	6,306641E+22	6,306574E+22	1,522103E+23	1,261321E+23	2,783425E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2167	7,610807E+22	7,610696E+22	6,306559E+22	6,306625E+22	1,522150E+23	1,261318E+23	2,783469E+23
-2166	7,610611E+22	7,610583E+22	6,306637E+22	6,306415E+22	1,522119E+23	1,261305E+23	2,783425E+23
-2165	7,610431E+22	7,610627E+22	6,306615E+22	6,306579E+22	1,522106E+23	1,261319E+23	2,783425E+23
-2164	7,610803E+22	7,610692E+22	6,306493E+22	6,306646E+22	1,522150E+23	1,261314E+23	2,783463E+23
-2163	7,610403E+22	7,610558E+22	6,306602E+22	6,306541E+22	1,522096E+23	1,261314E+23	2,783410E+23
-2162	7,610575E+22	7,610617E+22	6,306627E+22	6,306706E+22	1,522119E+23	1,261333E+23	2,783453E+23
-2161	7,610835E+22	7,610644E+22	6,306626E+22	6,306608E+22	1,522148E+23	1,261323E+23	2,783471E+23
-2160	7,610467E+22	7,610566E+22	6,306746E+22	6,306626E+22	1,522103E+23	1,261337E+23	2,783440E+23
-2159	7,610808E+22	7,610714E+22	6,306748E+22	6,306844E+22	1,522152E+23	1,261359E+23	2,783511E+23
-2158	7,610691E+22	7,610697E+22	6,306843E+22	6,306744E+22	1,522139E+23	1,261359E+23	2,783498E+23
-2157	7,610392E+22	7,610706E+22	6,306907E+22	6,306878E+22	1,522110E+23	1,261379E+23	2,783488E+23
-2156	7,610824E+22	7,610769E+22	6,306854E+22	6,306981E+22	1,522159E+23	1,261384E+23	2,783543E+23
-2155	7,610542E+22	7,610566E+22	6,306971E+22	6,306799E+22	1,522111E+23	1,261377E+23	2,783488E+23
-2154	7,610587E+22	7,610606E+22	6,306954E+22	6,306925E+22	1,522119E+23	1,261388E+23	2,783507E+23
-2153	7,610897E+22	7,610705E+22	6,306815E+22	6,306882E+22	1,522160E+23	1,261370E+23	2,783530E+23
-2152	7,610464E+22	7,610595E+22	6,306809E+22	6,306766E+22	1,522106E+23	1,261358E+23	2,783463E+23
-2151	7,610700E+22	7,610722E+22	6,306739E+22	6,306871E+22	1,522142E+23	1,261361E+23	2,783503E+23
-2150	7,610740E+22	7,610694E+22	6,306733E+22	6,306644E+22	1,522143E+23	1,261338E+23	2,783481E+23
-2149	7,610399E+22	7,610616E+22	6,306749E+22	6,306603E+22	1,522102E+23	1,261335E+23	2,783437E+23
-2148	7,610808E+22	7,610711E+22	6,306661E+22	6,306724E+22	1,522152E+23	1,261338E+23	2,783490E+23
-2147	7,610556E+22	7,610552E+22	6,306710E+22	6,306555E+22	1,522111E+23	1,261326E+23	2,783437E+23
-2146	7,610415E+22	7,610598E+22	6,306695E+22	6,306695E+22	1,522101E+23	1,261339E+23	2,783440E+23
-2145	7,610783E+22	7,610710E+22	6,306599E+22	6,306745E+22	1,522149E+23	1,261334E+23	2,783484E+23
-2144	7,610448E+22	7,610514E+22	6,306681E+22	6,306611E+22	1,522096E+23	1,261329E+23	2,783425E+23
-2143	7,610651E+22	7,610602E+22	6,306732E+22	6,306767E+22	1,522125E+23	1,261350E+23	2,783475E+23
-2142	7,610834E+22	7,610654E+22	6,306773E+22	6,306720E+22	1,522149E+23	1,261349E+23	2,783498E+23
-2141	7,610430E+22	7,610621E+22	6,306851E+22	6,306754E+22	1,522105E+23	1,261361E+23	2,783466E+23
-2140	7,610745E+22	7,610787E+22	6,306850E+22	6,307003E+22	1,522153E+23	1,261385E+23	2,783539E+23
-2139	7,610616E+22	7,610659E+22	6,306959E+22	6,306884E+22	1,522127E+23	1,261384E+23	2,783512E+23
-2138	7,610424E+22	7,610626E+22	6,307042E+22	6,306955E+22	1,522105E+23	1,261400E+23	2,783505E+23
-2137	7,610857E+22	7,610734E+22	6,306983E+22	6,307053E+22	1,522159E+23	1,261404E+23	2,783563E+23
-2136	7,610597E+22	7,610531E+22	6,307019E+22	6,306897E+22	1,522113E+23	1,261392E+23	2,783504E+23
-2135	7,610619E+22	7,610648E+22	6,306983E+22	6,307023E+22	1,522127E+23	1,261401E+23	2,783527E+23
-2134	7,610840E+22	7,610761E+22	6,306896E+22	6,306983E+22	1,522160E+23	1,261388E+23	2,783548E+23
-2133	7,610438E+22	7,610643E+22	6,306892E+22	6,306813E+22	1,522108E+23	1,261371E+23	2,783479E+23
-2132	7,610694E+22	7,610743E+22	6,306846E+22	6,306910E+22	1,522144E+23	1,261376E+23	2,783519E+23
-2131	7,610713E+22	7,610618E+22	6,306855E+22	6,306716E+22	1,522133E+23	1,261357E+23	2,783490E+23
-2130	7,610417E+22	7,610547E+22	6,306858E+22	6,306694E+22	1,522096E+23	1,261355E+23	2,783452E+23
-2129	7,610749E+22	7,610719E+22	6,306743E+22	6,306855E+22	1,522147E+23	1,261360E+23	2,783507E+23
-2128	7,610536E+22	7,610522E+22	6,306729E+22	6,306695E+22	1,522106E+23	1,261342E+23	2,783448E+23
-2127	7,610446E+22	7,610577E+22	6,306738E+22	6,306775E+22	1,522102E+23	1,261351E+23	2,783454E+23
-2126	7,610803E+22	7,610689E+22	6,306717E+22	6,306809E+22	1,522149E+23	1,261353E+23	2,783502E+23
-2125	7,610506E+22	7,610525E+22	6,306786E+22	6,306654E+22	1,522103E+23	1,261344E+23	2,783447E+23
-2124	7,610664E+22	7,610679E+22	6,306844E+22	6,306869E+22	1,522134E+23	1,261371E+23	2,783506E+23
-2123	7,610765E+22	7,610688E+22	6,306894E+22	6,306877E+22	1,522145E+23	1,261377E+23	2,783522E+23
-2122	7,610392E+22	7,610626E+22	6,306993E+22	6,306893E+22	1,522102E+23	1,261389E+23	2,783490E+23
-2121	7,610684E+22	7,610802E+22	6,307012E+22	6,307126E+22	1,522149E+23	1,261414E+23	2,783562E+23
-2120	7,610645E+22	7,610577E+22	6,307065E+22	6,306998E+22	1,522122E+23	1,261406E+23	2,783529E+23
-2119	7,610497E+22	7,610561E+22	6,307135E+22	6,307047E+22	1,522106E+23	1,261418E+23	2,783524E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2118	7,610869E+22	7,610723E+22	6,307081E+22	6,307178E+22	1,522159E+23	1,261426E+23	2,783585E+23
-2117	7,610591E+22	7,610572E+22	6,307047E+22	6,306992E+22	1,522116E+23	1,261404E+23	2,783520E+23
-2116	7,610592E+22	7,610728E+22	6,307023E+22	6,307108E+22	1,522132E+23	1,261413E+23	2,783545E+23
-2115	7,610799E+22	7,610736E+22	6,306982E+22	6,307037E+22	1,522154E+23	1,261402E+23	2,783555E+23
-2114	7,610463E+22	7,610583E+22	6,307016E+22	6,306828E+22	1,522105E+23	1,261384E+23	2,783489E+23
-2113	7,610680E+22	7,610732E+22	6,306983E+22	6,306955E+22	1,522141E+23	1,261394E+23	2,783535E+23
-2112	7,610712E+22	7,610573E+22	6,306911E+22	6,306829E+22	1,522129E+23	1,261374E+23	2,783503E+23
-2111	7,610411E+22	7,610547E+22	6,306897E+22	6,306819E+22	1,522096E+23	1,261372E+23	2,783467E+23
-2110	7,610700E+22	7,610726E+22	6,306823E+22	6,306986E+22	1,522143E+23	1,261381E+23	2,783524E+23
-2109	7,610542E+22	7,610534E+22	6,306793E+22	6,306765E+22	1,522108E+23	1,261356E+23	2,783463E+23
-2108	7,610492E+22	7,610609E+22	6,306832E+22	6,306834E+22	1,522110E+23	1,261367E+23	2,783477E+23
-2107	7,610816E+22	7,610654E+22	6,306850E+22	6,306895E+22	1,522147E+23	1,261374E+23	2,783522E+23
-2106	7,610525E+22	7,610530E+22	6,306922E+22	6,306765E+22	1,522106E+23	1,261369E+23	2,783474E+23
-2105	7,610585E+22	7,610746E+22	6,306981E+22	6,307008E+22	1,522133E+23	1,261399E+23	2,783532E+23
-2104	7,610718E+22	7,610670E+22	6,306984E+22	6,307042E+22	1,522139E+23	1,261403E+23	2,783541E+23
-2103	7,610411E+22	7,610573E+22	6,307103E+22	6,307004E+22	1,522098E+23	1,261411E+23	2,783509E+23
-2102	7,610693E+22	7,610734E+22	6,307157E+22	6,307225E+22	1,522143E+23	1,261438E+23	2,783581E+23
-2101	7,610707E+22	7,610552E+22	6,307148E+22	6,307077E+22	1,522126E+23	1,261422E+23	2,783548E+23
-2100	7,610538E+22	7,610615E+22	6,307180E+22	6,307145E+22	1,522115E+23	1,261433E+23	2,783548E+23
-2099	7,610826E+22	7,610746E+22	6,307147E+22	6,307291E+22	1,522157E+23	1,261444E+23	2,783601E+23
-2098	7,610582E+22	7,610607E+22	6,307140E+22	6,307059E+22	1,522119E+23	1,261420E+23	2,783539E+23
-2097	7,610540E+22	7,610766E+22	6,307161E+22	6,307141E+22	1,522131E+23	1,261430E+23	2,783561E+23
-2096	7,610807E+22	7,610675E+22	6,307084E+22	6,307099E+22	1,522148E+23	1,261418E+23	2,783567E+23
-2095	7,610498E+22	7,610512E+22	6,307118E+22	6,306903E+22	1,522101E+23	1,261402E+23	2,783503E+23
-2094	7,610625E+22	7,610706E+22	6,307079E+22	6,307093E+22	1,522133E+23	1,261417E+23	2,783550E+23
-2093	7,610672E+22	7,610586E+22	6,306929E+22	6,306960E+22	1,522126E+23	1,261389E+23	2,783515E+23
-2092	7,610396E+22	7,610587E+22	6,306913E+22	6,306925E+22	1,522098E+23	1,261384E+23	2,783482E+23
-2091	7,610697E+22	7,610681E+22	6,306902E+22	6,307059E+22	1,522138E+23	1,261396E+23	2,783534E+23
-2090	7,610618E+22	7,610502E+22	6,306905E+22	6,306790E+22	1,522112E+23	1,261370E+23	2,783482E+23
-2089	7,610510E+22	7,610648E+22	6,306983E+22	6,306881E+22	1,522116E+23	1,261386E+23	2,783502E+23
-2088	7,610818E+22	7,610665E+22	6,306947E+22	6,307021E+22	1,522148E+23	1,261397E+23	2,783545E+23
-2087	7,610502E+22	7,610552E+22	6,307039E+22	6,306907E+22	1,522105E+23	1,261395E+23	2,783500E+23
-2086	7,610508E+22	7,610758E+22	6,307138E+22	6,307169E+22	1,522127E+23	1,261431E+23	2,783557E+23
-2085	7,610705E+22	7,610640E+22	6,307094E+22	6,307150E+22	1,522134E+23	1,261424E+23	2,783559E+23
-2084	7,610457E+22	7,610552E+22	6,307203E+22	6,307103E+22	1,522101E+23	1,261431E+23	2,783532E+23
-2083	7,610724E+22	7,610658E+22	6,307266E+22	6,307342E+22	1,522138E+23	1,261461E+23	2,783599E+23
-2082	7,610736E+22	7,610556E+22	6,307224E+22	6,307184E+22	1,522129E+23	1,261441E+23	2,783570E+23
-2081	7,610490E+22	7,610702E+22	6,307266E+22	6,307242E+22	1,522119E+23	1,261451E+23	2,783570E+23
-2080	7,610803E+22	7,610744E+22	6,307206E+22	6,307383E+22	1,522155E+23	1,261459E+23	2,783614E+23
-2079	7,610601E+22	7,610579E+22	6,307247E+22	6,307099E+22	1,522118E+23	1,261435E+23	2,783553E+23
-2078	7,610521E+22	7,610730E+22	6,307306E+22	6,307199E+22	1,522125E+23	1,261451E+23	2,783576E+23
-2077	7,610804E+22	7,610656E+22	6,307159E+22	6,307174E+22	1,522146E+23	1,261433E+23	2,783579E+23
-2076	7,610489E+22	7,610552E+22	6,307153E+22	6,307025E+22	1,522104E+23	1,261418E+23	2,783522E+23
-2075	7,610569E+22	7,610682E+22	6,307138E+22	6,307230E+22	1,522125E+23	1,261437E+23	2,783562E+23
-2074	7,610674E+22	7,610587E+22	6,307001E+22	6,307043E+22	1,522126E+23	1,261404E+23	2,783531E+23
-2073	7,610399E+22	7,610615E+22	6,307030E+22	6,306956E+22	1,522101E+23	1,261399E+23	2,783500E+23
-2072	7,610751E+22	7,610631E+22	6,306999E+22	6,307117E+22	1,522138E+23	1,261412E+23	2,783550E+23
-2071	7,610681E+22	7,610479E+22	6,307029E+22	6,306866E+22	1,522116E+23	1,261389E+23	2,783506E+23
-2070	7,610447E+22	7,610670E+22	6,307119E+22	6,307021E+22	1,522112E+23	1,261414E+23	2,783526E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2069	7,610748E+22	7,610700E+22	6,307025E+22	6,307168E+22	1,522145E+23	1,261419E+23	2,783564E+23
-2068	7,610475E+22	7,610569E+22	6,307117E+22	6,307042E+22	1,522104E+23	1,261416E+23	2,783520E+23
-2067	7,610484E+22	7,610665E+22	6,307268E+22	6,307284E+22	1,522115E+23	1,261455E+23	2,783570E+23
-2066	7,610767E+22	7,610587E+22	6,307214E+22	6,307228E+22	1,522135E+23	1,261444E+23	2,783580E+23
-2065	7,610485E+22	7,610578E+22	6,307320E+22	6,307182E+22	1,522106E+23	1,261450E+23	2,783557E+23
-2064	7,610741E+22	7,610670E+22	6,307321E+22	6,307473E+22	1,522141E+23	1,261479E+23	2,783621E+23
-2063	7,610745E+22	7,610594E+22	6,307308E+22	6,307285E+22	1,522134E+23	1,261459E+23	2,783593E+23
-2062	7,610427E+22	7,610742E+22	6,307406E+22	6,307335E+22	1,522117E+23	1,261474E+23	2,783591E+23
-2061	7,610783E+22	7,610745E+22	6,307314E+22	6,307436E+22	1,522153E+23	1,261475E+23	2,783628E+23
-2060	7,610622E+22	7,610569E+22	6,307349E+22	6,307170E+22	1,522119E+23	1,261452E+23	2,783571E+23
-2059	7,610492E+22	7,610652E+22	6,307419E+22	6,307320E+22	1,522114E+23	1,261474E+23	2,783588E+23
-2058	7,610780E+22	7,610646E+22	6,307215E+22	6,307295E+22	1,522143E+23	1,261451E+23	2,783594E+23
-2057	7,610439E+22	7,610592E+22	6,307212E+22	6,307126E+22	1,522103E+23	1,261434E+23	2,783537E+23
-2056	7,610584E+22	7,610632E+22	6,307169E+22	6,307318E+22	1,522122E+23	1,261449E+23	2,783570E+23
-2055	7,610743E+22	7,610536E+22	6,307090E+22	6,307062E+22	1,522128E+23	1,261415E+23	2,783543E+23
-2054	7,610426E+22	7,610611E+22	6,307168E+22	6,306999E+22	1,522104E+23	1,261417E+23	2,783520E+23
-2053	7,610760E+22	7,610652E+22	6,307082E+22	6,307178E+22	1,522141E+23	1,261426E+23	2,783567E+23
-2052	7,610651E+22	7,610561E+22	6,307102E+22	6,306995E+22	1,522121E+23	1,261410E+23	2,783531E+23
-2051	7,610358E+22	7,610665E+22	6,307244E+22	6,307187E+22	1,522102E+23	1,261443E+23	2,783545E+23
-2050	7,610700E+22	7,610695E+22	6,307151E+22	6,307292E+22	1,522139E+23	1,261444E+23	2,783584E+23
-2049	7,610466E+22	7,610565E+22	6,307271E+22	6,307134E+22	1,522103E+23	1,261441E+23	2,783544E+23
-2048	7,610547E+22	7,610567E+22	6,307370E+22	6,307402E+22	1,522111E+23	1,261477E+23	2,783589E+23
-2047	7,610838E+22	7,610546E+22	6,307320E+22	6,307337E+22	1,522138E+23	1,261466E+23	2,783604E+23
-2046	7,610458E+22	7,610628E+22	6,307422E+22	6,307321E+22	1,522109E+23	1,261474E+23	2,783583E+23
-2045	7,610704E+22	7,610726E+22	6,307375E+22	6,307577E+22	1,522143E+23	1,261495E+23	2,783638E+23
-2044	7,610740E+22	7,610649E+22	6,307386E+22	6,307366E+22	1,522139E+23	1,261475E+23	2,783614E+23
-2043	7,610405E+22	7,610678E+22	6,307553E+22	6,307406E+22	1,522108E+23	1,261496E+23	2,783604E+23
-2042	7,610795E+22	7,610715E+22	6,307440E+22	6,307492E+22	1,522151E+23	1,261493E+23	2,783644E+23
-2041	7,610606E+22	7,610588E+22	6,307462E+22	6,307254E+22	1,522119E+23	1,261472E+23	2,783591E+23
-2040	7,610473E+22	7,610615E+22	6,307457E+22	6,307463E+22	1,522109E+23	1,261492E+23	2,783601E+23
-2039	7,610790E+22	7,610631E+22	6,307277E+22	6,307396E+22	1,522142E+23	1,261467E+23	2,783609E+23
-2038	7,610413E+22	7,610595E+22	6,307303E+22	6,307195E+22	1,522101E+23	1,261450E+23	2,783551E+23
-2037	7,610610E+22	7,610623E+22	6,307231E+22	6,307343E+22	1,522123E+23	1,261457E+23	2,783581E+23
-2036	7,610803E+22	7,610553E+22	6,307162E+22	6,307110E+22	1,522136E+23	1,261427E+23	2,783563E+23
-2035	7,610389E+22	7,610580E+22	6,307288E+22	6,307116E+22	1,522097E+23	1,261440E+23	2,783537E+23
-2034	7,610687E+22	7,610701E+22	6,307173E+22	6,307306E+22	1,522139E+23	1,261448E+23	2,783587E+23
-2033	7,610570E+22	7,610609E+22	6,307218E+22	6,307124E+22	1,522118E+23	1,261434E+23	2,783552E+23
-2032	7,610342E+22	7,610583E+22	6,307336E+22	6,307323E+22	1,522093E+23	1,261466E+23	2,783558E+23
-2031	7,610763E+22	7,610602E+22	6,307279E+22	6,307370E+22	1,522137E+23	1,261465E+23	2,783601E+23
-2030	7,610504E+22	7,610534E+22	6,307405E+22	6,307230E+22	1,522104E+23	1,261464E+23	2,783567E+23
-2029	7,610588E+22	7,610588E+22	6,307428E+22	6,307503E+22	1,522118E+23	1,261493E+23	2,783611E+23
-2028	7,610853E+22	7,610641E+22	6,307375E+22	6,307460E+22	1,522149E+23	1,261484E+23	2,783633E+23
-2027	7,610407E+22	7,610653E+22	6,307555E+22	6,307452E+22	1,522106E+23	1,261501E+23	2,783607E+23
-2026	7,610664E+22	7,610766E+22	6,307514E+22	6,307643E+22	1,522143E+23	1,261516E+23	2,783659E+23
-2025	7,610724E+22	7,610666E+22	6,307560E+22	6,307426E+22	1,522139E+23	1,261499E+23	2,783638E+23
-2024	7,610430E+22	7,610578E+22	6,307669E+22	6,307523E+22	1,522101E+23	1,261519E+23	2,783620E+23
-2023	7,610804E+22	7,610648E+22	6,307535E+22	6,307607E+22	1,522145E+23	1,261514E+23	2,783659E+23
-2022	7,610551E+22	7,610599E+22	6,307526E+22	6,307401E+22	1,522115E+23	1,261493E+23	2,783608E+23
-2021	7,610459E+22	7,610609E+22	6,307448E+22	6,307551E+22	1,522107E+23	1,261500E+23	2,783607E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2020	7,610819E+22	7,610645E+22	6,307296E+22	6,307441E+22	1,522146E+23	1,261474E+23	2,783620E+23
-2019	7,610437E+22	7,610549E+22	6,307406E+22	6,307233E+22	1,522099E+23	1,261464E+23	2,783562E+23
-2018	7,610624E+22	7,610644E+22	6,307328E+22	6,307362E+22	1,522127E+23	1,261469E+23	2,783596E+23
-2017	7,610774E+22	7,610632E+22	6,307280E+22	6,307187E+22	1,522141E+23	1,261447E+23	2,783587E+23
-2016	7,610345E+22	7,610564E+22	6,307372E+22	6,307270E+22	1,522091E+23	1,261464E+23	2,783555E+23
-2015	7,610648E+22	7,610675E+22	6,307299E+22	6,307430E+22	1,522132E+23	1,261473E+23	2,783605E+23
-2014	7,610530E+22	7,610590E+22	6,307365E+22	6,307246E+22	1,522112E+23	1,261461E+23	2,783573E+23
-2013	7,610385E+22	7,610521E+22	6,307423E+22	6,307408E+22	1,522091E+23	1,261483E+23	2,783574E+23
-2012	7,610846E+22	7,610591E+22	6,307359E+22	6,307476E+22	1,522144E+23	1,261483E+23	2,783627E+23
-2011	7,610509E+22	7,610519E+22	6,307514E+22	6,307376E+22	1,522103E+23	1,261489E+23	2,783592E+23
-2010	7,610551E+22	7,610673E+22	6,307508E+22	6,307620E+22	1,522122E+23	1,261513E+23	2,783635E+23
-2009	7,610813E+22	7,610727E+22	6,307501E+22	6,307558E+22	1,522154E+23	1,261506E+23	2,783660E+23
-2008	7,610399E+22	7,610598E+22	6,307680E+22	6,307557E+22	1,522100E+23	1,261524E+23	2,783623E+23
-2007	7,610696E+22	7,610697E+22	6,307677E+22	6,307703E+22	1,522139E+23	1,261538E+23	2,783677E+23
-2006	7,610715E+22	7,610634E+22	6,307698E+22	6,307527E+22	1,522135E+23	1,261522E+23	2,783657E+23
-2005	7,610422E+22	7,610562E+22	6,307701E+22	6,307640E+22	1,522098E+23	1,261534E+23	2,783632E+23
-2004	7,610803E+22	7,610686E+22	6,307542E+22	6,307732E+22	1,522149E+23	1,261527E+23	2,783676E+23
-2003	7,610513E+22	7,610578E+22	6,307593E+22	6,307510E+22	1,522109E+23	1,261510E+23	2,783619E+23
-2002	7,610452E+22	7,610641E+22	6,307515E+22	6,307575E+22	1,522109E+23	1,261509E+23	2,783618E+23
-2001	7,610848E+22	7,610671E+22	6,307415E+22	6,307451E+22	1,522152E+23	1,261487E+23	2,783638E+23
-2000	7,610468E+22	7,610486E+22	6,307504E+22	6,307314E+22	1,522095E+23	1,261482E+23	2,783577E+23
-1999	7,610607E+22	7,610629E+22	6,307441E+22	6,307453E+22	1,522124E+23	1,261489E+23	2,783613E+23
-1998	7,610683E+22	7,610664E+22	6,307387E+22	6,307332E+22	1,522135E+23	1,261472E+23	2,783607E+23
-1997	7,610310E+22	7,610535E+22	6,307424E+22	6,307393E+22	1,522085E+23	1,261482E+23	2,783566E+23
-1996	7,610679E+22	7,610642E+22	6,307372E+22	6,307523E+22	1,522132E+23	1,261489E+23	2,783621E+23
-1995	7,610568E+22	7,610510E+22	6,307494E+22	6,307349E+22	1,522108E+23	1,261484E+23	2,783592E+23
-1994	7,610426E+22	7,610545E+22	6,307511E+22	6,307482E+22	1,522097E+23	1,261499E+23	2,783596E+23
-1993	7,610852E+22	7,610686E+22	6,307470E+22	6,307584E+22	1,522154E+23	1,261505E+23	2,783659E+23
-1992	7,610501E+22	7,610541E+22	6,307610E+22	6,307534E+22	1,522104E+23	1,261514E+23	2,783619E+23
-1991	7,610525E+22	7,610682E+22	6,307659E+22	6,307712E+22	1,522121E+23	1,261537E+23	2,783658E+23
-1990	7,610769E+22	7,610741E+22	6,307680E+22	6,307660E+22	1,522151E+23	1,261534E+23	2,783685E+23
-1989	7,610426E+22	7,610529E+22	6,307788E+22	6,307646E+22	1,522096E+23	1,261543E+23	2,783639E+23
-1988	7,610718E+22	7,610662E+22	6,307756E+22	6,307818E+22	1,522138E+23	1,261557E+23	2,783695E+23
-1987	7,610675E+22	7,610598E+22	6,307778E+22	6,307693E+22	1,522127E+23	1,261547E+23	2,783674E+23
-1986	7,610374E+22	7,610603E+22	6,307720E+22	6,307744E+22	1,522098E+23	1,261546E+23	2,783644E+23
-1985	7,610794E+22	7,610728E+22	6,307606E+22	6,307792E+22	1,522152E+23	1,261540E+23	2,783692E+23
-1984	7,610557E+22	7,610510E+22	6,307659E+22	6,307556E+22	1,522107E+23	1,261521E+23	2,783628E+23
-1983	7,610512E+22	7,610593E+22	6,307636E+22	6,307567E+22	1,522111E+23	1,261520E+23	2,783631E+23
-1982	7,610839E+22	7,610700E+22	6,307541E+22	6,307508E+22	1,522154E+23	1,261505E+23	2,783659E+23
-1981	7,610445E+22	7,610502E+22	6,307558E+22	6,307419E+22	1,522095E+23	1,261498E+23	2,783593E+23
-1980	7,610561E+22	7,610671E+22	6,307503E+22	6,307584E+22	1,522123E+23	1,261509E+23	2,783632E+23
-1979	7,610616E+22	7,610628E+22	6,307510E+22	6,307480E+22	1,522124E+23	1,261499E+23	2,783623E+23
-1978	7,610296E+22	7,610531E+22	6,307522E+22	6,307472E+22	1,522083E+23	1,261499E+23	2,783582E+23
-1977	7,610733E+22	7,610630E+22	6,307501E+22	6,307601E+22	1,522136E+23	1,261510E+23	2,783646E+23
-1976	7,610619E+22	7,610442E+22	6,307584E+22	6,307486E+22	1,522106E+23	1,261507E+23	2,783613E+23
-1975	7,610440E+22	7,610561E+22	6,307616E+22	6,307597E+22	1,522100E+23	1,261521E+23	2,783621E+23
-1974	7,610794E+22	7,610751E+22	6,307582E+22	6,307715E+22	1,522155E+23	1,261530E+23	2,783684E+23
-1973	7,610482E+22	7,610538E+22	6,307695E+22	6,307637E+22	1,522102E+23	1,261533E+23	2,783635E+23
-1972	7,610543E+22	7,610672E+22	6,307774E+22	6,307788E+22	1,522121E+23	1,261556E+23	2,783678E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1971	7,610764E+22	7,610667E+22	6,307837E+22	6,307772E+22	1,522143E+23	1,261561E+23	2,783704E+23
-1970	7,610417E+22	7,610541E+22	6,307877E+22	6,307743E+22	1,522096E+23	1,261562E+23	2,783658E+23
-1969	7,610707E+22	7,610705E+22	6,307840E+22	6,307937E+22	1,522141E+23	1,261578E+23	2,783719E+23
-1968	7,610666E+22	7,610567E+22	6,307830E+22	6,307834E+22	1,522123E+23	1,261566E+23	2,783690E+23
-1967	7,610388E+22	7,610592E+22	6,307814E+22	6,307791E+22	1,522098E+23	1,261560E+23	2,783658E+23
-1966	7,610794E+22	7,610741E+22	6,307729E+22	6,307826E+22	1,522154E+23	1,261556E+23	2,783709E+23
-1965	7,610610E+22	7,610474E+22	6,307736E+22	6,307594E+22	1,522108E+23	1,261533E+23	2,783641E+23
-1964	7,610526E+22	7,610605E+22	6,307711E+22	6,307641E+22	1,522113E+23	1,261535E+23	2,783648E+23
-1963	7,610757E+22	7,610704E+22	6,307640E+22	6,307663E+22	1,522146E+23	1,261530E+23	2,783676E+23
-1962	7,610361E+22	7,610546E+22	6,307613E+22	6,307539E+22	1,522091E+23	1,261515E+23	2,783606E+23
-1961	7,610528E+22	7,610674E+22	6,307606E+22	6,307682E+22	1,522120E+23	1,261529E+23	2,783649E+23
-1960	7,610655E+22	7,610525E+22	6,307605E+22	6,307588E+22	1,522118E+23	1,261519E+23	2,783637E+23
-1959	7,610370E+22	7,610462E+22	6,307633E+22	6,307517E+22	1,522083E+23	1,261515E+23	2,783598E+23
-1958	7,610748E+22	7,610662E+22	6,307609E+22	6,307697E+22	1,522141E+23	1,261531E+23	2,783672E+23
-1957	7,610638E+22	7,610478E+22	6,307629E+22	6,307604E+22	1,522112E+23	1,261523E+23	2,783635E+23
-1956	7,610421E+22	7,610623E+22	6,307702E+22	6,307706E+22	1,522104E+23	1,261541E+23	2,783645E+23
-1955	7,610732E+22	7,610757E+22	6,307750E+22	6,307843E+22	1,522149E+23	1,261559E+23	2,783708E+23
-1954	7,610457E+22	7,610547E+22	6,307841E+22	6,307712E+22	1,522100E+23	1,261555E+23	2,783656E+23
-1953	7,610559E+22	7,610651E+22	6,307940E+22	6,307887E+22	1,522121E+23	1,261583E+23	2,783704E+23
-1952	7,610769E+22	7,610583E+22	6,307937E+22	6,307941E+22	1,522135E+23	1,261588E+23	2,783723E+23
-1951	7,610408E+22	7,610521E+22	6,307953E+22	6,307871E+22	1,522093E+23	1,261582E+23	2,783675E+23
-1950	7,610670E+22	7,610734E+22	6,307913E+22	6,308054E+22	1,522140E+23	1,261597E+23	2,783737E+23
-1949	7,610697E+22	7,610541E+22	6,307864E+22	6,307895E+22	1,522124E+23	1,261576E+23	2,783700E+23
-1948	7,610450E+22	7,610590E+22	6,307887E+22	6,307806E+22	1,522104E+23	1,261569E+23	2,783673E+23
-1947	7,610797E+22	7,610720E+22	6,307857E+22	6,307885E+22	1,522152E+23	1,261574E+23	2,783726E+23
-1946	7,610570E+22	7,610541E+22	6,307815E+22	6,307662E+22	1,522111E+23	1,261548E+23	2,783659E+23
-1945	7,610471E+22	7,610672E+22	6,307809E+22	6,307759E+22	1,522114E+23	1,261557E+23	2,783671E+23
-1944	7,610686E+22	7,610657E+22	6,307721E+22	6,307818E+22	1,522134E+23	1,261554E+23	2,783688E+23
-1943	7,610349E+22	7,610496E+22	6,307726E+22	6,307620E+22	1,522085E+23	1,261535E+23	2,783619E+23
-1942	7,610546E+22	7,610625E+22	6,307726E+22	6,307750E+22	1,522117E+23	1,261548E+23	2,783665E+23
-1941	7,610729E+22	7,610448E+22	6,307664E+22	6,307665E+22	1,522118E+23	1,261533E+23	2,783651E+23
-1940	7,610419E+22	7,610482E+22	6,307690E+22	6,307610E+22	1,522090E+23	1,261530E+23	2,783620E+23
-1939	7,610693E+22	7,610697E+22	6,307707E+22	6,307844E+22	1,522139E+23	1,261555E+23	2,783694E+23
-1938	7,610576E+22	7,610561E+22	6,307715E+22	6,307704E+22	1,522114E+23	1,261542E+23	2,783656E+23
-1937	7,610406E+22	7,610648E+22	6,307859E+22	6,307791E+22	1,522105E+23	1,261565E+23	2,783670E+23
-1936	7,610735E+22	7,610667E+22	6,307905E+22	6,307958E+22	1,522140E+23	1,261586E+23	2,783727E+23
-1935	7,610492E+22	7,610489E+22	6,307996E+22	6,307801E+22	1,522098E+23	1,261580E+23	2,783678E+23
-1934	7,610541E+22	7,610661E+22	6,308062E+22	6,308026E+22	1,522120E+23	1,261609E+23	2,783729E+23
-1933	7,610774E+22	7,610583E+22	6,307974E+22	6,308093E+22	1,522136E+23	1,261607E+23	2,783743E+23
-1932	7,610419E+22	7,610556E+22	6,308005E+22	6,307971E+22	1,522098E+23	1,261598E+23	2,783695E+23
-1931	7,610648E+22	7,610738E+22	6,308029E+22	6,308145E+22	1,522139E+23	1,261617E+23	2,783756E+23
-1930	7,610709E+22	7,610577E+22	6,307960E+22	6,307918E+22	1,522129E+23	1,261588E+23	2,783717E+23
-1929	7,610472E+22	7,610605E+22	6,308020E+22	6,307859E+22	1,522108E+23	1,261588E+23	2,783696E+23
-1928	7,610757E+22	7,610685E+22	6,307952E+22	6,308018E+22	1,522144E+23	1,261597E+23	2,783741E+23
-1927	7,610514E+22	7,610530E+22	6,307897E+22	6,307768E+22	1,522104E+23	1,261566E+23	2,783671E+23
-1926	7,610394E+22	7,610664E+22	6,307898E+22	6,307870E+22	1,522106E+23	1,261577E+23	2,783683E+23
-1925	7,610708E+22	7,610573E+22	6,307762E+22	6,307898E+22	1,522128E+23	1,261566E+23	2,783694E+23
-1924	7,610424E+22	7,610438E+22	6,307786E+22	6,307656E+22	1,522086E+23	1,261544E+23	2,783630E+23
-1923	7,610576E+22	7,610597E+22	6,307824E+22	6,307838E+22	1,522117E+23	1,261566E+23	2,783684E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1922	7,610725E+22	7,610531E+22	6,307719E+22	6,307740E+22	1,522126E+23	1,261546E+23	2,783672E+23
-1921	7,610400E+22	7,610579E+22	6,307799E+22	6,307719E+22	1,522098E+23	1,261552E+23	2,783650E+23
-1920	7,610632E+22	7,610698E+22	6,307840E+22	6,307982E+22	1,522133E+23	1,261582E+23	2,783715E+23
-1919	7,610553E+22	7,610549E+22	6,307892E+22	6,307789E+22	1,522110E+23	1,261568E+23	2,783678E+23
-1918	7,610395E+22	7,610617E+22	6,308047E+22	6,307901E+22	1,522101E+23	1,261595E+23	2,783696E+23
-1917	7,610768E+22	7,610585E+22	6,308007E+22	6,308101E+22	1,522135E+23	1,261611E+23	2,783746E+23
-1916	7,610513E+22	7,610481E+22	6,308065E+22	6,307955E+22	1,522099E+23	1,261602E+23	2,783701E+23
-1915	7,610495E+22	7,610668E+22	6,308136E+22	6,308204E+22	1,522116E+23	1,261634E+23	2,783750E+23
-1914	7,610744E+22	7,610641E+22	6,308024E+22	6,308180E+22	1,522139E+23	1,261620E+23	2,783759E+23
-1913	7,610465E+22	7,610585E+22	6,308115E+22	6,308017E+22	1,522105E+23	1,261613E+23	2,783718E+23
-1912	7,610672E+22	7,610673E+22	6,308146E+22	6,308196E+22	1,522135E+23	1,261634E+23	2,783769E+23
-1911	7,610730E+22	7,610570E+22	6,308085E+22	6,307955E+22	1,522130E+23	1,261604E+23	2,783734E+23
-1910	7,610427E+22	7,610635E+22	6,308129E+22	6,307955E+22	1,522106E+23	1,261608E+23	2,783715E+23
-1909	7,610704E+22	7,610663E+22	6,307992E+22	6,308142E+22	1,522137E+23	1,261613E+23	2,783750E+23
-1908	7,610494E+22	7,610520E+22	6,307958E+22	6,307864E+22	1,522101E+23	1,261582E+23	2,783684E+23
-1907	7,610369E+22	7,610609E+22	6,308001E+22	6,307969E+22	1,522098E+23	1,261597E+23	2,783695E+23
-1906	7,610735E+22	7,610560E+22	6,307834E+22	6,307939E+22	1,522130E+23	1,261577E+23	2,783707E+23
-1905	7,610488E+22	7,610448E+22	6,307877E+22	6,307728E+22	1,522094E+23	1,261561E+23	2,783654E+23
-1904	7,610553E+22	7,610594E+22	6,307897E+22	6,307971E+22	1,522115E+23	1,261587E+23	2,783702E+23
-1903	7,610688E+22	7,610584E+22	6,307814E+22	6,307844E+22	1,522127E+23	1,261566E+23	2,783693E+23
-1902	7,610344E+22	7,610612E+22	6,307944E+22	6,307827E+22	1,522096E+23	1,261577E+23	2,783673E+23
-1901	7,610633E+22	7,610642E+22	6,307960E+22	6,308081E+22	1,522127E+23	1,261604E+23	2,783732E+23
-1900	7,610600E+22	7,610500E+22	6,308026E+22	6,307879E+22	1,522110E+23	1,261590E+23	2,783700E+23
-1899	7,610388E+22	7,610581E+22	6,308186E+22	6,308060E+22	1,522097E+23	1,261625E+23	2,783721E+23
-1898	7,610749E+22	7,610636E+22	6,308073E+22	6,308236E+22	1,522138E+23	1,261631E+23	2,783769E+23
-1897	7,610520E+22	7,610537E+22	6,308148E+22	6,308091E+22	1,522106E+23	1,261624E+23	2,783730E+23
-1896	7,610479E+22	7,610656E+22	6,308233E+22	6,308326E+22	1,522114E+23	1,261656E+23	2,783769E+23
-1895	7,610774E+22	7,610635E+22	6,308153E+22	6,308209E+22	1,522141E+23	1,261636E+23	2,783777E+23
-1894	7,610481E+22	7,610576E+22	6,308272E+22	6,308060E+22	1,522106E+23	1,261633E+23	2,783739E+23
-1893	7,610684E+22	7,610630E+22	6,308231E+22	6,308280E+22	1,522131E+23	1,261651E+23	2,783782E+23
-1892	7,610702E+22	7,610575E+22	6,308148E+22	6,308067E+22	1,522128E+23	1,261621E+23	2,783749E+23
-1891	7,610334E+22	7,610627E+22	6,308202E+22	6,308113E+22	1,522096E+23	1,261632E+23	2,783728E+23
-1890	7,610650E+22	7,610665E+22	6,308032E+22	6,308219E+22	1,522131E+23	1,261625E+23	2,783757E+23
-1889	7,610542E+22	7,610492E+22	6,308037E+22	6,307919E+22	1,522103E+23	1,261596E+23	2,783699E+23
-1888	7,610411E+22	7,610533E+22	6,308076E+22	6,308038E+22	1,522094E+23	1,261611E+23	2,783706E+23
-1887	7,610775E+22	7,610571E+22	6,307919E+22	6,307987E+22	1,522135E+23	1,261591E+23	2,783725E+23
-1886	7,610471E+22	7,610523E+22	6,307979E+22	6,307827E+22	1,522099E+23	1,261581E+23	2,783680E+23
-1885	7,610518E+22	7,610617E+22	6,307970E+22	6,308085E+22	1,522114E+23	1,261605E+23	2,783719E+23
-1884	7,610671E+22	7,610605E+22	6,307938E+22	6,307942E+22	1,522128E+23	1,261588E+23	2,783716E+23
-1883	7,610313E+22	7,610573E+22	6,308117E+22	6,307959E+22	1,522089E+23	1,261608E+23	2,783696E+23
-1882	7,610626E+22	7,610616E+22	6,308091E+22	6,308178E+22	1,522124E+23	1,261627E+23	2,783751E+23
-1881	7,610646E+22	7,610490E+22	6,308147E+22	6,308030E+22	1,522114E+23	1,261618E+23	2,783731E+23
-1880	7,610361E+22	7,610542E+22	6,308256E+22	6,308242E+22	1,522090E+23	1,261650E+23	2,783740E+23
-1879	7,610735E+22	7,610655E+22	6,308150E+22	6,308350E+22	1,522139E+23	1,261650E+23	2,783789E+23
-1878	7,610531E+22	7,610556E+22	6,308262E+22	6,308165E+22	1,522109E+23	1,261643E+23	2,783751E+23
-1877	7,610523E+22	7,610607E+22	6,308321E+22	6,308368E+22	1,522113E+23	1,261669E+23	2,783782E+23
-1876	7,610831E+22	7,610626E+22	6,308269E+22	6,308247E+22	1,522146E+23	1,261652E+23	2,783797E+23
-1875	7,610449E+22	7,610583E+22	6,308397E+22	6,308179E+22	1,522103E+23	1,261658E+23	2,783761E+23
-1874	7,610602E+22	7,610690E+22	6,308295E+22	6,308385E+22	1,522129E+23	1,261668E+23	2,783797E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1873	7,610666E+22	7,610610E+22	6,308225E+22	6,308197E+22	1,522128E+23	1,261642E+23	2,783770E+23
-1872	7,610286E+22	7,610568E+22	6,308281E+22	6,308233E+22	1,522085E+23	1,261651E+23	2,783737E+23
-1871	7,610679E+22	7,610621E+22	6,308127E+22	6,308259E+22	1,522130E+23	1,261639E+23	2,783769E+23
-1870	7,610596E+22	7,610463E+22	6,308147E+22	6,307970E+22	1,522106E+23	1,261612E+23	2,783718E+23
-1869	7,610452E+22	7,610506E+22	6,308121E+22	6,308123E+22	1,522096E+23	1,261624E+23	2,783720E+23
-1868	7,610774E+22	7,610616E+22	6,307976E+22	6,308081E+22	1,522139E+23	1,261606E+23	2,783745E+23
-1867	7,610397E+22	7,610559E+22	6,308087E+22	6,307969E+22	1,522096E+23	1,261606E+23	2,783701E+23
-1866	7,610465E+22	7,610642E+22	6,308076E+22	6,308156E+22	1,522111E+23	1,261623E+23	2,783734E+23
-1865	7,610701E+22	7,610577E+22	6,308079E+22	6,308030E+22	1,522128E+23	1,261611E+23	2,783739E+23
-1864	7,610323E+22	7,610486E+22	6,308249E+22	6,308090E+22	1,522081E+23	1,261634E+23	2,783715E+23
-1863	7,610646E+22	7,610599E+22	6,308194E+22	6,308288E+22	1,522124E+23	1,261648E+23	2,783773E+23
-1862	7,610633E+22	7,610525E+22	6,308248E+22	6,308170E+22	1,522116E+23	1,261642E+23	2,783758E+23
-1861	7,610364E+22	7,610545E+22	6,308313E+22	6,308371E+22	1,522091E+23	1,261668E+23	2,783759E+23
-1860	7,610760E+22	7,610668E+22	6,308258E+22	6,308422E+22	1,522143E+23	1,261668E+23	2,783811E+23
-1859	7,610532E+22	7,610552E+22	6,308418E+22	6,308258E+22	1,522108E+23	1,261668E+23	2,783776E+23
-1858	7,610521E+22	7,610618E+22	6,308441E+22	6,308421E+22	1,522114E+23	1,261686E+23	2,783800E+23
-1857	7,610834E+22	7,610652E+22	6,308375E+22	6,308373E+22	1,522149E+23	1,261675E+23	2,783823E+23
-1856	7,610367E+22	7,610561E+22	6,308471E+22	6,308351E+22	1,522093E+23	1,261682E+23	2,783775E+23
-1855	7,610543E+22	7,610682E+22	6,308367E+22	6,308486E+22	1,522123E+23	1,261685E+23	2,783808E+23
-1854	7,610664E+22	7,610580E+22	6,308325E+22	6,308270E+22	1,522124E+23	1,261659E+23	2,783784E+23
-1853	7,610351E+22	7,610477E+22	6,308329E+22	6,308276E+22	1,522083E+23	1,261660E+23	2,783743E+23
-1852	7,610763E+22	7,610589E+22	6,308198E+22	6,308292E+22	1,522135E+23	1,261649E+23	2,783784E+23
-1851	7,610598E+22	7,610497E+22	6,308229E+22	6,308071E+22	1,522109E+23	1,261630E+23	2,783740E+23
-1850	7,610398E+22	7,610589E+22	6,308179E+22	6,308192E+22	1,522099E+23	1,261637E+23	2,783736E+23
-1849	7,610754E+22	7,610684E+22	6,308081E+22	6,308188E+22	1,522144E+23	1,261627E+23	2,783771E+23
-1848	7,610343E+22	7,610515E+22	6,308222E+22	6,308087E+22	1,522086E+23	1,261631E+23	2,783717E+23
-1847	7,610454E+22	7,610595E+22	6,308231E+22	6,308227E+22	1,522105E+23	1,261646E+23	2,783751E+23
-1846	7,610725E+22	7,610532E+22	6,308234E+22	6,308146E+22	1,522126E+23	1,261638E+23	2,783764E+23
-1845	7,610337E+22	7,610428E+22	6,308305E+22	6,308246E+22	1,522077E+23	1,261655E+23	2,783732E+23
-1844	7,610653E+22	7,610610E+22	6,308253E+22	6,308433E+22	1,522126E+23	1,261669E+23	2,783795E+23
-1843	7,610605E+22	7,610550E+22	6,308338E+22	6,308319E+22	1,522116E+23	1,261666E+23	2,783781E+23
-1842	7,610365E+22	7,610574E+22	6,308407E+22	6,308416E+22	1,522094E+23	1,261682E+23	2,783776E+23
-1841	7,610824E+22	7,610684E+22	6,308392E+22	6,308482E+22	1,522151E+23	1,261687E+23	2,783838E+23
-1840	7,610525E+22	7,610524E+22	6,308559E+22	6,308366E+22	1,522105E+23	1,261693E+23	2,783797E+23
-1839	7,610484E+22	7,610651E+22	6,308561E+22	6,308519E+22	1,522113E+23	1,261708E+23	2,783821E+23
-1838	7,610777E+22	7,610685E+22	6,308492E+22	6,308507E+22	1,522146E+23	1,261700E+23	2,783846E+23
-1837	7,610340E+22	7,610517E+22	6,308529E+22	6,308478E+22	1,522086E+23	1,261701E+23	2,783786E+23
-1836	7,610572E+22	7,610629E+22	6,308455E+22	6,308550E+22	1,522120E+23	1,261700E+23	2,783821E+23
-1835	7,610690E+22	7,610536E+22	6,308432E+22	6,308350E+22	1,522123E+23	1,261678E+23	2,783801E+23
-1834	7,610390E+22	7,610479E+22	6,308390E+22	6,308310E+22	1,522087E+23	1,261670E+23	2,783757E+23
-1833	7,610787E+22	7,610636E+22	6,308250E+22	6,308382E+22	1,522142E+23	1,261663E+23	2,783805E+23
-1832	7,610522E+22	7,610520E+22	6,308295E+22	6,308204E+22	1,522104E+23	1,261650E+23	2,783754E+23
-1831	7,610338E+22	7,610611E+22	6,308275E+22	6,308259E+22	1,522095E+23	1,261653E+23	2,783748E+23
-1830	7,610724E+22	7,610662E+22	6,308229E+22	6,308257E+22	1,522139E+23	1,261649E+23	2,783787E+23
-1829	7,610371E+22	7,610422E+22	6,308323E+22	6,308180E+22	1,522079E+23	1,261650E+23	2,783730E+23
-1828	7,610499E+22	7,610534E+22	6,308340E+22	6,308327E+22	1,522103E+23	1,261667E+23	2,783770E+23
-1827	7,610704E+22	7,610546E+22	6,308330E+22	6,308318E+22	1,522125E+23	1,261665E+23	2,783790E+23
-1826	7,610315E+22	7,610484E+22	6,308357E+22	6,308359E+22	1,522080E+23	1,261672E+23	2,783752E+23
-1825	7,610672E+22	7,610667E+22	6,308343E+22	6,308551E+22	1,522134E+23	1,261689E+23	2,783823E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1824	7,610593E+22	7,610542E+22	6,308478E+22	6,308424E+22	1,522114E+23	1,261690E+23	2,783804E+23
-1823	7,610385E+22	7,610572E+22	6,308574E+22	6,308462E+22	1,522096E+23	1,261704E+23	2,783799E+23
-1822	7,610832E+22	7,610686E+22	6,308573E+22	6,308580E+22	1,522152E+23	1,261715E+23	2,783867E+23
-1821	7,610498E+22	7,610493E+22	6,308646E+22	6,308522E+22	1,522099E+23	1,261717E+23	2,783816E+23
-1820	7,610443E+22	7,610635E+22	6,308646E+22	6,308661E+22	1,522108E+23	1,261731E+23	2,783838E+23
-1819	7,610729E+22	7,610665E+22	6,308583E+22	6,308650E+22	1,522139E+23	1,261723E+23	2,783863E+23
-1818	7,610356E+22	7,610479E+22	6,308583E+22	6,308513E+22	1,522083E+23	1,261710E+23	2,783793E+23
-1817	7,610666E+22	7,610610E+22	6,308519E+22	6,308598E+22	1,522128E+23	1,261712E+23	2,783839E+23
-1816	7,610707E+22	7,610516E+22	6,308499E+22	6,308424E+22	1,522122E+23	1,261692E+23	2,783815E+23
-1815	7,610361E+22	7,610545E+22	6,308459E+22	6,308360E+22	1,522091E+23	1,261682E+23	2,783773E+23
-1814	7,610730E+22	7,610710E+22	6,308361E+22	6,308467E+22	1,522144E+23	1,261683E+23	2,783827E+23
-1813	7,610472E+22	7,610500E+22	6,308383E+22	6,308308E+22	1,522097E+23	1,261669E+23	2,783766E+23
-1812	7,610330E+22	7,610559E+22	6,308414E+22	6,308335E+22	1,522089E+23	1,261675E+23	2,783764E+23
-1811	7,610714E+22	7,610603E+22	6,308375E+22	6,308380E+22	1,522132E+23	1,261676E+23	2,783807E+23
-1810	7,610386E+22	7,610387E+22	6,308401E+22	6,308282E+22	1,522077E+23	1,261668E+23	2,783746E+23
-1809	7,610529E+22	7,610557E+22	6,308389E+22	6,308485E+22	1,522109E+23	1,261687E+23	2,783796E+23
-1808	7,610658E+22	7,610555E+22	6,308399E+22	6,308481E+22	1,522121E+23	1,261688E+23	2,783809E+23
-1807	7,610308E+22	7,610522E+22	6,308464E+22	6,308426E+22	1,522083E+23	1,261689E+23	2,783772E+23
-1806	7,610699E+22	7,610679E+22	6,308514E+22	6,308599E+22	1,522138E+23	1,261711E+23	2,783849E+23
-1805	7,610636E+22	7,610499E+22	6,308613E+22	6,308508E+22	1,522113E+23	1,261712E+23	2,783826E+23
-1804	7,610408E+22	7,610555E+22	6,308724E+22	6,308564E+22	1,522096E+23	1,261729E+23	2,783825E+23
-1803	7,610758E+22	7,610717E+22	6,308702E+22	6,308756E+22	1,522148E+23	1,261746E+23	2,783893E+23
-1802	7,610449E+22	7,610516E+22	6,308718E+22	6,308653E+22	1,522096E+23	1,261737E+23	2,783834E+23
-1801	7,610451E+22	7,610627E+22	6,308715E+22	6,308781E+22	1,522108E+23	1,261750E+23	2,783857E+23
-1800	7,610716E+22	7,610609E+22	6,308677E+22	6,308747E+22	1,522132E+23	1,261742E+23	2,783875E+23
-1799	7,610405E+22	7,610460E+22	6,308670E+22	6,308535E+22	1,522086E+23	1,261720E+23	2,783807E+23
-1798	7,610689E+22	7,610624E+22	6,308617E+22	6,308653E+22	1,522131E+23	1,261727E+23	2,783858E+23
-1797	7,610680E+22	7,610531E+22	6,308533E+22	6,308532E+22	1,522121E+23	1,261707E+23	2,783828E+23
-1796	7,610321E+22	7,610553E+22	6,308539E+22	6,308448E+22	1,522087E+23	1,261699E+23	2,783786E+23
-1795	7,610653E+22	7,610707E+22	6,308481E+22	6,308568E+22	1,522136E+23	1,261705E+23	2,783841E+23
-1794	7,610471E+22	7,610452E+22	6,308478E+22	6,308354E+22	1,522092E+23	1,261683E+23	2,783776E+23
-1793	7,610390E+22	7,610512E+22	6,308505E+22	6,308429E+22	1,522090E+23	1,261693E+23	2,783784E+23
-1792	7,610702E+22	7,610567E+22	6,308466E+22	6,308524E+22	1,522127E+23	1,261699E+23	2,783826E+23
-1791	7,610376E+22	7,610434E+22	6,308471E+22	6,308385E+22	1,522081E+23	1,261686E+23	2,783767E+23
-1790	7,610523E+22	7,610617E+22	6,308502E+22	6,308595E+22	1,522114E+23	1,261710E+23	2,783824E+23
-1789	7,610661E+22	7,610553E+22	6,308501E+22	6,308587E+22	1,522121E+23	1,261709E+23	2,783830E+23
-1788	7,610345E+22	7,610500E+22	6,308639E+22	6,308495E+22	1,522084E+23	1,261713E+23	2,783798E+23
-1787	7,610693E+22	7,610672E+22	6,308704E+22	6,308717E+22	1,522137E+23	1,261742E+23	2,783879E+23
-1786	7,610621E+22	7,610493E+22	6,308727E+22	6,308631E+22	1,522111E+23	1,261736E+23	2,783847E+23
-1785	7,610386E+22	7,610581E+22	6,308796E+22	6,308751E+22	1,522097E+23	1,261755E+23	2,783851E+23
-1784	7,610674E+22	7,610693E+22	6,308777E+22	6,308932E+22	1,522137E+23	1,261771E+23	2,783908E+23
-1783	7,610433E+22	7,610499E+22	6,308795E+22	6,308720E+22	1,522093E+23	1,261752E+23	2,783845E+23
-1782	7,610504E+22	7,610601E+22	6,308825E+22	6,308819E+22	1,522111E+23	1,261764E+23	2,783875E+23
-1781	7,610776E+22	7,610554E+22	6,308740E+22	6,308801E+22	1,522133E+23	1,261754E+23	2,783887E+23
-1780	7,610445E+22	7,610465E+22	6,308759E+22	6,308586E+22	1,522091E+23	1,261735E+23	2,783825E+23
-1779	7,610627E+22	7,610690E+22	6,308709E+22	6,308754E+22	1,522132E+23	1,261746E+23	2,783878E+23
-1778	7,610624E+22	7,610571E+22	6,308600E+22	6,308605E+22	1,522119E+23	1,261720E+23	2,783840E+23
-1777	7,610312E+22	7,610557E+22	6,308629E+22	6,308545E+22	1,522087E+23	1,261717E+23	2,783804E+23
-1776	7,610607E+22	7,610640E+22	6,308611E+22	6,308670E+22	1,522125E+23	1,261728E+23	2,783853E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1775	7,610491E+22	7,610412E+22	6,308593E+22	6,308425E+22	1,522090E+23	1,261702E+23	2,783792E+23
-1774	7,610411E+22	7,610503E+22	6,308607E+22	6,308545E+22	1,522091E+23	1,261715E+23	2,783806E+23
-1773	7,610687E+22	7,610558E+22	6,308503E+22	6,308681E+22	1,522124E+23	1,261718E+23	2,783843E+23
-1772	7,610388E+22	7,610439E+22	6,308557E+22	6,308490E+22	1,522083E+23	1,261705E+23	2,783787E+23
-1771	7,610499E+22	7,610636E+22	6,308636E+22	6,308686E+22	1,522113E+23	1,261732E+23	2,783846E+23
-1770	7,610699E+22	7,610548E+22	6,308623E+22	6,308638E+22	1,522125E+23	1,261726E+23	2,783851E+23
-1769	7,610401E+22	7,610495E+22	6,308761E+22	6,308602E+22	1,522090E+23	1,261736E+23	2,783826E+23
-1768	7,610620E+22	7,610672E+22	6,308837E+22	6,308881E+22	1,522129E+23	1,261772E+23	2,783901E+23
-1767	7,610566E+22	7,610537E+22	6,308829E+22	6,308768E+22	1,522110E+23	1,261760E+23	2,783870E+23
-1766	7,610354E+22	7,610591E+22	6,308914E+22	6,308883E+22	1,522094E+23	1,261780E+23	2,783874E+23
-1765	7,610673E+22	7,610637E+22	6,308859E+22	6,309045E+22	1,522131E+23	1,261790E+23	2,783921E+23
-1764	7,610510E+22	7,610430E+22	6,308912E+22	6,308768E+22	1,522094E+23	1,261768E+23	2,783862E+23
-1763	7,610535E+22	7,610589E+22	6,308940E+22	6,308889E+22	1,522112E+23	1,261783E+23	2,783895E+23
-1762	7,610789E+22	7,610577E+22	6,308790E+22	6,308868E+22	1,522137E+23	1,261766E+23	2,783902E+23
-1761	7,610429E+22	7,610524E+22	6,308798E+22	6,308705E+22	1,522095E+23	1,261750E+23	2,783846E+23
-1760	7,610520E+22	7,610698E+22	6,308800E+22	6,308869E+22	1,522122E+23	1,261767E+23	2,783889E+23
-1759	7,610588E+22	7,610561E+22	6,308705E+22	6,308649E+22	1,522115E+23	1,261735E+23	2,783850E+23
-1758	7,610341E+22	7,610510E+22	6,308762E+22	6,308605E+22	1,522085E+23	1,261737E+23	2,783822E+23
-1757	7,610633E+22	7,610563E+22	6,308686E+22	6,308776E+22	1,522120E+23	1,261746E+23	2,783866E+23
-1756	7,610522E+22	7,610392E+22	6,308675E+22	6,308536E+22	1,522091E+23	1,261721E+23	2,783813E+23
-1755	7,610380E+22	7,610560E+22	6,308687E+22	6,308684E+22	1,522094E+23	1,261737E+23	2,783831E+23
-1754	7,610679E+22	7,610587E+22	6,308565E+22	6,308767E+22	1,522127E+23	1,261733E+23	2,783860E+23
-1753	7,610422E+22	7,610469E+22	6,308658E+22	6,308585E+22	1,522089E+23	1,261724E+23	2,783813E+23
-1752	7,610475E+22	7,610609E+22	6,308799E+22	6,308778E+22	1,522108E+23	1,261758E+23	2,783866E+23
-1751	7,610696E+22	7,610546E+22	6,308774E+22	6,308723E+22	1,522124E+23	1,261750E+23	2,783874E+23
-1750	7,610384E+22	7,610511E+22	6,308903E+22	6,308756E+22	1,522089E+23	1,261766E+23	2,783855E+23
-1749	7,610555E+22	7,610644E+22	6,308910E+22	6,309066E+22	1,522120E+23	1,261798E+23	2,783918E+23
-1748	7,610564E+22	7,610491E+22	6,308935E+22	6,308893E+22	1,522105E+23	1,261783E+23	2,783888E+23
-1747	7,610364E+22	7,610561E+22	6,309027E+22	6,308972E+22	1,522093E+23	1,261800E+23	2,783892E+23
-1746	7,610747E+22	7,610592E+22	6,308934E+22	6,309080E+22	1,522134E+23	1,261801E+23	2,783935E+23
-1745	7,610596E+22	7,610451E+22	6,308973E+22	6,308841E+22	1,522105E+23	1,261781E+23	2,783886E+23
-1744	7,610482E+22	7,610633E+22	6,309030E+22	6,308990E+22	1,522112E+23	1,261802E+23	2,783913E+23
-1743	7,610728E+22	7,610662E+22	6,308875E+22	6,308944E+22	1,522139E+23	1,261782E+23	2,783921E+23
-1742	7,610383E+22	7,610559E+22	6,308925E+22	6,308796E+22	1,522094E+23	1,261772E+23	2,783866E+23
-1741	7,610467E+22	7,610640E+22	6,308907E+22	6,308969E+22	1,522111E+23	1,261788E+23	2,783898E+23
-1740	7,610628E+22	7,610467E+22	6,308839E+22	6,308725E+22	1,522110E+23	1,261756E+23	2,783866E+23
-1739	7,610346E+22	7,610463E+22	6,308862E+22	6,308717E+22	1,522081E+23	1,261758E+23	2,783839E+23
-1738	7,610648E+22	7,610550E+22	6,308707E+22	6,308892E+22	1,522120E+23	1,261760E+23	2,783880E+23
-1737	7,610544E+22	7,610429E+22	6,308678E+22	6,308666E+22	1,522097E+23	1,261734E+23	2,783832E+23
-1736	7,610320E+22	7,610571E+22	6,308770E+22	6,308779E+22	1,522089E+23	1,261755E+23	2,783844E+23
-1735	7,610687E+22	7,610611E+22	6,308685E+22	6,308792E+22	1,522130E+23	1,261748E+23	2,783878E+23
-1734	7,610464E+22	7,610463E+22	6,308828E+22	6,308645E+22	1,522093E+23	1,261747E+23	2,783840E+23
-1733	7,610457E+22	7,610574E+22	6,308932E+22	6,308905E+22	1,522103E+23	1,261784E+23	2,783887E+23
-1732	7,610687E+22	7,610532E+22	6,308912E+22	6,308869E+22	1,522122E+23	1,261778E+23	2,783900E+23
-1731	7,610326E+22	7,610532E+22	6,309026E+22	6,308926E+22	1,522086E+23	1,261795E+23	2,783881E+23
-1730	7,610553E+22	7,610621E+22	6,308990E+22	6,309186E+22	1,522117E+23	1,261818E+23	2,783935E+23
-1729	7,610626E+22	7,610480E+22	6,309015E+22	6,308999E+22	1,522111E+23	1,261801E+23	2,783912E+23
-1728	7,610379E+22	7,610534E+22	6,309152E+22	6,309059E+22	1,522091E+23	1,261821E+23	2,783912E+23
-1727	7,610772E+22	7,610622E+22	6,309036E+22	6,309138E+22	1,522139E+23	1,261817E+23	2,783957E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1726	7,610585E+22	7,610520E+22	6,309075E+22	6,308954E+22	1,522110E+23	1,261803E+23	2,783913E+23
-1725	7,610398E+22	7,610646E+22	6,309098E+22	6,309120E+22	1,522104E+23	1,261822E+23	2,783926E+23
-1724	7,610695E+22	7,610627E+22	6,308992E+22	6,309026E+22	1,522132E+23	1,261802E+23	2,783934E+23
-1723	7,610368E+22	7,610515E+22	6,309053E+22	6,308872E+22	1,522088E+23	1,261793E+23	2,783881E+23
-1722	7,610511E+22	7,610546E+22	6,308973E+22	6,309021E+22	1,522106E+23	1,261799E+23	2,783905E+23
-1721	7,610684E+22	7,610449E+22	6,308872E+22	6,308829E+22	1,522113E+23	1,261770E+23	2,783883E+23
-1720	7,610309E+22	7,610483E+22	6,308912E+22	6,308835E+22	1,522079E+23	1,261775E+23	2,783854E+23
-1719	7,610619E+22	7,610612E+22	6,308760E+22	6,308962E+22	1,522123E+23	1,261772E+23	2,783895E+23
-1718	7,610547E+22	7,610485E+22	6,308793E+22	6,308740E+22	1,522103E+23	1,261753E+23	2,783857E+23
-1717	7,610303E+22	7,610541E+22	6,308902E+22	6,308851E+22	1,522084E+23	1,261775E+23	2,783860E+23
-1716	7,610724E+22	7,610555E+22	6,308869E+22	6,308863E+22	1,522128E+23	1,261773E+23	2,783901E+23
-1715	7,610445E+22	7,610454E+22	6,308993E+22	6,308787E+22	1,522090E+23	1,261778E+23	2,783868E+23
-1714	7,610420E+22	7,610558E+22	6,309011E+22	6,309073E+22	1,522098E+23	1,261808E+23	2,783906E+23
-1713	7,610672E+22	7,610547E+22	6,308965E+22	6,309056E+22	1,522122E+23	1,261802E+23	2,783924E+23
-1712	7,610284E+22	7,610506E+22	6,309126E+22	6,309062E+22	1,522079E+23	1,261819E+23	2,783898E+23
-1711	7,610595E+22	7,610612E+22	6,309094E+22	6,309238E+22	1,522121E+23	1,261833E+23	2,783954E+23
-1710	7,610708E+22	7,610493E+22	6,309141E+22	6,309062E+22	1,522120E+23	1,261820E+23	2,783940E+23
-1709	7,610376E+22	7,610542E+22	6,309251E+22	6,309159E+22	1,522092E+23	1,261841E+23	2,783933E+23
-1708	7,610764E+22	7,610655E+22	6,309158E+22	6,309239E+22	1,522142E+23	1,261840E+23	2,783982E+23
-1707	7,610509E+22	7,610564E+22	6,309200E+22	6,309069E+22	1,522107E+23	1,261827E+23	2,783934E+23
-1706	7,610356E+22	7,610615E+22	6,309186E+22	6,309206E+22	1,522097E+23	1,261839E+23	2,783936E+23
-1705	7,610721E+22	7,610577E+22	6,309066E+22	6,309110E+22	1,522130E+23	1,261818E+23	2,783947E+23
-1704	7,610356E+22	7,610434E+22	6,309153E+22	6,308961E+22	1,522079E+23	1,261811E+23	2,783890E+23
-1703	7,610526E+22	7,610535E+22	6,309029E+22	6,309096E+22	1,522106E+23	1,261812E+23	2,783919E+23
-1702	7,610688E+22	7,610492E+22	6,308920E+22	6,308941E+22	1,522118E+23	1,261786E+23	2,783904E+23
-1701	7,610258E+22	7,610493E+22	6,308957E+22	6,308940E+22	1,522075E+23	1,261790E+23	2,783865E+23
-1700	7,610634E+22	7,610595E+22	6,308880E+22	6,309005E+22	1,522123E+23	1,261788E+23	2,783911E+23
-1699	7,610552E+22	7,610483E+22	6,308950E+22	6,308793E+22	1,522103E+23	1,261774E+23	2,783878E+23
-1698	7,610330E+22	7,610499E+22	6,309023E+22	6,308928E+22	1,522083E+23	1,261795E+23	2,783878E+23
-1697	7,610729E+22	7,610571E+22	6,308963E+22	6,309012E+22	1,522130E+23	1,261798E+23	2,783928E+23
-1696	7,610365E+22	7,610474E+22	6,309109E+22	6,308974E+22	1,522084E+23	1,261808E+23	2,783892E+23
-1695	7,610378E+22	7,610584E+22	6,309109E+22	6,309208E+22	1,522096E+23	1,261832E+23	2,783928E+23
-1694	7,610687E+22	7,610566E+22	6,309092E+22	6,309182E+22	1,522125E+23	1,261827E+23	2,783953E+23
-1693	7,610308E+22	7,610459E+22	6,309246E+22	6,309160E+22	1,522077E+23	1,261841E+23	2,783917E+23
-1692	7,610669E+22	7,610565E+22	6,309245E+22	6,309304E+22	1,522123E+23	1,261855E+23	2,783978E+23
-1691	7,610711E+22	7,610533E+22	6,309274E+22	6,309173E+22	1,522124E+23	1,261845E+23	2,783969E+23
-1690	7,610346E+22	7,610555E+22	6,309311E+22	6,309275E+22	1,522090E+23	1,261859E+23	2,783949E+23
-1689	7,610718E+22	7,610678E+22	6,309218E+22	6,309358E+22	1,522140E+23	1,261858E+23	2,783997E+23
-1688	7,610444E+22	7,610528E+22	6,309314E+22	6,309163E+22	1,522097E+23	1,261848E+23	2,783945E+23
-1687	7,610362E+22	7,610560E+22	6,309282E+22	6,309241E+22	1,522092E+23	1,261852E+23	2,783945E+23
-1686	7,610766E+22	7,610557E+22	6,309155E+22	6,309187E+22	1,522132E+23	1,261834E+23	2,783967E+23
-1685	7,610347E+22	7,610411E+22	6,309197E+22	6,309065E+22	1,522076E+23	1,261826E+23	2,783902E+23
-1684	7,610535E+22	7,610547E+22	6,309096E+22	6,309182E+22	1,522108E+23	1,261828E+23	2,783936E+23
-1683	7,610653E+22	7,610553E+22	6,309017E+22	6,309025E+22	1,522121E+23	1,261804E+23	2,783925E+23
-1682	7,610253E+22	7,610487E+22	6,309047E+22	6,308999E+22	1,522074E+23	1,261805E+23	2,783879E+23
-1681	7,610658E+22	7,610589E+22	6,308997E+22	6,309077E+22	1,522125E+23	1,261807E+23	2,783932E+23
-1680	7,610523E+22	7,610450E+22	6,309109E+22	6,308913E+22	1,522097E+23	1,261802E+23	2,783900E+23
-1679	7,610296E+22	7,610505E+22	6,309134E+22	6,309065E+22	1,522080E+23	1,261820E+23	2,783900E+23
-1678	7,610691E+22	7,610610E+22	6,309055E+22	6,309197E+22	1,522130E+23	1,261825E+23	2,783955E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1677	7,610309E+22	7,610442E+22	6,309191E+22	6,309138E+22	1,522075E+23	1,261833E+23	2,783908E+23
-1676	7,610433E+22	7,610525E+22	6,309238E+22	6,309294E+22	1,522096E+23	1,261853E+23	2,783949E+23
-1675	7,610741E+22	7,610543E+22	6,309237E+22	6,309242E+22	1,522128E+23	1,261848E+23	2,783976E+23
-1674	7,610375E+22	7,610435E+22	6,309343E+22	6,309230E+22	1,522081E+23	1,261857E+23	2,783938E+23
-1673	7,610693E+22	7,610615E+22	6,309323E+22	6,309409E+22	1,522131E+23	1,261873E+23	2,784004E+23
-1672	7,610625E+22	7,610583E+22	6,309391E+22	6,309309E+22	1,522121E+23	1,261870E+23	2,783991E+23
-1671	7,610278E+22	7,610594E+22	6,309420E+22	6,309371E+22	1,522087E+23	1,261879E+23	2,783966E+23
-1670	7,610691E+22	7,610683E+22	6,309342E+22	6,309456E+22	1,522137E+23	1,261880E+23	2,784017E+23
-1669	7,610430E+22	7,610441E+22	6,309425E+22	6,309259E+22	1,522087E+23	1,261868E+23	2,783955E+23
-1668	7,610419E+22	7,610473E+22	6,309388E+22	6,309318E+22	1,522089E+23	1,261871E+23	2,783960E+23
-1667	7,610759E+22	7,610570E+22	6,309229E+22	6,309295E+22	1,522133E+23	1,261852E+23	2,783985E+23
-1666	7,610340E+22	7,610424E+22	6,309204E+22	6,309170E+22	1,522076E+23	1,261837E+23	2,783914E+23
-1665	7,610532E+22	7,610581E+22	6,309128E+22	6,309256E+22	1,522111E+23	1,261838E+23	2,783950E+23
-1664	7,610623E+22	7,610555E+22	6,309137E+22	6,309084E+22	1,522118E+23	1,261822E+23	2,783940E+23
-1663	7,610270E+22	7,610475E+22	6,309175E+22	6,309032E+22	1,522074E+23	1,261821E+23	2,783895E+23
-1662	7,610661E+22	7,610609E+22	6,309133E+22	6,309181E+22	1,522127E+23	1,261831E+23	2,783958E+23
-1661	7,610470E+22	7,610438E+22	6,309217E+22	6,309078E+22	1,522091E+23	1,261830E+23	2,783920E+23
-1660	7,610279E+22	7,610480E+22	6,309249E+22	6,309212E+22	1,522076E+23	1,261846E+23	2,783922E+23
-1659	7,610663E+22	7,610624E+22	6,309183E+22	6,309330E+22	1,522129E+23	1,261851E+23	2,783980E+23
-1658	7,610356E+22	7,610390E+22	6,309275E+22	6,309227E+22	1,522075E+23	1,261850E+23	2,783925E+23
-1657	7,610507E+22	7,610500E+22	6,309337E+22	6,309367E+22	1,522101E+23	1,261870E+23	2,783971E+23
-1656	7,610750E+22	7,610548E+22	6,309378E+22	6,309352E+22	1,522130E+23	1,261873E+23	2,784003E+23
-1655	7,610350E+22	7,610486E+22	6,309444E+22	6,309342E+22	1,522084E+23	1,261879E+23	2,783962E+23
-1654	7,610627E+22	7,610697E+22	6,309424E+22	6,309556E+22	1,522132E+23	1,261898E+23	2,784030E+23
-1653	7,610543E+22	7,610559E+22	6,309497E+22	6,309443E+22	1,522110E+23	1,261894E+23	2,784004E+23
-1652	7,610294E+22	7,610511E+22	6,309553E+22	6,309443E+22	1,522081E+23	1,261900E+23	2,783980E+23
-1651	7,610710E+22	7,610637E+22	6,309468E+22	6,309523E+22	1,522135E+23	1,261899E+23	2,784034E+23
-1650	7,610481E+22	7,610384E+22	6,309468E+22	6,309345E+22	1,522087E+23	1,261881E+23	2,783968E+23
-1649	7,610449E+22	7,610501E+22	6,309407E+22	6,309418E+22	1,522095E+23	1,261882E+23	2,783977E+23
-1648	7,610709E+22	7,610617E+22	6,309298E+22	6,309399E+22	1,522133E+23	1,261870E+23	2,784002E+23
-1647	7,610315E+22	7,610473E+22	6,309284E+22	6,309221E+22	1,522079E+23	1,261850E+23	2,783929E+23
-1646	7,610529E+22	7,610621E+22	6,309250E+22	6,309308E+22	1,522115E+23	1,261856E+23	2,783971E+23
-1645	7,610604E+22	7,610499E+22	6,309279E+22	6,309168E+22	1,522110E+23	1,261845E+23	2,783955E+23
-1644	7,610299E+22	7,610412E+22	6,309323E+22	6,309140E+22	1,522071E+23	1,261846E+23	2,783917E+23
-1643	7,610608E+22	7,610613E+22	6,309247E+22	6,309329E+22	1,522122E+23	1,261858E+23	2,783980E+23
-1642	7,610440E+22	7,610406E+22	6,309260E+22	6,309240E+22	1,522085E+23	1,261850E+23	2,783935E+23
-1641	7,610303E+22	7,610459E+22	6,309301E+22	6,309325E+22	1,522076E+23	1,261863E+23	2,783939E+23
-1640	7,610674E+22	7,610588E+22	6,309305E+22	6,309416E+22	1,522126E+23	1,261872E+23	2,783998E+23
-1639	7,610417E+22	7,610395E+22	6,309385E+22	6,309277E+22	1,522081E+23	1,261866E+23	2,783947E+23
-1638	7,610537E+22	7,610571E+22	6,309452E+22	6,309464E+22	1,522111E+23	1,261892E+23	2,784002E+23
-1637	7,610692E+22	7,610590E+22	6,309496E+22	6,309500E+22	1,522128E+23	1,261900E+23	2,784028E+23
-1636	7,610317E+22	7,610503E+22	6,309588E+22	6,309474E+22	1,522082E+23	1,261906E+23	2,783988E+23
-1635	7,610554E+22	7,610716E+22	6,309585E+22	6,309669E+22	1,522127E+23	1,261925E+23	2,784052E+23
-1634	7,610554E+22	7,610484E+22	6,309601E+22	6,309548E+22	1,522104E+23	1,261915E+23	2,784019E+23
-1633	7,610358E+22	7,610436E+22	6,309639E+22	6,309527E+22	1,522079E+23	1,261917E+23	2,783996E+23
-1632	7,610717E+22	7,610603E+22	6,309561E+22	6,309639E+22	1,522132E+23	1,261920E+23	2,784052E+23
-1631	7,610481E+22	7,610421E+22	6,309494E+22	6,309438E+22	1,522090E+23	1,261893E+23	2,783983E+23
-1630	7,610425E+22	7,610584E+22	6,309443E+22	6,309512E+22	1,522101E+23	1,261896E+23	2,783996E+23
-1629	7,610670E+22	7,610614E+22	6,309384E+22	6,309471E+22	1,522128E+23	1,261885E+23	2,784014E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1628	7,610350E+22	7,610420E+22	6,309419E+22	6,309244E+22	1,522077E+23	1,261866E+23	2,783943E+23
-1627	7,610518E+22	7,610609E+22	6,309406E+22	6,309356E+22	1,522113E+23	1,261876E+23	2,783989E+23
-1626	7,610610E+22	7,610452E+22	6,309353E+22	6,309282E+22	1,522106E+23	1,261863E+23	2,783970E+23
-1625	7,610283E+22	7,610407E+22	6,309379E+22	6,309281E+22	1,522069E+23	1,261866E+23	2,783935E+23
-1624	7,610545E+22	7,610620E+22	6,309344E+22	6,309487E+22	1,522117E+23	1,261883E+23	2,784000E+23
-1623	7,610436E+22	7,610413E+22	6,309339E+22	6,309336E+22	1,522085E+23	1,261868E+23	2,783952E+23
-1622	7,610343E+22	7,610486E+22	6,309406E+22	6,309409E+22	1,522083E+23	1,261881E+23	2,783964E+23
-1621	7,610700E+22	7,610552E+22	6,309441E+22	6,309515E+22	1,522125E+23	1,261896E+23	2,784021E+23
-1620	7,610457E+22	7,610390E+22	6,309532E+22	6,309385E+22	1,522085E+23	1,261892E+23	2,783976E+23
-1619	7,610472E+22	7,610642E+22	6,309593E+22	6,309599E+22	1,522111E+23	1,261919E+23	2,784031E+23
-1618	7,610643E+22	7,610582E+22	6,309583E+22	6,309654E+22	1,522123E+23	1,261924E+23	2,784046E+23
-1617	7,610318E+22	7,610461E+22	6,309695E+22	6,309585E+22	1,522078E+23	1,261928E+23	2,784006E+23
-1616	7,610548E+22	7,610647E+22	6,309729E+22	6,309764E+22	1,522120E+23	1,261949E+23	2,784069E+23
-1615	7,610601E+22	7,610446E+22	6,309687E+22	6,309619E+22	1,522105E+23	1,261931E+23	2,784035E+23
-1614	7,610398E+22	7,610483E+22	6,309688E+22	6,309630E+22	1,522088E+23	1,261932E+23	2,784020E+23
-1613	7,610681E+22	7,610622E+22	6,309618E+22	6,309757E+22	1,522130E+23	1,261937E+23	2,784068E+23
-1612	7,610484E+22	7,610453E+22	6,309582E+22	6,309511E+22	1,522094E+23	1,261909E+23	2,784003E+23
-1611	7,610384E+22	7,610623E+22	6,309572E+22	6,309544E+22	1,522101E+23	1,261912E+23	2,784012E+23
-1610	7,610673E+22	7,610561E+22	6,309484E+22	6,309525E+22	1,522123E+23	1,261901E+23	2,784024E+23
-1609	7,610385E+22	7,610362E+22	6,309529E+22	6,309321E+22	1,522075E+23	1,261885E+23	2,783960E+23
-1608	7,610461E+22	7,610578E+22	6,309522E+22	6,309499E+22	1,522104E+23	1,261902E+23	2,784006E+23
-1607	7,610559E+22	7,610468E+22	6,309397E+22	6,309431E+22	1,522103E+23	1,261883E+23	2,783986E+23
-1606	7,610262E+22	7,610446E+22	6,309414E+22	6,309419E+22	1,522071E+23	1,261883E+23	2,783954E+23
-1605	7,610537E+22	7,610571E+22	6,309435E+22	6,309590E+22	1,522111E+23	1,261903E+23	2,784013E+23
-1604	7,610522E+22	7,610372E+22	6,309466E+22	6,309382E+22	1,522089E+23	1,261885E+23	2,783974E+23
-1603	7,610375E+22	7,610514E+22	6,309564E+22	6,309460E+22	1,522089E+23	1,261902E+23	2,783991E+23
-1602	7,610714E+22	7,610566E+22	6,309545E+22	6,309637E+22	1,522128E+23	1,261918E+23	2,784046E+23
-1601	7,610442E+22	7,610425E+22	6,309649E+22	6,309525E+22	1,522087E+23	1,261917E+23	2,784004E+23
-1600	7,610383E+22	7,610665E+22	6,309755E+22	6,309758E+22	1,522105E+23	1,261951E+23	2,784056E+23
-1599	7,610615E+22	7,610573E+22	6,309705E+22	6,309768E+22	1,522119E+23	1,261947E+23	2,784066E+23
-1598	7,610348E+22	7,610445E+22	6,309805E+22	6,309694E+22	1,522079E+23	1,261950E+23	2,784029E+23
-1597	7,610574E+22	7,610567E+22	6,309846E+22	6,309887E+22	1,522114E+23	1,261973E+23	2,784087E+23
-1596	7,610646E+22	7,610424E+22	6,309764E+22	6,309723E+22	1,522107E+23	1,261949E+23	2,784056E+23
-1595	7,610355E+22	7,610553E+22	6,309759E+22	6,309722E+22	1,522091E+23	1,261948E+23	2,784039E+23
-1594	7,610664E+22	7,610621E+22	6,309651E+22	6,309842E+22	1,522128E+23	1,261949E+23	2,784078E+23
-1593	7,610497E+22	7,610426E+22	6,309667E+22	6,309545E+22	1,522092E+23	1,261921E+23	2,784014E+23
-1592	7,610359E+22	7,610592E+22	6,309714E+22	6,309594E+22	1,522095E+23	1,261931E+23	2,784026E+23
-1591	7,610670E+22	7,610541E+22	6,309572E+22	6,309590E+22	1,522121E+23	1,261916E+23	2,784037E+23
-1590	7,610370E+22	7,610400E+22	6,309587E+22	6,309452E+22	1,522077E+23	1,261904E+23	2,783981E+23
-1589	7,610398E+22	7,610557E+22	6,309599E+22	6,309657E+22	1,522095E+23	1,261926E+23	2,784021E+23
-1588	7,610558E+22	7,610458E+22	6,309489E+22	6,309540E+22	1,522102E+23	1,261903E+23	2,784004E+23
-1587	7,610261E+22	7,610468E+22	6,309542E+22	6,309479E+22	1,522073E+23	1,261902E+23	2,783975E+23
-1586	7,610598E+22	7,610516E+22	6,309536E+22	6,309663E+22	1,522111E+23	1,261920E+23	2,784031E+23
-1585	7,610596E+22	7,610348E+22	6,309596E+22	6,309465E+22	1,522094E+23	1,261906E+23	2,784001E+23
-1584	7,610333E+22	7,610544E+22	6,309717E+22	6,309604E+22	1,522088E+23	1,261932E+23	2,784020E+23
-1583	7,610645E+22	7,610620E+22	6,309643E+22	6,309789E+22	1,522127E+23	1,261943E+23	2,784070E+23
-1582	7,610406E+22	7,610471E+22	6,309750E+22	6,309684E+22	1,522088E+23	1,261943E+23	2,784031E+23
-1581	7,610347E+22	7,610584E+22	6,309899E+22	6,309889E+22	1,522093E+23	1,261979E+23	2,784072E+23
-1580	7,610672E+22	7,610508E+22	6,309837E+22	6,309853E+22	1,522118E+23	1,261969E+23	2,784087E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1579	7,610382E+22	7,610447E+22	6,309916E+22	6,309767E+22	1,522083E+23	1,261968E+23	2,784051E+23
-1578	7,610592E+22	7,610556E+22	6,309883E+22	6,310005E+22	1,522115E+23	1,261989E+23	2,784104E+23
-1577	7,610655E+22	7,610461E+22	6,309824E+22	6,309817E+22	1,522112E+23	1,261964E+23	2,784076E+23
-1576	7,610293E+22	7,610591E+22	6,309877E+22	6,309804E+22	1,522088E+23	1,261968E+23	2,784057E+23
-1575	7,610636E+22	7,610634E+22	6,309751E+22	6,309883E+22	1,522127E+23	1,261963E+23	2,784090E+23
-1574	7,610515E+22	7,610429E+22	6,309770E+22	6,309610E+22	1,522094E+23	1,261938E+23	2,784032E+23
-1573	7,610329E+22	7,610514E+22	6,309840E+22	6,309710E+22	1,522084E+23	1,261955E+23	2,784039E+23
-1572	7,610649E+22	7,610526E+22	6,309652E+22	6,309717E+22	1,522118E+23	1,261937E+23	2,784054E+23
-1571	7,610313E+22	7,610434E+22	6,309660E+22	6,309570E+22	1,522075E+23	1,261923E+23	2,783998E+23
-1570	7,610401E+22	7,610504E+22	6,309640E+22	6,309771E+22	1,522091E+23	1,261941E+23	2,784032E+23
-1569	7,610626E+22	7,610405E+22	6,309584E+22	6,309587E+22	1,522103E+23	1,261917E+23	2,784020E+23
-1568	7,610291E+22	7,610456E+22	6,309690E+22	6,309538E+22	1,522075E+23	1,261923E+23	2,783997E+23
-1567	7,610622E+22	7,610547E+22	6,309639E+22	6,309738E+22	1,522117E+23	1,261938E+23	2,784055E+23
-1566	7,610578E+22	7,610444E+22	6,309690E+22	6,309609E+22	1,522102E+23	1,261930E+23	2,784032E+23
-1565	7,610250E+22	7,610558E+22	6,309863E+22	6,309786E+22	1,522081E+23	1,261965E+23	2,784046E+23
-1564	7,610601E+22	7,610617E+22	6,309787E+22	6,309922E+22	1,522122E+23	1,261971E+23	2,784093E+23
-1563	7,610379E+22	7,610462E+22	6,309914E+22	6,309783E+22	1,522084E+23	1,261970E+23	2,784054E+23
-1562	7,610401E+22	7,610479E+22	6,310000E+22	6,310008E+22	1,522088E+23	1,262001E+23	2,784089E+23
-1561	7,610739E+22	7,610443E+22	6,309936E+22	6,309958E+22	1,522118E+23	1,261989E+23	2,784108E+23
-1560	7,610358E+22	7,610479E+22	6,310005E+22	6,309899E+22	1,522084E+23	1,261990E+23	2,784074E+23
-1559	7,610560E+22	7,610609E+22	6,309917E+22	6,310100E+22	1,522117E+23	1,262002E+23	2,784119E+23
-1558	7,610646E+22	7,610523E+22	6,309883E+22	6,309891E+22	1,522117E+23	1,261977E+23	2,784094E+23
-1557	7,610272E+22	7,610537E+22	6,310013E+22	6,309864E+22	1,522081E+23	1,261988E+23	2,784069E+23
-1556	7,610648E+22	7,610597E+22	6,309882E+22	6,309920E+22	1,522125E+23	1,261980E+23	2,784105E+23
-1555	7,610496E+22	7,610444E+22	6,309894E+22	6,309686E+22	1,522094E+23	1,261958E+23	2,784052E+23
-1554	7,610308E+22	7,610473E+22	6,309887E+22	6,309854E+22	1,522078E+23	1,261974E+23	2,784052E+23
-1553	7,610645E+22	7,610508E+22	6,309722E+22	6,309837E+22	1,522115E+23	1,261956E+23	2,784071E+23
-1552	7,610283E+22	7,610441E+22	6,309764E+22	6,309671E+22	1,522072E+23	1,261943E+23	2,784016E+23
-1551	7,610424E+22	7,610501E+22	6,309718E+22	6,309825E+22	1,522093E+23	1,261954E+23	2,784047E+23
-1550	7,610693E+22	7,610435E+22	6,309678E+22	6,309665E+22	1,522113E+23	1,261934E+23	2,784047E+23
-1549	7,610279E+22	7,610428E+22	6,309833E+22	6,309665E+22	1,522071E+23	1,261950E+23	2,784021E+23
-1548	7,610570E+22	7,610595E+22	6,309758E+22	6,309873E+22	1,522116E+23	1,261963E+23	2,784080E+23
-1547	7,610502E+22	7,610502E+22	6,309820E+22	6,309747E+22	1,522100E+23	1,261957E+23	2,784057E+23
-1546	7,610220E+22	7,610481E+22	6,309965E+22	6,309932E+22	1,522070E+23	1,261990E+23	2,784060E+23
-1545	7,610646E+22	7,610529E+22	6,309924E+22	6,310012E+22	1,522118E+23	1,261994E+23	2,784111E+23
-1544	7,610411E+22	7,610414E+22	6,310054E+22	6,309883E+22	1,522082E+23	1,261994E+23	2,784076E+23
-1543	7,610439E+22	7,610482E+22	6,310061E+22	6,310107E+22	1,522092E+23	1,262017E+23	2,784109E+23
-1542	7,610759E+22	7,610532E+22	6,309979E+22	6,310081E+22	1,522129E+23	1,262006E+23	2,784135E+23
-1541	7,610310E+22	7,610504E+22	6,310117E+22	6,310020E+22	1,522081E+23	1,262014E+23	2,784095E+23
-1540	7,610528E+22	7,610650E+22	6,310041E+22	6,310155E+22	1,522118E+23	1,262020E+23	2,784137E+23
-1539	7,610625E+22	7,610547E+22	6,310041E+22	6,309931E+22	1,522117E+23	1,261997E+23	2,784114E+23
-1538	7,610289E+22	7,610441E+22	6,310126E+22	6,309962E+22	1,522073E+23	1,262009E+23	2,784082E+23
-1537	7,610657E+22	7,610531E+22	6,309986E+22	6,310029E+22	1,522119E+23	1,262001E+23	2,784120E+23
-1536	7,610431E+22	7,610450E+22	6,309973E+22	6,309842E+22	1,522088E+23	1,261982E+23	2,784070E+23
-1535	7,610280E+22	7,610474E+22	6,309896E+22	6,309972E+22	1,522075E+23	1,261987E+23	2,784062E+23
-1534	7,610667E+22	7,610523E+22	6,309754E+22	6,309918E+22	1,522119E+23	1,261967E+23	2,784086E+23
-1533	7,610313E+22	7,610391E+22	6,309877E+22	6,309733E+22	1,522070E+23	1,261961E+23	2,784031E+23
-1532	7,610467E+22	7,610507E+22	6,309825E+22	6,309851E+22	1,522097E+23	1,261968E+23	2,784065E+23
-1531	7,610676E+22	7,610506E+22	6,309808E+22	6,309741E+22	1,522118E+23	1,261955E+23	2,784073E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1530	7,610243E+22	7,610425E+22	6,309930E+22	6,309825E+22	1,522067E+23	1,261976E+23	2,784042E+23
-1529	7,610524E+22	7,610578E+22	6,309899E+22	6,310008E+22	1,522110E+23	1,261991E+23	2,784101E+23
-1528	7,610446E+22	7,610491E+22	6,309987E+22	6,309888E+22	1,522094E+23	1,261988E+23	2,784081E+23
-1527	7,610248E+22	7,610421E+22	6,310068E+22	6,310034E+22	1,522067E+23	1,262010E+23	2,784077E+23
-1526	7,610720E+22	7,610507E+22	6,310014E+22	6,310128E+22	1,522123E+23	1,262014E+23	2,784137E+23
-1525	7,610428E+22	7,610385E+22	6,310165E+22	6,310031E+22	1,522081E+23	1,262020E+23	2,784101E+23
-1524	7,610418E+22	7,610552E+22	6,310132E+22	6,310219E+22	1,522097E+23	1,262035E+23	2,784132E+23
-1523	7,610717E+22	7,610623E+22	6,310088E+22	6,310170E+22	1,522134E+23	1,262026E+23	2,784160E+23
-1522	7,610305E+22	7,610458E+22	6,310223E+22	6,310111E+22	1,522076E+23	1,262033E+23	2,784110E+23
-1521	7,610550E+22	7,610588E+22	6,310194E+22	6,310197E+22	1,522114E+23	1,262039E+23	2,784153E+23
-1520	7,610612E+22	7,610523E+22	6,310184E+22	6,310022E+22	1,522114E+23	1,262021E+23	2,784134E+23
-1519	7,610274E+22	7,610426E+22	6,310173E+22	6,310078E+22	1,522070E+23	1,262025E+23	2,784095E+23
-1518	7,610646E+22	7,610576E+22	6,310007E+22	6,310171E+22	1,522122E+23	1,262018E+23	2,784140E+23
-1517	7,610393E+22	7,610421E+22	6,310047E+22	6,309968E+22	1,522081E+23	1,262002E+23	2,784083E+23
-1516	7,610277E+22	7,610492E+22	6,309969E+22	6,310016E+22	1,522077E+23	1,261998E+23	2,784075E+23
-1515	7,610701E+22	7,610545E+22	6,309873E+22	6,309937E+22	1,522125E+23	1,261981E+23	2,784106E+23
-1514	7,610357E+22	7,610321E+22	6,309979E+22	6,309815E+22	1,522068E+23	1,261979E+23	2,784047E+23
-1513	7,610464E+22	7,610496E+22	6,309954E+22	6,309945E+22	1,522096E+23	1,261990E+23	2,784086E+23
-1512	7,610592E+22	7,610550E+22	6,309932E+22	6,309898E+22	1,522114E+23	1,261983E+23	2,784097E+23
-1511	7,610195E+22	7,610412E+22	6,310006E+22	6,309968E+22	1,522061E+23	1,261997E+23	2,784058E+23
-1510	7,610535E+22	7,610559E+22	6,309991E+22	6,310128E+22	1,522109E+23	1,262012E+23	2,784121E+23
-1509	7,610472E+22	7,610401E+22	6,310134E+22	6,310006E+22	1,522087E+23	1,262014E+23	2,784101E+23
-1508	7,610295E+22	7,610422E+22	6,310169E+22	6,310118E+22	1,522072E+23	1,262029E+23	2,784100E+23
-1507	7,610734E+22	7,610583E+22	6,310123E+22	6,310234E+22	1,522132E+23	1,262036E+23	2,784167E+23
-1506	7,610425E+22	7,610403E+22	6,310246E+22	6,310182E+22	1,522083E+23	1,262043E+23	2,784126E+23
-1505	7,610401E+22	7,610572E+22	6,310269E+22	6,310307E+22	1,522097E+23	1,262058E+23	2,784155E+23
-1504	7,610668E+22	7,610650E+22	6,310258E+22	6,310265E+22	1,522132E+23	1,262052E+23	2,784184E+23
-1503	7,610320E+22	7,610412E+22	6,310336E+22	6,310195E+22	1,522073E+23	1,262053E+23	2,784126E+23
-1502	7,610567E+22	7,610556E+22	6,310281E+22	6,310305E+22	1,522112E+23	1,262059E+23	2,784171E+23
-1501	7,610572E+22	7,610475E+22	6,310277E+22	6,310183E+22	1,522105E+23	1,262046E+23	2,784151E+23
-1500	7,610234E+22	7,610448E+22	6,310192E+22	6,310186E+22	1,522068E+23	1,262038E+23	2,784106E+23
-1499	7,610622E+22	7,610602E+22	6,310064E+22	6,310239E+22	1,522122E+23	1,262030E+23	2,784153E+23
-1498	7,610434E+22	7,610350E+22	6,310105E+22	6,310027E+22	1,522078E+23	1,262013E+23	2,784092E+23
-1497	7,610344E+22	7,610436E+22	6,310086E+22	6,310015E+22	1,522078E+23	1,262010E+23	2,784088E+23
-1496	7,610703E+22	7,610570E+22	6,310007E+22	6,309999E+22	1,522127E+23	1,262001E+23	2,784128E+23
-1495	7,610344E+22	7,610348E+22	6,310050E+22	6,309926E+22	1,522069E+23	1,261998E+23	2,784067E+23
-1494	7,610415E+22	7,610555E+22	6,310035E+22	6,310091E+22	1,522097E+23	1,262013E+23	2,784110E+23
-1493	7,610519E+22	7,610529E+22	6,310079E+22	6,310065E+22	1,522105E+23	1,262014E+23	2,784119E+23
-1492	7,610174E+22	7,610405E+22	6,310127E+22	6,310068E+22	1,522058E+23	1,262020E+23	2,784077E+23
-1491	7,610574E+22	7,610543E+22	6,310139E+22	6,310221E+22	1,522112E+23	1,262036E+23	2,784148E+23
-1490	7,610534E+22	7,610323E+22	6,310236E+22	6,310153E+22	1,522086E+23	1,262039E+23	2,784125E+23
-1489	7,610321E+22	7,610426E+22	6,310279E+22	6,310241E+22	1,522075E+23	1,262052E+23	2,784127E+23
-1488	7,610686E+22	7,610659E+22	6,310236E+22	6,310378E+22	1,522134E+23	1,262061E+23	2,784196E+23
-1487	7,610406E+22	7,610418E+22	6,310327E+22	6,310289E+22	1,522082E+23	1,262062E+23	2,784144E+23
-1486	7,610417E+22	7,610579E+22	6,310382E+22	6,310381E+22	1,522100E+23	1,262076E+23	2,784176E+23
-1485	7,610668E+22	7,610574E+22	6,310414E+22	6,310356E+22	1,522124E+23	1,262077E+23	2,784201E+23
-1484	7,610311E+22	7,610406E+22	6,310427E+22	6,310274E+22	1,522072E+23	1,262070E+23	2,784142E+23
-1483	7,610544E+22	7,610592E+22	6,310362E+22	6,310412E+22	1,522114E+23	1,262077E+23	2,784191E+23
-1482	7,610549E+22	7,610432E+22	6,310319E+22	6,310324E+22	1,522098E+23	1,262064E+23	2,784162E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1481	7,610238E+22	7,610429E+22	6,310276E+22	6,310245E+22	1,522067E+23	1,262052E+23	2,784119E+23
-1480	7,610621E+22	7,610610E+22	6,310177E+22	6,310286E+22	1,522123E+23	1,262046E+23	2,784169E+23
-1479	7,610487E+22	7,610316E+22	6,310180E+22	6,310069E+22	1,522080E+23	1,262025E+23	2,784105E+23
-1478	7,610373E+22	7,610453E+22	6,310169E+22	6,310091E+22	1,522083E+23	1,262026E+23	2,784109E+23
-1477	7,610634E+22	7,610576E+22	6,310126E+22	6,310153E+22	1,522121E+23	1,262028E+23	2,784149E+23
-1476	7,610260E+22	7,610402E+22	6,310128E+22	6,310062E+22	1,522066E+23	1,262019E+23	2,784085E+23
-1475	7,610367E+22	7,610567E+22	6,310158E+22	6,310208E+22	1,522093E+23	1,262037E+23	2,784130E+23
-1474	7,610540E+22	7,610424E+22	6,310193E+22	6,310194E+22	1,522096E+23	1,262039E+23	2,784135E+23
-1473	7,610250E+22	7,610330E+22	6,310260E+22	6,310139E+22	1,522058E+23	1,262040E+23	2,784098E+23
-1472	7,610597E+22	7,610561E+22	6,310266E+22	6,310339E+22	1,522116E+23	1,262060E+23	2,784176E+23
-1471	7,610562E+22	7,610362E+22	6,310294E+22	6,310289E+22	1,522092E+23	1,262058E+23	2,784151E+23
-1470	7,610316E+22	7,610496E+22	6,310362E+22	6,310361E+22	1,522081E+23	1,262072E+23	2,784153E+23
-1469	7,610630E+22	7,610668E+22	6,310402E+22	6,310504E+22	1,522130E+23	1,262091E+23	2,784220E+23
-1468	7,610386E+22	7,610433E+22	6,310467E+22	6,310352E+22	1,522082E+23	1,262082E+23	2,784164E+23
-1467	7,610417E+22	7,610557E+22	6,310543E+22	6,310457E+22	1,522097E+23	1,262100E+23	2,784197E+23
-1466	7,610668E+22	7,610487E+22	6,310514E+22	6,310509E+22	1,522115E+23	1,262102E+23	2,784218E+23
-1465	7,610299E+22	7,610373E+22	6,310501E+22	6,310396E+22	1,522067E+23	1,262090E+23	2,784157E+23
-1464	7,610493E+22	7,610613E+22	6,310428E+22	6,310538E+22	1,522111E+23	1,262097E+23	2,784207E+23
-1463	7,610570E+22	7,610405E+22	6,310341E+22	6,310396E+22	1,522098E+23	1,262074E+23	2,784171E+23
-1462	7,610295E+22	7,610425E+22	6,310336E+22	6,310267E+22	1,522072E+23	1,262060E+23	2,784132E+23
-1461	7,610636E+22	7,610585E+22	6,310303E+22	6,310341E+22	1,522122E+23	1,262064E+23	2,784186E+23
-1460	7,610467E+22	7,610377E+22	6,310265E+22	6,310128E+22	1,522084E+23	1,262039E+23	2,784124E+23
-1459	7,610317E+22	7,610530E+22	6,310284E+22	6,310205E+22	1,522085E+23	1,262049E+23	2,784134E+23
-1458	7,610564E+22	7,610547E+22	6,310228E+22	6,310320E+22	1,522111E+23	1,262055E+23	2,784166E+23
-1457	7,610239E+22	7,610360E+22	6,310270E+22	6,310170E+22	1,522060E+23	1,262044E+23	2,784104E+23
-1456	7,610370E+22	7,610530E+22	6,310311E+22	6,310315E+22	1,522090E+23	1,262063E+23	2,784153E+23
-1455	7,610611E+22	7,610345E+22	6,310278E+22	6,310301E+22	1,522096E+23	1,262058E+23	2,784154E+23
-1454	7,610313E+22	7,610341E+22	6,310334E+22	6,310255E+22	1,522065E+23	1,262059E+23	2,784124E+23
-1453	7,610567E+22	7,610585E+22	6,310367E+22	6,310495E+22	1,522115E+23	1,262086E+23	2,784201E+23
-1452	7,610504E+22	7,610445E+22	6,310376E+22	6,310394E+22	1,522095E+23	1,262077E+23	2,784172E+23
-1451	7,610295E+22	7,610538E+22	6,310512E+22	6,310442E+22	1,522083E+23	1,262095E+23	2,784179E+23
-1450	7,610626E+22	7,610582E+22	6,310553E+22	6,310607E+22	1,522121E+23	1,262116E+23	2,784237E+23
-1449	7,610416E+22	7,610371E+22	6,310625E+22	6,310430E+22	1,522079E+23	1,262106E+23	2,784184E+23
-1448	7,610393E+22	7,610556E+22	6,310666E+22	6,310587E+22	1,522095E+23	1,262125E+23	2,784220E+23
-1447	7,610656E+22	7,610479E+22	6,310544E+22	6,310656E+22	1,522114E+23	1,262120E+23	2,784233E+23
-1446	7,610302E+22	7,610405E+22	6,310536E+22	6,310503E+22	1,522071E+23	1,262104E+23	2,784175E+23
-1445	7,610470E+22	7,610601E+22	6,310529E+22	6,310629E+22	1,522107E+23	1,262116E+23	2,784223E+23
-1444	7,610581E+22	7,610436E+22	6,310426E+22	6,310416E+22	1,522102E+23	1,262084E+23	2,784186E+23
-1443	7,610328E+22	7,610440E+22	6,310466E+22	6,310306E+22	1,522077E+23	1,262077E+23	2,784154E+23
-1442	7,610608E+22	7,610548E+22	6,310408E+22	6,310463E+22	1,522116E+23	1,262087E+23	2,784203E+23
-1441	7,610421E+22	7,610383E+22	6,310369E+22	6,310248E+22	1,522080E+23	1,262062E+23	2,784142E+23
-1440	7,610232E+22	7,610539E+22	6,310399E+22	6,310345E+22	1,522077E+23	1,262074E+23	2,784152E+23
-1439	7,610569E+22	7,610478E+22	6,310300E+22	6,310435E+22	1,522105E+23	1,262073E+23	2,784178E+23
-1438	7,610310E+22	7,610298E+22	6,310350E+22	6,310237E+22	1,522061E+23	1,262059E+23	2,784119E+23
-1437	7,610406E+22	7,610476E+22	6,310431E+22	6,310422E+22	1,522088E+23	1,262085E+23	2,784174E+23
-1436	7,610624E+22	7,610412E+22	6,310344E+22	6,310390E+22	1,522104E+23	1,262073E+23	2,784177E+23
-1435	7,610298E+22	7,610434E+22	6,310444E+22	6,310369E+22	1,522073E+23	1,262081E+23	2,784155E+23
-1434	7,610513E+22	7,610597E+22	6,310499E+22	6,310641E+22	1,522111E+23	1,262114E+23	2,784225E+23
-1433	7,610487E+22	7,610445E+22	6,310553E+22	6,310481E+22	1,522093E+23	1,262103E+23	2,784197E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1432	7,610273E+22	7,610519E+22	6,310706E+22	6,310549E+22	1,522079E+23	1,262126E+23	2,784205E+23
-1431	7,610651E+22	7,610505E+22	6,310662E+22	6,310739E+22	1,522116E+23	1,262140E+23	2,784256E+23
-1430	7,610432E+22	7,610354E+22	6,310697E+22	6,310576E+22	1,522079E+23	1,262127E+23	2,784206E+23
-1429	7,610342E+22	7,610551E+22	6,310739E+22	6,310764E+22	1,522089E+23	1,262150E+23	2,784240E+23
-1428	7,610621E+22	7,610524E+22	6,310578E+22	6,310742E+22	1,522115E+23	1,262132E+23	2,784247E+23
-1427	7,610334E+22	7,610427E+22	6,310629E+22	6,310541E+22	1,522076E+23	1,262117E+23	2,784193E+23
-1426	7,610504E+22	7,610538E+22	6,310633E+22	6,310672E+22	1,522104E+23	1,262131E+23	2,784235E+23
-1425	7,610616E+22	7,610427E+22	6,310552E+22	6,310444E+22	1,522104E+23	1,262100E+23	2,784204E+23
-1424	7,610290E+22	7,610483E+22	6,310591E+22	6,310407E+22	1,522077E+23	1,262100E+23	2,784177E+23
-1423	7,610552E+22	7,610542E+22	6,310466E+22	6,310596E+22	1,522109E+23	1,262106E+23	2,784216E+23
-1422	7,610392E+22	7,610385E+22	6,310450E+22	6,310367E+22	1,522078E+23	1,262082E+23	2,784159E+23
-1421	7,610202E+22	7,610478E+22	6,310520E+22	6,310467E+22	1,522068E+23	1,262099E+23	2,784167E+23
-1420	7,610582E+22	7,610453E+22	6,310386E+22	6,310498E+22	1,522103E+23	1,262088E+23	2,784192E+23
-1419	7,610373E+22	7,610299E+22	6,310457E+22	6,310324E+22	1,522067E+23	1,262078E+23	2,784145E+23
-1418	7,610403E+22	7,610456E+22	6,310514E+22	6,310568E+22	1,522086E+23	1,262108E+23	2,784194E+23
-1417	7,610599E+22	7,610464E+22	6,310448E+22	6,310510E+22	1,522106E+23	1,262096E+23	2,784202E+23
-1416	7,610246E+22	7,610481E+22	6,310593E+22	6,310492E+22	1,522073E+23	1,262109E+23	2,784181E+23
-1415	7,610505E+22	7,610554E+22	6,310623E+22	6,310741E+22	1,522106E+23	1,262136E+23	2,784242E+23
-1414	7,610531E+22	7,610405E+22	6,310692E+22	6,310570E+22	1,522094E+23	1,262126E+23	2,784220E+23
-1413	7,610266E+22	7,610468E+22	6,310853E+22	6,310697E+22	1,522073E+23	1,262155E+23	2,784228E+23
-1412	7,610621E+22	7,610545E+22	6,310730E+22	6,310867E+22	1,522117E+23	1,262160E+23	2,784276E+23
-1411	7,610431E+22	7,610405E+22	6,310774E+22	6,310708E+22	1,522084E+23	1,262148E+23	2,784232E+23
-1410	7,610321E+22	7,610526E+22	6,310823E+22	6,310888E+22	1,522085E+23	1,262171E+23	2,784256E+23
-1409	7,610651E+22	7,610521E+22	6,310699E+22	6,310779E+22	1,522117E+23	1,262148E+23	2,784265E+23
-1408	7,610355E+22	7,610423E+22	6,310779E+22	6,310581E+22	1,522078E+23	1,262136E+23	2,784214E+23
-1407	7,610528E+22	7,610499E+22	6,310720E+22	6,310747E+22	1,522103E+23	1,262147E+23	2,784249E+23
-1406	7,610605E+22	7,610438E+22	6,310617E+22	6,310548E+22	1,522104E+23	1,262117E+23	2,784221E+23
-1405	7,610194E+22	7,610477E+22	6,310676E+22	6,310570E+22	1,522067E+23	1,262125E+23	2,784192E+23
-1404	7,610481E+22	7,610555E+22	6,310518E+22	6,310690E+22	1,522104E+23	1,262121E+23	2,784224E+23
-1403	7,610417E+22	7,610354E+22	6,310544E+22	6,310441E+22	1,522077E+23	1,262098E+23	2,784176E+23
-1402	7,610240E+22	7,610388E+22	6,310613E+22	6,310558E+22	1,522063E+23	1,262117E+23	2,784180E+23
-1401	7,610638E+22	7,610444E+22	6,310487E+22	6,310563E+22	1,522108E+23	1,262105E+23	2,784213E+23
-1400	7,610366E+22	7,610368E+22	6,310570E+22	6,310437E+22	1,522073E+23	1,262101E+23	2,784174E+23
-1399	7,610380E+22	7,610490E+22	6,310592E+22	6,310695E+22	1,522087E+23	1,262129E+23	2,784216E+23
-1398	7,610587E+22	7,610500E+22	6,310577E+22	6,310617E+22	1,522109E+23	1,262119E+23	2,784228E+23
-1397	7,610211E+22	7,610455E+22	6,310781E+22	6,310629E+22	1,522067E+23	1,262141E+23	2,784208E+23
-1396	7,610491E+22	7,610536E+22	6,310767E+22	6,310833E+22	1,522103E+23	1,262160E+23	2,784263E+23
-1395	7,610564E+22	7,610391E+22	6,310830E+22	6,310713E+22	1,522095E+23	1,262154E+23	2,784250E+23
-1394	7,610242E+22	7,610424E+22	6,310936E+22	6,310886E+22	1,522067E+23	1,262182E+23	2,784249E+23
-1393	7,610604E+22	7,610559E+22	6,310809E+22	6,310993E+22	1,522116E+23	1,262180E+23	2,784296E+23
-1392	7,610433E+22	7,610428E+22	6,310881E+22	6,310798E+22	1,522086E+23	1,262168E+23	2,784254E+23
-1391	7,610370E+22	7,610472E+22	6,310893E+22	6,310928E+22	1,522084E+23	1,262182E+23	2,784266E+23
-1390	7,610716E+22	7,610507E+22	6,310797E+22	6,310803E+22	1,522122E+23	1,262160E+23	2,784282E+23
-1389	7,610339E+22	7,610421E+22	6,310893E+22	6,310679E+22	1,522076E+23	1,262157E+23	2,784233E+23
-1388	7,610441E+22	7,610559E+22	6,310779E+22	6,310835E+22	1,522100E+23	1,262161E+23	2,784261E+23
-1387	7,610553E+22	7,610485E+22	6,310701E+22	6,310677E+22	1,522104E+23	1,262138E+23	2,784242E+23
-1386	7,610137E+22	7,610414E+22	6,310766E+22	6,310704E+22	1,522055E+23	1,262147E+23	2,784202E+23
-1385	7,610498E+22	7,610503E+22	6,310631E+22	6,310753E+22	1,522100E+23	1,262138E+23	2,784238E+23
-1384	7,610467E+22	7,610317E+22	6,310668E+22	6,310513E+22	1,522078E+23	1,262118E+23	2,784197E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1383	7,610291E+22	7,610345E+22	6,310669E+22	6,310656E+22	1,522064E+23	1,262133E+23	2,784196E+23
-1382	7,610654E+22	7,610488E+22	6,310552E+22	6,310675E+22	1,522114E+23	1,262123E+23	2,784237E+23
-1381	7,610306E+22	7,610407E+22	6,310684E+22	6,310591E+22	1,522071E+23	1,262127E+23	2,784199E+23
-1380	7,610322E+22	7,610531E+22	6,310708E+22	6,310775E+22	1,522085E+23	1,262148E+23	2,784234E+23
-1379	7,610613E+22	7,610491E+22	6,310737E+22	6,310709E+22	1,522110E+23	1,262145E+23	2,784255E+23
-1378	7,610220E+22	7,610367E+22	6,310937E+22	6,310767E+22	1,522059E+23	1,262170E+23	2,784229E+23
-1377	7,610509E+22	7,610520E+22	6,310899E+22	6,310958E+22	1,522103E+23	1,262186E+23	2,784289E+23
-1376	7,610546E+22	7,610422E+22	6,310944E+22	6,310868E+22	1,522097E+23	1,262181E+23	2,784278E+23
-1375	7,610243E+22	7,610422E+22	6,310989E+22	6,311027E+22	1,522066E+23	1,262202E+23	2,784268E+23
-1374	7,610636E+22	7,610565E+22	6,310896E+22	6,311067E+22	1,522120E+23	1,262196E+23	2,784316E+23
-1373	7,610432E+22	7,610415E+22	6,311014E+22	6,310879E+22	1,522085E+23	1,262189E+23	2,784274E+23
-1372	7,610370E+22	7,610489E+22	6,310994E+22	6,310958E+22	1,522086E+23	1,262195E+23	2,784281E+23
-1371	7,610722E+22	7,610531E+22	6,310898E+22	6,310900E+22	1,522125E+23	1,262180E+23	2,784305E+23
-1370	7,610260E+22	7,610402E+22	6,310972E+22	6,310842E+22	1,522066E+23	1,262181E+23	2,784248E+23
-1369	7,610374E+22	7,610558E+22	6,310859E+22	6,310942E+22	1,522093E+23	1,262180E+23	2,784273E+23
-1368	7,610528E+22	7,610457E+22	6,310811E+22	6,310763E+22	1,522099E+23	1,262157E+23	2,784256E+23
-1367	7,610193E+22	7,610318E+22	6,310822E+22	6,310764E+22	1,522051E+23	1,262159E+23	2,784210E+23
-1366	7,610587E+22	7,610456E+22	6,310708E+22	6,310797E+22	1,522104E+23	1,262150E+23	2,784255E+23
-1365	7,610480E+22	7,610337E+22	6,310760E+22	6,310627E+22	1,522082E+23	1,262139E+23	2,784220E+23
-1364	7,610250E+22	7,610434E+22	6,310732E+22	6,310738E+22	1,522068E+23	1,262147E+23	2,784215E+23
-1363	7,610633E+22	7,610569E+22	6,310669E+22	6,310794E+22	1,522120E+23	1,262146E+23	2,784266E+23
-1362	7,610255E+22	7,610385E+22	6,310843E+22	6,310731E+22	1,522064E+23	1,262157E+23	2,784222E+23
-1361	7,610308E+22	7,610502E+22	6,310891E+22	6,310866E+22	1,522081E+23	1,262176E+23	2,784257E+23
-1360	7,610630E+22	7,610456E+22	6,310922E+22	6,310842E+22	1,522109E+23	1,262176E+23	2,784285E+23
-1359	7,610244E+22	7,610295E+22	6,311013E+22	6,310932E+22	1,522054E+23	1,262194E+23	2,784248E+23
-1358	7,610514E+22	7,610517E+22	6,310962E+22	6,311113E+22	1,522103E+23	1,262208E+23	2,784311E+23
-1357	7,610516E+22	7,610438E+22	6,311024E+22	6,311026E+22	1,522095E+23	1,262205E+23	2,784300E+23
-1356	7,610233E+22	7,610444E+22	6,311058E+22	6,311071E+22	1,522068E+23	1,262213E+23	2,784281E+23
-1355	7,610696E+22	7,610580E+22	6,311012E+22	6,311112E+22	1,522128E+23	1,262212E+23	2,784340E+23
-1354	7,610438E+22	7,610378E+22	6,311140E+22	6,310963E+22	1,522082E+23	1,262210E+23	2,784292E+23
-1353	7,610340E+22	7,610516E+22	6,311111E+22	6,311034E+22	1,522086E+23	1,262214E+23	2,784300E+23
-1352	7,610659E+22	7,610573E+22	6,311015E+22	6,311021E+22	1,522123E+23	1,262204E+23	2,784327E+23
-1351	7,610221E+22	7,610357E+22	6,311032E+22	6,310969E+22	1,522058E+23	1,262200E+23	2,784258E+23
-1350	7,610387E+22	7,610506E+22	6,310950E+22	6,311019E+22	1,522089E+23	1,262197E+23	2,784286E+23
-1349	7,610546E+22	7,610401E+22	6,310922E+22	6,310856E+22	1,522095E+23	1,262178E+23	2,784272E+23
-1348	7,610229E+22	7,610310E+22	6,310886E+22	6,310807E+22	1,522054E+23	1,262169E+23	2,784223E+23
-1347	7,610627E+22	7,610501E+22	6,310774E+22	6,310901E+22	1,522113E+23	1,262167E+23	2,784280E+23
-1346	7,610420E+22	7,610367E+22	6,310841E+22	6,310782E+22	1,522079E+23	1,262162E+23	2,784241E+23
-1345	7,610200E+22	7,610481E+22	6,310853E+22	6,310833E+22	1,522068E+23	1,262169E+23	2,784237E+23
-1344	7,610603E+22	7,610565E+22	6,310842E+22	6,310882E+22	1,522117E+23	1,262172E+23	2,784289E+23
-1343	7,610283E+22	7,610299E+22	6,310970E+22	6,310839E+22	1,522058E+23	1,262181E+23	2,784239E+23
-1342	7,610357E+22	7,610438E+22	6,311018E+22	6,310974E+22	1,522079E+23	1,262199E+23	2,784279E+23
-1341	7,610601E+22	7,610452E+22	6,311032E+22	6,311022E+22	1,522105E+23	1,262205E+23	2,784311E+23
-1340	7,610211E+22	7,610350E+22	6,311065E+22	6,311057E+22	1,522056E+23	1,262212E+23	2,784268E+23
-1339	7,610531E+22	7,610565E+22	6,311047E+22	6,311237E+22	1,522110E+23	1,262228E+23	2,784338E+23
-1338	7,610506E+22	7,610426E+22	6,311153E+22	6,311133E+22	1,522093E+23	1,262229E+23	2,784322E+23
-1337	7,610261E+22	7,610445E+22	6,311212E+22	6,311106E+22	1,522071E+23	1,262232E+23	2,784302E+23
-1336	7,610706E+22	7,610581E+22	6,311184E+22	6,311185E+22	1,522129E+23	1,262237E+23	2,784366E+23
-1335	7,610419E+22	7,610350E+22	6,311222E+22	6,311098E+22	1,522077E+23	1,262232E+23	2,784309E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1334	7,610293E+22	7,610507E+22	6,311189E+22	6,311163E+22	1,522080E+23	1,262235E+23	2,784315E+23
-1333	7,610586E+22	7,610555E+22	6,311103E+22	6,311168E+22	1,522114E+23	1,262227E+23	2,784341E+23
-1332	7,610218E+22	7,610321E+22	6,311083E+22	6,311014E+22	1,522054E+23	1,262210E+23	2,784264E+23
-1331	7,610469E+22	7,610473E+22	6,311021E+22	6,311077E+22	1,522094E+23	1,262210E+23	2,784304E+23
-1330	7,610573E+22	7,610371E+22	6,311002E+22	6,310949E+22	1,522094E+23	1,262195E+23	2,784290E+23
-1329	7,610219E+22	7,610373E+22	6,310968E+22	6,310875E+22	1,522059E+23	1,262184E+23	2,784243E+23
-1328	7,610581E+22	7,610585E+22	6,310899E+22	6,311002E+22	1,522117E+23	1,262190E+23	2,784307E+23
-1327	7,610386E+22	7,610356E+22	6,310938E+22	6,310897E+22	1,522074E+23	1,262183E+23	2,784258E+23
-1326	7,610187E+22	7,610438E+22	6,311008E+22	6,310921E+22	1,522062E+23	1,262193E+23	2,784255E+23
-1325	7,610583E+22	7,610514E+22	6,311008E+22	6,311018E+22	1,522110E+23	1,262203E+23	2,784312E+23
-1324	7,610289E+22	7,610256E+22	6,311068E+22	6,310951E+22	1,522055E+23	1,262202E+23	2,784256E+23
-1323	7,610382E+22	7,610448E+22	6,311090E+22	6,311147E+22	1,522083E+23	1,262224E+23	2,784307E+23
-1322	7,610558E+22	7,610451E+22	6,311108E+22	6,311205E+22	1,522101E+23	1,262231E+23	2,784332E+23
-1321	7,610206E+22	7,610383E+22	6,311168E+22	6,311139E+22	1,522059E+23	1,262231E+23	2,784290E+23
-1320	7,610560E+22	7,610578E+22	6,311207E+22	6,311287E+22	1,522114E+23	1,262249E+23	2,784363E+23
-1319	7,610557E+22	7,610378E+22	6,311274E+22	6,311199E+22	1,522094E+23	1,262247E+23	2,784341E+23
-1318	7,610292E+22	7,610430E+22	6,311353E+22	6,311185E+22	1,522072E+23	1,262254E+23	2,784326E+23
-1317	7,610633E+22	7,610612E+22	6,311306E+22	6,311340E+22	1,522125E+23	1,262265E+23	2,784389E+23
-1316	7,610348E+22	7,610383E+22	6,311289E+22	6,311218E+22	1,522073E+23	1,262251E+23	2,784324E+23
-1315	7,610284E+22	7,610509E+22	6,311264E+22	6,311291E+22	1,522079E+23	1,262256E+23	2,784335E+23
-1314	7,610561E+22	7,610497E+22	6,311204E+22	6,311282E+22	1,522106E+23	1,262249E+23	2,784354E+23
-1313	7,610268E+22	7,610300E+22	6,311181E+22	6,311053E+22	1,522057E+23	1,262223E+23	2,784280E+23
-1312	7,610509E+22	7,610471E+22	6,311126E+22	6,311138E+22	1,522098E+23	1,262226E+23	2,784324E+23
-1311	7,610568E+22	7,610375E+22	6,311042E+22	6,311063E+22	1,522094E+23	1,262210E+23	2,784305E+23
-1310	7,610195E+22	7,610392E+22	6,311050E+22	6,310970E+22	1,522059E+23	1,262202E+23	2,784261E+23
-1309	7,610497E+22	7,610590E+22	6,311027E+22	6,311112E+22	1,522109E+23	1,262214E+23	2,784323E+23
-1308	7,610370E+22	7,610328E+22	6,311050E+22	6,310956E+22	1,522070E+23	1,262201E+23	2,784270E+23
-1307	7,610240E+22	7,610391E+22	6,311125E+22	6,311027E+22	1,522063E+23	1,262215E+23	2,784278E+23
-1306	7,610567E+22	7,610468E+22	6,311126E+22	6,311179E+22	1,522104E+23	1,262230E+23	2,784334E+23
-1305	7,610282E+22	7,610296E+22	6,311157E+22	6,311075E+22	1,522058E+23	1,262223E+23	2,784281E+23
-1304	7,610372E+22	7,610498E+22	6,311210E+22	6,311275E+22	1,522087E+23	1,262249E+23	2,784335E+23
-1303	7,610567E+22	7,610445E+22	6,311207E+22	6,311323E+22	1,522101E+23	1,262253E+23	2,784354E+23
-1302	7,610249E+22	7,610364E+22	6,311330E+22	6,311203E+22	1,522061E+23	1,262253E+23	2,784315E+23
-1301	7,610554E+22	7,610572E+22	6,311387E+22	6,311391E+22	1,522113E+23	1,262278E+23	2,784390E+23
-1300	7,610548E+22	7,610383E+22	6,311384E+22	6,311301E+22	1,522093E+23	1,262269E+23	2,784362E+23
-1299	7,610267E+22	7,610460E+22	6,311432E+22	6,311359E+22	1,522073E+23	1,262279E+23	2,784352E+23
-1298	7,610537E+22	7,610601E+22	6,311389E+22	6,311523E+22	1,522114E+23	1,262291E+23	2,784405E+23
-1297	7,610321E+22	7,610365E+22	6,311369E+22	6,311297E+22	1,522069E+23	1,262267E+23	2,784335E+23
-1296	7,610327E+22	7,610468E+22	6,311377E+22	6,311337E+22	1,522080E+23	1,262271E+23	2,784351E+23
-1295	7,610633E+22	7,610417E+22	6,311258E+22	6,311333E+22	1,522105E+23	1,262259E+23	2,784364E+23
-1294	7,610317E+22	7,610285E+22	6,311259E+22	6,311098E+22	1,522060E+23	1,262236E+23	2,784296E+23
-1293	7,610456E+22	7,610537E+22	6,311211E+22	6,311241E+22	1,522099E+23	1,262245E+23	2,784344E+23
-1292	7,610512E+22	7,610426E+22	6,311107E+22	6,311137E+22	1,522094E+23	1,262224E+23	2,784318E+23
-1291	7,610181E+22	7,610410E+22	6,311158E+22	6,311080E+22	1,522059E+23	1,262224E+23	2,784283E+23
-1290	7,610446E+22	7,610535E+22	6,311180E+22	6,311232E+22	1,522098E+23	1,262241E+23	2,784339E+23
-1289	7,610384E+22	7,610289E+22	6,311193E+22	6,311043E+22	1,522067E+23	1,262224E+23	2,784291E+23
-1288	7,610262E+22	7,610372E+22	6,311257E+22	6,311161E+22	1,522063E+23	1,262242E+23	2,784305E+23
-1287	7,610558E+22	7,610446E+22	6,311179E+22	6,311355E+22	1,522100E+23	1,262253E+23	2,784354E+23
-1286	7,610293E+22	7,610301E+22	6,311248E+22	6,311203E+22	1,522059E+23	1,262245E+23	2,784304E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1285	7,610354E+22	7,610517E+22	6,311340E+22	6,311384E+22	1,522087E+23	1,262272E+23	2,784359E+23
-1284	7,610600E+22	7,610446E+22	6,311325E+22	6,311374E+22	1,522105E+23	1,262270E+23	2,784375E+23
-1283	7,610314E+22	7,610373E+22	6,311460E+22	6,311306E+22	1,522069E+23	1,262277E+23	2,784345E+23
-1282	7,610490E+22	7,610578E+22	6,311530E+22	6,311545E+22	1,522107E+23	1,262307E+23	2,784414E+23
-1281	7,610494E+22	7,610438E+22	6,311495E+22	6,311434E+22	1,522093E+23	1,262293E+23	2,784386E+23
-1280	7,610229E+22	7,610466E+22	6,311551E+22	6,311486E+22	1,522070E+23	1,262304E+23	2,784373E+23
-1279	7,610522E+22	7,610533E+22	6,311464E+22	6,311635E+22	1,522106E+23	1,262310E+23	2,784416E+23
-1278	7,610389E+22	7,610291E+22	6,311473E+22	6,311343E+22	1,522068E+23	1,262282E+23	2,784350E+23
-1277	7,610353E+22	7,610434E+22	6,311476E+22	6,311404E+22	1,522079E+23	1,262288E+23	2,784367E+23
-1276	7,610649E+22	7,610433E+22	6,311299E+22	6,311393E+22	1,522108E+23	1,262269E+23	2,784377E+23
-1275	7,610314E+22	7,610346E+22	6,311295E+22	6,311215E+22	1,522066E+23	1,262251E+23	2,784317E+23
-1274	7,610350E+22	7,610557E+22	6,311307E+22	6,311362E+22	1,522091E+23	1,262267E+23	2,784358E+23
-1273	7,610475E+22	7,610433E+22	6,311225E+22	6,311193E+22	1,522091E+23	1,262242E+23	2,784333E+23
-1272	7,610200E+22	7,610363E+22	6,311315E+22	6,311149E+22	1,522056E+23	1,262246E+23	2,784303E+23
-1271	7,610469E+22	7,610450E+22	6,311279E+22	6,311351E+22	1,522092E+23	1,262263E+23	2,784355E+23
-1270	7,610417E+22	7,610258E+22	6,311295E+22	6,311168E+22	1,522068E+23	1,262246E+23	2,784314E+23
-1269	7,610224E+22	7,610416E+22	6,311349E+22	6,311323E+22	1,522064E+23	1,262267E+23	2,784331E+23
-1268	7,610550E+22	7,610481E+22	6,311249E+22	6,311465E+22	1,522103E+23	1,262271E+23	2,784375E+23
-1267	7,610330E+22	7,610337E+22	6,311359E+22	6,311317E+22	1,522067E+23	1,262268E+23	2,784334E+23
-1266	7,610339E+22	7,610507E+22	6,311513E+22	6,311491E+22	1,522085E+23	1,262300E+23	2,784385E+23
-1265	7,610615E+22	7,610449E+22	6,311486E+22	6,311454E+22	1,522106E+23	1,262294E+23	2,784400E+23
-1264	7,610304E+22	7,610385E+22	6,311616E+22	6,311448E+22	1,522069E+23	1,262306E+23	2,784375E+23
-1263	7,610429E+22	7,610550E+22	6,311602E+22	6,311720E+22	1,522098E+23	1,262332E+23	2,784430E+23
-1262	7,610472E+22	7,610389E+22	6,311593E+22	6,311555E+22	1,522086E+23	1,262315E+23	2,784401E+23
-1261	7,610217E+22	7,610429E+22	6,311653E+22	6,311579E+22	1,522065E+23	1,262323E+23	2,784388E+23
-1260	7,610584E+22	7,610473E+22	6,311524E+22	6,311664E+22	1,522106E+23	1,262319E+23	2,784424E+23
-1259	7,610478E+22	7,610294E+22	6,311523E+22	6,311410E+22	1,522077E+23	1,262293E+23	2,784370E+23
-1258	7,610316E+22	7,610472E+22	6,311552E+22	6,311500E+22	1,522079E+23	1,262305E+23	2,784384E+23
-1257	7,610597E+22	7,610524E+22	6,311377E+22	6,311462E+22	1,522112E+23	1,262284E+23	2,784396E+23
-1256	7,610270E+22	7,610394E+22	6,311429E+22	6,311307E+22	1,522066E+23	1,262274E+23	2,784340E+23
-1255	7,610297E+22	7,610508E+22	6,311423E+22	6,311465E+22	1,522080E+23	1,262289E+23	2,784369E+23
-1254	7,610501E+22	7,610351E+22	6,311379E+22	6,311278E+22	1,522085E+23	1,262266E+23	2,784351E+23
-1253	7,610204E+22	7,610311E+22	6,311441E+22	6,311280E+22	1,522052E+23	1,262272E+23	2,784324E+23
-1252	7,610479E+22	7,610429E+22	6,311328E+22	6,311486E+22	1,522091E+23	1,262281E+23	2,784372E+23
-1251	7,610441E+22	7,610302E+22	6,311324E+22	6,311336E+22	1,522074E+23	1,262266E+23	2,784340E+23
-1250	7,610173E+22	7,610433E+22	6,311445E+22	6,311455E+22	1,522061E+23	1,262290E+23	2,784351E+23
-1249	7,610568E+22	7,610513E+22	6,311382E+22	6,311513E+22	1,522108E+23	1,262290E+23	2,784398E+23
-1248	7,610388E+22	7,610331E+22	6,311536E+22	6,311375E+22	1,522072E+23	1,262291E+23	2,784363E+23
-1247	7,610331E+22	7,610467E+22	6,311650E+22	6,311604E+22	1,522080E+23	1,262325E+23	2,784405E+23
-1246	7,610607E+22	7,610444E+22	6,311626E+22	6,311589E+22	1,522105E+23	1,262322E+23	2,784427E+23
-1245	7,610231E+22	7,610403E+22	6,311736E+22	6,311617E+22	1,522063E+23	1,262335E+23	2,784399E+23
-1244	7,610400E+22	7,610527E+22	6,311678E+22	6,311840E+22	1,522093E+23	1,262352E+23	2,784445E+23
-1243	7,610519E+22	7,610371E+22	6,311665E+22	6,311665E+22	1,522089E+23	1,262333E+23	2,784422E+23
-1242	7,610226E+22	7,610388E+22	6,311762E+22	6,311664E+22	1,522061E+23	1,262343E+23	2,784404E+23
-1241	7,610620E+22	7,610490E+22	6,311612E+22	6,311712E+22	1,522111E+23	1,262332E+23	2,784443E+23
-1240	7,610479E+22	7,610350E+22	6,311615E+22	6,311504E+22	1,522083E+23	1,262312E+23	2,784395E+23
-1239	7,610241E+22	7,610490E+22	6,311611E+22	6,311621E+22	1,522073E+23	1,262323E+23	2,784396E+23
-1238	7,610563E+22	7,610502E+22	6,311492E+22	6,311540E+22	1,522107E+23	1,262303E+23	2,784410E+23
-1237	7,610238E+22	7,610356E+22	6,311566E+22	6,311393E+22	1,522059E+23	1,262296E+23	2,784355E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1236	7,610326E+22	7,610427E+22	6,311514E+22	6,311532E+22	1,522075E+23	1,262305E+23	2,784380E+23
-1235	7,610553E+22	7,610329E+22	6,311443E+22	6,311406E+22	1,522088E+23	1,262285E+23	2,784373E+23
-1234	7,610171E+22	7,610327E+22	6,311517E+22	6,311432E+22	1,522050E+23	1,262295E+23	2,784345E+23
-1233	7,610465E+22	7,610483E+22	6,311397E+22	6,311584E+22	1,522095E+23	1,262298E+23	2,784393E+23
-1232	7,610450E+22	7,610350E+22	6,311452E+22	6,311431E+22	1,522080E+23	1,262288E+23	2,784368E+23
-1231	7,610172E+22	7,610407E+22	6,311578E+22	6,311538E+22	1,522058E+23	1,262312E+23	2,784370E+23
-1230	7,610607E+22	7,610462E+22	6,311569E+22	6,311582E+22	1,522107E+23	1,262315E+23	2,784422E+23
-1229	7,610370E+22	7,610327E+22	6,311712E+22	6,311516E+22	1,522070E+23	1,262323E+23	2,784392E+23
-1228	7,610290E+22	7,610458E+22	6,311739E+22	6,311767E+22	1,522075E+23	1,262351E+23	2,784425E+23
-1227	7,610577E+22	7,610466E+22	6,311687E+22	6,311782E+22	1,522104E+23	1,262347E+23	2,784451E+23
-1226	7,610177E+22	7,610377E+22	6,311834E+22	6,311766E+22	1,522055E+23	1,262360E+23	2,784415E+23
-1225	7,610432E+22	7,610505E+22	6,311777E+22	6,311890E+22	1,522094E+23	1,262367E+23	2,784460E+23
-1224	7,610600E+22	7,610367E+22	6,311781E+22	6,311718E+22	1,522097E+23	1,262350E+23	2,784447E+23
-1223	7,610240E+22	7,610379E+22	6,311839E+22	6,311744E+22	1,522062E+23	1,262358E+23	2,784420E+23
-1222	7,610617E+22	7,610522E+22	6,311716E+22	6,311792E+22	1,522114E+23	1,262351E+23	2,784465E+23
-1221	7,610407E+22	7,610407E+22	6,311731E+22	6,311612E+22	1,522081E+23	1,262334E+23	2,784416E+23
-1220	7,610190E+22	7,610475E+22	6,311706E+22	6,311704E+22	1,522067E+23	1,262341E+23	2,784408E+23
-1219	7,610576E+22	7,610476E+22	6,311588E+22	6,311642E+22	1,522105E+23	1,262323E+23	2,784428E+23
-1218	7,610223E+22	7,610279E+22	6,311690E+22	6,311503E+22	1,522050E+23	1,262319E+23	2,784369E+23
-1217	7,610345E+22	7,610404E+22	6,311598E+22	6,311626E+22	1,522075E+23	1,262322E+23	2,784397E+23
-1216	7,610566E+22	7,610356E+22	6,311509E+22	6,311537E+22	1,522092E+23	1,262305E+23	2,784397E+23
-1215	7,610124E+22	7,610327E+22	6,311563E+22	6,311559E+22	1,522045E+23	1,262312E+23	2,784357E+23
-1214	7,610481E+22	7,610472E+22	6,311517E+22	6,311650E+22	1,522095E+23	1,262317E+23	2,784412E+23
-1213	7,610458E+22	7,610348E+22	6,311612E+22	6,311497E+22	1,522081E+23	1,262311E+23	2,784391E+23
-1212	7,610202E+22	7,610371E+22	6,311711E+22	6,311615E+22	1,522057E+23	1,262333E+23	2,784390E+23
-1211	7,610619E+22	7,610484E+22	6,311678E+22	6,311731E+22	1,522110E+23	1,262341E+23	2,784451E+23
-1210	7,610286E+22	7,610351E+22	6,311841E+22	6,311707E+22	1,522064E+23	1,262355E+23	2,784418E+23
-1209	7,610239E+22	7,610488E+22	6,311847E+22	6,311909E+22	1,522073E+23	1,262376E+23	2,784448E+23
-1208	7,610577E+22	7,610474E+22	6,311817E+22	6,311910E+22	1,522105E+23	1,262373E+23	2,784478E+23
-1207	7,610194E+22	7,610320E+22	6,311942E+22	6,311865E+22	1,522051E+23	1,262381E+23	2,784432E+23
-1206	7,610514E+22	7,610444E+22	6,311912E+22	6,311948E+22	1,522096E+23	1,262386E+23	2,784482E+23
-1205	7,610609E+22	7,610391E+22	6,311900E+22	6,311814E+22	1,522100E+23	1,262371E+23	2,784471E+23
-1204	7,610217E+22	7,610404E+22	6,311893E+22	6,311849E+22	1,522062E+23	1,262374E+23	2,784436E+23
-1203	7,610573E+22	7,610563E+22	6,311775E+22	6,311911E+22	1,522114E+23	1,262369E+23	2,784482E+23
-1202	7,610337E+22	7,610387E+22	6,311853E+22	6,311715E+22	1,522072E+23	1,262357E+23	2,784429E+23
-1201	7,610193E+22	7,610421E+22	6,311813E+22	6,311743E+22	1,522061E+23	1,262356E+23	2,784417E+23
-1200	7,610610E+22	7,610440E+22	6,311696E+22	6,311721E+22	1,522105E+23	1,262342E+23	2,784447E+23
-1199	7,610218E+22	7,610243E+22	6,311742E+22	6,311620E+22	1,522046E+23	1,262336E+23	2,784382E+23
-1198	7,610353E+22	7,610400E+22	6,311671E+22	6,311729E+22	1,522075E+23	1,262340E+23	2,784415E+23
-1197	7,610530E+22	7,610412E+22	6,311611E+22	6,311647E+22	1,522094E+23	1,262326E+23	2,784420E+23
-1196	7,610124E+22	7,610329E+22	6,311659E+22	6,311634E+22	1,522045E+23	1,262329E+23	2,784375E+23
-1195	7,610509E+22	7,610479E+22	6,311646E+22	6,311736E+22	1,522099E+23	1,262338E+23	2,784437E+23
-1194	7,610439E+22	7,610327E+22	6,311787E+22	6,311624E+22	1,522077E+23	1,262341E+23	2,784418E+23
-1193	7,610176E+22	7,610380E+22	6,311846E+22	6,311750E+22	1,522056E+23	1,262360E+23	2,784415E+23
-1192	7,610575E+22	7,610526E+22	6,311793E+22	6,311919E+22	1,522110E+23	1,262371E+23	2,784481E+23
-1191	7,610226E+22	7,610319E+22	6,311928E+22	6,311881E+22	1,522054E+23	1,262381E+23	2,784435E+23
-1190	7,610276E+22	7,610421E+22	6,311978E+22	6,312004E+22	1,522070E+23	1,262398E+23	2,784468E+23
-1189	7,610625E+22	7,610445E+22	6,311958E+22	6,311980E+22	1,522107E+23	1,262394E+23	2,784501E+23
-1188	7,610264E+22	7,610289E+22	6,312030E+22	6,311927E+22	1,522055E+23	1,262396E+23	2,784451E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1187	7,610550E+22	7,610498E+22	6,311981E+22	6,312050E+22	1,522105E+23	1,262403E+23	2,784508E+23
-1186	7,610535E+22	7,610447E+22	6,312003E+22	6,311940E+22	1,522098E+23	1,262394E+23	2,784493E+23
-1185	7,610151E+22	7,610449E+22	6,311997E+22	6,311933E+22	1,522060E+23	1,262393E+23	2,784453E+23
-1184	7,610539E+22	7,610572E+22	6,311898E+22	6,311997E+22	1,522111E+23	1,262389E+23	2,784501E+23
-1183	7,610307E+22	7,610298E+22	6,311962E+22	6,311808E+22	1,522060E+23	1,262377E+23	2,784437E+23
-1182	7,610240E+22	7,610326E+22	6,311929E+22	6,311825E+22	1,522057E+23	1,262375E+23	2,784432E+23
-1181	7,610601E+22	7,610432E+22	6,311779E+22	6,311842E+22	1,522103E+23	1,262362E+23	2,784465E+23
-1180	7,610209E+22	7,610248E+22	6,311756E+22	6,311740E+22	1,522046E+23	1,262350E+23	2,784395E+23
-1179	7,610357E+22	7,610438E+22	6,311705E+22	6,311831E+22	1,522079E+23	1,262354E+23	2,784433E+23
-1178	7,610504E+22	7,610416E+22	6,311736E+22	6,311725E+22	1,522092E+23	1,262346E+23	2,784438E+23
-1177	7,610149E+22	7,610324E+22	6,311803E+22	6,311674E+22	1,522047E+23	1,262348E+23	2,784395E+23
-1176	7,610520E+22	7,610497E+22	6,311804E+22	6,311835E+22	1,522102E+23	1,262364E+23	2,784466E+23
-1175	7,610387E+22	7,610319E+22	6,311913E+22	6,311792E+22	1,522071E+23	1,262370E+23	2,784441E+23
-1174	7,610157E+22	7,610361E+22	6,311981E+22	6,311909E+22	1,522052E+23	1,262389E+23	2,784441E+23
-1173	7,610530E+22	7,610537E+22	6,311937E+22	6,312072E+22	1,522107E+23	1,262401E+23	2,784508E+23
-1172	7,610261E+22	7,610274E+22	6,312026E+22	6,311993E+22	1,522054E+23	1,262402E+23	2,784455E+23
-1171	7,610353E+22	7,610395E+22	6,312077E+22	6,312095E+22	1,522075E+23	1,262417E+23	2,784492E+23
-1170	7,610647E+22	7,610441E+22	6,312096E+22	6,312090E+22	1,522109E+23	1,262419E+23	2,784527E+23
-1169	7,610261E+22	7,610333E+22	6,312118E+22	6,312019E+22	1,522059E+23	1,262414E+23	2,784473E+23
-1168	7,610487E+22	7,610578E+22	6,312069E+22	6,312174E+22	1,522106E+23	1,262424E+23	2,784531E+23
-1167	7,610449E+22	7,610438E+22	6,312093E+22	6,312062E+22	1,522089E+23	1,262416E+23	2,784504E+23
-1166	7,610154E+22	7,610367E+22	6,312127E+22	6,311997E+22	1,522052E+23	1,262412E+23	2,784464E+23
-1165	7,610538E+22	7,610521E+22	6,312029E+22	6,312063E+22	1,522106E+23	1,262409E+23	2,784515E+23
-1164	7,610352E+22	7,610231E+22	6,312012E+22	6,311894E+22	1,522058E+23	1,262391E+23	2,784449E+23
-1163	7,610267E+22	7,610342E+22	6,311953E+22	6,311938E+22	1,522061E+23	1,262389E+23	2,784450E+23
-1162	7,610555E+22	7,610474E+22	6,311851E+22	6,311964E+22	1,522103E+23	1,262382E+23	2,784485E+23
-1161	7,610192E+22	7,610297E+22	6,311839E+22	6,311802E+22	1,522049E+23	1,262364E+23	2,784413E+23
-1160	7,610358E+22	7,610484E+22	6,311837E+22	6,311892E+22	1,522084E+23	1,262373E+23	2,784457E+23
-1159	7,610496E+22	7,610373E+22	6,311886E+22	6,311815E+22	1,522087E+23	1,262370E+23	2,784457E+23
-1158	7,610181E+22	7,610265E+22	6,311977E+22	6,311788E+22	1,522045E+23	1,262376E+23	2,784421E+23
-1157	7,610465E+22	7,610514E+22	6,311950E+22	6,312002E+22	1,522098E+23	1,262395E+23	2,784493E+23
-1156	7,610348E+22	7,610299E+22	6,311984E+22	6,311977E+22	1,522065E+23	1,262396E+23	2,784461E+23
-1155	7,610170E+22	7,610346E+22	6,312056E+22	6,312060E+22	1,522052E+23	1,262412E+23	2,784463E+23
-1154	7,610542E+22	7,610490E+22	6,312065E+22	6,312179E+22	1,522103E+23	1,262424E+23	2,784528E+23
-1153	7,610326E+22	7,610262E+22	6,312134E+22	6,312044E+22	1,522059E+23	1,262418E+23	2,784477E+23
-1152	7,610399E+22	7,610450E+22	6,312179E+22	6,312179E+22	1,522085E+23	1,262436E+23	2,784521E+23
-1151	7,610596E+22	7,610476E+22	6,312191E+22	6,312218E+22	1,522107E+23	1,262441E+23	2,784548E+23
-1150	7,610227E+22	7,610357E+22	6,312249E+22	6,312134E+22	1,522058E+23	1,262438E+23	2,784497E+23
-1149	7,610404E+22	7,610601E+22	6,312221E+22	6,312274E+22	1,522101E+23	1,262449E+23	2,784550E+23
-1148	7,610441E+22	7,610370E+22	6,312194E+22	6,312156E+22	1,522081E+23	1,262435E+23	2,784516E+23
-1147	7,610206E+22	7,610291E+22	6,312212E+22	6,312084E+22	1,522050E+23	1,262430E+23	2,784479E+23
-1146	7,610540E+22	7,610468E+22	6,312125E+22	6,312179E+22	1,522101E+23	1,262430E+23	2,784531E+23
-1145	7,610355E+22	7,610255E+22	6,312042E+22	6,311991E+22	1,522061E+23	1,262403E+23	2,784464E+23
-1144	7,610250E+22	7,610416E+22	6,311987E+22	6,312040E+22	1,522067E+23	1,262403E+23	2,784469E+23
-1143	7,610517E+22	7,610473E+22	6,311934E+22	6,312048E+22	1,522099E+23	1,262398E+23	2,784497E+23
-1142	7,610237E+22	7,610255E+22	6,311987E+22	6,311838E+22	1,522049E+23	1,262382E+23	2,784432E+23
-1141	7,610351E+22	7,610480E+22	6,312015E+22	6,311951E+22	1,522083E+23	1,262397E+23	2,784480E+23
-1140	7,610507E+22	7,610345E+22	6,311993E+22	6,311944E+22	1,522085E+23	1,262394E+23	2,784479E+23
-1139	7,610169E+22	7,610270E+22	6,312062E+22	6,311954E+22	1,522044E+23	1,262402E+23	2,784446E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1138	7,610394E+22	7,610524E+22	6,312072E+22	6,312187E+22	1,522092E+23	1,262426E+23	2,784518E+23
-1137	7,610342E+22	7,610301E+22	6,312079E+22	6,312093E+22	1,522064E+23	1,262417E+23	2,784481E+23
-1136	7,610203E+22	7,610360E+22	6,312164E+22	6,312157E+22	1,522056E+23	1,262432E+23	2,784488E+23
-1135	7,610571E+22	7,610451E+22	6,312195E+22	6,312283E+22	1,522102E+23	1,262448E+23	2,784550E+23
-1134	7,610382E+22	7,610244E+22	6,312275E+22	6,312141E+22	1,522063E+23	1,262442E+23	2,784504E+23
-1133	7,610342E+22	7,610520E+22	6,312314E+22	6,312299E+22	1,522086E+23	1,262461E+23	2,784547E+23
-1132	7,610550E+22	7,610484E+22	6,312267E+22	6,312356E+22	1,522103E+23	1,262462E+23	2,784566E+23
-1131	7,610216E+22	7,610328E+22	6,312348E+22	6,312238E+22	1,522054E+23	1,262459E+23	2,784513E+23
-1130	7,610380E+22	7,610537E+22	6,312362E+22	6,312363E+22	1,522092E+23	1,262473E+23	2,784564E+23
-1129	7,610476E+22	7,610320E+22	6,312280E+22	6,312214E+22	1,522080E+23	1,262449E+23	2,784529E+23
-1128	7,610239E+22	7,610318E+22	6,312261E+22	6,312182E+22	1,522056E+23	1,262444E+23	2,784500E+23
-1127	7,610509E+22	7,610476E+22	6,312172E+22	6,312302E+22	1,522099E+23	1,262447E+23	2,784546E+23
-1126	7,610360E+22	7,610278E+22	6,312128E+22	6,312073E+22	1,522064E+23	1,262420E+23	2,784484E+23
-1125	7,610214E+22	7,610467E+22	6,312121E+22	6,312091E+22	1,522068E+23	1,262421E+23	2,784489E+23
-1124	7,610527E+22	7,610439E+22	6,312046E+22	6,312115E+22	1,522097E+23	1,262416E+23	2,784513E+23
-1123	7,610280E+22	7,610215E+22	6,312120E+22	6,311934E+22	1,522049E+23	1,262405E+23	2,784455E+23
-1122	7,610303E+22	7,610449E+22	6,312157E+22	6,312103E+22	1,522075E+23	1,262426E+23	2,784501E+23
-1121	7,610450E+22	7,610360E+22	6,312065E+22	6,312105E+22	1,522081E+23	1,262417E+23	2,784498E+23
-1120	7,610140E+22	7,610308E+22	6,312117E+22	6,312116E+22	1,522045E+23	1,262423E+23	2,784468E+23
-1119	7,610375E+22	7,610464E+22	6,312170E+22	6,312313E+22	1,522084E+23	1,262448E+23	2,784532E+23
-1118	7,610425E+22	7,610249E+22	6,312214E+22	6,312156E+22	1,522067E+23	1,262437E+23	2,784504E+23
-1117	7,610245E+22	7,610375E+22	6,312319E+22	6,312214E+22	1,522062E+23	1,262453E+23	2,784515E+23
-1116	7,610596E+22	7,610460E+22	6,312294E+22	6,312396E+22	1,522106E+23	1,262469E+23	2,784575E+23
-1115	7,610376E+22	7,610292E+22	6,312382E+22	6,312273E+22	1,522067E+23	1,262466E+23	2,784532E+23
-1114	7,610251E+22	7,610549E+22	6,312468E+22	6,312443E+22	1,522080E+23	1,262491E+23	2,784571E+23
-1113	7,610508E+22	7,610484E+22	6,312387E+22	6,312455E+22	1,522099E+23	1,262484E+23	2,784583E+23
-1112	7,610231E+22	7,610311E+22	6,312455E+22	6,312338E+22	1,522054E+23	1,262479E+23	2,784533E+23
-1111	7,610389E+22	7,610447E+22	6,312475E+22	6,312479E+22	1,522084E+23	1,262495E+23	2,784579E+23
-1110	7,610521E+22	7,610287E+22	6,312362E+22	6,312321E+22	1,522081E+23	1,262468E+23	2,784549E+23
-1109	7,610198E+22	7,610381E+22	6,312330E+22	6,312284E+22	1,522058E+23	1,262461E+23	2,784519E+23
-1108	7,610497E+22	7,610486E+22	6,312205E+22	6,312404E+22	1,522098E+23	1,262461E+23	2,784559E+23
-1107	7,610385E+22	7,610261E+22	6,312211E+22	6,312122E+22	1,522065E+23	1,262433E+23	2,784498E+23
-1106	7,610196E+22	7,610439E+22	6,312273E+22	6,312146E+22	1,522063E+23	1,262442E+23	2,784505E+23
-1105	7,610533E+22	7,610424E+22	6,312150E+22	6,312175E+22	1,522096E+23	1,262433E+23	2,784528E+23
-1104	7,610260E+22	7,610250E+22	6,312200E+22	6,312070E+22	1,522051E+23	1,262427E+23	2,784478E+23
-1103	7,610229E+22	7,610435E+22	6,312255E+22	6,312279E+22	1,522066E+23	1,262453E+23	2,784520E+23
-1102	7,610441E+22	7,610343E+22	6,312178E+22	6,312238E+22	1,522078E+23	1,262442E+23	2,784520E+23
-1101	7,610131E+22	7,610323E+22	6,312259E+22	6,312203E+22	1,522045E+23	1,262446E+23	2,784492E+23
-1100	7,610441E+22	7,610407E+22	6,312275E+22	6,312405E+22	1,522085E+23	1,262468E+23	2,784553E+23
-1099	7,610509E+22	7,610221E+22	6,312343E+22	6,312247E+22	1,522073E+23	1,262459E+23	2,784532E+23
-1098	7,610219E+22	7,610406E+22	6,312471E+22	6,312354E+22	1,522062E+23	1,262483E+23	2,784545E+23
-1097	7,610535E+22	7,610521E+22	6,312390E+22	6,312533E+22	1,522106E+23	1,262492E+23	2,784598E+23
-1096	7,610327E+22	7,610348E+22	6,312481E+22	6,312423E+22	1,522068E+23	1,262490E+23	2,784558E+23
-1095	7,610202E+22	7,610480E+22	6,312608E+22	6,312569E+22	1,522068E+23	1,262518E+23	2,784586E+23
-1094	7,610548E+22	7,610411E+22	6,312524E+22	6,312535E+22	1,522096E+23	1,262506E+23	2,784602E+23
-1093	7,610257E+22	7,610303E+22	6,312570E+22	6,312415E+22	1,522056E+23	1,262499E+23	2,784555E+23
-1092	7,610412E+22	7,610421E+22	6,312509E+22	6,312598E+22	1,522083E+23	1,262511E+23	2,784594E+23
-1091	7,610536E+22	7,610318E+22	6,312413E+22	6,312422E+22	1,522085E+23	1,262484E+23	2,784569E+23
-1090	7,610148E+22	7,610413E+22	6,312433E+22	6,312366E+22	1,522056E+23	1,262480E+23	2,784536E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1089	7,610467E+22	7,610500E+22	6,312298E+22	6,312437E+22	1,522097E+23	1,262474E+23	2,784570E+23
-1088	7,610402E+22	7,610276E+22	6,312317E+22	6,312187E+22	1,522068E+23	1,262450E+23	2,784518E+23
-1087	7,610168E+22	7,610362E+22	6,312411E+22	6,312262E+22	1,522053E+23	1,262467E+23	2,784520E+23
-1086	7,610512E+22	7,610405E+22	6,312260E+22	6,312311E+22	1,522092E+23	1,262457E+23	2,784549E+23
-1085	7,610198E+22	7,610284E+22	6,312295E+22	6,312212E+22	1,522048E+23	1,262451E+23	2,784499E+23
-1084	7,610223E+22	7,610380E+22	6,312315E+22	6,312421E+22	1,522060E+23	1,262474E+23	2,784534E+23
-1083	7,610505E+22	7,610290E+22	6,312284E+22	6,312318E+22	1,522080E+23	1,262460E+23	2,784540E+23
-1082	7,610166E+22	7,610299E+22	6,312411E+22	6,312278E+22	1,522047E+23	1,262469E+23	2,784515E+23
-1081	7,610475E+22	7,610434E+22	6,312383E+22	6,312482E+22	1,522091E+23	1,262487E+23	2,784577E+23
-1080	7,610506E+22	7,610321E+22	6,312439E+22	6,312387E+22	1,522083E+23	1,262483E+23	2,784565E+23
-1079	7,610135E+22	7,610433E+22	6,312618E+22	6,312529E+22	1,522057E+23	1,262515E+23	2,784572E+23
-1078	7,610488E+22	7,610535E+22	6,312547E+22	6,312666E+22	1,522102E+23	1,262521E+23	2,784624E+23
-1077	7,610288E+22	7,610351E+22	6,312656E+22	6,312528E+22	1,522064E+23	1,262518E+23	2,784582E+23
-1076	7,610245E+22	7,610379E+22	6,312720E+22	6,312693E+22	1,522062E+23	1,262541E+23	2,784604E+23
-1075	7,610619E+22	7,610332E+22	6,312618E+22	6,312639E+22	1,522095E+23	1,262526E+23	2,784621E+23
-1074	7,610237E+22	7,610313E+22	6,312649E+22	6,312541E+22	1,522055E+23	1,262519E+23	2,784574E+23
-1073	7,610387E+22	7,610468E+22	6,312522E+22	6,312685E+22	1,522085E+23	1,262521E+23	2,784606E+23
-1072	7,610524E+22	7,610376E+22	6,312452E+22	6,312492E+22	1,522090E+23	1,262494E+23	2,784584E+23
-1071	7,610124E+22	7,610369E+22	6,312561E+22	6,312422E+22	1,522049E+23	1,262498E+23	2,784547E+23
-1070	7,610485E+22	7,610464E+22	6,312437E+22	6,312468E+22	1,522095E+23	1,262490E+23	2,784585E+23
-1069	7,610380E+22	7,610292E+22	6,312458E+22	6,312264E+22	1,522067E+23	1,262472E+23	2,784539E+23
-1068	7,610144E+22	7,610326E+22	6,312478E+22	6,312418E+22	1,522047E+23	1,262490E+23	2,784537E+23
-1067	7,610496E+22	7,610387E+22	6,312346E+22	6,312453E+22	1,522088E+23	1,262480E+23	2,784568E+23
-1066	7,610160E+22	7,610286E+22	6,312414E+22	6,312340E+22	1,522045E+23	1,262475E+23	2,784520E+23
-1065	7,610245E+22	7,610369E+22	6,312402E+22	6,312495E+22	1,522061E+23	1,262490E+23	2,784551E+23
-1064	7,610571E+22	7,610314E+22	6,312386E+22	6,312411E+22	1,522089E+23	1,262480E+23	2,784568E+23
-1063	7,610172E+22	7,610276E+22	6,312565E+22	6,312412E+22	1,522045E+23	1,262498E+23	2,784543E+23
-1062	7,610440E+22	7,610485E+22	6,312519E+22	6,312622E+22	1,522092E+23	1,262514E+23	2,784607E+23
-1061	7,610432E+22	7,610401E+22	6,312585E+22	6,312537E+22	1,522083E+23	1,262512E+23	2,784595E+23
-1060	7,610105E+22	7,610369E+22	6,312730E+22	6,312683E+22	1,522047E+23	1,262541E+23	2,784589E+23
-1059	7,610521E+22	7,610450E+22	6,312691E+22	6,312762E+22	1,522097E+23	1,262545E+23	2,784642E+23
-1058	7,610316E+22	7,610287E+22	6,312792E+22	6,312623E+22	1,522060E+23	1,262541E+23	2,784602E+23
-1057	7,610274E+22	7,610356E+22	6,312771E+22	6,312779E+22	1,522063E+23	1,262555E+23	2,784618E+23
-1056	7,610633E+22	7,610408E+22	6,312645E+22	6,312757E+22	1,522104E+23	1,262540E+23	2,784644E+23
-1055	7,610192E+22	7,610329E+22	6,312737E+22	6,312652E+22	1,522052E+23	1,262539E+23	2,784591E+23
-1054	7,610361E+22	7,610504E+22	6,312634E+22	6,312732E+22	1,522087E+23	1,262537E+23	2,784623E+23
-1053	7,610504E+22	7,610411E+22	6,312602E+22	6,312523E+22	1,522091E+23	1,262513E+23	2,784604E+23
-1052	7,610142E+22	7,610282E+22	6,312677E+22	6,312513E+22	1,522042E+23	1,262519E+23	2,784561E+23
-1051	7,610492E+22	7,610405E+22	6,312557E+22	6,312578E+22	1,522090E+23	1,262513E+23	2,784603E+23
-1050	7,610311E+22	7,610294E+22	6,312555E+22	6,312428E+22	1,522061E+23	1,262498E+23	2,784559E+23
-1049	7,610102E+22	7,610327E+22	6,312507E+22	6,312556E+22	1,522043E+23	1,262506E+23	2,784549E+23
-1048	7,610513E+22	7,610401E+22	6,312392E+22	6,312565E+22	1,522091E+23	1,262496E+23	2,784587E+23
-1047	7,610188E+22	7,610230E+22	6,312540E+22	6,312425E+22	1,522042E+23	1,262497E+23	2,784538E+23
-1046	7,610305E+22	7,610373E+22	6,312530E+22	6,312544E+22	1,522068E+23	1,262507E+23	2,784575E+23
-1045	7,610571E+22	7,610390E+22	6,312535E+22	6,312499E+22	1,522096E+23	1,262503E+23	2,784600E+23
-1044	7,610152E+22	7,610288E+22	6,312681E+22	6,312581E+22	1,522044E+23	1,262526E+23	2,784570E+23
-1043	7,610402E+22	7,610481E+22	6,312670E+22	6,312759E+22	1,522088E+23	1,262543E+23	2,784631E+23
-1042	7,610365E+22	7,610391E+22	6,312761E+22	6,312680E+22	1,522076E+23	1,262544E+23	2,784620E+23
-1041	7,610116E+22	7,610313E+22	6,312838E+22	6,312786E+22	1,522043E+23	1,262562E+23	2,784605E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1040	7,610578E+22	7,610416E+22	6,312777E+22	6,312877E+22	1,522099E+23	1,262565E+23	2,784665E+23
-1039	7,610330E+22	7,610242E+22	6,312896E+22	6,312766E+22	1,522057E+23	1,262566E+23	2,784623E+23
-1038	7,610264E+22	7,610407E+22	6,312829E+22	6,312886E+22	1,522067E+23	1,262571E+23	2,784639E+23
-1037	7,610590E+22	7,610496E+22	6,312735E+22	6,312838E+22	1,522109E+23	1,262557E+23	2,784666E+23
-1036	7,610191E+22	7,610291E+22	6,312824E+22	6,312733E+22	1,522048E+23	1,262556E+23	2,784604E+23
-1035	7,610383E+22	7,610447E+22	6,312776E+22	6,312760E+22	1,522083E+23	1,262554E+23	2,784636E+23
-1034	7,610489E+22	7,610388E+22	6,312746E+22	6,312602E+22	1,522088E+23	1,262535E+23	2,784622E+23
-1033	7,610125E+22	7,610263E+22	6,312734E+22	6,312622E+22	1,522039E+23	1,262536E+23	2,784574E+23
-1032	7,610464E+22	7,610449E+22	6,312592E+22	6,312731E+22	1,522091E+23	1,262532E+23	2,784624E+23
-1031	7,610265E+22	7,610272E+22	6,312648E+22	6,312581E+22	1,522054E+23	1,262523E+23	2,784577E+23
-1030	7,610099E+22	7,610336E+22	6,312601E+22	6,312632E+22	1,522044E+23	1,262523E+23	2,784567E+23
-1029	7,610550E+22	7,610426E+22	6,312533E+22	6,312617E+22	1,522098E+23	1,262515E+23	2,784613E+23
-1028	7,610255E+22	7,610158E+22	6,312655E+22	6,312524E+22	1,522041E+23	1,262518E+23	2,784559E+23
-1027	7,610325E+22	7,610362E+22	6,312673E+22	6,312646E+22	1,522069E+23	1,262532E+23	2,784600E+23
-1026	7,610503E+22	7,610441E+22	6,312668E+22	6,312659E+22	1,522094E+23	1,262533E+23	2,784627E+23
-1025	7,610093E+22	7,610284E+22	6,312768E+22	6,312727E+22	1,522038E+23	1,262549E+23	2,784587E+23
-1024	7,610391E+22	7,610475E+22	6,312774E+22	6,312891E+22	1,522087E+23	1,262566E+23	2,784653E+23
-1023	7,610377E+22	7,610298E+22	6,312915E+22	6,312804E+22	1,522068E+23	1,262572E+23	2,784639E+23
-1022	7,610161E+22	7,610292E+22	6,312946E+22	6,312873E+22	1,522045E+23	1,262582E+23	2,784627E+23
-1021	7,610594E+22	7,610475E+22	6,312879E+22	6,312980E+22	1,522107E+23	1,262586E+23	2,784693E+23
-1020	7,610332E+22	7,610252E+22	6,312958E+22	6,312907E+22	1,522058E+23	1,262586E+23	2,784645E+23
-1019	7,610255E+22	7,610430E+22	6,312943E+22	6,312963E+22	1,522068E+23	1,262591E+23	2,784659E+23
-1018	7,610544E+22	7,610525E+22	6,312885E+22	6,312914E+22	1,522107E+23	1,262580E+23	2,784687E+23
-1017	7,610196E+22	7,610256E+22	6,312930E+22	6,312797E+22	1,522045E+23	1,262573E+23	2,784618E+23
-1016	7,610395E+22	7,610427E+22	6,312867E+22	6,312859E+22	1,522082E+23	1,262573E+23	2,784655E+23
-1015	7,610443E+22	7,610340E+22	6,312856E+22	6,312762E+22	1,522078E+23	1,262562E+23	2,784640E+23
-1014	7,610084E+22	7,610288E+22	6,312780E+22	6,312753E+22	1,522037E+23	1,262553E+23	2,784590E+23
-1013	7,610435E+22	7,610474E+22	6,312668E+22	6,312827E+22	1,522091E+23	1,262549E+23	2,784640E+23
-1012	7,610308E+22	7,610198E+22	6,312720E+22	6,312669E+22	1,522051E+23	1,262539E+23	2,784590E+23
-1011	7,610182E+22	7,610274E+22	6,312721E+22	6,312650E+22	1,522046E+23	1,262537E+23	2,784583E+23
-1010	7,610561E+22	7,610438E+22	6,312672E+22	6,312687E+22	1,522100E+23	1,262536E+23	2,784636E+23
-1009	7,610248E+22	7,610193E+22	6,312735E+22	6,312638E+22	1,522044E+23	1,262537E+23	2,784581E+23
-1008	7,610274E+22	7,610431E+22	6,312763E+22	6,312798E+22	1,522071E+23	1,262556E+23	2,784627E+23
-1007	7,610422E+22	7,610431E+22	6,312832E+22	6,312835E+22	1,522085E+23	1,262567E+23	2,784652E+23
-1006	7,610069E+22	7,610278E+22	6,312908E+22	6,312841E+22	1,522035E+23	1,262575E+23	2,784610E+23
-1005	7,610412E+22	7,610456E+22	6,312935E+22	6,312992E+22	1,522087E+23	1,262593E+23	2,784680E+23
-1004	7,610439E+22	7,610209E+22	6,313022E+22	6,312954E+22	1,522065E+23	1,262598E+23	2,784662E+23
-1003	7,610196E+22	7,610278E+22	6,313047E+22	6,312994E+22	1,522047E+23	1,262604E+23	2,784651E+23
-1002	7,610549E+22	7,610542E+22	6,312975E+22	6,313119E+22	1,522109E+23	1,262609E+23	2,784718E+23
-1001	7,610315E+22	7,610271E+22	6,313016E+22	6,313000E+22	1,522059E+23	1,262602E+23	2,784660E+23
-1000	7,610263E+22	7,610444E+22	6,313039E+22	6,313023E+22	1,522071E+23	1,262606E+23	2,784677E+23
-999	7,610541E+22	7,610464E+22	6,313040E+22	6,312993E+22	1,522100E+23	1,262603E+23	2,784704E+23
-998	7,610189E+22	7,610249E+22	6,313035E+22	6,312872E+22	1,522044E+23	1,262591E+23	2,784635E+23
-997	7,610363E+22	7,610466E+22	6,312967E+22	6,312972E+22	1,522083E+23	1,262594E+23	2,784677E+23
-996	7,610420E+22	7,610292E+22	6,312907E+22	6,312915E+22	1,522071E+23	1,262582E+23	2,784653E+23
-995	7,610085E+22	7,610256E+22	6,312867E+22	6,312831E+22	1,522034E+23	1,262570E+23	2,784604E+23
-994	7,610436E+22	7,610474E+22	6,312779E+22	6,312893E+22	1,522091E+23	1,262567E+23	2,784658E+23
-993	7,610361E+22	7,610159E+22	6,312792E+22	6,312722E+22	1,522052E+23	1,262551E+23	2,784603E+23
-992	7,610218E+22	7,610296E+22	6,312812E+22	6,312737E+22	1,522051E+23	1,262555E+23	2,784606E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-991	7,610506E+22	7,610451E+22	6,312806E+22	6,312845E+22	1,522096E+23	1,262565E+23	2,784661E+23
-990	7,610170E+22	7,610258E+22	6,312837E+22	6,312786E+22	1,522043E+23	1,262562E+23	2,784605E+23
-989	7,610216E+22	7,610461E+22	6,312909E+22	6,312930E+22	1,522068E+23	1,262584E+23	2,784652E+23
-988	7,610432E+22	7,610330E+22	6,312963E+22	6,312977E+22	1,522076E+23	1,262594E+23	2,784670E+23
-987	7,610140E+22	7,610195E+22	6,313053E+22	6,312925E+22	1,522033E+23	1,262598E+23	2,784631E+23
-986	7,610439E+22	7,610452E+22	6,313064E+22	6,313112E+22	1,522089E+23	1,262618E+23	2,784707E+23
-985	7,610462E+22	7,610238E+22	6,313074E+22	6,313087E+22	1,522070E+23	1,262616E+23	2,784686E+23
-984	7,610194E+22	7,610358E+22	6,313115E+22	6,313115E+22	1,522055E+23	1,262623E+23	2,784678E+23
-983	7,610496E+22	7,610558E+22	6,313130E+22	6,313238E+22	1,522105E+23	1,262637E+23	2,784742E+23
-982	7,610298E+22	7,610302E+22	6,313155E+22	6,313061E+22	1,522060E+23	1,262622E+23	2,784682E+23
-981	7,610262E+22	7,610432E+22	6,313201E+22	6,313086E+22	1,522069E+23	1,262629E+23	2,784698E+23
-980	7,610541E+22	7,610374E+22	6,313146E+22	6,313133E+22	1,522092E+23	1,262628E+23	2,784719E+23
-979	7,610181E+22	7,610207E+22	6,313110E+22	6,312991E+22	1,522039E+23	1,262610E+23	2,784649E+23
-978	7,610297E+22	7,610471E+22	6,313031E+22	6,313105E+22	1,522077E+23	1,262614E+23	2,784690E+23
-977	7,610423E+22	7,610261E+22	6,312927E+22	6,313002E+22	1,522068E+23	1,262593E+23	2,784661E+23
-976	7,610137E+22	7,610246E+22	6,312921E+22	6,312870E+22	1,522038E+23	1,262579E+23	2,784617E+23
-975	7,610458E+22	7,610441E+22	6,312909E+22	6,312956E+22	1,522090E+23	1,262587E+23	2,784676E+23
-974	7,610361E+22	7,610218E+22	6,312888E+22	6,312788E+22	1,522058E+23	1,262568E+23	2,784625E+23
-973	7,610169E+22	7,610381E+22	6,312944E+22	6,312852E+22	1,522055E+23	1,262580E+23	2,784635E+23
-972	7,610440E+22	7,610437E+22	6,312928E+22	6,313022E+22	1,522088E+23	1,262595E+23	2,784683E+23
-971	7,610145E+22	7,610220E+22	6,313000E+22	6,312909E+22	1,522037E+23	1,262591E+23	2,784627E+23
-970	7,610202E+22	7,610422E+22	6,313081E+22	6,313057E+22	1,522062E+23	1,262614E+23	2,784676E+23
-969	7,610494E+22	7,610249E+22	6,313062E+22	6,313099E+22	1,522074E+23	1,262616E+23	2,784690E+23
-968	7,610203E+22	7,610194E+22	6,313133E+22	6,313056E+22	1,522040E+23	1,262619E+23	2,784659E+23
-967	7,610422E+22	7,610475E+22	6,313172E+22	6,313281E+22	1,522090E+23	1,262645E+23	2,784735E+23
-966	7,610419E+22	7,610325E+22	6,313153E+22	6,313198E+22	1,522074E+23	1,262635E+23	2,784710E+23
-965	7,610176E+22	7,610413E+22	6,313261E+22	6,313192E+22	1,522059E+23	1,262645E+23	2,784704E+23
-964	7,610502E+22	7,610477E+22	6,313270E+22	6,313322E+22	1,522098E+23	1,262659E+23	2,784757E+23
-963	7,610323E+22	7,610234E+22	6,313307E+22	6,313118E+22	1,522056E+23	1,262643E+23	2,784698E+23
-962	7,610228E+22	7,610426E+22	6,313319E+22	6,313203E+22	1,522065E+23	1,262652E+23	2,784718E+23
-961	7,610509E+22	7,610359E+22	6,313169E+22	6,313273E+22	1,522087E+23	1,262644E+23	2,784731E+23
-960	7,610168E+22	7,610235E+22	6,313139E+22	6,313108E+22	1,522040E+23	1,262625E+23	2,784665E+23
-959	7,610273E+22	7,610449E+22	6,313129E+22	6,313207E+22	1,522072E+23	1,262634E+23	2,784706E+23
-958	7,610437E+22	7,610285E+22	6,313014E+22	6,313034E+22	1,522072E+23	1,262605E+23	2,784677E+23
-957	7,610178E+22	7,610265E+22	6,313056E+22	6,312912E+22	1,522044E+23	1,262597E+23	2,784641E+23
-956	7,610449E+22	7,610402E+22	6,313025E+22	6,313077E+22	1,522085E+23	1,262610E+23	2,784695E+23
-955	7,610327E+22	7,610233E+22	6,313010E+22	6,312913E+22	1,522056E+23	1,262592E+23	2,784648E+23
-954	7,610083E+22	7,610401E+22	6,313078E+22	6,313006E+22	1,522048E+23	1,262608E+23	2,784657E+23
-953	7,610422E+22	7,610380E+22	6,313020E+22	6,313154E+22	1,522080E+23	1,262617E+23	2,784698E+23
-952	7,610202E+22	7,610170E+22	6,313103E+22	6,313007E+22	1,522037E+23	1,262611E+23	2,784648E+23
-951	7,610236E+22	7,610358E+22	6,313225E+22	6,313189E+22	1,522059E+23	1,262641E+23	2,784701E+23
-950	7,610515E+22	7,610306E+22	6,313148E+22	6,313211E+22	1,522082E+23	1,262636E+23	2,784718E+23
-949	7,610202E+22	7,610282E+22	6,313244E+22	6,313176E+22	1,522048E+23	1,262642E+23	2,784690E+23
-948	7,610381E+22	7,610484E+22	6,313293E+22	6,313424E+22	1,522086E+23	1,262672E+23	2,784758E+23
-947	7,610413E+22	7,610329E+22	6,313315E+22	6,313273E+22	1,522074E+23	1,262659E+23	2,784733E+23
-946	7,610145E+22	7,610395E+22	6,313441E+22	6,313280E+22	1,522054E+23	1,262672E+23	2,784726E+23
-945	7,610509E+22	7,610406E+22	6,313374E+22	6,313435E+22	1,522092E+23	1,262681E+23	2,784772E+23
-944	7,610331E+22	7,610213E+22	6,313374E+22	6,313254E+22	1,522054E+23	1,262663E+23	2,784717E+23
-943	7,610168E+22	7,610406E+22	6,313394E+22	6,313378E+22	1,522057E+23	1,262677E+23	2,784735E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-942	7,610468E+22	7,610396E+22	6,313198E+22	6,313369E+22	1,522086E+23	1,262657E+23	2,784743E+23
-941	7,610192E+22	7,610248E+22	6,313224E+22	6,313149E+22	1,522044E+23	1,262637E+23	2,784681E+23
-940	7,610316E+22	7,610378E+22	6,313225E+22	6,313254E+22	1,522069E+23	1,262648E+23	2,784717E+23
-939	7,610490E+22	7,610266E+22	6,313138E+22	6,313057E+22	1,522076E+23	1,262620E+23	2,784695E+23
-938	7,610146E+22	7,610309E+22	6,313191E+22	6,313011E+22	1,522046E+23	1,262620E+23	2,784666E+23
-937	7,610394E+22	7,610415E+22	6,313101E+22	6,313215E+22	1,522081E+23	1,262632E+23	2,784713E+23
-936	7,610288E+22	7,610253E+22	6,313113E+22	6,313055E+22	1,522054E+23	1,262617E+23	2,784671E+23
-935	7,610044E+22	7,610353E+22	6,313235E+22	6,313162E+22	1,522040E+23	1,262640E+23	2,784679E+23
-934	7,610430E+22	7,610357E+22	6,313136E+22	6,313249E+22	1,522079E+23	1,262638E+23	2,784717E+23
-933	7,610267E+22	7,610164E+22	6,313235E+22	6,313116E+22	1,522043E+23	1,262635E+23	2,784678E+23
-932	7,610257E+22	7,610321E+22	6,313315E+22	6,313347E+22	1,522058E+23	1,262666E+23	2,784724E+23
-931	7,610502E+22	7,610346E+22	6,313251E+22	6,313335E+22	1,522085E+23	1,262659E+23	2,784743E+23
-930	7,610152E+22	7,610339E+22	6,313384E+22	6,313298E+22	1,522049E+23	1,262668E+23	2,784717E+23
-929	7,610369E+22	7,610448E+22	6,313407E+22	6,313513E+22	1,522082E+23	1,262692E+23	2,784774E+23
-928	7,610449E+22	7,610300E+22	6,313447E+22	6,313349E+22	1,522075E+23	1,262680E+23	2,784755E+23
-927	7,610137E+22	7,610340E+22	6,313589E+22	6,313412E+22	1,522048E+23	1,262700E+23	2,784748E+23
-926	7,610468E+22	7,610439E+22	6,313444E+22	6,313551E+22	1,522091E+23	1,262699E+23	2,784790E+23
-925	7,610316E+22	7,610261E+22	6,313450E+22	6,313380E+22	1,522058E+23	1,262683E+23	2,784741E+23
-924	7,610144E+22	7,610366E+22	6,313466E+22	6,313501E+22	1,522051E+23	1,262697E+23	2,784748E+23
-923	7,610496E+22	7,610379E+22	6,313309E+22	6,313408E+22	1,522088E+23	1,262672E+23	2,784759E+23
-922	7,610218E+22	7,610242E+22	6,313361E+22	6,313189E+22	1,522046E+23	1,262655E+23	2,784701E+23
-921	7,610344E+22	7,610341E+22	6,313310E+22	6,313322E+22	1,522069E+23	1,262663E+23	2,784732E+23
-920	7,610490E+22	7,610296E+22	6,313217E+22	6,313169E+22	1,522079E+23	1,262639E+23	2,784717E+23
-919	7,610055E+22	7,610317E+22	6,313303E+22	6,313192E+22	1,522037E+23	1,262650E+23	2,784687E+23
-918	7,610315E+22	7,610445E+22	6,313186E+22	6,313338E+22	1,522076E+23	1,262652E+23	2,784728E+23
-917	7,610304E+22	7,610225E+22	6,313235E+22	6,313152E+22	1,522053E+23	1,262639E+23	2,784692E+23
-916	7,610079E+22	7,610245E+22	6,313349E+22	6,313274E+22	1,522032E+23	1,262662E+23	2,784695E+23
-915	7,610496E+22	7,610328E+22	6,313249E+22	6,313331E+22	1,522082E+23	1,262658E+23	2,784740E+23
-914	7,610263E+22	7,610215E+22	6,313349E+22	6,313238E+22	1,522048E+23	1,262659E+23	2,784707E+23
-913	7,610237E+22	7,610358E+22	6,313389E+22	6,313481E+22	1,522060E+23	1,262687E+23	2,784747E+23
-912	7,610495E+22	7,610393E+22	6,313372E+22	6,313445E+22	1,522089E+23	1,262682E+23	2,784771E+23
-911	7,610115E+22	7,610321E+22	6,313573E+22	6,313431E+22	1,522044E+23	1,262700E+23	2,784744E+23
-910	7,610349E+22	7,610443E+22	6,313553E+22	6,313596E+22	1,522079E+23	1,262715E+23	2,784794E+23
-909	7,610473E+22	7,610282E+22	6,313590E+22	6,313474E+22	1,522076E+23	1,262706E+23	2,784782E+23
-908	7,610112E+22	7,610282E+22	6,313673E+22	6,313591E+22	1,522039E+23	1,262726E+23	2,784766E+23
-907	7,610450E+22	7,610437E+22	6,313513E+22	6,313672E+22	1,522089E+23	1,262719E+23	2,784807E+23
-906	7,610302E+22	7,610274E+22	6,313541E+22	6,313471E+22	1,522058E+23	1,262701E+23	2,784759E+23
-905	7,610189E+22	7,610315E+22	6,313522E+22	6,313545E+22	1,522050E+23	1,262707E+23	2,784757E+23
-904	7,610564E+22	7,610369E+22	6,313400E+22	6,313434E+22	1,522093E+23	1,262683E+23	2,784777E+23
-903	7,610216E+22	7,610246E+22	6,313487E+22	6,313290E+22	1,522046E+23	1,262678E+23	2,784724E+23
-902	7,610270E+22	7,610411E+22	6,313383E+22	6,313412E+22	1,522068E+23	1,262680E+23	2,784748E+23
-901	7,610436E+22	7,610357E+22	6,313321E+22	6,313303E+22	1,522079E+23	1,262662E+23	2,784742E+23
-900	7,610002E+22	7,610256E+22	6,313411E+22	6,313341E+22	1,522026E+23	1,262675E+23	2,784701E+23
-899	7,610317E+22	7,610385E+22	6,313319E+22	6,313419E+22	1,522070E+23	1,262674E+23	2,784744E+23
-898	7,610340E+22	7,610186E+22	6,313377E+22	6,313247E+22	1,522053E+23	1,262662E+23	2,784715E+23
-897	7,610135E+22	7,610187E+22	6,313416E+22	6,313390E+22	1,522032E+23	1,262681E+23	2,784713E+23
-896	7,610523E+22	7,610365E+22	6,313322E+22	6,313460E+22	1,522089E+23	1,262678E+23	2,784767E+23
-895	7,610218E+22	7,610259E+22	6,313466E+22	6,313404E+22	1,522048E+23	1,262687E+23	2,784735E+23
-894	7,610182E+22	7,610413E+22	6,313506E+22	6,313564E+22	1,522059E+23	1,262707E+23	2,784766E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-893	7,610517E+22	7,610400E+22	6,313538E+22	6,313532E+22	1,522092E+23	1,262707E+23	2,784799E+23
-892	7,610125E+22	7,610231E+22	6,313734E+22	6,313557E+22	1,522036E+23	1,262729E+23	2,784765E+23
-891	7,610357E+22	7,610416E+22	6,313692E+22	6,313708E+22	1,522077E+23	1,262740E+23	2,784817E+23
-890	7,610443E+22	7,610309E+22	6,313702E+22	6,313624E+22	1,522075E+23	1,262733E+23	2,784808E+23
-889	7,610098E+22	7,610271E+22	6,313715E+22	6,313733E+22	1,522037E+23	1,262745E+23	2,784782E+23
-888	7,610477E+22	7,610446E+22	6,313589E+22	6,313758E+22	1,522092E+23	1,262735E+23	2,784827E+23
-887	7,610306E+22	7,610259E+22	6,313665E+22	6,313556E+22	1,522056E+23	1,262722E+23	2,784778E+23
-886	7,610198E+22	7,610335E+22	6,313617E+22	6,313572E+22	1,522053E+23	1,262719E+23	2,784772E+23
-885	7,610587E+22	7,610392E+22	6,313501E+22	6,313515E+22	1,522098E+23	1,262702E+23	2,784799E+23
-884	7,610146E+22	7,610223E+22	6,313572E+22	6,313446E+22	1,522037E+23	1,262702E+23	2,784739E+23
-883	7,610200E+22	7,610418E+22	6,313474E+22	6,313527E+22	1,522062E+23	1,262700E+23	2,784762E+23
-882	7,610391E+22	7,610331E+22	6,313443E+22	6,313406E+22	1,522072E+23	1,262685E+23	2,784757E+23
-881	7,610043E+22	7,610156E+22	6,313484E+22	6,313423E+22	1,522020E+23	1,262691E+23	2,784711E+23
-880	7,610408E+22	7,610327E+22	6,313410E+22	6,313486E+22	1,522074E+23	1,262690E+23	2,784763E+23
-879	7,610361E+22	7,610189E+22	6,313484E+22	6,313380E+22	1,522055E+23	1,262686E+23	2,784741E+23
-878	7,610106E+22	7,610279E+22	6,313485E+22	6,313488E+22	1,522039E+23	1,262697E+23	2,784736E+23
-877	7,610508E+22	7,610453E+22	6,313445E+22	6,313585E+22	1,522096E+23	1,262703E+23	2,784799E+23
-876	7,610174E+22	7,610247E+22	6,313633E+22	6,313548E+22	1,522042E+23	1,262718E+23	2,784760E+23
-875	7,610172E+22	7,610394E+22	6,313695E+22	6,313652E+22	1,522057E+23	1,262735E+23	2,784791E+23
-874	7,610519E+22	7,610371E+22	6,313732E+22	6,313658E+22	1,522089E+23	1,262739E+23	2,784828E+23
-873	7,610144E+22	7,610164E+22	6,313824E+22	6,313724E+22	1,522031E+23	1,262755E+23	2,784785E+23
-872	7,610356E+22	7,610414E+22	6,313762E+22	6,313872E+22	1,522077E+23	1,262763E+23	2,784840E+23
-871	7,610408E+22	7,610324E+22	6,313784E+22	6,313798E+22	1,522073E+23	1,262758E+23	2,784831E+23
-870	7,610090E+22	7,610288E+22	6,313770E+22	6,313781E+22	1,522038E+23	1,262755E+23	2,784793E+23
-869	7,610537E+22	7,610452E+22	6,313689E+22	6,313792E+22	1,522099E+23	1,262748E+23	2,784847E+23
-868	7,610330E+22	7,610213E+22	6,313773E+22	6,313620E+22	1,522054E+23	1,262739E+23	2,784794E+23
-867	7,610177E+22	7,610354E+22	6,313727E+22	6,313626E+22	1,522053E+23	1,262735E+23	2,784788E+23
-866	7,610513E+22	7,610446E+22	6,313620E+22	6,313626E+22	1,522096E+23	1,262725E+23	2,784821E+23
-865	7,610098E+22	7,610187E+22	6,313639E+22	6,313579E+22	1,522029E+23	1,262722E+23	2,784750E+23
-864	7,610196E+22	7,610372E+22	6,313581E+22	6,313624E+22	1,522057E+23	1,262720E+23	2,784777E+23
-863	7,610397E+22	7,610273E+22	6,313572E+22	6,313525E+22	1,522067E+23	1,262710E+23	2,784777E+23
-862	7,610075E+22	7,610139E+22	6,313560E+22	6,313486E+22	1,522021E+23	1,262705E+23	2,784726E+23
-861	7,610459E+22	7,610361E+22	6,313490E+22	6,313604E+22	1,522082E+23	1,262709E+23	2,784792E+23
-860	7,610322E+22	7,610211E+22	6,313571E+22	6,313545E+22	1,522053E+23	1,262712E+23	2,784765E+23
-859	7,610062E+22	7,610331E+22	6,313613E+22	6,313594E+22	1,522039E+23	1,262721E+23	2,784760E+23
-858	7,610476E+22	7,610470E+22	6,313629E+22	6,313683E+22	1,522095E+23	1,262731E+23	2,784826E+23
-857	7,610195E+22	7,610172E+22	6,313776E+22	6,313662E+22	1,522037E+23	1,262744E+23	2,784781E+23
-856	7,610216E+22	7,610342E+22	6,313844E+22	6,313771E+22	1,522056E+23	1,262762E+23	2,784817E+23
-855	7,610490E+22	7,610360E+22	6,313857E+22	6,313845E+22	1,522085E+23	1,262770E+23	2,784855E+23
-854	7,610106E+22	7,610213E+22	6,313877E+22	6,313857E+22	1,522032E+23	1,262773E+23	2,784805E+23
-853	7,610374E+22	7,610447E+22	6,313835E+22	6,313993E+22	1,522082E+23	1,262783E+23	2,784865E+23
-852	7,610396E+22	7,610292E+22	6,313892E+22	6,313898E+22	1,522069E+23	1,262779E+23	2,784848E+23
-851	7,610121E+22	7,610287E+22	6,313902E+22	6,313803E+22	1,522041E+23	1,262770E+23	2,784811E+23
-850	7,610550E+22	7,610448E+22	6,313844E+22	6,313842E+22	1,522100E+23	1,262769E+23	2,784868E+23
-849	7,610318E+22	7,610185E+22	6,313850E+22	6,313736E+22	1,522050E+23	1,262759E+23	2,784809E+23
-848	7,610132E+22	7,610356E+22	6,313806E+22	6,313752E+22	1,522049E+23	1,262756E+23	2,784805E+23
-847	7,610425E+22	7,610435E+22	6,313718E+22	6,313781E+22	1,522086E+23	1,262750E+23	2,784836E+23
-846	7,610078E+22	7,610160E+22	6,313703E+22	6,313643E+22	1,522024E+23	1,262735E+23	2,784758E+23
-845	7,610268E+22	7,610328E+22	6,313668E+22	6,313696E+22	1,522060E+23	1,262736E+23	2,784796E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-844	7,610430E+22	7,610224E+22	6,313666E+22	6,313635E+22	1,522065E+23	1,262730E+23	2,784795E+23
-843	7,610084E+22	7,610192E+22	6,313650E+22	6,313567E+22	1,522028E+23	1,262722E+23	2,784749E+23
-842	7,610418E+22	7,610450E+22	6,313622E+22	6,313719E+22	1,522087E+23	1,262734E+23	2,784821E+23
-841	7,610297E+22	7,610223E+22	6,313684E+22	6,313680E+22	1,522052E+23	1,262736E+23	2,784788E+23
-840	7,610054E+22	7,610313E+22	6,313790E+22	6,313699E+22	1,522037E+23	1,262749E+23	2,784786E+23
-839	7,610454E+22	7,610434E+22	6,313824E+22	6,313834E+22	1,522089E+23	1,262766E+23	2,784855E+23
-838	7,610203E+22	7,610132E+22	6,313894E+22	6,313780E+22	1,522034E+23	1,262767E+23	2,784801E+23
-837	7,610235E+22	7,610338E+22	6,313932E+22	6,313946E+22	1,522057E+23	1,262788E+23	2,784845E+23
-836	7,610447E+22	7,610349E+22	6,313930E+22	6,314034E+22	1,522080E+23	1,262796E+23	2,784876E+23
-835	7,610096E+22	7,610231E+22	6,313962E+22	6,313941E+22	1,522033E+23	1,262790E+23	2,784823E+23
-834	7,610394E+22	7,610455E+22	6,313975E+22	6,314039E+22	1,522085E+23	1,262801E+23	2,784886E+23
-833	7,610453E+22	7,610240E+22	6,313991E+22	6,313947E+22	1,522069E+23	1,262794E+23	2,784863E+23
-832	7,610158E+22	7,610271E+22	6,314029E+22	6,313860E+22	1,522043E+23	1,262789E+23	2,784832E+23
-831	7,610479E+22	7,610483E+22	6,313962E+22	6,313980E+22	1,522096E+23	1,262794E+23	2,784890E+23
-830	7,610234E+22	7,610227E+22	6,313914E+22	6,313846E+22	1,522046E+23	1,262776E+23	2,784822E+23
-829	7,610107E+22	7,610362E+22	6,313889E+22	6,313882E+22	1,522047E+23	1,262777E+23	2,784824E+23
-828	7,610392E+22	7,610369E+22	6,313825E+22	6,313905E+22	1,522076E+23	1,262773E+23	2,784849E+23
-827	7,610117E+22	7,610125E+22	6,313809E+22	6,313697E+22	1,522024E+23	1,262751E+23	2,784775E+23
-826	7,610313E+22	7,610319E+22	6,313787E+22	6,313775E+22	1,522063E+23	1,262756E+23	2,784819E+23
-825	7,610440E+22	7,610221E+22	6,313721E+22	6,313768E+22	1,522066E+23	1,262749E+23	2,784815E+23
-824	7,610074E+22	7,610229E+22	6,313750E+22	6,313689E+22	1,522030E+23	1,262744E+23	2,784774E+23
-823	7,610347E+22	7,610466E+22	6,313767E+22	6,313851E+22	1,522081E+23	1,262762E+23	2,784843E+23
-822	7,610279E+22	7,610210E+22	6,313813E+22	6,313751E+22	1,522049E+23	1,262756E+23	2,784805E+23
-821	7,610110E+22	7,610268E+22	6,313926E+22	6,313809E+22	1,522038E+23	1,262773E+23	2,784811E+23
-820	7,610432E+22	7,610374E+22	6,313956E+22	6,313996E+22	1,522081E+23	1,262795E+23	2,784876E+23
-819	7,610189E+22	7,610163E+22	6,313993E+22	6,313913E+22	1,522035E+23	1,262791E+23	2,784826E+23
-818	7,610217E+22	7,610376E+22	6,314050E+22	6,314082E+22	1,522059E+23	1,262813E+23	2,784872E+23
-817	7,610453E+22	7,610333E+22	6,314020E+22	6,314158E+22	1,522079E+23	1,262818E+23	2,784896E+23
-816	7,610144E+22	7,610217E+22	6,314104E+22	6,314002E+22	1,522036E+23	1,262811E+23	2,784847E+23
-815	7,610392E+22	7,610448E+22	6,314137E+22	6,314127E+22	1,522084E+23	1,262826E+23	2,784910E+23
-814	7,610448E+22	7,610252E+22	6,314089E+22	6,314024E+22	1,522070E+23	1,262811E+23	2,784881E+23
-813	7,610138E+22	7,610301E+22	6,314105E+22	6,314010E+22	1,522044E+23	1,262812E+23	2,784855E+23
-812	7,610371E+22	7,610476E+22	6,314045E+22	6,314155E+22	1,522085E+23	1,262820E+23	2,784905E+23
-811	7,610195E+22	7,610215E+22	6,314000E+22	6,313932E+22	1,522041E+23	1,262793E+23	2,784834E+23
-810	7,610130E+22	7,610314E+22	6,314012E+22	6,313941E+22	1,522044E+23	1,262795E+23	2,784840E+23
-809	7,610465E+22	7,610283E+22	6,313895E+22	6,313977E+22	1,522075E+23	1,262787E+23	2,784862E+23
-808	7,610183E+22	7,610104E+22	6,313899E+22	6,313760E+22	1,522029E+23	1,262766E+23	2,784795E+23
-807	7,610276E+22	7,610382E+22	6,313883E+22	6,313898E+22	1,522066E+23	1,262778E+23	2,784844E+23
-806	7,610398E+22	7,610283E+22	6,313790E+22	6,313853E+22	1,522068E+23	1,262764E+23	2,784832E+23
-805	7,610060E+22	7,610254E+22	6,313872E+22	6,313807E+22	1,522031E+23	1,262768E+23	2,784799E+23
-804	7,610290E+22	7,610426E+22	6,313937E+22	6,313981E+22	1,522072E+23	1,262792E+23	2,784863E+23
-803	7,610285E+22	7,610173E+22	6,313974E+22	6,313847E+22	1,522046E+23	1,262782E+23	2,784828E+23
-802	7,610123E+22	7,610240E+22	6,314083E+22	6,313952E+22	1,522036E+23	1,262803E+23	2,784840E+23
-801	7,610425E+22	7,610342E+22	6,314022E+22	6,314185E+22	1,522077E+23	1,262821E+23	2,784897E+23
-800	7,610197E+22	7,610165E+22	6,314084E+22	6,314054E+22	1,522036E+23	1,262814E+23	2,784850E+23
-799	7,610198E+22	7,610391E+22	6,314170E+22	6,314203E+22	1,522059E+23	1,262837E+23	2,784896E+23
-798	7,610484E+22	7,610331E+22	6,314121E+22	6,314199E+22	1,522081E+23	1,262832E+23	2,784913E+23
-797	7,610212E+22	7,610222E+22	6,314222E+22	6,314083E+22	1,522043E+23	1,262831E+23	2,784874E+23
-796	7,610342E+22	7,610449E+22	6,314267E+22	6,314253E+22	1,522079E+23	1,262852E+23	2,784931E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-795	7,610389E+22	7,610310E+22	6,314193E+22	6,314136E+22	1,522070E+23	1,262833E+23	2,784903E+23
-794	7,610086E+22	7,610319E+22	6,314230E+22	6,314135E+22	1,522040E+23	1,262836E+23	2,784877E+23
-793	7,610344E+22	7,610410E+22	6,314128E+22	6,314277E+22	1,522075E+23	1,262841E+23	2,784916E+23
-792	7,610253E+22	7,610144E+22	6,314115E+22	6,313999E+22	1,522040E+23	1,262811E+23	2,784851E+23
-791	7,610164E+22	7,610264E+22	6,314115E+22	6,314024E+22	1,522043E+23	1,262814E+23	2,784857E+23
-790	7,610490E+22	7,610283E+22	6,313941E+22	6,314043E+22	1,522077E+23	1,262798E+23	2,784876E+23
-789	7,610199E+22	7,610163E+22	6,313937E+22	6,313882E+22	1,522036E+23	1,262782E+23	2,784818E+23
-788	7,610178E+22	7,610407E+22	6,313980E+22	6,314027E+22	1,522058E+23	1,262801E+23	2,784859E+23
-787	7,610358E+22	7,610310E+22	6,313921E+22	6,313922E+22	1,522067E+23	1,262784E+23	2,784851E+23
-786	7,610073E+22	7,610216E+22	6,314052E+22	6,313888E+22	1,522029E+23	1,262794E+23	2,784823E+23
-785	7,610307E+22	7,610341E+22	6,314063E+22	6,314112E+22	1,522065E+23	1,262817E+23	2,784882E+23
-784	7,610317E+22	7,610141E+22	6,314100E+22	6,313987E+22	1,522046E+23	1,262809E+23	2,784855E+23
-783	7,610082E+22	7,610273E+22	6,314186E+22	6,314132E+22	1,522035E+23	1,262832E+23	2,784867E+23
-782	7,610412E+22	7,610375E+22	6,314094E+22	6,314307E+22	1,522079E+23	1,262840E+23	2,784919E+23
-781	7,610240E+22	7,610195E+22	6,314188E+22	6,314170E+22	1,522044E+23	1,262836E+23	2,784879E+23
-780	7,610185E+22	7,610380E+22	6,314330E+22	6,314304E+22	1,522057E+23	1,262863E+23	2,784920E+23
-779	7,610508E+22	7,610345E+22	6,314275E+22	6,314263E+22	1,522085E+23	1,262854E+23	2,784939E+23
-778	7,610205E+22	7,610238E+22	6,314382E+22	6,314205E+22	1,522044E+23	1,262859E+23	2,784903E+23
-777	7,610280E+22	7,610434E+22	6,314347E+22	6,314423E+22	1,522071E+23	1,262877E+23	2,784948E+23
-776	7,610359E+22	7,610272E+22	6,314292E+22	6,314260E+22	1,522063E+23	1,262855E+23	2,784918E+23
-775	7,610059E+22	7,610275E+22	6,314333E+22	6,314240E+22	1,522033E+23	1,262857E+23	2,784891E+23
-774	7,610398E+22	7,610339E+22	6,314180E+22	6,314307E+22	1,522074E+23	1,262849E+23	2,784922E+23
-773	7,610340E+22	7,610123E+22	6,314160E+22	6,314064E+22	1,522046E+23	1,262822E+23	2,784869E+23
-772	7,610136E+22	7,610291E+22	6,314185E+22	6,314124E+22	1,522043E+23	1,262831E+23	2,784873E+23
-771	7,610447E+22	7,610373E+22	6,314014E+22	6,314115E+22	1,522082E+23	1,262813E+23	2,784895E+23
-770	7,610156E+22	7,610220E+22	6,314079E+22	6,313980E+22	1,522038E+23	1,262806E+23	2,784844E+23
-769	7,610130E+22	7,610371E+22	6,314111E+22	6,314140E+22	1,522050E+23	1,262825E+23	2,784875E+23
-768	7,610377E+22	7,610242E+22	6,314096E+22	6,314018E+22	1,522062E+23	1,262811E+23	2,784873E+23
-767	7,610072E+22	7,610163E+22	6,314206E+22	6,314037E+22	1,522023E+23	1,262824E+23	2,784848E+23
-766	7,610313E+22	7,610309E+22	6,314134E+22	6,314258E+22	1,522062E+23	1,262839E+23	2,784901E+23
-765	7,610337E+22	7,610174E+22	6,314145E+22	6,314174E+22	1,522051E+23	1,262832E+23	2,784883E+23
-764	7,610036E+22	7,610286E+22	6,314280E+22	6,314286E+22	1,522032E+23	1,262857E+23	2,784889E+23
-763	7,610429E+22	7,610403E+22	6,314222E+22	6,314365E+22	1,522083E+23	1,262859E+23	2,784942E+23
-762	7,610302E+22	7,610198E+22	6,314368E+22	6,314228E+22	1,522050E+23	1,262860E+23	2,784910E+23
-761	7,610195E+22	7,610344E+22	6,314468E+22	6,314405E+22	1,522054E+23	1,262887E+23	2,784941E+23
-760	7,610509E+22	7,610349E+22	6,314421E+22	6,314386E+22	1,522086E+23	1,262881E+23	2,784966E+23
-759	7,610132E+22	7,610257E+22	6,314499E+22	6,314367E+22	1,522039E+23	1,262887E+23	2,784925E+23
-758	7,610229E+22	7,610411E+22	6,314417E+22	6,314535E+22	1,522064E+23	1,262895E+23	2,784959E+23
-757	7,610389E+22	7,610252E+22	6,314357E+22	6,314370E+22	1,522064E+23	1,262873E+23	2,784937E+23
-756	7,610057E+22	7,610219E+22	6,314427E+22	6,314327E+22	1,522028E+23	1,262875E+23	2,784903E+23
-755	7,610436E+22	7,610342E+22	6,314262E+22	6,314354E+22	1,522078E+23	1,262862E+23	2,784939E+23
-754	7,610356E+22	7,610168E+22	6,314251E+22	6,314153E+22	1,522052E+23	1,262840E+23	2,784893E+23
-753	7,610076E+22	7,610313E+22	6,314244E+22	6,314247E+22	1,522039E+23	1,262849E+23	2,784888E+23
-752	7,610418E+22	7,610372E+22	6,314136E+22	6,314202E+22	1,522079E+23	1,262834E+23	2,784913E+23
-751	7,610118E+22	7,610193E+22	6,314233E+22	6,314078E+22	1,522031E+23	1,262831E+23	2,784862E+23
-750	7,610147E+22	7,610298E+22	6,314226E+22	6,314215E+22	1,522044E+23	1,262844E+23	2,784889E+23
-749	7,610428E+22	7,610213E+22	6,314184E+22	6,314157E+22	1,522064E+23	1,262834E+23	2,784898E+23
-748	7,610033E+22	7,610167E+22	6,314301E+22	6,314208E+22	1,522020E+23	1,262851E+23	2,784871E+23
-747	7,610299E+22	7,610365E+22	6,314219E+22	6,314382E+22	1,522066E+23	1,262860E+23	2,784926E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-746	7,610345E+22	7,610223E+22	6,314286E+22	6,314292E+22	1,522057E+23	1,262858E+23	2,784915E+23
-745	7,610045E+22	7,610271E+22	6,314420E+22	6,314392E+22	1,522032E+23	1,262881E+23	2,784913E+23
-744	7,610483E+22	7,610362E+22	6,314409E+22	6,314437E+22	1,522084E+23	1,262885E+23	2,784969E+23
-743	7,610293E+22	7,610193E+22	6,314545E+22	6,314359E+22	1,522049E+23	1,262890E+23	2,784939E+23
-742	7,610160E+22	7,610338E+22	6,314554E+22	6,314544E+22	1,522050E+23	1,262910E+23	2,784960E+23
-741	7,610465E+22	7,610369E+22	6,314474E+22	6,314566E+22	1,522083E+23	1,262904E+23	2,784987E+23
-740	7,610056E+22	7,610232E+22	6,314588E+22	6,314517E+22	1,522029E+23	1,262911E+23	2,784939E+23
-739	7,610243E+22	7,610375E+22	6,314505E+22	6,314586E+22	1,522062E+23	1,262909E+23	2,784971E+23
-738	7,610459E+22	7,610226E+22	6,314468E+22	6,314418E+22	1,522069E+23	1,262889E+23	2,784957E+23
-737	7,610086E+22	7,610193E+22	6,314491E+22	6,314401E+22	1,522028E+23	1,262889E+23	2,784917E+23
-736	7,610445E+22	7,610368E+22	6,314355E+22	6,314427E+22	1,522081E+23	1,262878E+23	2,784959E+23
-735	7,610290E+22	7,610232E+22	6,314361E+22	6,314263E+22	1,522052E+23	1,262862E+23	2,784915E+23
-734	7,610026E+22	7,610309E+22	6,314342E+22	6,314326E+22	1,522033E+23	1,262867E+23	2,784900E+23
-733	7,610419E+22	7,610358E+22	6,314250E+22	6,314310E+22	1,522078E+23	1,262856E+23	2,784934E+23
-732	7,610096E+22	7,610127E+22	6,314379E+22	6,314207E+22	1,522022E+23	1,262859E+23	2,784881E+23
-731	7,610159E+22	7,610269E+22	6,314341E+22	6,314328E+22	1,522043E+23	1,262867E+23	2,784910E+23
-730	7,610440E+22	7,610238E+22	6,314286E+22	6,314318E+22	1,522068E+23	1,262860E+23	2,784928E+23
-729	7,609999E+22	7,610167E+22	6,314363E+22	6,314370E+22	1,522017E+23	1,262873E+23	2,784890E+23
-728	7,610324E+22	7,610358E+22	6,314349E+22	6,314479E+22	1,522068E+23	1,262883E+23	2,784951E+23
-727	7,610364E+22	7,610220E+22	6,314444E+22	6,314371E+22	1,522058E+23	1,262882E+23	2,784940E+23
-726	7,610078E+22	7,610234E+22	6,314551E+22	6,314457E+22	1,522031E+23	1,262901E+23	2,784932E+23
-725	7,610501E+22	7,610389E+22	6,314521E+22	6,314571E+22	1,522089E+23	1,262909E+23	2,784998E+23
-724	7,610206E+22	7,610218E+22	6,314671E+22	6,314538E+22	1,522042E+23	1,262921E+23	2,784963E+23
-723	7,610092E+22	7,610373E+22	6,314662E+22	6,314680E+22	1,522046E+23	1,262934E+23	2,784981E+23
-722	7,610449E+22	7,610374E+22	6,314603E+22	6,314690E+22	1,522082E+23	1,262929E+23	2,785012E+23
-721	7,610063E+22	7,610165E+22	6,314685E+22	6,314616E+22	1,522023E+23	1,262930E+23	2,784953E+23
-720	7,610326E+22	7,610305E+22	6,314629E+22	6,314640E+22	1,522063E+23	1,262927E+23	2,784990E+23
-719	7,610477E+22	7,610230E+22	6,314575E+22	6,314505E+22	1,522071E+23	1,262908E+23	2,784979E+23
-718	7,610071E+22	7,610216E+22	6,314535E+22	6,314492E+22	1,522029E+23	1,262903E+23	2,784931E+23
-717	7,610409E+22	7,610421E+22	6,314405E+22	6,314542E+22	1,522083E+23	1,262895E+23	2,784978E+23
-716	7,610210E+22	7,610227E+22	6,314485E+22	6,314373E+22	1,522044E+23	1,262886E+23	2,784929E+23
-715	7,610018E+22	7,610275E+22	6,314472E+22	6,314381E+22	1,522029E+23	1,262885E+23	2,784915E+23
-714	7,610445E+22	7,610324E+22	6,314392E+22	6,314406E+22	1,522077E+23	1,262880E+23	2,784957E+23
-713	7,610097E+22	7,610086E+22	6,314464E+22	6,314352E+22	1,522018E+23	1,262882E+23	2,784900E+23
-712	7,610178E+22	7,610255E+22	6,314434E+22	6,314458E+22	1,522043E+23	1,262889E+23	2,784932E+23
-711	7,610404E+22	7,610281E+22	6,314397E+22	6,314455E+22	1,522069E+23	1,262885E+23	2,784954E+23
-710	7,610006E+22	7,610169E+22	6,314458E+22	6,314457E+22	1,522017E+23	1,262892E+23	2,784909E+23
-709	7,610355E+22	7,610366E+22	6,314472E+22	6,314572E+22	1,522072E+23	1,262904E+23	2,784977E+23
-708	7,610348E+22	7,610208E+22	6,314622E+22	6,314497E+22	1,522056E+23	1,262912E+23	2,784967E+23
-707	7,610061E+22	7,610244E+22	6,314695E+22	6,314580E+22	1,522031E+23	1,262928E+23	2,784958E+23
-706	7,610452E+22	7,610431E+22	6,314650E+22	6,314748E+22	1,522088E+23	1,262940E+23	2,785028E+23
-705	7,610140E+22	7,610192E+22	6,314758E+22	6,314717E+22	1,522033E+23	1,262948E+23	2,784981E+23
-704	7,610114E+22	7,610299E+22	6,314789E+22	6,314778E+22	1,522041E+23	1,262957E+23	2,784998E+23
-703	7,610483E+22	7,610331E+22	6,314733E+22	6,314761E+22	1,522081E+23	1,262949E+23	2,785031E+23
-702	7,610136E+22	7,610114E+22	6,314754E+22	6,314660E+22	1,522025E+23	1,262941E+23	2,784966E+23
-701	7,610368E+22	7,610345E+22	6,314680E+22	6,314728E+22	1,522071E+23	1,262941E+23	2,785012E+23
-700	7,610410E+22	7,610294E+22	6,314664E+22	6,314624E+22	1,522070E+23	1,262929E+23	2,784999E+23
-699	7,610005E+22	7,610276E+22	6,314640E+22	6,314574E+22	1,522028E+23	1,262921E+23	2,784949E+23
-698	7,610367E+22	7,610450E+22	6,314551E+22	6,314636E+22	1,522082E+23	1,262919E+23	2,785000E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-697	7,610182E+22	7,610152E+22	6,314612E+22	6,314481E+22	1,522033E+23	1,262909E+23	2,784943E+23
-696	7,610063E+22	7,610178E+22	6,314615E+22	6,314481E+22	1,522024E+23	1,262910E+23	2,784934E+23
-695	7,610442E+22	7,610299E+22	6,314495E+22	6,314544E+22	1,522074E+23	1,262904E+23	2,784978E+23
-694	7,610086E+22	7,610076E+22	6,314488E+22	6,314488E+22	1,522016E+23	1,262898E+23	2,784914E+23
-693	7,610181E+22	7,610294E+22	6,314473E+22	6,314589E+22	1,522048E+23	1,262906E+23	2,784954E+23
-692	7,610379E+22	7,610286E+22	6,314523E+22	6,314555E+22	1,522066E+23	1,262908E+23	2,784974E+23
-691	7,610035E+22	7,610170E+22	6,314611E+22	6,314503E+22	1,522021E+23	1,262911E+23	2,784932E+23
-690	7,610378E+22	7,610388E+22	6,314646E+22	6,314664E+22	1,522077E+23	1,262931E+23	2,785008E+23
-689	7,610306E+22	7,610203E+22	6,314758E+22	6,314658E+22	1,522051E+23	1,262942E+23	2,784993E+23
-688	7,610039E+22	7,610234E+22	6,314841E+22	6,314740E+22	1,522027E+23	1,262958E+23	2,784985E+23
-687	7,610391E+22	7,610438E+22	6,314794E+22	6,314904E+22	1,522083E+23	1,262970E+23	2,785053E+23
-686	7,610154E+22	7,610142E+22	6,314851E+22	6,314828E+22	1,522030E+23	1,262968E+23	2,784998E+23
-685	7,610183E+22	7,610266E+22	6,314874E+22	6,314871E+22	1,522045E+23	1,262975E+23	2,785019E+23
-684	7,610501E+22	7,610312E+22	6,314855E+22	6,314864E+22	1,522081E+23	1,262972E+23	2,785053E+23
-683	7,610145E+22	7,610158E+22	6,314837E+22	6,314742E+22	1,522030E+23	1,262958E+23	2,784988E+23
-682	7,610319E+22	7,610428E+22	6,314766E+22	6,314842E+22	1,522075E+23	1,262961E+23	2,785036E+23
-681	7,610332E+22	7,610303E+22	6,314752E+22	6,314747E+22	1,522064E+23	1,262950E+23	2,785013E+23
-680	7,610010E+22	7,610201E+22	6,314774E+22	6,314640E+22	1,522021E+23	1,262941E+23	2,784963E+23
-679	7,610351E+22	7,610392E+22	6,314693E+22	6,314706E+22	1,522074E+23	1,262940E+23	2,785014E+23
-678	7,610220E+22	7,610077E+22	6,314676E+22	6,314570E+22	1,522030E+23	1,262925E+23	2,784954E+23
-677	7,610088E+22	7,610176E+22	6,314649E+22	6,314608E+22	1,522026E+23	1,262926E+23	2,784952E+23
-676	7,610392E+22	7,610332E+22	6,314576E+22	6,314690E+22	1,522072E+23	1,262927E+23	2,784999E+23
-675	7,610074E+22	7,610123E+22	6,314578E+22	6,314569E+22	1,522020E+23	1,262915E+23	2,784934E+23
-674	7,610188E+22	7,610341E+22	6,314616E+22	6,314665E+22	1,522053E+23	1,262928E+23	2,784981E+23
-673	7,610382E+22	7,610257E+22	6,314681E+22	6,314655E+22	1,522064E+23	1,262934E+23	2,784998E+23
-672	7,610078E+22	7,610115E+22	6,314803E+22	6,314614E+22	1,522019E+23	1,262942E+23	2,784961E+23
-671	7,610324E+22	7,610405E+22	6,314812E+22	6,314829E+22	1,522073E+23	1,262964E+23	2,785037E+23
-670	7,610263E+22	7,610190E+22	6,314839E+22	6,314842E+22	1,522045E+23	1,262968E+23	2,785013E+23
-669	7,610032E+22	7,610223E+22	6,314918E+22	6,314904E+22	1,522026E+23	1,262982E+23	2,785008E+23
-668	7,610385E+22	7,610396E+22	6,314923E+22	6,315028E+22	1,522078E+23	1,262995E+23	2,785073E+23
-667	7,610214E+22	7,610123E+22	6,314958E+22	6,314882E+22	1,522034E+23	1,262984E+23	2,785018E+23
-666	7,610241E+22	7,610310E+22	6,314976E+22	6,314952E+22	1,522055E+23	1,262993E+23	2,785048E+23
-665	7,610475E+22	7,610340E+22	6,314935E+22	6,314979E+22	1,522081E+23	1,262991E+23	2,785073E+23
-664	7,610122E+22	7,610185E+22	6,314955E+22	6,314841E+22	1,522031E+23	1,262980E+23	2,785010E+23
-663	7,610237E+22	7,610459E+22	6,314906E+22	6,314928E+22	1,522070E+23	1,262983E+23	2,785053E+23
-662	7,610308E+22	7,610241E+22	6,314849E+22	6,314828E+22	1,522055E+23	1,262968E+23	2,785023E+23
-661	7,610045E+22	7,610133E+22	6,314866E+22	6,314733E+22	1,522018E+23	1,262960E+23	2,784978E+23
-660	7,610344E+22	7,610328E+22	6,314801E+22	6,314831E+22	1,522067E+23	1,262963E+23	2,785030E+23
-659	7,610221E+22	7,610087E+22	6,314726E+22	6,314681E+22	1,522031E+23	1,262941E+23	2,784972E+23
-658	7,610076E+22	7,610245E+22	6,314694E+22	6,314733E+22	1,522032E+23	1,262943E+23	2,784975E+23
-657	7,610359E+22	7,610333E+22	6,314660E+22	6,314798E+22	1,522069E+23	1,262946E+23	2,785015E+23
-656	7,610125E+22	7,610089E+22	6,314734E+22	6,314622E+22	1,522021E+23	1,262936E+23	2,784957E+23
-655	7,610191E+22	7,610336E+22	6,314804E+22	6,314725E+22	1,522053E+23	1,262953E+23	2,785006E+23
-654	7,610397E+22	7,610232E+22	6,314805E+22	6,314778E+22	1,522063E+23	1,262958E+23	2,785021E+23
-653	7,610068E+22	7,610132E+22	6,314906E+22	6,314790E+22	1,522020E+23	1,262970E+23	2,784990E+23
-652	7,610237E+22	7,610422E+22	6,314949E+22	6,315029E+22	1,522066E+23	1,262998E+23	2,785064E+23
-651	7,610242E+22	7,610201E+22	6,314953E+22	6,314978E+22	1,522044E+23	1,262993E+23	2,785037E+23
-650	7,610061E+22	7,610229E+22	6,315036E+22	6,315017E+22	1,522029E+23	1,263005E+23	2,785034E+23
-649	7,610420E+22	7,610345E+22	6,315048E+22	6,315137E+22	1,522077E+23	1,263018E+23	2,785095E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-648	7,610292E+22	7,610087E+22	6,315084E+22	6,314963E+22	1,522038E+23	1,263005E+23	2,785043E+23
-647	7,610195E+22	7,610363E+22	6,315091E+22	6,315050E+22	1,522056E+23	1,263014E+23	2,785070E+23
-646	7,610429E+22	7,610359E+22	6,314991E+22	6,315096E+22	1,522079E+23	1,263009E+23	2,785087E+23
-645	7,610100E+22	7,610168E+22	6,315038E+22	6,314938E+22	1,522027E+23	1,262998E+23	2,785024E+23
-644	7,610192E+22	7,610401E+22	6,315047E+22	6,315014E+22	1,522059E+23	1,263006E+23	2,785065E+23
-643	7,610332E+22	7,610188E+22	6,314945E+22	6,314883E+22	1,522052E+23	1,262983E+23	2,785035E+23
-642	7,610075E+22	7,610141E+22	6,314931E+22	6,314835E+22	1,522022E+23	1,262977E+23	2,784998E+23
-641	7,610319E+22	7,610327E+22	6,314856E+22	6,314968E+22	1,522065E+23	1,262982E+23	2,785047E+23
-640	7,610232E+22	7,610103E+22	6,314814E+22	6,314780E+22	1,522033E+23	1,262959E+23	2,784993E+23
-639	7,610041E+22	7,610296E+22	6,314831E+22	6,314804E+22	1,522034E+23	1,262963E+23	2,784997E+23
-638	7,610377E+22	7,610312E+22	6,314776E+22	6,314874E+22	1,522069E+23	1,262965E+23	2,785034E+23
-637	7,610169E+22	7,610064E+22	6,314881E+22	6,314727E+22	1,522023E+23	1,262961E+23	2,784984E+23
-636	7,610149E+22	7,610321E+22	6,314976E+22	6,314889E+22	1,522047E+23	1,262986E+23	2,785033E+23
-635	7,610342E+22	7,610258E+22	6,314911E+22	6,314950E+22	1,522060E+23	1,262986E+23	2,785046E+23
-634	7,610035E+22	7,610177E+22	6,314993E+22	6,314980E+22	1,522021E+23	1,262997E+23	2,785019E+23
-633	7,610216E+22	7,610361E+22	6,315057E+22	6,315179E+22	1,522058E+23	1,263024E+23	2,785081E+23
-632	7,610320E+22	7,610132E+22	6,315092E+22	6,315052E+22	1,522045E+23	1,263014E+23	2,785060E+23
-631	7,610111E+22	7,610229E+22	6,315177E+22	6,315069E+22	1,522034E+23	1,263025E+23	2,785059E+23
-630	7,610455E+22	7,610338E+22	6,315125E+22	6,315228E+22	1,522079E+23	1,263035E+23	2,785115E+23
-629	7,610288E+22	7,610141E+22	6,315170E+22	6,315080E+22	1,522043E+23	1,263025E+23	2,785068E+23
-628	7,610101E+22	7,610401E+22	6,315227E+22	6,315177E+22	1,522050E+23	1,263040E+23	2,785091E+23
-627	7,610372E+22	7,610371E+22	6,315107E+22	6,315179E+22	1,522074E+23	1,263029E+23	2,785103E+23
-626	7,610101E+22	7,610157E+22	6,315149E+22	6,315034E+22	1,522026E+23	1,263018E+23	2,785044E+23
-625	7,610189E+22	7,610306E+22	6,315161E+22	6,315129E+22	1,522049E+23	1,263029E+23	2,785078E+23
-624	7,610376E+22	7,610136E+22	6,315040E+22	6,314992E+22	1,522051E+23	1,263003E+23	2,785054E+23
-623	7,610040E+22	7,610185E+22	6,315000E+22	6,314945E+22	1,522023E+23	1,262995E+23	2,785017E+23
-622	7,610305E+22	7,610333E+22	6,314884E+22	6,315084E+22	1,522064E+23	1,262997E+23	2,785061E+23
-621	7,610260E+22	7,610102E+22	6,314898E+22	6,314854E+22	1,522036E+23	1,262975E+23	2,785011E+23
-620	7,610027E+22	7,610276E+22	6,314996E+22	6,314876E+22	1,522030E+23	1,262987E+23	2,785017E+23
-619	7,610391E+22	7,610311E+22	6,314912E+22	6,314945E+22	1,522070E+23	1,262986E+23	2,785056E+23
-618	7,610164E+22	7,610101E+22	6,314994E+22	6,314874E+22	1,522027E+23	1,262987E+23	2,785013E+23
-617	7,610075E+22	7,610313E+22	6,315098E+22	6,315082E+22	1,522039E+23	1,263018E+23	2,785057E+23
-616	7,610332E+22	7,610239E+22	6,315039E+22	6,315100E+22	1,522057E+23	1,263014E+23	2,785071E+23
-615	7,610012E+22	7,610177E+22	6,315139E+22	6,315084E+22	1,522019E+23	1,263022E+23	2,785041E+23
-614	7,610273E+22	7,610299E+22	6,315160E+22	6,315279E+22	1,522057E+23	1,263044E+23	2,785101E+23
-613	7,610408E+22	7,610097E+22	6,315209E+22	6,315143E+22	1,522050E+23	1,263035E+23	2,785086E+23
-612	7,610095E+22	7,610250E+22	6,315319E+22	6,315198E+22	1,522035E+23	1,263052E+23	2,785086E+23
-611	7,610405E+22	7,610406E+22	6,315211E+22	6,315347E+22	1,522081E+23	1,263056E+23	2,785137E+23
-610	7,610235E+22	7,610211E+22	6,315259E+22	6,315216E+22	1,522045E+23	1,263047E+23	2,785092E+23
-609	7,610040E+22	7,610348E+22	6,315359E+22	6,315295E+22	1,522039E+23	1,263065E+23	2,785104E+23
-608	7,610400E+22	7,610292E+22	6,315244E+22	6,315247E+22	1,522069E+23	1,263049E+23	2,785118E+23
-607	7,610114E+22	7,610132E+22	6,315267E+22	6,315105E+22	1,522025E+23	1,263037E+23	2,785062E+23
-606	7,610214E+22	7,610266E+22	6,315196E+22	6,315247E+22	1,522048E+23	1,263044E+23	2,785092E+23
-605	7,610387E+22	7,610161E+22	6,315087E+22	6,315107E+22	1,522055E+23	1,263019E+23	2,785074E+23
-604	7,609992E+22	7,610226E+22	6,315106E+22	6,315050E+22	1,522022E+23	1,263016E+23	2,785037E+23
-603	7,610284E+22	7,610359E+22	6,314989E+22	6,315134E+22	1,522064E+23	1,263012E+23	2,785077E+23
-602	7,610286E+22	7,610132E+22	6,315024E+22	6,314936E+22	1,522042E+23	1,262996E+23	2,785038E+23
-601	7,610016E+22	7,610208E+22	6,315153E+22	6,314996E+22	1,522022E+23	1,263015E+23	2,785037E+23
-600	7,610377E+22	7,610284E+22	6,315050E+22	6,315084E+22	1,522066E+23	1,263013E+23	2,785080E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-599	7,610097E+22	7,610140E+22	6,315110E+22	6,315032E+22	1,522024E+23	1,263014E+23	2,785038E+23
-598	7,610054E+22	7,610258E+22	6,315168E+22	6,315246E+22	1,522031E+23	1,263041E+23	2,785073E+23
-597	7,610378E+22	7,610187E+22	6,315152E+22	6,315208E+22	1,522056E+23	1,263036E+23	2,785092E+23
-596	7,610047E+22	7,610142E+22	6,315289E+22	6,315171E+22	1,522019E+23	1,263046E+23	2,785065E+23
-595	7,610316E+22	7,610312E+22	6,315266E+22	6,315352E+22	1,522063E+23	1,263062E+23	2,785125E+23
-594	7,610419E+22	7,610194E+22	6,315298E+22	6,315273E+22	1,522061E+23	1,263057E+23	2,785118E+23
-593	7,610019E+22	7,610283E+22	6,315450E+22	6,315355E+22	1,522030E+23	1,263081E+23	2,785111E+23
-592	7,610355E+22	7,610425E+22	6,315362E+22	6,315462E+22	1,522078E+23	1,263082E+23	2,785160E+23
-591	7,610184E+22	7,610217E+22	6,315426E+22	6,315306E+22	1,522040E+23	1,263073E+23	2,785113E+23
-590	7,610061E+22	7,610246E+22	6,315466E+22	6,315407E+22	1,522031E+23	1,263087E+23	2,785118E+23
-589	7,610460E+22	7,610214E+22	6,315341E+22	6,315355E+22	1,522067E+23	1,263070E+23	2,785137E+23
-588	7,610095E+22	7,610125E+22	6,315351E+22	6,315239E+22	1,522022E+23	1,263059E+23	2,785081E+23
-587	7,610195E+22	7,610309E+22	6,315216E+22	6,315351E+22	1,522050E+23	1,263057E+23	2,785107E+23
-586	7,610386E+22	7,610219E+22	6,315125E+22	6,315194E+22	1,522061E+23	1,263032E+23	2,785092E+23
-585	7,609975E+22	7,610187E+22	6,315233E+22	6,315115E+22	1,522016E+23	1,263035E+23	2,785051E+23
-584	7,610316E+22	7,610323E+22	6,315138E+22	6,315162E+22	1,522064E+23	1,263030E+23	2,785094E+23
-583	7,610267E+22	7,610142E+22	6,315179E+22	6,315010E+22	1,522041E+23	1,263019E+23	2,785060E+23
-582	7,609989E+22	7,610177E+22	6,315242E+22	6,315159E+22	1,522017E+23	1,263040E+23	2,785057E+23
-581	7,610349E+22	7,610276E+22	6,315152E+22	6,315250E+22	1,522063E+23	1,263040E+23	2,785103E+23
-580	7,610045E+22	7,610139E+22	6,315247E+22	6,315190E+22	1,522018E+23	1,263044E+23	2,785062E+23
-579	7,610070E+22	7,610245E+22	6,315269E+22	6,315344E+22	1,522031E+23	1,263061E+23	2,785093E+23
-578	7,610443E+22	7,610204E+22	6,315260E+22	6,315315E+22	1,522065E+23	1,263058E+23	2,785122E+23
-577	7,610068E+22	7,610116E+22	6,315443E+22	6,315303E+22	1,522018E+23	1,263075E+23	2,785093E+23
-576	7,610307E+22	7,610352E+22	6,315401E+22	6,315475E+22	1,522066E+23	1,263088E+23	2,785153E+23
-575	7,610346E+22	7,610280E+22	6,315438E+22	6,315408E+22	1,522063E+23	1,263085E+23	2,785147E+23
-574	7,609982E+22	7,610241E+22	6,315556E+22	6,315501E+22	1,522022E+23	1,263106E+23	2,785128E+23
-573	7,610366E+22	7,610352E+22	6,315503E+22	6,315556E+22	1,522072E+23	1,263106E+23	2,785178E+23
-572	7,610198E+22	7,610154E+22	6,315570E+22	6,315404E+22	1,522035E+23	1,263097E+23	2,785133E+23
-571	7,610090E+22	7,610207E+22	6,315525E+22	6,315491E+22	1,522030E+23	1,263102E+23	2,785131E+23
-570	7,610477E+22	7,610274E+22	6,315368E+22	6,315478E+22	1,522075E+23	1,263085E+23	2,785160E+23
-569	7,610061E+22	7,610135E+22	6,315421E+22	6,315351E+22	1,522020E+23	1,263077E+23	2,785097E+23
-568	7,610174E+22	7,610335E+22	6,315316E+22	6,315398E+22	1,522051E+23	1,263071E+23	2,785122E+23
-567	7,610365E+22	7,610263E+22	6,315270E+22	6,315227E+22	1,522063E+23	1,263050E+23	2,785112E+23
-566	7,609994E+22	7,610109E+22	6,315354E+22	6,315205E+22	1,522010E+23	1,263056E+23	2,785066E+23
-565	7,610322E+22	7,610272E+22	6,315279E+22	6,315276E+22	1,522059E+23	1,263055E+23	2,785115E+23
-564	7,610200E+22	7,610147E+22	6,315302E+22	6,315187E+22	1,522035E+23	1,263049E+23	2,785084E+23
-563	7,609936E+22	7,610180E+22	6,315296E+22	6,315319E+22	1,522012E+23	1,263062E+23	2,785073E+23
-562	7,610353E+22	7,610292E+22	6,315216E+22	6,315394E+22	1,522065E+23	1,263061E+23	2,785126E+23
-561	7,610069E+22	7,610074E+22	6,315380E+22	6,315296E+22	1,522014E+23	1,263068E+23	2,785082E+23
-560	7,610141E+22	7,610230E+22	6,315405E+22	6,315403E+22	1,522037E+23	1,263081E+23	2,785118E+23
-559	7,610461E+22	7,610269E+22	6,315410E+22	6,315398E+22	1,522073E+23	1,263081E+23	2,785154E+23
-558	7,610056E+22	7,610132E+22	6,315556E+22	6,315461E+22	1,522019E+23	1,263102E+23	2,785121E+23
-557	7,610269E+22	7,610374E+22	6,315552E+22	6,315613E+22	1,522064E+23	1,263117E+23	2,785181E+23
-556	7,610273E+22	7,610284E+22	6,315617E+22	6,315553E+22	1,522056E+23	1,263117E+23	2,785173E+23
-555	7,609980E+22	7,610194E+22	6,315675E+22	6,315606E+22	1,522017E+23	1,263128E+23	2,785146E+23
-554	7,610416E+22	7,610312E+22	6,315589E+22	6,315668E+22	1,522073E+23	1,263126E+23	2,785199E+23
-553	7,610209E+22	7,610087E+22	6,315669E+22	6,315538E+22	1,522030E+23	1,263121E+23	2,785150E+23
-552	7,610093E+22	7,610237E+22	6,315571E+22	6,315592E+22	1,522033E+23	1,263116E+23	2,785149E+23
-551	7,610431E+22	7,610350E+22	6,315437E+22	6,315556E+22	1,522078E+23	1,263099E+23	2,785177E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-550	7,610058E+22	7,610106E+22	6,315493E+22	6,315432E+22	1,522016E+23	1,263092E+23	2,785109E+23
-549	7,610199E+22	7,610288E+22	6,315451E+22	6,315425E+22	1,522049E+23	1,263088E+23	2,785136E+23
-548	7,610352E+22	7,610243E+22	6,315424E+22	6,315302E+22	1,522060E+23	1,263073E+23	2,785132E+23
-547	7,609982E+22	7,610095E+22	6,315435E+22	6,315316E+22	1,522008E+23	1,263075E+23	2,785083E+23
-546	7,610286E+22	7,610318E+22	6,315337E+22	6,315442E+22	1,522060E+23	1,263078E+23	2,785138E+23
-545	7,610142E+22	7,610128E+22	6,315416E+22	6,315361E+22	1,522027E+23	1,263078E+23	2,785105E+23
-544	7,609936E+22	7,610176E+22	6,315408E+22	6,315418E+22	1,522011E+23	1,263083E+23	2,785094E+23
-543	7,610381E+22	7,610308E+22	6,315368E+22	6,315466E+22	1,522069E+23	1,263083E+23	2,785152E+23
-542	7,610145E+22	7,610009E+22	6,315504E+22	6,315408E+22	1,522015E+23	1,263091E+23	2,785107E+23
-541	7,610179E+22	7,610221E+22	6,315557E+22	6,315513E+22	1,522040E+23	1,263107E+23	2,785147E+23
-540	7,610407E+22	7,610333E+22	6,315557E+22	6,315567E+22	1,522074E+23	1,263112E+23	2,785186E+23
-539	7,610003E+22	7,610147E+22	6,315650E+22	6,315611E+22	1,522015E+23	1,263126E+23	2,785141E+23
-538	7,610243E+22	7,610382E+22	6,315660E+22	6,315749E+22	1,522062E+23	1,263141E+23	2,785203E+23
-537	7,610275E+22	7,610191E+22	6,315768E+22	6,315669E+22	1,522047E+23	1,263144E+23	2,785190E+23
-536	7,610018E+22	7,610143E+22	6,315779E+22	6,315680E+22	1,522016E+23	1,263146E+23	2,785162E+23
-535	7,610425E+22	7,610350E+22	6,315682E+22	6,315759E+22	1,522077E+23	1,263144E+23	2,785222E+23
-534	7,610212E+22	7,610084E+22	6,315708E+22	6,315671E+22	1,522030E+23	1,263138E+23	2,785167E+23
-533	7,610084E+22	7,610257E+22	6,315663E+22	6,315668E+22	1,522034E+23	1,263133E+23	2,785167E+23
-532	7,610389E+22	7,610383E+22	6,315571E+22	6,315628E+22	1,522077E+23	1,263120E+23	2,785197E+23
-531	7,610060E+22	7,610081E+22	6,315596E+22	6,315487E+22	1,522014E+23	1,263108E+23	2,785122E+23
-530	7,610210E+22	7,610279E+22	6,315553E+22	6,315520E+22	1,522049E+23	1,263107E+23	2,785156E+23
-529	7,610311E+22	7,610192E+22	6,315552E+22	6,315458E+22	1,522050E+23	1,263101E+23	2,785151E+23
-528	7,609940E+22	7,610110E+22	6,315506E+22	6,315460E+22	1,522005E+23	1,263097E+23	2,785102E+23
-527	7,610246E+22	7,610346E+22	6,315431E+22	6,315564E+22	1,522059E+23	1,263099E+23	2,785159E+23
-526	7,610174E+22	7,610054E+22	6,315501E+22	6,315481E+22	1,522023E+23	1,263098E+23	2,785121E+23
-525	7,610019E+22	7,610119E+22	6,315544E+22	6,315471E+22	1,522014E+23	1,263101E+23	2,785115E+23
-524	7,610411E+22	7,610314E+22	6,315523E+22	6,315556E+22	1,522072E+23	1,263108E+23	2,785180E+23
-523	7,610158E+22	7,610047E+22	6,315601E+22	6,315529E+22	1,522021E+23	1,263113E+23	2,785134E+23
-522	7,610144E+22	7,610303E+22	6,315650E+22	6,315668E+22	1,522045E+23	1,263132E+23	2,785176E+23
-521	7,610322E+22	7,610333E+22	6,315722E+22	6,315739E+22	1,522065E+23	1,263146E+23	2,785212E+23
-520	7,609971E+22	7,610147E+22	6,315796E+22	6,315726E+22	1,522012E+23	1,263152E+23	2,785164E+23
-519	7,610241E+22	7,610361E+22	6,315822E+22	6,315845E+22	1,522060E+23	1,263167E+23	2,785227E+23
-518	7,610325E+22	7,610094E+22	6,315874E+22	6,315813E+22	1,522042E+23	1,263169E+23	2,785211E+23
-517	7,610059E+22	7,610112E+22	6,315871E+22	6,315795E+22	1,522017E+23	1,263167E+23	2,785184E+23
-516	7,610384E+22	7,610401E+22	6,315762E+22	6,315893E+22	1,522078E+23	1,263165E+23	2,785244E+23
-515	7,610196E+22	7,610108E+22	6,315747E+22	6,315758E+22	1,522030E+23	1,263150E+23	2,785181E+23
-514	7,610091E+22	7,610277E+22	6,315741E+22	6,315720E+22	1,522037E+23	1,263146E+23	2,785183E+23
-513	7,610384E+22	7,610328E+22	6,315723E+22	6,315691E+22	1,522071E+23	1,263141E+23	2,785213E+23
-512	7,610064E+22	7,610070E+22	6,315711E+22	6,315550E+22	1,522013E+23	1,263126E+23	2,785140E+23
-511	7,610166E+22	7,610317E+22	6,315670E+22	6,315632E+22	1,522048E+23	1,263130E+23	2,785179E+23
-510	7,610278E+22	7,610158E+22	6,315623E+22	6,315632E+22	1,522044E+23	1,263126E+23	2,785169E+23
-509	7,609933E+22	7,610082E+22	6,315613E+22	6,315573E+22	1,522001E+23	1,263119E+23	2,785120E+23
-508	7,610246E+22	7,610343E+22	6,315565E+22	6,315669E+22	1,522059E+23	1,263123E+23	2,785182E+23
-507	7,610235E+22	7,610014E+22	6,315586E+22	6,315558E+22	1,522025E+23	1,263114E+23	2,785139E+23
-506	7,610070E+22	7,610137E+22	6,315644E+22	6,315571E+22	1,522021E+23	1,263121E+23	2,785142E+23
-505	7,610379E+22	7,610326E+22	6,315664E+22	6,315712E+22	1,522071E+23	1,263138E+23	2,785208E+23
-504	7,610089E+22	7,610111E+22	6,315711E+22	6,315676E+22	1,522020E+23	1,263139E+23	2,785159E+23
-503	7,610070E+22	7,610349E+22	6,315804E+22	6,315803E+22	1,522042E+23	1,263161E+23	2,785203E+23
-502	7,610318E+22	7,610239E+22	6,315858E+22	6,315785E+22	1,522056E+23	1,263164E+23	2,785220E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-501	7,610030E+22	7,610054E+22	6,315948E+22	6,315813E+22	1,522008E+23	1,263176E+23	2,785184E+23
-500	7,610267E+22	7,610335E+22	6,315951E+22	6,315961E+22	1,522060E+23	1,263191E+23	2,785251E+23
-499	7,610346E+22	7,610105E+22	6,315915E+22	6,315935E+22	1,522045E+23	1,263185E+23	2,785230E+23
-498	7,610057E+22	7,610189E+22	6,315915E+22	6,315911E+22	1,522025E+23	1,263183E+23	2,785207E+23
-497	7,610337E+22	7,610413E+22	6,315891E+22	6,315997E+22	1,522075E+23	1,263189E+23	2,785264E+23
-496	7,610178E+22	7,610139E+22	6,315872E+22	6,315803E+22	1,522032E+23	1,263167E+23	2,785199E+23
-495	7,610085E+22	7,610281E+22	6,315901E+22	6,315769E+22	1,522037E+23	1,263167E+23	2,785204E+23
-494	7,610382E+22	7,610245E+22	6,315840E+22	6,315823E+22	1,522063E+23	1,263166E+23	2,785229E+23
-493	7,610057E+22	7,610035E+22	6,315813E+22	6,315685E+22	1,522009E+23	1,263150E+23	2,785159E+23
-492	7,610098E+22	7,610323E+22	6,315755E+22	6,315792E+22	1,522042E+23	1,263155E+23	2,785197E+23
-491	7,610270E+22	7,610130E+22	6,315661E+22	6,315753E+22	1,522040E+23	1,263141E+23	2,785181E+23
-490	7,609987E+22	7,610069E+22	6,315669E+22	6,315639E+22	1,522006E+23	1,263131E+23	2,785136E+23
-489	7,610275E+22	7,610294E+22	6,315698E+22	6,315745E+22	1,522057E+23	1,263144E+23	2,785201E+23
-488	7,610255E+22	7,610065E+22	6,315691E+22	6,315629E+22	1,522032E+23	1,263132E+23	2,785164E+23
-487	7,610032E+22	7,610225E+22	6,315785E+22	6,315685E+22	1,522026E+23	1,263147E+23	2,785173E+23
-486	7,610315E+22	7,610328E+22	6,315799E+22	6,315891E+22	1,522064E+23	1,263169E+23	2,785233E+23
-485	7,610061E+22	7,610088E+22	6,315888E+22	6,315808E+22	1,522015E+23	1,263170E+23	2,785185E+23
-484	7,610039E+22	7,610315E+22	6,315990E+22	6,315940E+22	1,522035E+23	1,263193E+23	2,785228E+23
-483	7,610363E+22	7,610160E+22	6,315966E+22	6,316011E+22	1,522052E+23	1,263198E+23	2,785250E+23
-482	7,610092E+22	7,610037E+22	6,316024E+22	6,315944E+22	1,522013E+23	1,263197E+23	2,785210E+23
-481	7,610255E+22	7,610336E+22	6,316050E+22	6,316123E+22	1,522059E+23	1,263217E+23	2,785276E+23
-480	7,610314E+22	7,610186E+22	6,315974E+22	6,316040E+22	1,522050E+23	1,263201E+23	2,785251E+23
-479	7,610030E+22	7,610251E+22	6,316040E+22	6,315977E+22	1,522028E+23	1,263202E+23	2,785230E+23
-478	7,610340E+22	7,610350E+22	6,316023E+22	6,316074E+22	1,522069E+23	1,263210E+23	2,785279E+23
-477	7,610207E+22	7,610078E+22	6,316028E+22	6,315853E+22	1,522028E+23	1,263188E+23	2,785217E+23
-476	7,610055E+22	7,610273E+22	6,316036E+22	6,315885E+22	1,522033E+23	1,263192E+23	2,785225E+23
-475	7,610349E+22	7,610228E+22	6,315873E+22	6,315965E+22	1,522058E+23	1,263184E+23	2,785242E+23
-474	7,610032E+22	7,610058E+22	6,315844E+22	6,315820E+22	1,522009E+23	1,263166E+23	2,785175E+23
-473	7,610070E+22	7,610292E+22	6,315856E+22	6,315913E+22	1,522036E+23	1,263177E+23	2,785213E+23
-472	7,610283E+22	7,610138E+22	6,315750E+22	6,315802E+22	1,522042E+23	1,263155E+23	2,785197E+23
-471	7,610028E+22	7,610087E+22	6,315812E+22	6,315692E+22	1,522012E+23	1,263150E+23	2,785162E+23
-470	7,610289E+22	7,610253E+22	6,315824E+22	6,315870E+22	1,522054E+23	1,263169E+23	2,785224E+23
-469	7,610237E+22	7,610084E+22	6,315830E+22	6,315760E+22	1,522032E+23	1,263159E+23	2,785191E+23
-468	7,609950E+22	7,610260E+22	6,315935E+22	6,315852E+22	1,522021E+23	1,263179E+23	2,785200E+23
-467	7,610281E+22	7,610285E+22	6,315905E+22	6,316034E+22	1,522057E+23	1,263194E+23	2,785250E+23
-466	7,610102E+22	7,610044E+22	6,316004E+22	6,315922E+22	1,522015E+23	1,263193E+23	2,785207E+23
-465	7,610071E+22	7,610233E+22	6,316143E+22	6,316073E+22	1,522030E+23	1,263222E+23	2,785252E+23
-464	7,610383E+22	7,610193E+22	6,316055E+22	6,316122E+22	1,522058E+23	1,263218E+23	2,785275E+23
-463	7,610091E+22	7,610126E+22	6,316126E+22	6,316063E+22	1,522022E+23	1,263219E+23	2,785241E+23
-462	7,610222E+22	7,610349E+22	6,316154E+22	6,316266E+22	1,522057E+23	1,263242E+23	2,785299E+23
-461	7,610314E+22	7,610202E+22	6,316128E+22	6,316115E+22	1,522052E+23	1,263224E+23	2,785276E+23
-460	7,610005E+22	7,610242E+22	6,316213E+22	6,316055E+22	1,522025E+23	1,263227E+23	2,785251E+23
-459	7,610342E+22	7,610287E+22	6,316128E+22	6,316168E+22	1,522063E+23	1,263230E+23	2,785293E+23
-458	7,610218E+22	7,610056E+22	6,316096E+22	6,315976E+22	1,522027E+23	1,263207E+23	2,785235E+23
-457	7,609987E+22	7,610237E+22	6,316115E+22	6,316056E+22	1,522022E+23	1,263217E+23	2,785240E+23
-456	7,610293E+22	7,610261E+22	6,315908E+22	6,316077E+22	1,522055E+23	1,263198E+23	2,785254E+23
-455	7,610043E+22	7,610067E+22	6,315929E+22	6,315879E+22	1,522011E+23	1,263181E+23	2,785192E+23
-454	7,610116E+22	7,610212E+22	6,315956E+22	6,315976E+22	1,522033E+23	1,263193E+23	2,785226E+23
-453	7,610354E+22	7,610112E+22	6,315883E+22	6,315835E+22	1,522047E+23	1,263172E+23	2,785218E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-452	7,610011E+22	7,610129E+22	6,315959E+22	6,315794E+22	1,522014E+23	1,263175E+23	2,785189E+23
-451	7,610237E+22	7,610282E+22	6,315915E+22	6,316013E+22	1,522052E+23	1,263193E+23	2,785245E+23
-450	7,610195E+22	7,610120E+22	6,315944E+22	6,315914E+22	1,522031E+23	1,263186E+23	2,785217E+23
-449	7,609896E+22	7,610217E+22	6,316112E+22	6,316021E+22	1,522011E+23	1,263213E+23	2,785225E+23
-448	7,610276E+22	7,610267E+22	6,316038E+22	6,316146E+22	1,522054E+23	1,263218E+23	2,785273E+23
-447	7,610152E+22	7,610031E+22	6,316151E+22	6,316042E+22	1,522018E+23	1,263219E+23	2,785238E+23
-446	7,610102E+22	7,610186E+22	6,316246E+22	6,316245E+22	1,522029E+23	1,263249E+23	2,785278E+23
-445	7,610388E+22	7,610223E+22	6,316159E+22	6,316255E+22	1,522061E+23	1,263241E+23	2,785302E+23
-444	7,610050E+22	7,610186E+22	6,316255E+22	6,316189E+22	1,522024E+23	1,263244E+23	2,785268E+23
-443	7,610216E+22	7,610321E+22	6,316247E+22	6,316341E+22	1,522054E+23	1,263259E+23	2,785312E+23
-442	7,610343E+22	7,610175E+22	6,316241E+22	6,316171E+22	1,522052E+23	1,263241E+23	2,785293E+23
-441	7,609996E+22	7,610182E+22	6,316355E+22	6,316164E+22	1,522018E+23	1,263252E+23	2,785270E+23
-440	7,610294E+22	7,610308E+22	6,316195E+22	6,316268E+22	1,522060E+23	1,263246E+23	2,785307E+23
-439	7,610183E+22	7,610102E+22	6,316175E+22	6,316100E+22	1,522028E+23	1,263227E+23	2,785256E+23
-438	7,609959E+22	7,610189E+22	6,316186E+22	6,316191E+22	1,522015E+23	1,263238E+23	2,785253E+23
-437	7,610319E+22	7,610232E+22	6,316022E+22	6,316132E+22	1,522055E+23	1,263215E+23	2,785270E+23
-436	7,610071E+22	7,610060E+22	6,316068E+22	6,315932E+22	1,522013E+23	1,263200E+23	2,785213E+23
-435	7,610155E+22	7,610173E+22	6,316044E+22	6,316046E+22	1,522033E+23	1,263209E+23	2,785242E+23
-434	7,610368E+22	7,610149E+22	6,315972E+22	6,315952E+22	1,522052E+23	1,263192E+23	2,785244E+23
-433	7,609934E+22	7,610147E+22	6,316088E+22	6,315982E+22	1,522008E+23	1,263207E+23	2,785215E+23
-432	7,610144E+22	7,610328E+22	6,316021E+22	6,316152E+22	1,522047E+23	1,263217E+23	2,785264E+23
-431	7,610190E+22	7,610115E+22	6,316096E+22	6,316035E+22	1,522030E+23	1,263213E+23	2,785244E+23
-430	7,609927E+22	7,610105E+22	6,316254E+22	6,316159E+22	1,522003E+23	1,263241E+23	2,785245E+23
-429	7,610350E+22	7,610224E+22	6,316179E+22	6,316250E+22	1,522057E+23	1,263243E+23	2,785300E+23
-428	7,610167E+22	7,610066E+22	6,316270E+22	6,316173E+22	1,522023E+23	1,263244E+23	2,785268E+23
-427	7,610091E+22	7,610218E+22	6,316308E+22	6,316380E+22	1,522031E+23	1,263269E+23	2,785300E+23
-426	7,610389E+22	7,610278E+22	6,316257E+22	6,316359E+22	1,522067E+23	1,263262E+23	2,785328E+23
-425	7,610010E+22	7,610169E+22	6,316426E+22	6,316302E+22	1,522018E+23	1,263273E+23	2,785291E+23
-424	7,610185E+22	7,610326E+22	6,316385E+22	6,316403E+22	1,522051E+23	1,263279E+23	2,785330E+23
-423	7,610358E+22	7,610160E+22	6,316381E+22	6,316273E+22	1,522052E+23	1,263265E+23	2,785317E+23
-422	7,609969E+22	7,610113E+22	6,316444E+22	6,316332E+22	1,522008E+23	1,263278E+23	2,785286E+23
-421	7,610271E+22	7,610300E+22	6,316266E+22	6,316394E+22	1,522057E+23	1,263266E+23	2,785323E+23
-420	7,610155E+22	7,610108E+22	6,316259E+22	6,316203E+22	1,522026E+23	1,263246E+23	2,785272E+23
-419	7,609994E+22	7,610135E+22	6,316234E+22	6,316247E+22	1,522013E+23	1,263248E+23	2,785261E+23
-418	7,610394E+22	7,610212E+22	6,316104E+22	6,316162E+22	1,522061E+23	1,263227E+23	2,785287E+23
-417	7,610081E+22	7,610053E+22	6,316197E+22	6,316030E+22	1,522013E+23	1,263223E+23	2,785236E+23
-416	7,610094E+22	7,610254E+22	6,316130E+22	6,316140E+22	1,522035E+23	1,263227E+23	2,785262E+23
-415	7,610310E+22	7,610228E+22	6,316096E+22	6,316096E+22	1,522054E+23	1,263219E+23	2,785273E+23
-414	7,609878E+22	7,610104E+22	6,316230E+22	6,316159E+22	1,521998E+23	1,263239E+23	2,785237E+23
-413	7,610144E+22	7,610272E+22	6,316186E+22	6,316262E+22	1,522042E+23	1,263245E+23	2,785286E+23
-412	7,610218E+22	7,610071E+22	6,316264E+22	6,316156E+22	1,522029E+23	1,263242E+23	2,785271E+23
-411	7,609993E+22	7,610032E+22	6,316330E+22	6,316287E+22	1,522002E+23	1,263262E+23	2,785264E+23
-410	7,610385E+22	7,610241E+22	6,316249E+22	6,316386E+22	1,522063E+23	1,263264E+23	2,785326E+23
-409	7,610128E+22	7,610108E+22	6,316378E+22	6,316341E+22	1,522024E+23	1,263272E+23	2,785296E+23
-408	7,610037E+22	7,610280E+22	6,316407E+22	6,316459E+22	1,522032E+23	1,263287E+23	2,785318E+23
-407	7,610401E+22	7,610298E+22	6,316415E+22	6,316430E+22	1,522070E+23	1,263285E+23	2,785354E+23
-406	7,610022E+22	7,610083E+22	6,316583E+22	6,316411E+22	1,522011E+23	1,263299E+23	2,785310E+23
-405	7,610190E+22	7,610290E+22	6,316527E+22	6,316497E+22	1,522048E+23	1,263302E+23	2,785350E+23
-404	7,610316E+22	7,610184E+22	6,316492E+22	6,316414E+22	1,522050E+23	1,263291E+23	2,785341E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-403	7,609943E+22	7,610093E+22	6,316475E+22	6,316470E+22	1,522004E+23	1,263295E+23	2,785298E+23
-402	7,610286E+22	7,610301E+22	6,316328E+22	6,316486E+22	1,522059E+23	1,263281E+23	2,785340E+23
-401	7,610160E+22	7,610087E+22	6,316373E+22	6,316292E+22	1,522025E+23	1,263267E+23	2,785291E+23
-400	7,610004E+22	7,610156E+22	6,316325E+22	6,316277E+22	1,522016E+23	1,263260E+23	2,785276E+23
-399	7,610426E+22	7,610249E+22	6,316221E+22	6,316245E+22	1,522068E+23	1,263247E+23	2,785314E+23
-398	7,610032E+22	7,610038E+22	6,316306E+22	6,316195E+22	1,522007E+23	1,263250E+23	2,785257E+23
-397	7,610033E+22	7,610276E+22	6,316253E+22	6,316274E+22	1,522031E+23	1,263253E+23	2,785284E+23
-396	7,610261E+22	7,610215E+22	6,316240E+22	6,316221E+22	1,522048E+23	1,263246E+23	2,785294E+23
-395	7,609905E+22	7,610001E+22	6,316322E+22	6,316262E+22	1,521991E+23	1,263258E+23	2,785249E+23
-394	7,610230E+22	7,610208E+22	6,316289E+22	6,316347E+22	1,522044E+23	1,263264E+23	2,785307E+23
-393	7,610241E+22	7,610051E+22	6,316380E+22	6,316299E+22	1,522029E+23	1,263268E+23	2,785297E+23
-392	7,609966E+22	7,610119E+22	6,316400E+22	6,316397E+22	1,522008E+23	1,263280E+23	2,785288E+23
-391	7,610373E+22	7,610334E+22	6,316366E+22	6,316515E+22	1,522071E+23	1,263288E+23	2,785359E+23
-390	7,610090E+22	7,610101E+22	6,316539E+22	6,316482E+22	1,522019E+23	1,263302E+23	2,785321E+23
-389	7,610031E+22	7,610270E+22	6,316594E+22	6,316537E+22	1,522030E+23	1,263313E+23	2,785343E+23
-388	7,610395E+22	7,610274E+22	6,316606E+22	6,316537E+22	1,522067E+23	1,263314E+23	2,785381E+23
-387	7,610034E+22	7,610011E+22	6,316673E+22	6,316560E+22	1,522005E+23	1,263323E+23	2,785328E+23
-386	7,610183E+22	7,610279E+22	6,316590E+22	6,316650E+22	1,522046E+23	1,263324E+23	2,785370E+23
-385	7,610262E+22	7,610186E+22	6,316566E+22	6,316587E+22	1,522045E+23	1,263315E+23	2,785360E+23
-384	7,609923E+22	7,610114E+22	6,316517E+22	6,316531E+22	1,522004E+23	1,263305E+23	2,785308E+23
-383	7,610342E+22	7,610303E+22	6,316423E+22	6,316527E+22	1,522065E+23	1,263295E+23	2,785359E+23
-382	7,610201E+22	7,610038E+22	6,316486E+22	6,316362E+22	1,522024E+23	1,263285E+23	2,785309E+23
-381	7,610012E+22	7,610168E+22	6,316443E+22	6,316329E+22	1,522018E+23	1,263277E+23	2,785295E+23
-380	7,610361E+22	7,610309E+22	6,316352E+22	6,316357E+22	1,522067E+23	1,263271E+23	2,785338E+23
-379	7,609986E+22	7,610017E+22	6,316384E+22	6,316336E+22	1,522000E+23	1,263272E+23	2,785272E+23
-378	7,610012E+22	7,610234E+22	6,316372E+22	6,316388E+22	1,522025E+23	1,263276E+23	2,785301E+23
-377	7,610248E+22	7,610159E+22	6,316389E+22	6,316363E+22	1,522041E+23	1,263275E+23	2,785316E+23
-376	7,609930E+22	7,609977E+22	6,316412E+22	6,316347E+22	1,521991E+23	1,263276E+23	2,785267E+23
-375	7,610286E+22	7,610227E+22	6,316388E+22	6,316481E+22	1,522051E+23	1,263287E+23	2,785338E+23
-374	7,610222E+22	7,610068E+22	6,316474E+22	6,316479E+22	1,522029E+23	1,263295E+23	2,785324E+23
-373	7,609934E+22	7,610176E+22	6,316527E+22	6,316512E+22	1,522011E+23	1,263304E+23	2,785315E+23
-372	7,610340E+22	7,610367E+22	6,316549E+22	6,316613E+22	1,522071E+23	1,263316E+23	2,785387E+23
-371	7,610111E+22	7,610034E+22	6,316679E+22	6,316583E+22	1,522015E+23	1,263326E+23	2,785341E+23
-370	7,610067E+22	7,610221E+22	6,316743E+22	6,316640E+22	1,522029E+23	1,263338E+23	2,785367E+23
-369	7,610362E+22	7,610259E+22	6,316733E+22	6,316711E+22	1,522062E+23	1,263344E+23	2,785406E+23
-368	7,609980E+22	7,610057E+22	6,316724E+22	6,316692E+22	1,522004E+23	1,263342E+23	2,785345E+23
-367	7,610188E+22	7,610314E+22	6,316664E+22	6,316780E+22	1,522050E+23	1,263344E+23	2,785395E+23
-366	7,610255E+22	7,610146E+22	6,316669E+22	6,316697E+22	1,522040E+23	1,263337E+23	2,785377E+23
-365	7,609962E+22	7,610107E+22	6,316644E+22	6,316556E+22	1,522007E+23	1,263320E+23	2,785327E+23
-364	7,610369E+22	7,610297E+22	6,316567E+22	6,316567E+22	1,522067E+23	1,263313E+23	2,785380E+23
-363	7,610200E+22	7,610005E+22	6,316559E+22	6,316465E+22	1,522021E+23	1,263302E+23	2,785323E+23
-362	7,609972E+22	7,610186E+22	6,316526E+22	6,316454E+22	1,522016E+23	1,263298E+23	2,785314E+23
-361	7,610261E+22	7,610307E+22	6,316461E+22	6,316522E+22	1,522057E+23	1,263298E+23	2,785355E+23
-360	7,609942E+22	7,610000E+22	6,316467E+22	6,316424E+22	1,521994E+23	1,263289E+23	2,785283E+23
-359	7,610071E+22	7,610186E+22	6,316483E+22	6,316482E+22	1,522026E+23	1,263296E+23	2,785322E+23
-358	7,610283E+22	7,610089E+22	6,316504E+22	6,316493E+22	1,522037E+23	1,263300E+23	2,785337E+23
-357	7,609955E+22	7,610014E+22	6,316514E+22	6,316445E+22	1,521997E+23	1,263296E+23	2,785293E+23
-356	7,610255E+22	7,610310E+22	6,316519E+22	6,316605E+22	1,522056E+23	1,263312E+23	2,785369E+23
-355	7,610203E+22	7,610087E+22	6,316583E+22	6,316617E+22	1,522029E+23	1,263320E+23	2,785349E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-354	7,609934E+22	7,610172E+22	6,316700E+22	6,316615E+22	1,522011E+23	1,263331E+23	2,785342E+23
-353	7,610307E+22	7,610339E+22	6,316749E+22	6,316756E+22	1,522065E+23	1,263350E+23	2,785415E+23
-352	7,610108E+22	7,610009E+22	6,316809E+22	6,316699E+22	1,522012E+23	1,263351E+23	2,785363E+23
-351	7,610081E+22	7,610212E+22	6,316847E+22	6,316812E+22	1,522029E+23	1,263366E+23	2,785395E+23
-350	7,610318E+22	7,610241E+22	6,316814E+22	6,316910E+22	1,522056E+23	1,263372E+23	2,785428E+23
-349	7,609976E+22	7,610064E+22	6,316796E+22	6,316782E+22	1,522004E+23	1,263358E+23	2,785362E+23
-348	7,610203E+22	7,610308E+22	6,316785E+22	6,316825E+22	1,522051E+23	1,263361E+23	2,785412E+23
-347	7,610319E+22	7,610087E+22	6,316744E+22	6,316733E+22	1,522041E+23	1,263348E+23	2,785388E+23
-346	7,610008E+22	7,610083E+22	6,316753E+22	6,316594E+22	1,522009E+23	1,263335E+23	2,785344E+23
-345	7,610301E+22	7,610334E+22	6,316683E+22	6,316691E+22	1,522063E+23	1,263337E+23	2,785401E+23
-344	7,610112E+22	7,610062E+22	6,316625E+22	6,316574E+22	1,522017E+23	1,263320E+23	2,785337E+23
-343	7,609932E+22	7,610200E+22	6,316627E+22	6,316595E+22	1,522013E+23	1,263322E+23	2,785335E+23
-342	7,610218E+22	7,610245E+22	6,316589E+22	6,316667E+22	1,522046E+23	1,263326E+23	2,785372E+23
-341	7,609976E+22	7,609959E+22	6,316592E+22	6,316499E+22	1,521993E+23	1,263309E+23	2,785303E+23
-340	7,610117E+22	7,610164E+22	6,316621E+22	6,316579E+22	1,522028E+23	1,263320E+23	2,785348E+23
-339	7,610312E+22	7,610071E+22	6,316570E+22	6,316637E+22	1,522038E+23	1,263321E+23	2,785359E+23
-338	7,609954E+22	7,610054E+22	6,316618E+22	6,316577E+22	1,522001E+23	1,263319E+23	2,785320E+23
-337	7,610190E+22	7,610345E+22	6,316669E+22	6,316753E+22	1,522054E+23	1,263342E+23	2,785396E+23
-336	7,610178E+22	7,610095E+22	6,316722E+22	6,316698E+22	1,522027E+23	1,263342E+23	2,785369E+23
-335	7,609985E+22	7,610145E+22	6,316860E+22	6,316731E+22	1,522013E+23	1,263359E+23	2,785372E+23
-334	7,610292E+22	7,610275E+22	6,316899E+22	6,316918E+22	1,522057E+23	1,263382E+23	2,785438E+23
-333	7,610096E+22	7,610030E+22	6,316919E+22	6,316835E+22	1,522013E+23	1,263375E+23	2,785388E+23
-332	7,610056E+22	7,610239E+22	6,316956E+22	6,316947E+22	1,522030E+23	1,263390E+23	2,785420E+23
-331	7,610314E+22	7,610207E+22	6,316882E+22	6,317029E+22	1,522052E+23	1,263391E+23	2,785443E+23
-330	7,610018E+22	7,610047E+22	6,316913E+22	6,316836E+22	1,522006E+23	1,263375E+23	2,785381E+23
-329	7,610204E+22	7,610294E+22	6,316921E+22	6,316899E+22	1,522050E+23	1,263382E+23	2,785432E+23
-328	7,610316E+22	7,610102E+22	6,316830E+22	6,316790E+22	1,522042E+23	1,263362E+23	2,785404E+23
-327	7,609997E+22	7,610118E+22	6,316832E+22	6,316729E+22	1,522011E+23	1,263356E+23	2,785368E+23
-326	7,610191E+22	7,610333E+22	6,316775E+22	6,316864E+22	1,522052E+23	1,263364E+23	2,785416E+23
-325	7,610063E+22	7,610060E+22	6,316726E+22	6,316673E+22	1,522012E+23	1,263340E+23	2,785352E+23
-324	7,609941E+22	7,610146E+22	6,316764E+22	6,316669E+22	1,522009E+23	1,263343E+23	2,785352E+23
-323	7,610283E+22	7,610143E+22	6,316673E+22	6,316755E+22	1,522043E+23	1,263343E+23	2,785385E+23
-322	7,610052E+22	7,609927E+22	6,316690E+22	6,316577E+22	1,521998E+23	1,263327E+23	2,785325E+23
-321	7,610089E+22	7,610216E+22	6,316725E+22	6,316720E+22	1,522031E+23	1,263345E+23	2,785375E+23
-320	7,610273E+22	7,610152E+22	6,316651E+22	6,316745E+22	1,522043E+23	1,263340E+23	2,785382E+23
-319	7,609949E+22	7,610096E+22	6,316760E+22	6,316712E+22	1,522005E+23	1,263347E+23	2,785352E+23
-318	7,610141E+22	7,610320E+22	6,316861E+22	6,316897E+22	1,522046E+23	1,263376E+23	2,785422E+23
-317	7,610194E+22	7,610065E+22	6,316898E+22	6,316797E+22	1,522026E+23	1,263369E+23	2,785395E+23
-316	7,609992E+22	7,610108E+22	6,317030E+22	6,316871E+22	1,522010E+23	1,263390E+23	2,785400E+23
-315	7,610283E+22	7,610237E+22	6,316967E+22	6,317105E+22	1,522052E+23	1,263407E+23	2,785459E+23
-314	7,610093E+22	7,610025E+22	6,316997E+22	6,316978E+22	1,522012E+23	1,263398E+23	2,785409E+23
-313	7,610025E+22	7,610246E+22	6,317060E+22	6,317074E+22	1,522027E+23	1,263413E+23	2,785440E+23
-312	7,610339E+22	7,610202E+22	6,316962E+22	6,317063E+22	1,522054E+23	1,263403E+23	2,785457E+23
-311	7,610091E+22	7,610046E+22	6,317017E+22	6,316896E+22	1,522014E+23	1,263391E+23	2,785405E+23
-310	7,610170E+22	7,610292E+22	6,317041E+22	6,317003E+22	1,522046E+23	1,263404E+23	2,785451E+23
-309	7,610264E+22	7,610162E+22	6,316929E+22	6,316882E+22	1,522043E+23	1,263381E+23	2,785424E+23
-308	7,609935E+22	7,610144E+22	6,316962E+22	6,316848E+22	1,522008E+23	1,263381E+23	2,785389E+23
-307	7,610154E+22	7,610270E+22	6,316865E+22	6,316990E+22	1,522042E+23	1,263386E+23	2,785428E+23
-306	7,610100E+22	7,609989E+22	6,316853E+22	6,316755E+22	1,522009E+23	1,263361E+23	2,785370E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-305	7,609966E+22	7,610094E+22	6,316884E+22	6,316778E+22	1,522006E+23	1,263366E+23	2,785372E+23
-304	7,610313E+22	7,610136E+22	6,316737E+22	6,316843E+22	1,522045E+23	1,263358E+23	2,785403E+23
-303	7,610086E+22	7,609987E+22	6,316751E+22	6,316724E+22	1,522007E+23	1,263347E+23	2,785355E+23
-302	7,610016E+22	7,610248E+22	6,316831E+22	6,316871E+22	1,522026E+23	1,263370E+23	2,785397E+23
-301	7,610241E+22	7,610191E+22	6,316793E+22	6,316828E+22	1,522043E+23	1,263362E+23	2,785405E+23
-300	7,609962E+22	7,610069E+22	6,316953E+22	6,316796E+22	1,522003E+23	1,263375E+23	2,785378E+23
-299	7,610151E+22	7,610229E+22	6,316998E+22	6,317024E+22	1,522038E+23	1,263402E+23	2,785440E+23
-298	7,610217E+22	7,610030E+22	6,317036E+22	6,316937E+22	1,522025E+23	1,263397E+23	2,785422E+23
-297	7,609944E+22	7,610126E+22	6,317135E+22	6,317059E+22	1,522007E+23	1,263419E+23	2,785426E+23
-296	7,610255E+22	7,610262E+22	6,317032E+22	6,317231E+22	1,522052E+23	1,263426E+23	2,785478E+23
-295	7,610135E+22	7,610050E+22	6,317088E+22	6,317093E+22	1,522018E+23	1,263418E+23	2,785437E+23
-294	7,610018E+22	7,610227E+22	6,317199E+22	6,317165E+22	1,522025E+23	1,263436E+23	2,785461E+23
-293	7,610371E+22	7,610214E+22	6,317099E+22	6,317107E+22	1,522059E+23	1,263421E+23	2,785479E+23
-292	7,610093E+22	7,610055E+22	6,317166E+22	6,316989E+22	1,522015E+23	1,263416E+23	2,785430E+23
-291	7,610108E+22	7,610277E+22	6,317117E+22	6,317153E+22	1,522039E+23	1,263427E+23	2,785465E+23
-290	7,610225E+22	7,610142E+22	6,317028E+22	6,317005E+22	1,522037E+23	1,263403E+23	2,785440E+23
-289	7,609889E+22	7,610102E+22	6,317072E+22	6,316970E+22	1,521999E+23	1,263404E+23	2,785403E+23
-288	7,610189E+22	7,610204E+22	6,316936E+22	6,317044E+22	1,522039E+23	1,263398E+23	2,785437E+23
-287	7,610192E+22	7,609957E+22	6,316917E+22	6,316842E+22	1,522015E+23	1,263376E+23	2,785391E+23
-286	7,609957E+22	7,610108E+22	6,316967E+22	6,316900E+22	1,522006E+23	1,263387E+23	2,785393E+23
-285	7,610293E+22	7,610222E+22	6,316813E+22	6,316930E+22	1,522052E+23	1,263374E+23	2,785426E+23
-284	7,610046E+22	7,610047E+22	6,316898E+22	6,316829E+22	1,522009E+23	1,263373E+23	2,785382E+23
-283	7,609972E+22	7,610229E+22	6,316972E+22	6,316990E+22	1,522020E+23	1,263396E+23	2,785416E+23
-282	7,610256E+22	7,610138E+22	6,316980E+22	6,316928E+22	1,522039E+23	1,263391E+23	2,785430E+23
-281	7,609952E+22	7,610018E+22	6,317130E+22	6,316955E+22	1,521997E+23	1,263408E+23	2,785405E+23
-280	7,610149E+22	7,610196E+22	6,317090E+22	6,317175E+22	1,522034E+23	1,263427E+23	2,785461E+23
-279	7,610231E+22	7,610055E+22	6,317096E+22	6,317134E+22	1,522029E+23	1,263423E+23	2,785452E+23
-278	7,609898E+22	7,610135E+22	6,317225E+22	6,317226E+22	1,522003E+23	1,263445E+23	2,785448E+23
-277	7,610274E+22	7,610281E+22	6,317146E+22	6,317290E+22	1,522056E+23	1,263444E+23	2,785499E+23
-276	7,610195E+22	7,610048E+22	6,317252E+22	6,317135E+22	1,522024E+23	1,263439E+23	2,785463E+23
-275	7,610044E+22	7,610188E+22	6,317317E+22	6,317240E+22	1,522023E+23	1,263456E+23	2,785479E+23
-274	7,610372E+22	7,610223E+22	6,317233E+22	6,317204E+22	1,522059E+23	1,263444E+23	2,785503E+23
-273	7,610010E+22	7,610091E+22	6,317283E+22	6,317148E+22	1,522010E+23	1,263443E+23	2,785453E+23
-272	7,610037E+22	7,610267E+22	6,317193E+22	6,317269E+22	1,522030E+23	1,263446E+23	2,785477E+23
-271	7,610241E+22	7,610124E+22	6,317110E+22	6,317131E+22	1,522037E+23	1,263424E+23	2,785461E+23
-270	7,609889E+22	7,610035E+22	6,317172E+22	6,317072E+22	1,521992E+23	1,263424E+23	2,785417E+23
-269	7,610234E+22	7,610187E+22	6,317021E+22	6,317100E+22	1,522042E+23	1,263412E+23	2,785454E+23
-268	7,610223E+22	7,609990E+22	6,317010E+22	6,316936E+22	1,522021E+23	1,263395E+23	2,785416E+23
-267	7,609912E+22	7,610124E+22	6,317023E+22	6,317029E+22	1,522004E+23	1,263405E+23	2,785409E+23
-266	7,610266E+22	7,610239E+22	6,316940E+22	6,317028E+22	1,522050E+23	1,263397E+23	2,785447E+23
-265	7,610006E+22	7,610032E+22	6,317064E+22	6,316942E+22	1,522004E+23	1,263401E+23	2,785404E+23
-264	7,609978E+22	7,610165E+22	6,317108E+22	6,317072E+22	1,522014E+23	1,263418E+23	2,785432E+23
-263	7,610305E+22	7,610110E+22	6,317093E+22	6,317075E+22	1,522042E+23	1,263417E+23	2,785458E+23
-262	7,609914E+22	7,610010E+22	6,317241E+22	6,317138E+22	1,521992E+23	1,263438E+23	2,785430E+23
-261	7,610131E+22	7,610243E+22	6,317184E+22	6,317312E+22	1,522037E+23	1,263450E+23	2,785487E+23
-260	7,610237E+22	7,610093E+22	6,317234E+22	6,317256E+22	1,522033E+23	1,263449E+23	2,785482E+23
-259	7,609907E+22	7,610114E+22	6,317350E+22	6,317332E+22	1,522002E+23	1,263468E+23	2,785470E+23
-258	7,610332E+22	7,610252E+22	6,317318E+22	6,317356E+22	1,522058E+23	1,263467E+23	2,785526E+23
-257	7,610191E+22	7,610046E+22	6,317419E+22	6,317254E+22	1,522024E+23	1,263467E+23	2,785491E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-256	7,610011E+22	7,610195E+22	6,317408E+22	6,317365E+22	1,522021E+23	1,263477E+23	2,785498E+23
-255	7,610331E+22	7,610254E+22	6,317290E+22	6,317377E+22	1,522058E+23	1,263467E+23	2,785525E+23
-254	7,609925E+22	7,610069E+22	6,317375E+22	6,317303E+22	1,521999E+23	1,263468E+23	2,785467E+23
-253	7,610043E+22	7,610227E+22	6,317280E+22	6,317324E+22	1,522027E+23	1,263460E+23	2,785487E+23
-252	7,610296E+22	7,610076E+22	6,317221E+22	6,317179E+22	1,522037E+23	1,263440E+23	2,785477E+23
-251	7,609924E+22	7,609993E+22	6,317230E+22	6,317150E+22	1,521992E+23	1,263438E+23	2,785430E+23
-250	7,610256E+22	7,610204E+22	6,317108E+22	6,317177E+22	1,522046E+23	1,263429E+23	2,785475E+23
-249	7,610164E+22	7,610057E+22	6,317120E+22	6,317056E+22	1,522022E+23	1,263418E+23	2,785440E+23
-248	7,609865E+22	7,610138E+22	6,317130E+22	6,317116E+22	1,522000E+23	1,263425E+23	2,785425E+23
-247	7,610264E+22	7,610239E+22	6,317074E+22	6,317146E+22	1,522050E+23	1,263422E+23	2,785472E+23
-246	7,609979E+22	7,609979E+22	6,317235E+22	6,317085E+22	1,521996E+23	1,263432E+23	2,785428E+23
-245	7,609988E+22	7,610131E+22	6,317247E+22	6,317195E+22	1,522012E+23	1,263444E+23	2,785456E+23
-244	7,610308E+22	7,610124E+22	6,317218E+22	6,317247E+22	1,522043E+23	1,263447E+23	2,785490E+23
-243	7,609885E+22	7,610005E+22	6,317306E+22	6,317319E+22	1,521989E+23	1,263463E+23	2,785452E+23
-242	7,610153E+22	7,610234E+22	6,317310E+22	6,317426E+22	1,522039E+23	1,263474E+23	2,785512E+23
-241	7,610254E+22	7,610096E+22	6,317390E+22	6,317352E+22	1,522035E+23	1,263474E+23	2,785509E+23
-240	7,609948E+22	7,610082E+22	6,317476E+22	6,317391E+22	1,522003E+23	1,263487E+23	2,785490E+23
-239	7,610365E+22	7,610279E+22	6,317431E+22	6,317477E+22	1,522064E+23	1,263491E+23	2,785555E+23
-238	7,610116E+22	7,610071E+22	6,317536E+22	6,317415E+22	1,522019E+23	1,263495E+23	2,785514E+23
-237	7,609933E+22	7,610228E+22	6,317506E+22	6,317484E+22	1,522016E+23	1,263499E+23	2,785515E+23
-236	7,610295E+22	7,610259E+22	6,317412E+22	6,317490E+22	1,522055E+23	1,263490E+23	2,785546E+23
-235	7,609918E+22	7,609990E+22	6,317461E+22	6,317401E+22	1,521991E+23	1,263486E+23	2,785477E+23
-234	7,610115E+22	7,610145E+22	6,317400E+22	6,317382E+22	1,522026E+23	1,263478E+23	2,785504E+23
-233	7,610321E+22	7,610062E+22	6,317324E+22	6,317272E+22	1,522038E+23	1,263460E+23	2,785498E+23
-232	7,609918E+22	7,610010E+22	6,317274E+22	6,317241E+22	1,521993E+23	1,263451E+23	2,785444E+23
-231	7,610232E+22	7,610268E+22	6,317161E+22	6,317301E+22	1,522050E+23	1,263446E+23	2,785496E+23
-230	7,610088E+22	7,610065E+22	6,317249E+22	6,317176E+22	1,522015E+23	1,263442E+23	2,785458E+23
-229	7,609853E+22	7,610117E+22	6,317280E+22	6,317179E+22	1,521997E+23	1,263446E+23	2,785443E+23
-228	7,610285E+22	7,610207E+22	6,317242E+22	6,317245E+22	1,522049E+23	1,263449E+23	2,785498E+23
-227	7,609975E+22	7,609931E+22	6,317342E+22	6,317245E+22	1,521991E+23	1,263459E+23	2,785449E+23
-226	7,610002E+22	7,610119E+22	6,317364E+22	6,317352E+22	1,522012E+23	1,263472E+23	2,785484E+23
-225	7,610267E+22	7,610163E+22	6,317343E+22	6,317417E+22	1,522043E+23	1,263476E+23	2,785519E+23
-224	7,609894E+22	7,610012E+22	6,317411E+22	6,317429E+22	1,521991E+23	1,263484E+23	2,785475E+23
-223	7,610202E+22	7,610245E+22	6,317431E+22	6,317529E+22	1,522045E+23	1,263496E+23	2,785541E+23
-222	7,610249E+22	7,610086E+22	6,317561E+22	6,317470E+22	1,522033E+23	1,263503E+23	2,785537E+23
-221	7,609946E+22	7,610095E+22	6,317614E+22	6,317490E+22	1,522004E+23	1,263510E+23	2,785515E+23
-220	7,610311E+22	7,610316E+22	6,317557E+22	6,317626E+22	1,522063E+23	1,263518E+23	2,785581E+23
-219	7,610037E+22	7,610053E+22	6,317617E+22	6,317584E+22	1,522009E+23	1,263520E+23	2,785529E+23
-218	7,609937E+22	7,610154E+22	6,317626E+22	6,317581E+22	1,522009E+23	1,263521E+23	2,785530E+23
-217	7,610310E+22	7,610202E+22	6,317537E+22	6,317566E+22	1,522051E+23	1,263510E+23	2,785561E+23
-216	7,609988E+22	7,609927E+22	6,317520E+22	6,317442E+22	1,521991E+23	1,263496E+23	2,785488E+23
-215	7,610167E+22	7,610168E+22	6,317440E+22	6,317468E+22	1,522034E+23	1,263491E+23	2,785524E+23
-214	7,610264E+22	7,610125E+22	6,317406E+22	6,317391E+22	1,522039E+23	1,263480E+23	2,785519E+23
-213	7,609861E+22	7,610076E+22	6,317376E+22	6,317320E+22	1,521994E+23	1,263470E+23	2,785463E+23
-212	7,610183E+22	7,610305E+22	6,317320E+22	6,317393E+22	1,522049E+23	1,263471E+23	2,785520E+23
-211	7,610059E+22	7,610009E+22	6,317393E+22	6,317296E+22	1,522007E+23	1,263469E+23	2,785476E+23
-210	7,609890E+22	7,610026E+22	6,317451E+22	6,317296E+22	1,521992E+23	1,263475E+23	2,785466E+23
-209	7,610275E+22	7,610183E+22	6,317380E+22	6,317414E+22	1,522046E+23	1,263479E+23	2,785525E+23
-208	7,609968E+22	7,609916E+22	6,317392E+22	6,317408E+22	1,521988E+23	1,263480E+23	2,785468E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-207	7,610013E+22	7,610154E+22	6,317417E+22	6,317515E+22	1,522017E+23	1,263493E+23	2,785510E+23
-206	7,610253E+22	7,610162E+22	6,317467E+22	6,317535E+22	1,522042E+23	1,263500E+23	2,785542E+23
-205	7,609928E+22	7,610007E+22	6,317557E+22	6,317471E+22	1,521994E+23	1,263503E+23	2,785496E+23
-204	7,610232E+22	7,610266E+22	6,317602E+22	6,317604E+22	1,522050E+23	1,263521E+23	2,785570E+23
-203	7,610218E+22	7,610081E+22	6,317688E+22	6,317611E+22	1,522030E+23	1,263530E+23	2,785560E+23
-202	7,609917E+22	7,610091E+22	6,317759E+22	6,317636E+22	1,522001E+23	1,263539E+23	2,785540E+23
-201	7,610233E+22	7,610327E+22	6,317697E+22	6,317778E+22	1,522056E+23	1,263547E+23	2,785603E+23
-200	7,610030E+22	7,609999E+22	6,317705E+22	6,317691E+22	1,522003E+23	1,263540E+23	2,785543E+23
-199	7,609995E+22	7,610114E+22	6,317703E+22	6,317677E+22	1,522011E+23	1,263538E+23	2,785549E+23
-198	7,610328E+22	7,610164E+22	6,317644E+22	6,317664E+22	1,522049E+23	1,263531E+23	2,785580E+23
-197	7,610007E+22	7,609958E+22	6,317593E+22	6,317512E+22	1,521996E+23	1,263510E+23	2,785507E+23
-196	7,610133E+22	7,610252E+22	6,317519E+22	6,317572E+22	1,522039E+23	1,263509E+23	2,785548E+23
-195	7,610188E+22	7,610147E+22	6,317489E+22	6,317516E+22	1,522033E+23	1,263501E+23	2,785534E+23
-194	7,609863E+22	7,610026E+22	6,317529E+22	6,317402E+22	1,521989E+23	1,263493E+23	2,785482E+23
-193	7,610159E+22	7,610257E+22	6,317492E+22	6,317483E+22	1,522042E+23	1,263497E+23	2,785539E+23
-192	7,610093E+22	7,609938E+22	6,317493E+22	6,317405E+22	1,522003E+23	1,263490E+23	2,785493E+23
-191	7,609925E+22	7,610014E+22	6,317509E+22	6,317446E+22	1,521994E+23	1,263495E+23	2,785489E+23
-190	7,610225E+22	7,610203E+22	6,317473E+22	6,317584E+22	1,522043E+23	1,263506E+23	2,785549E+23
-189	7,609960E+22	7,609962E+22	6,317486E+22	6,317506E+22	1,521992E+23	1,263499E+23	2,785491E+23
-188	7,610022E+22	7,610193E+22	6,317560E+22	6,317601E+22	1,522021E+23	1,263516E+23	2,785538E+23
-187	7,610260E+22	7,610141E+22	6,317624E+22	6,317640E+22	1,522040E+23	1,263526E+23	2,785566E+23
-186	7,609980E+22	7,609958E+22	6,317751E+22	6,317575E+22	1,521994E+23	1,263533E+23	2,785527E+23
-185	7,610179E+22	7,610283E+22	6,317774E+22	6,317757E+22	1,522046E+23	1,263553E+23	2,785599E+23
-184	7,610170E+22	7,610078E+22	6,317770E+22	6,317783E+22	1,522025E+23	1,263555E+23	2,785580E+23
-183	7,609897E+22	7,610082E+22	6,317830E+22	6,317799E+22	1,521998E+23	1,263563E+23	2,785561E+23
-182	7,610207E+22	7,610278E+22	6,317817E+22	6,317902E+22	1,522049E+23	1,263572E+23	2,785620E+23
-181	7,610083E+22	7,609963E+22	6,317798E+22	6,317735E+22	1,522005E+23	1,263553E+23	2,785558E+23
-180	7,610050E+22	7,610133E+22	6,317793E+22	6,317744E+22	1,522018E+23	1,263554E+23	2,785572E+23
-179	7,610313E+22	7,610188E+22	6,317710E+22	6,317774E+22	1,522050E+23	1,263548E+23	2,785599E+23
-178	7,609992E+22	7,609989E+22	6,317705E+22	6,317608E+22	1,521998E+23	1,263531E+23	2,785529E+23
-177	7,610054E+22	7,610298E+22	6,317667E+22	6,317666E+22	1,522035E+23	1,263533E+23	2,785568E+23
-176	7,610169E+22	7,610099E+22	6,317599E+22	6,317601E+22	1,522027E+23	1,263520E+23	2,785547E+23
-175	7,609895E+22	7,609967E+22	6,317642E+22	6,317511E+22	1,521986E+23	1,263515E+23	2,785501E+23
-174	7,610151E+22	7,610188E+22	6,317619E+22	6,317621E+22	1,522034E+23	1,263524E+23	2,785558E+23
-173	7,610089E+22	7,609931E+22	6,317562E+22	6,317529E+22	1,522002E+23	1,263509E+23	2,785511E+23
-172	7,609910E+22	7,610074E+22	6,317570E+22	6,317593E+22	1,521998E+23	1,263516E+23	2,785515E+23
-171	7,610198E+22	7,610199E+22	6,317558E+22	6,317716E+22	1,522040E+23	1,263527E+23	2,785567E+23
-170	7,610016E+22	7,609929E+22	6,317648E+22	6,317573E+22	1,521994E+23	1,263522E+23	2,785517E+23
-169	7,610035E+22	7,610193E+22	6,317751E+22	6,317667E+22	1,522023E+23	1,263542E+23	2,785565E+23
-168	7,610282E+22	7,610121E+22	6,317753E+22	6,317751E+22	1,522040E+23	1,263550E+23	2,785591E+23
-167	7,609973E+22	7,609987E+22	6,317862E+22	6,317747E+22	1,521996E+23	1,263561E+23	2,785557E+23
-166	7,610081E+22	7,610304E+22	6,317912E+22	6,317952E+22	1,522038E+23	1,263586E+23	2,785625E+23
-165	7,610128E+22	7,610088E+22	6,317886E+22	6,317914E+22	1,522022E+23	1,263580E+23	2,785602E+23
-164	7,609914E+22	7,610081E+22	6,317946E+22	6,317910E+22	1,521999E+23	1,263586E+23	2,785585E+23
-163	7,610236E+22	7,610216E+22	6,317930E+22	6,318008E+22	1,522045E+23	1,263594E+23	2,785639E+23
-162	7,610167E+22	7,609922E+22	6,317922E+22	6,317814E+22	1,522009E+23	1,263574E+23	2,785582E+23
-161	7,610022E+22	7,610179E+22	6,317900E+22	6,317839E+22	1,522020E+23	1,263574E+23	2,785594E+23
-160	7,610279E+22	7,610218E+22	6,317761E+22	6,317885E+22	1,522050E+23	1,263565E+23	2,785614E+23
-159	7,609979E+22	7,609988E+22	6,317781E+22	6,317705E+22	1,521997E+23	1,263549E+23	2,785545E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-158	7,60997E+22	7,610244E+22	6,317810E+22	6,317753E+22	1,522024E+23	1,263556E+23	2,785580E+23
-157	7,610181E+22	7,610054E+22	6,317709E+22	6,317656E+22	1,522023E+23	1,263537E+23	2,785560E+23
-156	7,609917E+22	7,609959E+22	6,317725E+22	6,317620E+22	1,521988E+23	1,263535E+23	2,785522E+23
-155	7,610120E+22	7,610177E+22	6,317689E+22	6,317778E+22	1,522030E+23	1,263547E+23	2,785576E+23
-154	7,610102E+22	7,609941E+22	6,317662E+22	6,317652E+22	1,522004E+23	1,263531E+23	2,785536E+23
-153	7,609877E+22	7,610118E+22	6,317713E+22	6,317688E+22	1,521999E+23	1,263540E+23	2,785539E+23
-152	7,610223E+22	7,610185E+22	6,317679E+22	6,317805E+22	1,522041E+23	1,263548E+23	2,785589E+23
-151	7,610069E+22	7,609913E+22	6,317797E+22	6,317682E+22	1,521998E+23	1,263548E+23	2,785546E+23
-150	7,609999E+22	7,610183E+22	6,317933E+22	6,317824E+22	1,522018E+23	1,263576E+23	2,785594E+23
-149	7,610233E+22	7,610153E+22	6,317870E+22	6,317912E+22	1,522039E+23	1,263578E+23	2,785617E+23
-148	7,609924E+22	7,610034E+22	6,317960E+22	6,317937E+22	1,521996E+23	1,263590E+23	2,785586E+23
-147	7,610042E+22	7,610252E+22	6,318025E+22	6,318114E+22	1,522029E+23	1,263614E+23	2,785643E+23
-146	7,610195E+22	7,610011E+22	6,318028E+22	6,317998E+22	1,522021E+23	1,263603E+23	2,785623E+23
-145	7,609965E+22	7,610066E+22	6,318083E+22	6,317969E+22	1,522003E+23	1,263605E+23	2,785608E+23
-144	7,610291E+22	7,610193E+22	6,317990E+22	6,318088E+22	1,522048E+23	1,263608E+23	2,785656E+23
-143	7,610175E+22	7,609973E+22	6,317985E+22	6,317917E+22	1,522015E+23	1,263590E+23	2,785605E+23
-142	7,609936E+22	7,610225E+22	6,318014E+22	6,317950E+22	1,522016E+23	1,263596E+23	2,785612E+23
-141	7,610213E+22	7,610235E+22	6,317869E+22	6,317950E+22	1,522045E+23	1,263582E+23	2,785627E+23
-140	7,609964E+22	7,609987E+22	6,317902E+22	6,317799E+22	1,521995E+23	1,263570E+23	2,785565E+23
-139	7,609983E+22	7,610152E+22	6,317934E+22	6,317874E+22	1,522014E+23	1,263581E+23	2,785594E+23
-138	7,610220E+22	7,609989E+22	6,317827E+22	6,317777E+22	1,522021E+23	1,263560E+23	2,785581E+23
-137	7,609886E+22	7,609993E+22	6,317808E+22	6,317752E+22	1,521988E+23	1,263556E+23	2,785544E+23
-136	7,610111E+22	7,610178E+22	6,317724E+22	6,317913E+22	1,522029E+23	1,263564E+23	2,785593E+23
-135	7,610134E+22	7,609948E+22	6,317749E+22	6,317751E+22	1,522008E+23	1,263550E+23	2,785558E+23
-134	7,609872E+22	7,610101E+22	6,317880E+22	6,317769E+22	1,521997E+23	1,263565E+23	2,785562E+23
-133	7,610241E+22	7,610188E+22	6,317828E+22	6,317872E+22	1,522043E+23	1,263570E+23	2,785613E+23
-132	7,610070E+22	7,609961E+22	6,317931E+22	6,317828E+22	1,522003E+23	1,263576E+23	2,785579E+23
-131	7,609921E+22	7,610186E+22	6,318070E+22	6,318023E+22	1,522011E+23	1,263609E+23	2,785620E+23
-130	7,610213E+22	7,610145E+22	6,318022E+22	6,318077E+22	1,522036E+23	1,263610E+23	2,785646E+23
-129	7,609897E+22	7,610028E+22	6,318116E+22	6,318058E+22	1,521992E+23	1,263617E+23	2,785610E+23
-128	7,610094E+22	7,610182E+22	6,318129E+22	6,318222E+22	1,522028E+23	1,263635E+23	2,785663E+23
-127	7,610290E+22	7,609968E+22	6,318127E+22	6,318087E+22	1,522026E+23	1,263621E+23	2,785647E+23
-126	7,609955E+22	7,610067E+22	6,318200E+22	6,318080E+22	1,522002E+23	1,263628E+23	2,785630E+23
-125	7,610246E+22	7,610262E+22	6,318055E+22	6,318183E+22	1,522051E+23	1,263624E+23	2,785675E+23
-124	7,610121E+22	7,610049E+22	6,318056E+22	6,318035E+22	1,522017E+23	1,263609E+23	2,785626E+23
-123	7,609865E+22	7,610182E+22	6,318141E+22	6,318058E+22	1,522005E+23	1,263620E+23	2,785625E+23
-122	7,610233E+22	7,610160E+22	6,318014E+22	6,318013E+22	1,522039E+23	1,263603E+23	2,785642E+23
-121	7,609966E+22	7,609951E+22	6,318033E+22	6,317875E+22	1,521992E+23	1,263591E+23	2,785583E+23
-120	7,610006E+22	7,610101E+22	6,317983E+22	6,318001E+22	1,522011E+23	1,263598E+23	2,785609E+23
-119	7,610231E+22	7,610005E+22	6,317876E+22	6,317911E+22	1,522024E+23	1,263579E+23	2,785602E+23
-118	7,609836E+22	7,610028E+22	6,317914E+22	6,317876E+22	1,521986E+23	1,263579E+23	2,785565E+23
-117	7,610100E+22	7,610208E+22	6,317832E+22	6,317976E+22	1,522031E+23	1,263581E+23	2,785611E+23
-116	7,610161E+22	7,609984E+22	6,317886E+22	6,317843E+22	1,522014E+23	1,263573E+23	2,785587E+23
-115	7,609869E+22	7,610052E+22	6,318059E+22	6,317901E+22	1,521992E+23	1,263596E+23	2,785588E+23
-114	7,610239E+22	7,610168E+22	6,318000E+22	6,318020E+22	1,522041E+23	1,263602E+23	2,785643E+23
-113	7,610007E+22	7,610006E+22	6,318078E+22	6,318005E+22	1,522001E+23	1,263608E+23	2,785609E+23
-112	7,609900E+22	7,610136E+22	6,318151E+22	6,318201E+22	1,522004E+23	1,263635E+23	2,785639E+23
-111	7,610244E+22	7,610090E+22	6,318133E+22	6,318200E+22	1,522033E+23	1,263633E+23	2,785667E+23
-110	7,609926E+22	7,609985E+22	6,318254E+22	6,318150E+22	1,521991E+23	1,263640E+23	2,785631E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-109	7,610140E+22	7,610175E+22	6,318218E+22	6,318281E+22	1,522031E+23	1,263650E+23	2,785681E+23
-108	7,610305E+22	7,610054E+22	6,318201E+22	6,318201E+22	1,522036E+23	1,263640E+23	2,785676E+23
-107	7,609886E+22	7,610106E+22	6,318309E+22	6,318219E+22	1,521999E+23	1,263653E+23	2,785652E+23
-106	7,610196E+22	7,610285E+22	6,318198E+22	6,318280E+22	1,522048E+23	1,263648E+23	2,785696E+23
-105	7,610064E+22	7,610064E+22	6,318220E+22	6,318115E+22	1,522013E+23	1,263634E+23	2,785646E+23
-104	7,609875E+22	7,610085E+22	6,318249E+22	6,318161E+22	1,521996E+23	1,263641E+23	2,785637E+23
-103	7,610279E+22	7,610083E+22	6,318118E+22	6,318124E+22	1,522036E+23	1,263624E+23	2,785660E+23
-102	7,609948E+22	7,609928E+22	6,318121E+22	6,318015E+22	1,521988E+23	1,263614E+23	2,785601E+23
-101	7,609982E+22	7,610133E+22	6,318010E+22	6,318117E+22	1,522011E+23	1,263613E+23	2,785624E+23
-100	7,610229E+22	7,610070E+22	6,317924E+22	6,318025E+22	1,522030E+23	1,263595E+23	2,785625E+23
-99	7,609824E+22	7,609999E+22	6,318050E+22	6,317963E+22	1,521982E+23	1,263601E+23	2,785584E+23
-98	7,610146E+22	7,610182E+22	6,318006E+22	6,318024E+22	1,522033E+23	1,263603E+23	2,785636E+23
-97	7,610161E+22	7,609999E+22	6,318063E+22	6,317927E+22	1,522016E+23	1,263599E+23	2,785615E+23
-96	7,609851E+22	7,610027E+22	6,318171E+22	6,318071E+22	1,521988E+23	1,263624E+23	2,785612E+23
-95	7,610208E+22	7,610171E+22	6,318111E+22	6,318196E+22	1,522038E+23	1,263631E+23	2,785669E+23
-94	7,609937E+22	7,609996E+22	6,318221E+22	6,318175E+22	1,521993E+23	1,263640E+23	2,785633E+23
-93	7,609899E+22	7,610116E+22	6,318259E+22	6,318310E+22	1,522001E+23	1,263657E+23	2,785658E+23
-92	7,610303E+22	7,610095E+22	6,318237E+22	6,318313E+22	1,522040E+23	1,263655E+23	2,785695E+23
-91	7,609953E+22	7,609947E+22	6,318395E+22	6,318274E+22	1,521990E+23	1,263667E+23	2,785657E+23
-90	7,610152E+22	7,610204E+22	6,318340E+22	6,318388E+22	1,522036E+23	1,263673E+23	2,785708E+23
-89	7,610238E+22	7,610142E+22	6,318323E+22	6,318316E+22	1,522038E+23	1,263664E+23	2,785702E+23
-88	7,609848E+22	7,610078E+22	6,318402E+22	6,318347E+22	1,521993E+23	1,263675E+23	2,785668E+23
-87	7,610196E+22	7,610221E+22	6,318329E+22	6,318360E+22	1,522042E+23	1,263669E+23	2,785711E+23
-86	7,610058E+22	7,609995E+22	6,318364E+22	6,318204E+22	1,522005E+23	1,263657E+23	2,785662E+23
-85	7,609897E+22	7,610038E+22	6,318313E+22	6,318243E+22	1,521993E+23	1,263656E+23	2,785649E+23
-84	7,610288E+22	7,610128E+22	6,318152E+22	6,318257E+22	1,522042E+23	1,263641E+23	2,785682E+23
-83	7,609913E+22	7,609942E+22	6,318198E+22	6,318149E+22	1,521985E+23	1,263635E+23	2,785620E+23
-82	7,609978E+22	7,610155E+22	6,318120E+22	6,318187E+22	1,522013E+23	1,263631E+23	2,785644E+23
-81	7,610220E+22	7,610118E+22	6,318082E+22	6,318078E+22	1,522034E+23	1,263616E+23	2,785650E+23
-80	7,609861E+22	7,609933E+22	6,318180E+22	6,318059E+22	1,521979E+23	1,263624E+23	2,785603E+23
-79	7,610156E+22	7,610136E+22	6,318161E+22	6,318140E+22	1,522029E+23	1,263630E+23	2,785659E+23
-78	7,610094E+22	7,610011E+22	6,318205E+22	6,318110E+22	1,522011E+23	1,263632E+23	2,785642E+23
-77	7,609788E+22	7,610032E+22	6,318243E+22	6,318242E+22	1,521982E+23	1,263649E+23	2,785630E+23
-76	7,610192E+22	7,610190E+22	6,318193E+22	6,318363E+22	1,522038E+23	1,263656E+23	2,785694E+23
-75	7,609954E+22	7,609927E+22	6,318360E+22	6,318299E+22	1,521988E+23	1,263666E+23	2,785654E+23
-74	7,609977E+22	7,610081E+22	6,318399E+22	6,318375E+22	1,522006E+23	1,263677E+23	2,785683E+23
-73	7,610334E+22	7,610147E+22	6,318381E+22	6,318391E+22	1,522048E+23	1,263677E+23	2,785725E+23
-72	7,609956E+22	7,609962E+22	6,318490E+22	6,318412E+22	1,521992E+23	1,263690E+23	2,785682E+23
-71	7,610115E+22	7,610238E+22	6,318473E+22	6,318507E+22	1,522035E+23	1,263698E+23	2,785733E+23
-70	7,610161E+22	7,610156E+22	6,318487E+22	6,318441E+22	1,522032E+23	1,263693E+23	2,785724E+23
-69	7,609824E+22	7,610037E+22	6,318519E+22	6,318438E+22	1,521986E+23	1,263696E+23	2,785682E+23
-68	7,610223E+22	7,610191E+22	6,318422E+22	6,318476E+22	1,522041E+23	1,263690E+23	2,785731E+23
-67	7,610062E+22	7,609921E+22	6,318472E+22	6,318345E+22	1,521998E+23	1,263682E+23	2,785680E+23
-66	7,609910E+22	7,610049E+22	6,318374E+22	6,318359E+22	1,521996E+23	1,263673E+23	2,785669E+23
-65	7,610256E+22	7,610193E+22	6,318221E+22	6,318349E+22	1,522045E+23	1,263657E+23	2,785702E+23
-64	7,609919E+22	7,609913E+22	6,318264E+22	6,318240E+22	1,521983E+23	1,263650E+23	2,785634E+23
-63	7,610013E+22	7,610119E+22	6,318249E+22	6,318220E+22	1,522013E+23	1,263647E+23	2,785660E+23
-62	7,610210E+22	7,610096E+22	6,318240E+22	6,318152E+22	1,522031E+23	1,263639E+23	2,785670E+23
-61	7,609847E+22	7,609925E+22	6,318283E+22	6,318172E+22	1,521977E+23	1,263645E+23	2,785623E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-60	7,610112E+22	7,610188E+22	6,318240E+22	6,318318E+22	1,522030E+23	1,263656E+23	2,785686E+23
-59	7,610023E+22	7,609996E+22	6,318339E+22	6,318302E+22	1,522002E+23	1,263664E+23	2,785666E+23
-58	7,609786E+22	7,610019E+22	6,318375E+22	6,318364E+22	1,521981E+23	1,263674E+23	2,785654E+23
-57	7,610214E+22	7,610193E+22	6,318354E+22	6,318450E+22	1,522041E+23	1,263680E+23	2,785721E+23
-56	7,610036E+22	7,609858E+22	6,318482E+22	6,318415E+22	1,521989E+23	1,263690E+23	2,785679E+23
-55	7,610032E+22	7,610064E+22	6,318538E+22	6,318480E+22	1,522010E+23	1,263702E+23	2,785711E+23
-54	7,610285E+22	7,610207E+22	6,318517E+22	6,318545E+22	1,522049E+23	1,263706E+23	2,785755E+23
-53	7,609901E+22	7,609998E+22	6,318576E+22	6,318549E+22	1,521990E+23	1,263712E+23	2,785702E+23
-52	7,610075E+22	7,610261E+22	6,318578E+22	6,318635E+22	1,522034E+23	1,263721E+23	2,785755E+23
-51	7,610149E+22	7,610077E+22	6,318645E+22	6,318556E+22	1,522023E+23	1,263720E+23	2,785743E+23
-50	7,609865E+22	7,609973E+22	6,318633E+22	6,318511E+22	1,521984E+23	1,263714E+23	2,785698E+23
-49	7,610230E+22	7,610210E+22	6,318519E+22	6,318567E+22	1,522044E+23	1,263709E+23	2,785753E+23
-48	7,610073E+22	7,609907E+22	6,318500E+22	6,318477E+22	1,521998E+23	1,263698E+23	2,785696E+23
-47	7,609900E+22	7,610060E+22	6,318448E+22	6,318439E+22	1,521996E+23	1,263689E+23	2,785685E+23
-46	7,610213E+22	7,610226E+22	6,318346E+22	6,318425E+22	1,522044E+23	1,263677E+23	2,785721E+23
-45	7,609923E+22	7,609896E+22	6,318367E+22	6,318295E+22	1,521982E+23	1,263666E+23	2,785648E+23
-44	7,610023E+22	7,610121E+22	6,318367E+22	6,318317E+22	1,522014E+23	1,263668E+23	2,785683E+23
-43	7,610177E+22	7,610055E+22	6,318390E+22	6,318311E+22	1,522023E+23	1,263670E+23	2,785693E+23
-42	7,609809E+22	7,609936E+22	6,318385E+22	6,318329E+22	1,521975E+23	1,263671E+23	2,785646E+23
-41	7,610061E+22	7,610222E+22	6,318358E+22	6,318463E+22	1,522028E+23	1,263682E+23	2,785710E+23
-40	7,610047E+22	7,609920E+22	6,318437E+22	6,318444E+22	1,521997E+23	1,263688E+23	2,785685E+23
-39	7,609864E+22	7,609955E+22	6,318516E+22	6,318436E+22	1,521982E+23	1,263695E+23	2,785677E+23
-38	7,610253E+22	7,610187E+22	6,318507E+22	6,318547E+22	1,522044E+23	1,263705E+23	2,785749E+23
-37	7,610053E+22	7,609893E+22	6,318577E+22	6,318530E+22	1,521995E+23	1,263711E+23	2,785705E+23
-36	7,610001E+22	7,610164E+22	6,318631E+22	6,318633E+22	1,522017E+23	1,263726E+23	2,785743E+23
-35	7,610204E+22	7,610222E+22	6,318681E+22	6,318711E+22	1,522043E+23	1,263739E+23	2,785782E+23
-34	7,609870E+22	7,610002E+22	6,318732E+22	6,318661E+22	1,521987E+23	1,263739E+23	2,785727E+23
-33	7,610064E+22	7,610240E+22	6,318738E+22	6,318722E+22	1,522030E+23	1,263746E+23	2,785776E+23
-32	7,610187E+22	7,609968E+22	6,318744E+22	6,318689E+22	1,522015E+23	1,263743E+23	2,785759E+23
-31	7,609905E+22	7,609927E+22	6,318712E+22	6,318618E+22	1,521983E+23	1,263733E+23	2,785716E+23
-30	7,610188E+22	7,610238E+22	6,318581E+22	6,318697E+22	1,522043E+23	1,263728E+23	2,785770E+23
-29	7,610051E+22	7,609930E+22	6,318525E+22	6,318565E+22	1,521998E+23	1,263709E+23	2,785707E+23
-28	7,609908E+22	7,610087E+22	6,318515E+22	6,318497E+22	1,522000E+23	1,263701E+23	2,785701E+23
-27	7,610213E+22	7,610177E+22	6,318500E+22	6,318486E+22	1,522039E+23	1,263699E+23	2,785738E+23
-26	7,609942E+22	7,609887E+22	6,318499E+22	6,318358E+22	1,521983E+23	1,263686E+23	2,785669E+23
-25	7,609980E+22	7,610160E+22	6,318505E+22	6,318430E+22	1,522014E+23	1,263693E+23	2,785707E+23
-24	7,610136E+22	7,610029E+22	6,318482E+22	6,318497E+22	1,522016E+23	1,263698E+23	2,785714E+23
-23	7,609796E+22	7,609908E+22	6,318507E+22	6,318464E+22	1,521970E+23	1,263697E+23	2,785668E+23
-22	7,610046E+22	7,610207E+22	6,318507E+22	6,318593E+22	1,522025E+23	1,263710E+23	2,785735E+23
-21	7,610101E+22	7,609887E+22	6,318536E+22	6,318545E+22	1,521999E+23	1,263708E+23	2,785707E+23
-20	7,609923E+22	7,609975E+22	6,318623E+22	6,318557E+22	1,521990E+23	1,263718E+23	2,785708E+23
-19	7,610241E+22	7,610204E+22	6,318661E+22	6,318712E+22	1,522045E+23	1,263737E+23	2,785782E+23
-18	7,610011E+22	7,609961E+22	6,318693E+22	6,318675E+22	1,521997E+23	1,263737E+23	2,785734E+23
-17	7,609928E+22	7,610223E+22	6,318786E+22	6,318760E+22	1,522015E+23	1,263755E+23	2,785770E+23
-16	7,610196E+22	7,610141E+22	6,318811E+22	6,318843E+22	1,522034E+23	1,263765E+23	2,785799E+23
-15	7,609913E+22	7,609900E+22	6,318877E+22	6,318737E+22	1,521981E+23	1,263761E+23	2,785743E+23
-14	7,610074E+22	7,610197E+22	6,318863E+22	6,318830E+22	1,522027E+23	1,263769E+23	2,785796E+23
-13	7,610199E+22	7,609963E+22	6,318773E+22	6,318802E+22	1,522016E+23	1,263757E+23	2,785774E+23
-12	7,609898E+22	7,609996E+22	6,318738E+22	6,318734E+22	1,521989E+23	1,263747E+23	2,785737E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-11	7,610147E+22	7,610250E+22	6,318693E+22	6,318799E+22	1,522040E+23	1,263749E+23	2,785789E+23
-10	7,610042E+22	7,609959E+22	6,318643E+22	6,318605E+22	1,522000E+23	1,263725E+23	2,785725E+23
-9	7,609903E+22	7,610103E+22	6,318678E+22	6,318540E+22	1,522001E+23	1,263722E+23	2,785722E+23
-8	7,610217E+22	7,610100E+22	6,318627E+22	6,318610E+22	1,522032E+23	1,263724E+23	2,785755E+23
-7	7,609932E+22	7,609853E+22	6,318622E+22	6,318498E+22	1,521978E+23	1,263712E+23	2,785690E+23
-6	7,609904E+22	7,610171E+22	6,318611E+22	6,318610E+22	1,522007E+23	1,263722E+23	2,785730E+23
-5	7,610108E+22	7,610005E+22	6,318540E+22	6,318645E+22	1,522011E+23	1,263719E+23	2,785730E+23
-4	7,609841E+22	7,609901E+22	6,318584E+22	6,318571E+22	1,521974E+23	1,263715E+23	2,785690E+23
-3	7,610090E+22	7,610148E+22	6,318656E+22	6,318696E+22	1,522024E+23	1,263735E+23	2,785759E+23
-2	7,610146E+22	7,609925E+22	6,318656E+22	6,318630E+22	1,522007E+23	1,263729E+23	2,785736E+23
-1	7,609907E+22	7,610062E+22	6,318764E+22	6,318666E+22	1,521997E+23	1,263743E+23	2,785740E+23
1	7,610184E+22	7,610211E+22	6,318790E+22	6,318881E+22	1,522040E+23	1,263767E+23	2,785807E+23
2	7,609979E+22	7,609953E+22	6,318867E+22	6,318800E+22	1,521993E+23	1,263767E+23	2,785760E+23
3	7,609881E+22	7,610188E+22	6,318969E+22	6,318890E+22	1,522007E+23	1,263786E+23	2,785793E+23
4	7,610216E+22	7,610063E+22	6,318918E+22	6,318962E+22	1,522028E+23	1,263788E+23	2,785816E+23
5	7,609966E+22	7,609873E+22	6,318946E+22	6,318866E+22	1,521984E+23	1,263781E+23	2,785765E+23
6	7,610064E+22	7,610176E+22	6,318954E+22	6,318985E+22	1,522024E+23	1,263794E+23	2,785818E+23
7	7,610175E+22	7,610033E+22	6,318819E+22	6,318904E+22	1,522021E+23	1,263772E+23	2,785793E+23
8	7,609872E+22	7,610058E+22	6,318842E+22	6,318791E+22	1,521993E+23	1,263763E+23	2,785756E+23
9	7,610153E+22	7,610194E+22	6,318812E+22	6,318865E+22	1,522035E+23	1,263768E+23	2,785802E+23
10	7,610079E+22	7,609905E+22	6,318796E+22	6,318645E+22	1,521998E+23	1,263744E+23	2,785743E+23
11	7,609868E+22	7,610093E+22	6,318824E+22	6,318653E+22	1,521996E+23	1,263748E+23	2,785744E+23
12	7,610170E+22	7,610099E+22	6,318685E+22	6,318764E+22	1,522027E+23	1,263745E+23	2,785772E+23
13	7,609895E+22	7,609886E+22	6,318677E+22	6,318664E+22	1,521978E+23	1,263734E+23	2,785712E+23
14	7,609873E+22	7,610137E+22	6,318742E+22	6,318766E+22	1,522001E+23	1,263751E+23	2,785752E+23
15	7,610133E+22	7,610003E+22	6,318648E+22	6,318724E+22	1,522014E+23	1,263737E+23	2,785751E+23
16	7,609887E+22	7,609913E+22	6,318735E+22	6,318638E+22	1,521980E+23	1,263737E+23	2,785717E+23
17	7,610126E+22	7,610107E+22	6,318783E+22	6,318824E+22	1,522023E+23	1,263761E+23	2,785784E+23
18	7,610141E+22	7,609941E+22	6,318797E+22	6,318759E+22	1,522008E+23	1,263756E+23	2,785764E+23
19	7,609823E+22	7,610110E+22	6,318919E+22	6,318834E+22	1,521993E+23	1,263775E+23	2,785769E+23
20	7,610136E+22	7,610185E+22	6,318900E+22	6,319022E+22	1,522032E+23	1,263792E+23	2,785824E+23
21	7,610001E+22	7,609916E+22	6,318988E+22	6,318918E+22	1,521992E+23	1,263791E+23	2,785782E+23
22	7,609904E+22	7,610099E+22	6,319125E+22	6,319020E+22	1,522000E+23	1,263815E+23	2,785815E+23
23	7,610235E+22	7,610073E+22	6,319004E+22	6,319066E+22	1,522031E+23	1,263807E+23	2,785838E+23
24	7,609962E+22	7,609950E+22	6,319032E+22	6,318974E+22	1,521991E+23	1,263801E+23	2,785792E+23
25	7,610041E+22	7,610178E+22	6,319030E+22	6,319115E+22	1,522022E+23	1,263815E+23	2,785836E+23
26	7,610174E+22	7,610043E+22	6,318951E+22	6,318966E+22	1,522022E+23	1,263792E+23	2,785813E+23
27	7,609847E+22	7,610060E+22	6,319005E+22	6,318861E+22	1,521991E+23	1,263787E+23	2,785777E+23
28	7,610148E+22	7,610144E+22	6,318920E+22	6,318950E+22	1,522029E+23	1,263787E+23	2,785816E+23
29	7,610089E+22	7,609897E+22	6,318884E+22	6,318777E+22	1,521999E+23	1,263766E+23	2,785765E+23
30	7,609809E+22	7,610056E+22	6,318928E+22	6,318837E+22	1,521986E+23	1,263776E+23	2,785763E+23
31	7,610114E+22	7,610128E+22	6,318742E+22	6,318900E+22	1,522024E+23	1,263764E+23	2,785788E+23
32	7,609902E+22	7,609893E+22	6,318771E+22	6,318747E+22	1,521979E+23	1,263752E+23	2,785731E+23
33	7,609919E+22	7,610041E+22	6,318846E+22	6,318849E+22	1,521996E+23	1,263770E+23	2,785766E+23
34	7,610212E+22	7,609967E+22	6,318788E+22	6,318772E+22	1,522018E+23	1,263756E+23	2,785774E+23
35	7,609885E+22	7,609947E+22	6,318886E+22	6,318745E+22	1,521983E+23	1,263763E+23	2,785746E+23
36	7,610079E+22	7,610147E+22	6,318882E+22	6,318967E+22	1,522023E+23	1,263785E+23	2,785807E+23
37	7,610101E+22	7,609998E+22	6,318916E+22	6,318918E+22	1,522010E+23	1,263783E+23	2,785793E+23
38	7,609763E+22	7,610074E+22	6,319109E+22	6,319006E+22	1,521984E+23	1,263811E+23	2,785795E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
39	7,610119E+22	7,610174E+22	6,319046E+22	6,319138E+22	1,522029E+23	1,263818E+23	2,785848E+23
40	7,610038E+22	7,609896E+22	6,319137E+22	6,319034E+22	1,521993E+23	1,263817E+23	2,785811E+23
41	7,609933E+22	7,610032E+22	6,319225E+22	6,319186E+22	1,521997E+23	1,263841E+23	2,785838E+23
42	7,610249E+22	7,610088E+22	6,319095E+22	6,319193E+22	1,522034E+23	1,263829E+23	2,785862E+23
43	7,609918E+22	7,610005E+22	6,319139E+22	6,319093E+22	1,521992E+23	1,263823E+23	2,785816E+23
44	7,610032E+22	7,610167E+22	6,319110E+22	6,319186E+22	1,522020E+23	1,263830E+23	2,785849E+23
45	7,610208E+22	7,610030E+22	6,319057E+22	6,319018E+22	1,522024E+23	1,263808E+23	2,785831E+23
46	7,609847E+22	7,610003E+22	6,319158E+22	6,318963E+22	1,521985E+23	1,263812E+23	2,785797E+23
47	7,610109E+22	7,610162E+22	6,318999E+22	6,319044E+22	1,522027E+23	1,263804E+23	2,785831E+23
48	7,610041E+22	7,609941E+22	6,318973E+22	6,318903E+22	1,521998E+23	1,263788E+23	2,785786E+23
49	7,609774E+22	7,610007E+22	6,319007E+22	6,318987E+22	1,521978E+23	1,263799E+23	2,785777E+23
50	7,610133E+22	7,610083E+22	6,318864E+22	6,318975E+22	1,522022E+23	1,263784E+23	2,785805E+23
51	7,609924E+22	7,609880E+22	6,318917E+22	6,318821E+22	1,521980E+23	1,263774E+23	2,785754E+23
52	7,609966E+22	7,610003E+22	6,318937E+22	6,318933E+22	1,521997E+23	1,263787E+23	2,785784E+23
53	7,610239E+22	7,610005E+22	6,318885E+22	6,318898E+22	1,522024E+23	1,263778E+23	2,785803E+23
54	7,609823E+22	7,609974E+22	6,319030E+22	6,318936E+22	1,521980E+23	1,263797E+23	2,785776E+23
55	7,609987E+22	7,610205E+22	6,319001E+22	6,319110E+22	1,522019E+23	1,263811E+23	2,785830E+23
56	7,610080E+22	7,610006E+22	6,319083E+22	6,319043E+22	1,522009E+23	1,263813E+23	2,785821E+23
57	7,609790E+22	7,609958E+22	6,319259E+22	6,319146E+22	1,521975E+23	1,263841E+23	2,785815E+23
58	7,610181E+22	7,610110E+22	6,319192E+22	6,319242E+22	1,522029E+23	1,263843E+23	2,785873E+23
59	7,610049E+22	7,609921E+22	6,319255E+22	6,319170E+22	1,521997E+23	1,263842E+23	2,785839E+23
60	7,609923E+22	7,610058E+22	6,319274E+22	6,319322E+22	1,521998E+23	1,263860E+23	2,785858E+23
61	7,610254E+22	7,610149E+22	6,319179E+22	6,319299E+22	1,522040E+23	1,263848E+23	2,785888E+23
62	7,609894E+22	7,609989E+22	6,319297E+22	6,319194E+22	1,521988E+23	1,263849E+23	2,785837E+23
63	7,610005E+22	7,610176E+22	6,319239E+22	6,319231E+22	1,522018E+23	1,263847E+23	2,785865E+23
64	7,610222E+22	7,610025E+22	6,319192E+22	6,319097E+22	1,522025E+23	1,263829E+23	2,785854E+23
65	7,609818E+22	7,609922E+22	6,319250E+22	6,319119E+22	1,521974E+23	1,263837E+23	2,785811E+23
66	7,610073E+22	7,610150E+22	6,319080E+22	6,319176E+22	1,522022E+23	1,263826E+23	2,785848E+23
67	7,609998E+22	7,609944E+22	6,319062E+22	6,319025E+22	1,521994E+23	1,263809E+23	2,785803E+23
68	7,609798E+22	7,609949E+22	6,319060E+22	6,319064E+22	1,521975E+23	1,263812E+23	2,785787E+23
69	7,610213E+22	7,610062E+22	6,318949E+22	6,319027E+22	1,522027E+23	1,263798E+23	2,785825E+23
70	7,609949E+22	7,609864E+22	6,319056E+22	6,318925E+22	1,521981E+23	1,263798E+23	2,785779E+23
71	7,609924E+22	7,610088E+22	6,319036E+22	6,319030E+22	1,522001E+23	1,263807E+23	2,785808E+23
72	7,610188E+22	7,610099E+22	6,319020E+22	6,319041E+22	1,522029E+23	1,263806E+23	2,785835E+23
73	7,609763E+22	7,609941E+22	6,319189E+22	6,319119E+22	1,521970E+23	1,263831E+23	2,785801E+23
74	7,609977E+22	7,610160E+22	6,319187E+22	6,319232E+22	1,522014E+23	1,263842E+23	2,785856E+23
75	7,610088E+22	7,609964E+22	6,319269E+22	6,319178E+22	1,522005E+23	1,263845E+23	2,785850E+23
76	7,609848E+22	7,609883E+22	6,319353E+22	6,319290E+22	1,521973E+23	1,263864E+23	2,785837E+23
77	7,610229E+22	7,610115E+22	6,319266E+22	6,319389E+22	1,522034E+23	1,263866E+23	2,785900E+23
78	7,610024E+22	7,609955E+22	6,319357E+22	6,319340E+22	1,521998E+23	1,263870E+23	2,785868E+23
79	7,609883E+22	7,610123E+22	6,319348E+22	6,319394E+22	1,522001E+23	1,263874E+23	2,785875E+23
80	7,610259E+22	7,610173E+22	6,319315E+22	6,319350E+22	1,522043E+23	1,263866E+23	2,785910E+23
81	7,609905E+22	7,609910E+22	6,319440E+22	6,319280E+22	1,521981E+23	1,263872E+23	2,785853E+23
82	7,610006E+22	7,610133E+22	6,319376E+22	6,319304E+22	1,522014E+23	1,263868E+23	2,785882E+23
83	7,610165E+22	7,610044E+22	6,319308E+22	6,319229E+22	1,522021E+23	1,263854E+23	2,785874E+23
84	7,609781E+22	7,609901E+22	6,319282E+22	6,319263E+22	1,521968E+23	1,263855E+23	2,785823E+23
85	7,610077E+22	7,610144E+22	6,319144E+22	6,319284E+22	1,522022E+23	1,263843E+23	2,785865E+23
86	7,610003E+22	7,609915E+22	6,319181E+22	6,319131E+22	1,521992E+23	1,263831E+23	2,785823E+23
87	7,609814E+22	7,609964E+22	6,319150E+22	6,319106E+22	1,521978E+23	1,263826E+23	2,785803E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
88	7,610252E+22	7,610097E+22	6,319075E+22	6,319112E+22	1,522035E+23	1,263819E+23	2,785854E+23
89	7,609924E+22	7,609852E+22	6,319176E+22	6,319091E+22	1,521978E+23	1,263827E+23	2,785804E+23
90	7,609865E+22	7,610117E+22	6,319177E+22	6,319172E+22	1,521998E+23	1,263835E+23	2,785833E+23
91	7,610126E+22	7,610110E+22	6,319189E+22	6,319187E+22	1,522024E+23	1,263838E+23	2,785861E+23
92	7,609778E+22	7,609849E+22	6,319308E+22	6,319248E+22	1,521963E+23	1,263856E+23	2,785818E+23
93	7,610057E+22	7,610097E+22	6,319315E+22	6,319343E+22	1,522015E+23	1,263866E+23	2,785881E+23
94	7,610124E+22	7,609925E+22	6,319397E+22	6,319331E+22	1,522005E+23	1,263873E+23	2,785878E+23
95	7,609827E+22	7,609955E+22	6,319416E+22	6,319405E+22	1,521978E+23	1,263882E+23	2,785860E+23
96	7,610222E+22	7,610209E+22	6,319365E+22	6,319510E+22	1,522043E+23	1,263887E+23	2,785931E+23
97	7,609990E+22	7,609944E+22	6,319493E+22	6,319466E+22	1,521993E+23	1,263896E+23	2,785889E+23
98	7,609874E+22	7,610118E+22	6,319522E+22	6,319453E+22	1,521999E+23	1,263898E+23	2,785897E+23
99	7,610246E+22	7,610158E+22	6,319493E+22	6,319435E+22	1,522040E+23	1,263893E+23	2,785933E+23
100	7,609908E+22	7,609839E+22	6,319531E+22	6,319412E+22	1,521975E+23	1,263894E+23	2,785869E+23
101	7,609994E+22	7,610123E+22	6,319442E+22	6,319452E+22	1,522012E+23	1,263889E+23	2,785901E+23
102	7,610101E+22	7,610038E+22	6,319384E+22	6,319405E+22	1,522014E+23	1,263879E+23	2,785893E+23
103	7,609749E+22	7,609919E+22	6,319323E+22	6,319337E+22	1,521967E+23	1,263866E+23	2,785833E+23
104	7,610133E+22	7,610137E+22	6,319236E+22	6,319332E+22	1,522027E+23	1,263857E+23	2,785884E+23
105	7,610051E+22	7,609854E+22	6,319295E+22	6,319206E+22	1,521991E+23	1,263850E+23	2,785841E+23
106	7,609841E+22	7,609979E+22	6,319279E+22	6,319165E+22	1,521982E+23	1,263844E+23	2,785826E+23
107	7,610194E+22	7,610169E+22	6,319222E+22	6,319233E+22	1,522036E+23	1,263846E+23	2,785882E+23
108	7,609877E+22	7,609856E+22	6,319281E+22	6,319252E+22	1,521973E+23	1,263853E+23	2,785827E+23
109	7,609844E+22	7,610092E+22	6,319321E+22	6,319309E+22	1,521994E+23	1,263863E+23	2,785857E+23
110	7,610105E+22	7,610056E+22	6,319365E+22	6,319351E+22	1,522016E+23	1,263872E+23	2,785888E+23
111	7,609801E+22	7,609822E+22	6,319409E+22	6,319349E+22	1,521962E+23	1,263876E+23	2,785838E+23
112	7,610109E+22	7,610093E+22	6,319420E+22	6,319481E+22	1,522020E+23	1,263890E+23	2,785910E+23
113	7,610114E+22	7,609928E+22	6,319488E+22	6,319514E+22	1,522004E+23	1,263900E+23	2,785904E+23
114	7,609806E+22	7,610007E+22	6,319526E+22	6,319518E+22	1,521981E+23	1,263904E+23	2,785886E+23
115	7,610184E+22	7,610247E+22	6,319532E+22	6,319600E+22	1,522043E+23	1,263913E+23	2,785956E+23
116	7,610011E+22	7,609887E+22	6,319619E+22	6,319549E+22	1,521990E+23	1,263917E+23	2,785907E+23
117	7,609908E+22	7,610070E+22	6,319662E+22	6,319533E+22	1,521998E+23	1,263920E+23	2,785917E+23
118	7,610208E+22	7,610137E+22	6,319621E+22	6,319590E+22	1,522035E+23	1,263921E+23	2,785956E+23
119	7,609845E+22	7,609877E+22	6,319575E+22	6,319534E+22	1,521972E+23	1,263911E+23	2,785883E+23
120	7,609978E+22	7,610150E+22	6,319512E+22	6,319581E+22	1,522013E+23	1,263909E+23	2,785922E+23
121	7,610090E+22	7,609989E+22	6,319481E+22	6,319523E+22	1,522008E+23	1,263900E+23	2,785908E+23
122	7,609786E+22	7,609902E+22	6,319445E+22	6,319373E+22	1,521969E+23	1,263882E+23	2,785851E+23
123	7,610164E+22	7,610138E+22	6,319386E+22	6,319386E+22	1,522030E+23	1,263877E+23	2,785907E+23
124	7,610072E+22	7,609825E+22	6,319381E+22	6,319318E+22	1,521990E+23	1,263870E+23	2,785860E+23
125	7,609819E+22	7,610010E+22	6,319383E+22	6,319302E+22	1,521983E+23	1,263868E+23	2,785851E+23
126	7,610103E+22	7,610181E+22	6,319348E+22	6,319411E+22	1,522028E+23	1,263876E+23	2,785904E+23
127	7,609819E+22	7,609850E+22	6,319382E+22	6,319359E+22	1,521967E+23	1,263874E+23	2,785841E+23
128	7,609887E+22	7,610050E+22	6,319452E+22	6,319420E+22	1,521994E+23	1,263887E+23	2,785881E+23
129	7,610135E+22	7,609969E+22	6,319493E+22	6,319495E+22	1,522010E+23	1,263899E+23	2,785909E+23
130	7,609831E+22	7,609840E+22	6,319522E+22	6,319460E+22	1,521967E+23	1,263898E+23	2,785865E+23
131	7,610086E+22	7,610169E+22	6,319546E+22	6,319614E+22	1,522026E+23	1,263916E+23	2,785942E+23
132	7,610099E+22	7,609949E+22	6,319588E+22	6,319652E+22	1,522005E+23	1,263924E+23	2,785929E+23
133	7,609813E+22	7,610018E+22	6,319687E+22	6,319613E+22	1,521983E+23	1,263930E+23	2,785913E+23
134	7,610152E+22	7,610225E+22	6,319724E+22	6,319724E+22	1,522038E+23	1,263945E+23	2,785982E+23
135	7,609997E+22	7,609872E+22	6,319746E+22	6,319644E+22	1,521987E+23	1,263939E+23	2,785926E+23
136	7,609916E+22	7,610057E+22	6,319767E+22	6,319685E+22	1,521997E+23	1,263945E+23	2,785943E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
137	7,610151E+22	7,610108E+22	6,319699E+22	6,319781E+22	1,522026E+23	1,263948E+23	2,785974E+23
138	7,609829E+22	7,609885E+22	6,319644E+22	6,319637E+22	1,521971E+23	1,263928E+23	2,785899E+23
139	7,609984E+22	7,610139E+22	6,319628E+22	6,319642E+22	1,522012E+23	1,263927E+23	2,785939E+23
140	7,610159E+22	7,609927E+22	6,319559E+22	6,319573E+22	1,522009E+23	1,263913E+23	2,785922E+23
141	7,609856E+22	7,609877E+22	6,319552E+22	6,319413E+22	1,521973E+23	1,263896E+23	2,785870E+23
142	7,610113E+22	7,610171E+22	6,319509E+22	6,319507E+22	1,522028E+23	1,263902E+23	2,785930E+23
143	7,609990E+22	7,609900E+22	6,319451E+22	6,319427E+22	1,521989E+23	1,263888E+23	2,785877E+23
144	7,609768E+22	7,610030E+22	6,319497E+22	6,319449E+22	1,521980E+23	1,263895E+23	2,785874E+23
145	7,610045E+22	7,610124E+22	6,319498E+22	6,319573E+22	1,522017E+23	1,263907E+23	2,785924E+23
146	7,609843E+22	7,609804E+22	6,319526E+22	6,319456E+22	1,521965E+23	1,263898E+23	2,785863E+23
147	7,609925E+22	7,610013E+22	6,319610E+22	6,319536E+22	1,521994E+23	1,263915E+23	2,785908E+23
148	7,610176E+22	7,609936E+22	6,319570E+22	6,319653E+22	1,522011E+23	1,263922E+23	2,785934E+23
149	7,609844E+22	7,609876E+22	6,319622E+22	6,319599E+22	1,521972E+23	1,263922E+23	2,785894E+23
150	7,610030E+22	7,610210E+22	6,319689E+22	6,319765E+22	1,522024E+23	1,263945E+23	2,785969E+23
151	7,610075E+22	7,609970E+22	6,319714E+22	6,319723E+22	1,522004E+23	1,263944E+23	2,785948E+23
152	7,609854E+22	7,609996E+22	6,319846E+22	6,319710E+22	1,521985E+23	1,263956E+23	2,785941E+23
153	7,610135E+22	7,610163E+22	6,319875E+22	6,319868E+22	1,522030E+23	1,263974E+23	2,786004E+23
154	7,609977E+22	7,609885E+22	6,319859E+22	6,319771E+22	1,521986E+23	1,263963E+23	2,785949E+23
155	7,609876E+22	7,610086E+22	6,319881E+22	6,319826E+22	1,521996E+23	1,263971E+23	2,785967E+23
156	7,610145E+22	7,610067E+22	6,319762E+22	6,319910E+22	1,522021E+23	1,263967E+23	2,785988E+23
157	7,609873E+22	7,609862E+22	6,319750E+22	6,319699E+22	1,521974E+23	1,263945E+23	2,785918E+23
158	7,609997E+22	7,610118E+22	6,319747E+22	6,319716E+22	1,522012E+23	1,263946E+23	2,785958E+23
159	7,610160E+22	7,609938E+22	6,319634E+22	6,319620E+22	1,522010E+23	1,263925E+23	2,785935E+23
160	7,609855E+22	7,609916E+22	6,319638E+22	6,319538E+22	1,521977E+23	1,263918E+23	2,785895E+23
161	7,610008E+22	7,610175E+22	6,319611E+22	6,319679E+22	1,522018E+23	1,263929E+23	2,785947E+23
162	7,609932E+22	7,609909E+22	6,319571E+22	6,319542E+22	1,521984E+23	1,263911E+23	2,785895E+23
163	7,609762E+22	7,609982E+22	6,319659E+22	6,319545E+22	1,521974E+23	1,263920E+23	2,785895E+23
164	7,610101E+22	7,610014E+22	6,319604E+22	6,319681E+22	1,522012E+23	1,263929E+23	2,785940E+23
165	7,609925E+22	7,609763E+22	6,319640E+22	6,319553E+22	1,521969E+23	1,263919E+23	2,785888E+23
166	7,609911E+22	7,610048E+22	6,319719E+22	6,319692E+22	1,521996E+23	1,263941E+23	2,785937E+23
167	7,610137E+22	7,610021E+22	6,319650E+22	6,319769E+22	1,522016E+23	1,263942E+23	2,785958E+23
168	7,609845E+22	7,609929E+22	6,319761E+22	6,319733E+22	1,521977E+23	1,263949E+23	2,785927E+23
169	7,609979E+22	7,610191E+22	6,319881E+22	6,319903E+22	1,522017E+23	1,263978E+23	2,785995E+23
170	7,610087E+22	7,609957E+22	6,319898E+22	6,319820E+22	1,522004E+23	1,263972E+23	2,785976E+23
171	7,609857E+22	7,609961E+22	6,320028E+22	6,319845E+22	1,521982E+23	1,263987E+23	2,785969E+23
172	7,610126E+22	7,610119E+22	6,319955E+22	6,320053E+22	1,522024E+23	1,264001E+23	2,786025E+23
173	7,609978E+22	7,609875E+22	6,319928E+22	6,319915E+22	1,521985E+23	1,263984E+23	2,785970E+23
174	7,609836E+22	7,610077E+22	6,319967E+22	6,319956E+22	1,521991E+23	1,263992E+23	2,785984E+23
175	7,610162E+22	7,610058E+22	6,319819E+22	6,319939E+22	1,522022E+23	1,263976E+23	2,785998E+23
176	7,609948E+22	7,609847E+22	6,319836E+22	6,319743E+22	1,521979E+23	1,263958E+23	2,785937E+23
177	7,609975E+22	7,610107E+22	6,319860E+22	6,319805E+22	1,522008E+23	1,263967E+23	2,785975E+23
178	7,610121E+22	7,610000E+22	6,319731E+22	6,319703E+22	1,522012E+23	1,263943E+23	2,785956E+23
179	7,609787E+22	7,609953E+22	6,319779E+22	6,319659E+22	1,521974E+23	1,263944E+23	2,785918E+23
180	7,609962E+22	7,610124E+22	6,319719E+22	6,319818E+22	1,522009E+23	1,263954E+23	2,785962E+23
181	7,609956E+22	7,609842E+22	6,319717E+22	6,319642E+22	1,521980E+23	1,263936E+23	2,785916E+23
182	7,609778E+22	7,609922E+22	6,319799E+22	6,319676E+22	1,521970E+23	1,263947E+23	2,785918E+23
183	7,610135E+22	7,609994E+22	6,319681E+22	6,319784E+22	1,522013E+23	1,263947E+23	2,785959E+23
184	7,609963E+22	7,609811E+22	6,319713E+22	6,319711E+22	1,521977E+23	1,263942E+23	2,785920E+23
185	7,609851E+22	7,610090E+22	6,319829E+22	6,319862E+22	1,521994E+23	1,263969E+23	2,785963E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
186	7,610111E+22	7,610074E+22	6,319797E+22	6,319867E+22	1,522019E+23	1,263966E+23	2,785985E+23
187	7,609856E+22	7,609923E+22	6,319971E+22	6,319827E+22	1,521978E+23	1,263980E+23	2,785958E+23
188	7,609998E+22	7,610107E+22	6,320031E+22	6,320026E+22	1,522010E+23	1,264006E+23	2,786016E+23
189	7,610112E+22	7,609921E+22	6,320045E+22	6,319953E+22	1,522003E+23	1,264000E+23	2,786003E+23
190	7,609808E+22	7,609970E+22	6,320128E+22	6,320027E+22	1,521978E+23	1,264015E+23	2,785993E+23
191	7,610078E+22	7,610133E+22	6,320003E+22	6,320173E+22	1,522021E+23	1,264018E+23	2,786039E+23
192	7,610005E+22	7,609893E+22	6,320003E+22	6,320025E+22	1,521990E+23	1,264003E+23	2,785993E+23
193	7,609830E+22	7,610047E+22	6,320083E+22	6,320040E+22	1,521988E+23	1,264012E+23	2,786000E+23
194	7,610198E+22	7,610065E+22	6,319942E+22	6,319971E+22	1,522026E+23	1,263991E+23	2,786018E+23
195	7,609962E+22	7,609857E+22	6,319982E+22	6,319819E+22	1,521982E+23	1,263980E+23	2,785962E+23
196	7,609925E+22	7,610096E+22	6,319939E+22	6,319942E+22	1,522002E+23	1,263988E+23	2,785990E+23
197	7,610079E+22	7,610001E+22	6,319837E+22	6,319828E+22	1,522008E+23	1,263966E+23	2,785974E+23
198	7,609729E+22	7,609916E+22	6,319900E+22	6,319796E+22	1,521965E+23	1,263970E+23	2,785934E+23
199	7,609972E+22	7,610059E+22	6,319807E+22	6,319888E+22	1,522003E+23	1,263969E+23	2,785973E+23
200	7,610043E+22	7,609804E+22	6,319801E+22	6,319747E+22	1,521985E+23	1,263955E+23	2,785940E+23
201	7,609775E+22	7,609917E+22	6,319896E+22	6,319818E+22	1,521969E+23	1,263971E+23	2,785941E+23
202	7,610127E+22	7,610079E+22	6,319773E+22	6,319897E+22	1,522021E+23	1,263967E+23	2,785988E+23
203	7,609937E+22	7,609879E+22	6,319871E+22	6,319834E+22	1,521982E+23	1,263970E+23	2,785952E+23
204	7,609824E+22	7,610081E+22	6,319981E+22	6,319992E+22	1,521991E+23	1,263997E+23	2,785988E+23
205	7,610138E+22	7,610037E+22	6,319988E+22	6,319966E+22	1,522018E+23	1,263995E+23	2,786013E+23
206	7,609840E+22	7,609871E+22	6,320154E+22	6,319981E+22	1,521971E+23	1,264014E+23	2,785985E+23
207	7,609983E+22	7,610075E+22	6,320129E+22	6,320168E+22	1,522006E+23	1,264030E+23	2,786036E+23
208	7,610115E+22	7,609933E+22	6,320105E+22	6,320142E+22	1,522005E+23	1,264025E+23	2,786030E+23
209	7,609751E+22	7,609966E+22	6,320208E+22	6,320198E+22	1,521972E+23	1,264041E+23	2,786012E+23
210	7,610094E+22	7,610142E+22	6,320097E+22	6,320234E+22	1,522024E+23	1,264033E+23	2,786057E+23
211	7,610062E+22	7,609881E+22	6,320149E+22	6,320056E+22	1,521994E+23	1,264020E+23	2,786015E+23
212	7,609872E+22	7,610002E+22	6,320184E+22	6,320097E+22	1,521987E+23	1,264028E+23	2,786015E+23
213	7,610213E+22	7,610074E+22	6,320063E+22	6,320044E+22	1,522029E+23	1,264011E+23	2,786039E+23
214	7,609876E+22	7,609900E+22	6,320096E+22	6,319968E+22	1,521978E+23	1,264006E+23	2,785984E+23
215	7,609840E+22	7,610101E+22	6,320017E+22	6,320056E+22	1,521994E+23	1,264007E+23	2,786001E+23
216	7,610071E+22	7,609987E+22	6,319935E+22	6,319964E+22	1,522006E+23	1,263990E+23	2,785996E+23
217	7,609716E+22	7,609854E+22	6,320021E+22	6,319927E+22	1,521957E+23	1,263995E+23	2,785952E+23
218	7,610019E+22	7,610033E+22	6,319915E+22	6,319971E+22	1,522005E+23	1,263989E+23	2,785994E+23
219	7,610087E+22	7,609827E+22	6,319922E+22	6,319866E+22	1,521991E+23	1,263979E+23	2,785970E+23
220	7,609762E+22	7,609930E+22	6,319961E+22	6,319967E+22	1,521969E+23	1,263993E+23	2,785962E+23
221	7,610114E+22	7,610107E+22	6,319905E+22	6,320011E+22	1,522022E+23	1,263992E+23	2,786014E+23
222	7,609902E+22	7,609881E+22	6,320040E+22	6,319956E+22	1,521978E+23	1,264000E+23	2,785978E+23
223	7,609818E+22	7,610026E+22	6,320123E+22	6,320069E+22	1,521984E+23	1,264019E+23	2,786004E+23
224	7,610177E+22	7,610012E+22	6,320118E+22	6,320107E+22	1,522019E+23	1,264023E+23	2,786041E+23
225	7,609800E+22	7,609854E+22	6,320275E+22	6,320164E+22	1,521965E+23	1,264044E+23	2,786009E+23
226	7,609954E+22	7,610115E+22	6,320225E+22	6,320308E+22	1,522007E+23	1,264053E+23	2,786060E+23
227	7,610111E+22	7,609965E+22	6,320236E+22	6,320267E+22	1,522008E+23	1,264050E+23	2,786058E+23
228	7,609761E+22	7,609935E+22	6,320312E+22	6,320301E+22	1,521970E+23	1,264061E+23	2,786031E+23
229	7,610154E+22	7,610113E+22	6,320247E+22	6,320288E+22	1,522027E+23	1,264053E+23	2,786080E+23
230	7,610065E+22	7,609873E+22	6,320294E+22	6,320153E+22	1,521994E+23	1,264045E+23	2,786039E+23
231	7,609839E+22	7,610008E+22	6,320265E+22	6,320194E+22	1,521985E+23	1,264046E+23	2,786030E+23
232	7,610170E+22	7,610119E+22	6,320121E+22	6,320204E+22	1,522029E+23	1,264033E+23	2,786061E+23
233	7,609778E+22	7,609889E+22	6,320195E+22	6,320133E+22	1,521967E+23	1,264033E+23	2,785999E+23
234	7,609829E+22	7,610070E+22	6,320125E+22	6,320135E+22	1,521990E+23	1,264026E+23	2,786016E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
235	7,610122E+22	7,609929E+22	6,320069E+22	6,320034E+22	1,522005E+23	1,264010E+23	2,786015E+23
236	7,609765E+22	7,609794E+22	6,320094E+22	6,320024E+22	1,521956E+23	1,264012E+23	2,785968E+23
237	7,610066E+22	7,610037E+22	6,320004E+22	6,320061E+22	1,522010E+23	1,264007E+23	2,786017E+23
238	7,610035E+22	7,609888E+22	6,320028E+22	6,320000E+22	1,521992E+23	1,264003E+23	2,785995E+23
239	7,609714E+22	7,609960E+22	6,320070E+22	6,320060E+22	1,521967E+23	1,264013E+23	2,785980E+23
240	7,610111E+22	7,610119E+22	6,320049E+22	6,320132E+22	1,522023E+23	1,264018E+23	2,786041E+23
241	7,609868E+22	7,609837E+22	6,320229E+22	6,320105E+22	1,521971E+23	1,264033E+23	2,786004E+23
242	7,609826E+22	7,609996E+22	6,320282E+22	6,320196E+22	1,521982E+23	1,264048E+23	2,786030E+23
243	7,610174E+22	7,610015E+22	6,320263E+22	6,320279E+22	1,522019E+23	1,264054E+23	2,786073E+23
244	7,609773E+22	7,609844E+22	6,320342E+22	6,320355E+22	1,521962E+23	1,264070E+23	2,786031E+23
245	7,609974E+22	7,610099E+22	6,320338E+22	6,320428E+22	1,522007E+23	1,264077E+23	2,786084E+23
246	7,610119E+22	7,609962E+22	6,320374E+22	6,320363E+22	1,522008E+23	1,264074E+23	2,786082E+23
247	7,609803E+22	7,609904E+22	6,320416E+22	6,320340E+22	1,521971E+23	1,264076E+23	2,786046E+23
248	7,610191E+22	7,610134E+22	6,320347E+22	6,320384E+22	1,522033E+23	1,264073E+23	2,786106E+23
249	7,609995E+22	7,609909E+22	6,320408E+22	6,320301E+22	1,521990E+23	1,264071E+23	2,786061E+23
250	7,609761E+22	7,610053E+22	6,320367E+22	6,320310E+22	1,521981E+23	1,264068E+23	2,786049E+23
251	7,610123E+22	7,610133E+22	6,320261E+22	6,320323E+22	1,522026E+23	1,264058E+23	2,786084E+23
252	7,609773E+22	7,609809E+22	6,320288E+22	6,320242E+22	1,521958E+23	1,264053E+23	2,786011E+23
253	7,609894E+22	7,609978E+22	6,320251E+22	6,320206E+22	1,521987E+23	1,264046E+23	2,786033E+23
254	7,610149E+22	7,609902E+22	6,320177E+22	6,320141E+22	1,522005E+23	1,264032E+23	2,786037E+23
255	7,609766E+22	7,609797E+22	6,320137E+22	6,320120E+22	1,521956E+23	1,264026E+23	2,785982E+23
256	7,610049E+22	7,610107E+22	6,320062E+22	6,320199E+22	1,522016E+23	1,264026E+23	2,786042E+23
257	7,609965E+22	7,609911E+22	6,320159E+22	6,320136E+22	1,521988E+23	1,264029E+23	2,786017E+23
258	7,609701E+22	7,609953E+22	6,320236E+22	6,320133E+22	1,521965E+23	1,264037E+23	2,786002E+23
259	7,610127E+22	7,610096E+22	6,320242E+22	6,320233E+22	1,522022E+23	1,264047E+23	2,786070E+23
260	7,609868E+22	7,609782E+22	6,320356E+22	6,320268E+22	1,521965E+23	1,264062E+23	2,786027E+23
261	7,609836E+22	7,609978E+22	6,320412E+22	6,320361E+22	1,521981E+23	1,264077E+23	2,786059E+23
262	7,610126E+22	7,610044E+22	6,320384E+22	6,320460E+22	1,522017E+23	1,264084E+23	2,786101E+23
263	7,609768E+22	7,609842E+22	6,320432E+22	6,320467E+22	1,521961E+23	1,264090E+23	2,786051E+23
264	7,610023E+22	7,610112E+22	6,320445E+22	6,320532E+22	1,522013E+23	1,264098E+23	2,786111E+23
265	7,610119E+22	7,609952E+22	6,320530E+22	6,320473E+22	1,522007E+23	1,264100E+23	2,786107E+23
266	7,609815E+22	7,609922E+22	6,320554E+22	6,320424E+22	1,521974E+23	1,264098E+23	2,786071E+23
267	7,610152E+22	7,610170E+22	6,320476E+22	6,320511E+22	1,522032E+23	1,264099E+23	2,786131E+23
268	7,609919E+22	7,609896E+22	6,320486E+22	6,320463E+22	1,521982E+23	1,264095E+23	2,786076E+23
269	7,609756E+22	7,609986E+22	6,320480E+22	6,320407E+22	1,521974E+23	1,264089E+23	2,786063E+23
270	7,610113E+22	7,610062E+22	6,320380E+22	6,320406E+22	1,522018E+23	1,264079E+23	2,786096E+23
271	7,609828E+22	7,609735E+22	6,320347E+22	6,320288E+22	1,521956E+23	1,264063E+23	2,786020E+23
272	7,609955E+22	7,609983E+22	6,320293E+22	6,320300E+22	1,521994E+23	1,264059E+23	2,786053E+23
273	7,610101E+22	7,609956E+22	6,320260E+22	6,320272E+22	1,522006E+23	1,264053E+23	2,786059E+23
274	7,609720E+22	7,609875E+22	6,320243E+22	6,320210E+22	1,521960E+23	1,264045E+23	2,786005E+23
275	7,610003E+22	7,610154E+22	6,320236E+22	6,320297E+22	1,522016E+23	1,264053E+23	2,786069E+23
276	7,609939E+22	7,609872E+22	6,320320E+22	6,320266E+22	1,521981E+23	1,264059E+23	2,786040E+23
277	7,609737E+22	7,609870E+22	6,320427E+22	6,320256E+22	1,521961E+23	1,264068E+23	2,786029E+23
278	7,610107E+22	7,610065E+22	6,320403E+22	6,320412E+22	1,522017E+23	1,264081E+23	2,786099E+23
279	7,609857E+22	7,609766E+22	6,320423E+22	6,320442E+22	1,521962E+23	1,264086E+23	2,786049E+23
280	7,609840E+22	7,610007E+22	6,320472E+22	6,320545E+22	1,521985E+23	1,264102E+23	2,786086E+23
281	7,610107E+22	7,610047E+22	6,320510E+22	6,320602E+22	1,522015E+23	1,264111E+23	2,786127E+23
282	7,609813E+22	7,609837E+22	6,320574E+22	6,320513E+22	1,521965E+23	1,264109E+23	2,786074E+23
283	7,610070E+22	7,610128E+22	6,320614E+22	6,320592E+22	1,522020E+23	1,264121E+23	2,786140E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
284	7,610113E+22	7,609946E+22	6,320641E+22	6,320588E+22	1,522006E+23	1,264123E+23	2,786129E+23
285	7,609786E+22	7,609920E+22	6,320684E+22	6,320547E+22	1,521971E+23	1,264123E+23	2,786094E+23
286	7,610055E+22	7,610192E+22	6,320604E+22	6,320653E+22	1,522025E+23	1,264126E+23	2,786150E+23
287	7,609886E+22	7,609841E+22	6,320567E+22	6,320562E+22	1,521973E+23	1,264113E+23	2,786086E+23
288	7,609794E+22	7,609938E+22	6,320558E+22	6,320510E+22	1,521973E+23	1,264107E+23	2,786080E+23
289	7,610128E+22	7,610011E+22	6,320486E+22	6,320513E+22	1,522014E+23	1,264100E+23	2,786114E+23
290	7,609857E+22	7,609748E+22	6,320423E+22	6,320360E+22	1,521960E+23	1,264078E+23	2,786039E+23
291	7,609939E+22	7,610061E+22	6,320376E+22	6,320407E+22	1,522000E+23	1,264078E+23	2,786078E+23
292	7,610042E+22	7,609986E+22	6,320341E+22	6,320405E+22	1,522003E+23	1,264075E+23	2,786077E+23
293	7,609721E+22	7,609843E+22	6,320408E+22	6,320302E+22	1,521956E+23	1,264071E+23	2,786027E+23
294	7,609974E+22	7,610114E+22	6,320424E+22	6,320395E+22	1,522009E+23	1,264082E+23	2,786091E+23
295	7,609960E+22	7,609801E+22	6,320444E+22	6,320378E+22	1,521976E+23	1,264082E+23	2,786058E+23
296	7,609769E+22	7,609857E+22	6,320514E+22	6,320427E+22	1,521963E+23	1,264094E+23	2,786057E+23
297	7,610054E+22	7,610081E+22	6,320514E+22	6,320609E+22	1,522013E+23	1,264112E+23	2,786126E+23
298	7,609850E+22	7,609812E+22	6,320530E+22	6,320566E+22	1,521966E+23	1,264110E+23	2,786076E+23
299	7,609862E+22	7,610039E+22	6,320616E+22	6,320642E+22	1,521990E+23	1,264126E+23	2,786116E+23
300	7,610125E+22	7,610023E+22	6,320656E+22	6,320705E+22	1,522015E+23	1,264136E+23	2,786151E+23
301	7,609877E+22	7,609796E+22	6,320754E+22	6,320597E+22	1,521967E+23	1,264135E+23	2,786102E+23
302	7,610020E+22	7,610136E+22	6,320774E+22	6,320720E+22	1,522016E+23	1,264149E+23	2,786165E+23
303	7,610057E+22	7,609951E+22	6,320715E+22	6,320738E+22	1,522001E+23	1,264145E+23	2,786146E+23
304	7,609752E+22	7,609920E+22	6,320746E+22	6,320706E+22	1,521967E+23	1,264145E+23	2,786112E+23
305	7,610004E+22	7,610143E+22	6,320720E+22	6,320780E+22	1,522015E+23	1,264150E+23	2,786165E+23
306	7,609927E+22	7,609798E+22	6,320660E+22	6,320607E+22	1,521973E+23	1,264127E+23	2,786099E+23
307	7,609851E+22	7,609934E+22	6,320649E+22	6,320573E+22	1,521979E+23	1,264122E+23	2,786101E+23
308	7,610128E+22	7,610020E+22	6,320548E+22	6,320622E+22	1,522015E+23	1,264117E+23	2,786132E+23
309	7,609858E+22	7,609779E+22	6,320527E+22	6,320454E+22	1,521964E+23	1,264098E+23	2,786062E+23
310	7,609859E+22	7,610113E+22	6,320523E+22	6,320505E+22	1,521997E+23	1,264103E+23	2,786100E+23
311	7,610019E+22	7,609964E+22	6,320463E+22	6,320495E+22	1,521998E+23	1,264096E+23	2,786094E+23
312	7,609745E+22	7,609801E+22	6,320545E+22	6,320428E+22	1,521955E+23	1,264097E+23	2,786052E+23
313	7,609957E+22	7,610058E+22	6,320588E+22	6,320559E+22	1,522001E+23	1,264115E+23	2,786116E+23
314	7,609963E+22	7,609789E+22	6,320549E+22	6,320524E+22	1,521975E+23	1,264107E+23	2,786082E+23
315	7,609760E+22	7,609905E+22	6,320601E+22	6,320599E+22	1,521966E+23	1,264120E+23	2,786086E+23
316	7,610037E+22	7,610074E+22	6,320596E+22	6,320763E+22	1,522011E+23	1,264136E+23	2,786147E+23
317	7,609904E+22	7,609773E+22	6,320683E+22	6,320642E+22	1,521968E+23	1,264132E+23	2,786100E+23
318	7,609877E+22	7,610039E+22	6,320795E+22	6,320705E+22	1,521992E+23	1,264150E+23	2,786142E+23
319	7,610154E+22	7,610000E+22	6,320774E+22	6,320793E+22	1,522015E+23	1,264157E+23	2,786172E+23
320	7,609872E+22	7,609827E+22	6,320859E+22	6,320751E+22	1,521970E+23	1,264161E+23	2,786131E+23
321	7,609913E+22	7,610166E+22	6,320904E+22	6,320901E+22	1,522008E+23	1,264180E+23	2,786188E+23
322	7,609996E+22	7,609963E+22	6,320826E+22	6,320857E+22	1,521996E+23	1,264168E+23	2,786164E+23
323	7,609753E+22	7,609911E+22	6,320862E+22	6,320811E+22	1,521966E+23	1,264167E+23	2,786134E+23
324	7,610028E+22	7,610066E+22	6,320819E+22	6,320883E+22	1,522009E+23	1,264170E+23	2,786180E+23
325	7,610011E+22	7,609740E+22	6,320776E+22	6,320680E+22	1,521975E+23	1,264146E+23	2,786121E+23
326	7,609837E+22	7,609966E+22	6,320746E+22	6,320666E+22	1,521980E+23	1,264141E+23	2,786121E+23
327	7,610098E+22	7,610051E+22	6,320592E+22	6,320730E+22	1,522015E+23	1,264132E+23	2,786147E+23
328	7,609846E+22	7,609803E+22	6,320609E+22	6,320569E+22	1,521965E+23	1,264118E+23	2,786083E+23
329	7,609802E+22	7,610077E+22	6,320684E+22	6,320609E+22	1,521988E+23	1,264129E+23	2,786117E+23
330	7,610031E+22	7,609929E+22	6,320606E+22	6,320565E+22	1,521996E+23	1,264117E+23	2,786113E+23
331	7,609778E+22	7,609785E+22	6,320660E+22	6,320549E+22	1,521956E+23	1,264121E+23	2,786077E+23
332	7,609927E+22	7,610034E+22	6,320676E+22	6,320733E+22	1,521996E+23	1,264141E+23	2,786137E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
333	7,609973E+22	7,609798E+22	6,320658E+22	6,320669E+22	1,521977E+23	1,264133E+23	2,786110E+23
334	7,609722E+22	7,609939E+22	6,320740E+22	6,320715E+22	1,521966E+23	1,264146E+23	2,786112E+23
335	7,610059E+22	7,610059E+22	6,320717E+22	6,320861E+22	1,522012E+23	1,264158E+23	2,786170E+23
336	7,609965E+22	7,609767E+22	6,320825E+22	6,320750E+22	1,521973E+23	1,264157E+23	2,786131E+23
337	7,609849E+22	7,610031E+22	6,320976E+22	6,320848E+22	1,521988E+23	1,264182E+23	2,786170E+23
338	7,610114E+22	7,610039E+22	6,320896E+22	6,320933E+22	1,522015E+23	1,264183E+23	2,786198E+23
339	7,609819E+22	7,609877E+22	6,320961E+22	6,320926E+22	1,521970E+23	1,264189E+23	2,786158E+23
340	7,609856E+22	7,610120E+22	6,321011E+22	6,321060E+22	1,521998E+23	1,264207E+23	2,786205E+23
341	7,610047E+22	7,609879E+22	6,320962E+22	6,320938E+22	1,521993E+23	1,264190E+23	2,786183E+23
342	7,609790E+22	7,609873E+22	6,320987E+22	6,320866E+22	1,521966E+23	1,264185E+23	2,786152E+23
343	7,610088E+22	7,610032E+22	6,320870E+22	6,320956E+22	1,522012E+23	1,264183E+23	2,786195E+23
344	7,610031E+22	7,609790E+22	6,320827E+22	6,320785E+22	1,521982E+23	1,264161E+23	2,786143E+23
345	7,609758E+22	7,610026E+22	6,320859E+22	6,320785E+22	1,521978E+23	1,264164E+23	2,786143E+23
346	7,610043E+22	7,610084E+22	6,320708E+22	6,320798E+22	1,522013E+23	1,264151E+23	2,786163E+23
347	7,609830E+22	7,609813E+22	6,320751E+22	6,320670E+22	1,521964E+23	1,264142E+23	2,786106E+23
348	7,609786E+22	7,609995E+22	6,320823E+22	6,320738E+22	1,521978E+23	1,264156E+23	2,786134E+23
349	7,610062E+22	7,609852E+22	6,320744E+22	6,320694E+22	1,521991E+23	1,264144E+23	2,786135E+23
350	7,609742E+22	7,609804E+22	6,320762E+22	6,320701E+22	1,521955E+23	1,264146E+23	2,786101E+23
351	7,609919E+22	7,610027E+22	6,320718E+22	6,320889E+22	1,521995E+23	1,264161E+23	2,786155E+23
352	7,610002E+22	7,609807E+22	6,320746E+22	6,320794E+22	1,521981E+23	1,264154E+23	2,786135E+23
353	7,609722E+22	7,609925E+22	6,320906E+22	6,320811E+22	1,521965E+23	1,264172E+23	2,786136E+23
354	7,610086E+22	7,610062E+22	6,320869E+22	6,320920E+22	1,522015E+23	1,264179E+23	2,786194E+23
355	7,609978E+22	7,609815E+22	6,320968E+22	6,320880E+22	1,521979E+23	1,264185E+23	2,786164E+23
356	7,609778E+22	7,610037E+22	6,321110E+22	6,321030E+22	1,521982E+23	1,264214E+23	2,786196E+23
357	7,610078E+22	7,610035E+22	6,321046E+22	6,321087E+22	1,522011E+23	1,264213E+23	2,786225E+23
358	7,609772E+22	7,609873E+22	6,321112E+22	6,321049E+22	1,521965E+23	1,264216E+23	2,786181E+23
359	7,609888E+22	7,610041E+22	6,321109E+22	6,321167E+22	1,521993E+23	1,264228E+23	2,786220E+23
360	7,610133E+22	7,609835E+22	6,321055E+22	6,321036E+22	1,521997E+23	1,264209E+23	2,786206E+23
361	7,609794E+22	7,609861E+22	6,321095E+22	6,320977E+22	1,521965E+23	1,264207E+23	2,786173E+23
362	7,610063E+22	7,610095E+22	6,320929E+22	6,321046E+22	1,522016E+23	1,264198E+23	2,786213E+23
363	7,609993E+22	7,609874E+22	6,320888E+22	6,320897E+22	1,521987E+23	1,264179E+23	2,786165E+23
364	7,609686E+22	7,609996E+22	6,320977E+22	6,320891E+22	1,521968E+23	1,264187E+23	2,786155E+23
365	7,610053E+22	7,610022E+22	6,320865E+22	6,320861E+22	1,522008E+23	1,264173E+23	2,786180E+23
366	7,609823E+22	7,609771E+22	6,320898E+22	6,320752E+22	1,521959E+23	1,264165E+23	2,786124E+23
367	7,609801E+22	7,609934E+22	6,320896E+22	6,320876E+22	1,521973E+23	1,264177E+23	2,786151E+23
368	7,610072E+22	7,609864E+22	6,320808E+22	6,320854E+22	1,521994E+23	1,264166E+23	2,786160E+23
369	7,609690E+22	7,609833E+22	6,320874E+22	6,320850E+22	1,521952E+23	1,264172E+23	2,786125E+23
370	7,609914E+22	7,610058E+22	6,320832E+22	6,320971E+22	1,521997E+23	1,264180E+23	2,786177E+23
371	7,610037E+22	7,609846E+22	6,320890E+22	6,320892E+22	1,521988E+23	1,264178E+23	2,786166E+23
372	7,609727E+22	7,609887E+22	6,321089E+22	6,320939E+22	1,521961E+23	1,264203E+23	2,786164E+23
373	7,610099E+22	7,610043E+22	6,321052E+22	6,321055E+22	1,522014E+23	1,264211E+23	2,786225E+23
374	7,609908E+22	7,609860E+22	6,321123E+22	6,321052E+22	1,521977E+23	1,264217E+23	2,786194E+23
375	7,609740E+22	7,610005E+22	6,321197E+22	6,321215E+22	1,521975E+23	1,264241E+23	2,786216E+23
376	7,610091E+22	7,609989E+22	6,321156E+22	6,321226E+22	1,522008E+23	1,264238E+23	2,786246E+23
377	7,609792E+22	7,609821E+22	6,321248E+22	6,321152E+22	1,521961E+23	1,264240E+23	2,786201E+23
378	7,609946E+22	7,610013E+22	6,321188E+22	6,321218E+22	1,521996E+23	1,264241E+23	2,786237E+23
379	7,610160E+22	7,609899E+22	6,321115E+22	6,321134E+22	1,522006E+23	1,264225E+23	2,786231E+23
380	7,609739E+22	7,609901E+22	6,321177E+22	6,321098E+22	1,521964E+23	1,264228E+23	2,786192E+23
381	7,610014E+22	7,610117E+22	6,321055E+22	6,321126E+22	1,522013E+23	1,264218E+23	2,786231E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
382	7,609925E+22	7,609897E+22	6,321050E+22	6,320971E+22	1,521982E+23	1,264202E+23	2,786184E+23
383	7,609687E+22	7,609908E+22	6,321091E+22	6,320993E+22	1,521959E+23	1,264208E+23	2,786168E+23
384	7,610087E+22	7,609948E+22	6,320984E+22	6,320980E+22	1,522003E+23	1,264196E+23	2,786200E+23
385	7,609803E+22	7,609738E+22	6,321007E+22	6,320908E+22	1,521954E+23	1,264192E+23	2,786146E+23
386	7,609780E+22	7,609951E+22	6,320941E+22	6,321009E+22	1,521973E+23	1,264195E+23	2,786168E+23
387	7,610070E+22	7,609926E+22	6,320866E+22	6,320994E+22	1,522000E+23	1,264186E+23	2,786186E+23
388	7,609685E+22	7,609807E+22	6,321007E+22	6,320955E+22	1,521949E+23	1,264196E+23	2,786145E+23
389	7,609967E+22	7,610030E+22	6,321012E+22	6,321025E+22	1,522000E+23	1,264204E+23	2,786203E+23
390	7,610046E+22	7,609869E+22	6,321077E+22	6,320976E+22	1,521991E+23	1,264205E+23	2,786197E+23
391	7,609717E+22	7,609870E+22	6,321215E+22	6,321106E+22	1,521959E+23	1,264232E+23	2,786191E+23
392	7,610061E+22	7,610069E+22	6,321180E+22	6,321243E+22	1,522013E+23	1,264242E+23	2,786255E+23
393	7,609832E+22	7,609857E+22	6,321275E+22	6,321236E+22	1,521969E+23	1,264251E+23	2,786220E+23
394	7,609728E+22	7,609980E+22	6,321312E+22	6,321331E+22	1,521971E+23	1,264264E+23	2,786235E+23
395	7,610146E+22	7,609984E+22	6,321251E+22	6,321337E+22	1,522013E+23	1,264259E+23	2,786272E+23
396	7,609820E+22	7,609765E+22	6,321365E+22	6,321262E+22	1,521959E+23	1,264263E+23	2,786221E+23
397	7,609973E+22	7,610026E+22	6,321294E+22	6,321305E+22	1,522000E+23	1,264260E+23	2,786260E+23
398	7,610103E+22	7,609982E+22	6,321216E+22	6,321230E+22	1,522008E+23	1,264245E+23	2,786253E+23
399	7,609699E+22	7,609886E+22	6,321258E+22	6,321214E+22	1,521958E+23	1,264247E+23	2,786206E+23
400	7,610004E+22	7,610074E+22	6,321183E+22	6,321204E+22	1,522008E+23	1,264239E+23	2,786246E+23
401	7,609907E+22	7,609831E+22	6,321203E+22	6,321060E+22	1,521974E+23	1,264226E+23	2,786200E+23
402	7,609704E+22	7,609855E+22	6,321176E+22	6,321076E+22	1,521956E+23	1,264225E+23	2,786181E+23
403	7,610094E+22	7,609979E+22	6,321034E+22	6,321124E+22	1,522007E+23	1,264216E+23	2,786223E+23
404	7,609763E+22	7,609747E+22	6,321089E+22	6,321062E+22	1,521951E+23	1,264215E+23	2,786166E+23
405	7,609782E+22	7,609969E+22	6,321057E+22	6,321102E+22	1,521975E+23	1,264216E+23	2,786191E+23
406	7,610058E+22	7,609971E+22	6,321032E+22	6,321066E+22	1,522003E+23	1,264210E+23	2,786213E+23
407	7,609728E+22	7,609759E+22	6,321154E+22	6,321066E+22	1,521949E+23	1,264222E+23	2,786171E+23
408	7,609991E+22	7,609998E+22	6,321186E+22	6,321151E+22	1,521999E+23	1,264234E+23	2,786233E+23
409	7,609993E+22	7,609885E+22	6,321244E+22	6,321167E+22	1,521988E+23	1,264241E+23	2,786229E+23
410	7,609662E+22	7,609882E+22	6,321301E+22	6,321280E+22	1,521954E+23	1,264258E+23	2,786213E+23
411	7,610027E+22	7,610089E+22	6,321266E+22	6,321419E+22	1,522012E+23	1,264269E+23	2,786280E+23
412	7,609834E+22	7,609788E+22	6,321407E+22	6,321366E+22	1,521962E+23	1,264277E+23	2,786240E+23
413	7,609803E+22	7,609918E+22	6,321442E+22	6,321392E+22	1,521972E+23	1,264283E+23	2,786255E+23
414	7,610179E+22	7,610010E+22	6,321383E+22	6,321402E+22	1,522019E+23	1,264278E+23	2,786297E+23
415	7,609838E+22	7,609771E+22	6,321436E+22	6,321377E+22	1,521961E+23	1,264281E+23	2,786242E+23
416	7,609942E+22	7,610067E+22	6,321401E+22	6,321406E+22	1,522001E+23	1,264281E+23	2,786282E+23
417	7,610024E+22	7,610009E+22	6,321365E+22	6,321340E+22	1,522003E+23	1,264270E+23	2,786274E+23
418	7,609666E+22	7,609854E+22	6,321374E+22	6,321291E+22	1,521952E+23	1,264267E+23	2,786218E+23
419	7,610012E+22	7,610051E+22	6,321286E+22	6,321317E+22	1,522006E+23	1,264260E+23	2,786266E+23
420	7,609905E+22	7,609750E+22	6,321321E+22	6,321202E+22	1,521965E+23	1,264252E+23	2,786218E+23
421	7,609715E+22	7,609843E+22	6,321254E+22	6,321203E+22	1,521956E+23	1,264246E+23	2,786202E+23
422	7,610061E+22	7,610040E+22	6,321114E+22	6,321243E+22	1,522010E+23	1,264236E+23	2,786246E+23
423	7,609773E+22	7,609726E+22	6,321160E+22	6,321181E+22	1,521950E+23	1,264234E+23	2,786184E+23
424	7,609826E+22	7,609950E+22	6,321198E+22	6,321165E+22	1,521978E+23	1,264236E+23	2,786214E+23
425	7,610069E+22	7,609954E+22	6,321204E+22	6,321152E+22	1,522002E+23	1,264236E+23	2,786238E+23
426	7,609728E+22	7,609754E+22	6,321279E+22	6,321177E+22	1,521948E+23	1,264246E+23	2,786194E+23
427	7,609952E+22	7,610059E+22	6,321282E+22	6,321329E+22	1,522001E+23	1,264261E+23	2,786262E+23
428	7,609910E+22	7,609873E+22	6,321384E+22	6,321362E+22	1,521978E+23	1,264275E+23	2,786253E+23
429	7,609647E+22	7,609864E+22	6,321446E+22	6,321413E+22	1,521951E+23	1,264286E+23	2,786237E+23
430	7,610036E+22	7,610082E+22	6,321427E+22	6,321514E+22	1,522012E+23	1,264294E+23	2,786306E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
431	7,609910E+22	7,609712E+22	6,321523E+22	6,321481E+22	1,521962E+23	1,264300E+23	2,786263E+23
432	7,609869E+22	7,609894E+22	6,321566E+22	6,321489E+22	1,521976E+23	1,264306E+23	2,786282E+23
433	7,610142E+22	7,610059E+22	6,321501E+22	6,321538E+22	1,522020E+23	1,264304E+23	2,786324E+23
434	7,609785E+22	7,609819E+22	6,321505E+22	6,321495E+22	1,521960E+23	1,264300E+23	2,786260E+23
435	7,609894E+22	7,610103E+22	6,321490E+22	6,321519E+22	1,522000E+23	1,264301E+23	2,786301E+23
436	7,609992E+22	7,609939E+22	6,321515E+22	6,321441E+22	1,521993E+23	1,264296E+23	2,786289E+23
437	7,609701E+22	7,609786E+22	6,321497E+22	6,321360E+22	1,521949E+23	1,264286E+23	2,786234E+23
438	7,610008E+22	7,610052E+22	6,321395E+22	6,321411E+22	1,522006E+23	1,264281E+23	2,786287E+23
439	7,609915E+22	7,609733E+22	6,321363E+22	6,321354E+22	1,521965E+23	1,264272E+23	2,786236E+23
440	7,609714E+22	7,609854E+22	6,321331E+22	6,321313E+22	1,521957E+23	1,264264E+23	2,786221E+23
441	7,610029E+22	7,610068E+22	6,321246E+22	6,321344E+22	1,522010E+23	1,264259E+23	2,786269E+23
442	7,609792E+22	7,609717E+22	6,321266E+22	6,321242E+22	1,521951E+23	1,264251E+23	2,786202E+23
443	7,609843E+22	7,609957E+22	6,321323E+22	6,321263E+22	1,521980E+23	1,264259E+23	2,786239E+23
444	7,610043E+22	7,609923E+22	6,321370E+22	6,321308E+22	1,521997E+23	1,264268E+23	2,786264E+23
445	7,609696E+22	7,609760E+22	6,321405E+22	6,321338E+22	1,521946E+23	1,264274E+23	2,786220E+23
446	7,609884E+22	7,610096E+22	6,321419E+22	6,321489E+22	1,521998E+23	1,264291E+23	2,786289E+23
447	7,609920E+22	7,609802E+22	6,321491E+22	6,321523E+22	1,521972E+23	1,264301E+23	2,786274E+23
448	7,609716E+22	7,609792E+22	6,321587E+22	6,321501E+22	1,521951E+23	1,264309E+23	2,786260E+23
449	7,610080E+22	7,610059E+22	6,321576E+22	6,321611E+22	1,522014E+23	1,264319E+23	2,786333E+23
450	7,609940E+22	7,609733E+22	6,321602E+22	6,321578E+22	1,521967E+23	1,264318E+23	2,786285E+23
451	7,609845E+22	7,609996E+22	6,321638E+22	6,321625E+22	1,521984E+23	1,264326E+23	2,786310E+23
452	7,610063E+22	7,610088E+22	6,321642E+22	6,321684E+22	1,522015E+23	1,264333E+23	2,786348E+23
453	7,609744E+22	7,609827E+22	6,321655E+22	6,321591E+22	1,521957E+23	1,264325E+23	2,786282E+23
454	7,609863E+22	7,610096E+22	6,321657E+22	6,321601E+22	1,521996E+23	1,264326E+23	2,786322E+23
455	7,610021E+22	7,609833E+22	6,321625E+22	6,321574E+22	1,521985E+23	1,264320E+23	2,786305E+23
456	7,609745E+22	7,609729E+22	6,321592E+22	6,321478E+22	1,521947E+23	1,264307E+23	2,786254E+23
457	7,609982E+22	7,610062E+22	6,321463E+22	6,321553E+22	1,522004E+23	1,264302E+23	2,786306E+23
458	7,609895E+22	7,609753E+22	6,321386E+22	6,321455E+22	1,521965E+23	1,264284E+23	2,786249E+23
459	7,609725E+22	7,609891E+22	6,321390E+22	6,321386E+22	1,521962E+23	1,264278E+23	2,786239E+23
460	7,610030E+22	7,610021E+22	6,321398E+22	6,321409E+22	1,522005E+23	1,264281E+23	2,786286E+23
461	7,609819E+22	7,609707E+22	6,321417E+22	6,321306E+22	1,521953E+23	1,264272E+23	2,786225E+23
462	7,609805E+22	7,609998E+22	6,321481E+22	6,321375E+22	1,521980E+23	1,264286E+23	2,786266E+23
463	7,609997E+22	7,609908E+22	6,321481E+22	6,321502E+22	1,521991E+23	1,264298E+23	2,786289E+23
464	7,609674E+22	7,609742E+22	6,321543E+22	6,321496E+22	1,521942E+23	1,264304E+23	2,786245E+23
465	7,609856E+22	7,610073E+22	6,321580E+22	6,321638E+22	1,521993E+23	1,264322E+23	2,786315E+23
466	7,609962E+22	7,609765E+22	6,321597E+22	6,321635E+22	1,521973E+23	1,264323E+23	2,786296E+23
467	7,609780E+22	7,609802E+22	6,321683E+22	6,321623E+22	1,521958E+23	1,264331E+23	2,786289E+23
468	7,610078E+22	7,610061E+22	6,321718E+22	6,321763E+22	1,522014E+23	1,264348E+23	2,786362E+23
469	7,609913E+22	7,609805E+22	6,321709E+22	6,321709E+22	1,521972E+23	1,264342E+23	2,786314E+23
470	7,609768E+22	7,610068E+22	6,321783E+22	6,321739E+22	1,521984E+23	1,264352E+23	2,786336E+23
471	7,610046E+22	7,610028E+22	6,321771E+22	6,321811E+22	1,522007E+23	1,264358E+23	2,786366E+23
472	7,609784E+22	7,609728E+22	6,321802E+22	6,321665E+22	1,521951E+23	1,264347E+23	2,786298E+23
473	7,609868E+22	7,610036E+22	6,321786E+22	6,321707E+22	1,521990E+23	1,264349E+23	2,786340E+23
474	7,610033E+22	7,609813E+22	6,321650E+22	6,321682E+22	1,521985E+23	1,264333E+23	2,786318E+23
475	7,609731E+22	7,609784E+22	6,321601E+22	6,321599E+22	1,521952E+23	1,264320E+23	2,786272E+23
476	7,609939E+22	7,610072E+22	6,321562E+22	6,321662E+22	1,522001E+23	1,264322E+23	2,786324E+23
477	7,609894E+22	7,609777E+22	6,321500E+22	6,321502E+22	1,521967E+23	1,264300E+23	2,786267E+23
478	7,609720E+22	7,609915E+22	6,321561E+22	6,321432E+22	1,521964E+23	1,264299E+23	2,786263E+23
479	7,610045E+22	7,609958E+22	6,321541E+22	6,321534E+22	1,522000E+23	1,264308E+23	2,786308E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
480	7,609817E+22	7,609678E+22	6,321565E+22	6,321453E+22	1,521949E+23	1,264302E+23	2,786251E+23
481	7,609725E+22	7,610014E+22	6,321611E+22	6,321573E+22	1,521974E+23	1,264318E+23	2,786292E+23
482	7,609954E+22	7,609892E+22	6,321553E+22	6,321670E+22	1,521985E+23	1,264322E+23	2,786307E+23
483	7,609701E+22	7,609735E+22	6,321628E+22	6,321628E+22	1,521944E+23	1,264326E+23	2,786269E+23
484	7,609900E+22	7,610006E+22	6,321733E+22	6,321754E+22	1,521991E+23	1,264349E+23	2,786339E+23
485	7,610018E+22	7,609783E+22	6,321722E+22	6,321721E+22	1,521980E+23	1,264344E+23	2,786324E+23
486	7,609776E+22	7,609892E+22	6,321826E+22	6,321730E+22	1,521967E+23	1,264356E+23	2,786322E+23
487	7,610037E+22	7,610080E+22	6,321840E+22	6,321925E+22	1,522012E+23	1,264377E+23	2,786388E+23
488	7,609887E+22	7,609812E+22	6,321879E+22	6,321828E+22	1,521970E+23	1,264371E+23	2,786341E+23
489	7,609720E+22	7,610040E+22	6,321959E+22	6,321855E+22	1,521976E+23	1,264381E+23	2,786357E+23
490	7,610044E+22	7,609953E+22	6,321873E+22	6,321913E+22	1,522000E+23	1,264379E+23	2,786378E+23
491	7,609823E+22	7,609698E+22	6,321865E+22	6,321787E+22	1,521952E+23	1,264365E+23	2,786317E+23
492	7,609854E+22	7,609989E+22	6,321870E+22	6,321855E+22	1,521984E+23	1,264373E+23	2,786357E+23
493	7,610009E+22	7,609865E+22	6,321692E+22	6,321788E+22	1,521987E+23	1,264348E+23	2,786335E+23
494	7,609705E+22	7,609847E+22	6,321692E+22	6,321663E+22	1,521955E+23	1,264336E+23	2,786291E+23
495	7,609950E+22	7,610022E+22	6,321674E+22	6,321733E+22	1,521997E+23	1,264341E+23	2,786338E+23
496	7,609942E+22	7,609733E+22	6,321657E+22	6,321544E+22	1,521967E+23	1,264320E+23	2,786288E+23
497	7,609696E+22	7,609903E+22	6,321722E+22	6,321541E+22	1,521960E+23	1,264326E+23	2,786286E+23
498	7,609994E+22	7,609964E+22	6,321622E+22	6,321688E+22	1,521996E+23	1,264331E+23	2,786327E+23
499	7,609771E+22	7,609720E+22	6,321635E+22	6,321637E+22	1,521949E+23	1,264327E+23	2,786276E+23
500	7,609676E+22	7,609975E+22	6,321759E+22	6,321751E+22	1,521965E+23	1,264351E+23	2,786316E+23
501	7,609972E+22	7,609885E+22	6,321683E+22	6,321778E+22	1,521986E+23	1,264346E+23	2,786332E+23
502	7,609747E+22	7,609743E+22	6,321790E+22	6,321714E+22	1,521949E+23	1,264350E+23	2,786299E+23
503	7,609958E+22	7,609962E+22	6,321870E+22	6,321895E+22	1,521992E+23	1,264376E+23	2,786368E+23
504	7,610045E+22	7,609796E+22	6,321863E+22	6,321848E+22	1,521984E+23	1,264371E+23	2,786355E+23
505	7,609703E+22	7,609944E+22	6,321974E+22	6,321890E+22	1,521965E+23	1,264386E+23	2,786351E+23
506	7,609983E+22	7,610073E+22	6,321938E+22	6,322050E+22	1,522006E+23	1,264399E+23	2,786405E+23
507	7,609887E+22	7,609780E+22	6,321987E+22	6,321935E+22	1,521967E+23	1,264392E+23	2,786359E+23
508	7,609724E+22	7,609943E+22	6,322112E+22	6,321972E+22	1,521967E+23	1,264408E+23	2,786375E+23
509	7,610060E+22	7,609941E+22	6,321954E+22	6,322006E+22	1,522000E+23	1,264396E+23	2,786396E+23
510	7,609810E+22	7,609758E+22	6,321942E+22	6,321890E+22	1,521957E+23	1,264383E+23	2,786340E+23
511	7,609836E+22	7,609988E+22	6,321930E+22	6,321988E+22	1,521982E+23	1,264392E+23	2,786374E+23
512	7,610012E+22	7,609872E+22	6,321812E+22	6,321853E+22	1,521988E+23	1,264366E+23	2,786355E+23
513	7,609683E+22	7,609854E+22	6,321851E+22	6,321733E+22	1,521954E+23	1,264358E+23	2,786312E+23
514	7,609948E+22	7,609982E+22	6,321785E+22	6,321808E+22	1,521993E+23	1,264359E+23	2,786352E+23
515	7,609951E+22	7,609732E+22	6,321759E+22	6,321674E+22	1,521968E+23	1,264343E+23	2,786312E+23
516	7,609640E+22	7,609872E+22	6,321852E+22	6,321733E+22	1,521951E+23	1,264359E+23	2,786310E+23
517	7,609928E+22	7,609996E+22	6,321706E+22	6,321848E+22	1,521992E+23	1,264355E+23	2,786348E+23
518	7,609761E+22	7,609738E+22	6,321758E+22	6,321758E+22	1,521950E+23	1,264352E+23	2,786301E+23
519	7,609729E+22	7,609875E+22	6,321883E+22	6,321869E+22	1,521960E+23	1,264375E+23	2,786336E+23
520	7,610066E+22	7,609837E+22	6,321838E+22	6,321848E+22	1,521990E+23	1,264369E+23	2,786359E+23
521	7,609771E+22	7,609766E+22	6,321938E+22	6,321822E+22	1,521954E+23	1,264376E+23	2,786330E+23
522	7,609920E+22	7,610002E+22	6,321957E+22	6,322027E+22	1,521992E+23	1,264398E+23	2,786391E+23
523	7,610000E+22	7,609874E+22	6,321969E+22	6,322000E+22	1,521987E+23	1,264397E+23	2,786384E+23
524	7,609635E+22	7,609916E+22	6,322157E+22	6,322050E+22	1,521955E+23	1,264421E+23	2,786376E+23
525	7,609948E+22	7,610062E+22	6,322087E+22	6,322156E+22	1,522001E+23	1,264424E+23	2,786425E+23
526	7,609908E+22	7,609759E+22	6,322136E+22	6,322041E+22	1,521967E+23	1,264418E+23	2,786384E+23
527	7,609753E+22	7,609855E+22	6,322208E+22	6,322128E+22	1,521961E+23	1,264434E+23	2,786394E+23
528	7,610079E+22	7,609937E+22	6,322036E+22	6,322128E+22	1,522002E+23	1,264416E+23	2,786418E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
529	7,609771E+22	7,609802E+22	6,322027E+22	6,322004E+22	1,521957E+23	1,264403E+23	2,786360E+23
530	7,609823E+22	7,609980E+22	6,321988E+22	6,322054E+22	1,521980E+23	1,264404E+23	2,786384E+23
531	7,610048E+22	7,609869E+22	6,321904E+22	6,321900E+22	1,521992E+23	1,264380E+23	2,786372E+23
532	7,609685E+22	7,609795E+22	6,322011E+22	6,321827E+22	1,521948E+23	1,264384E+23	2,786332E+23
533	7,609912E+22	7,610006E+22	6,321890E+22	6,321906E+22	1,521992E+23	1,264380E+23	2,786371E+23
534	7,609899E+22	7,609785E+22	6,321875E+22	6,321816E+22	1,521968E+23	1,264369E+23	2,786337E+23
535	7,609604E+22	7,609828E+22	6,321958E+22	6,321913E+22	1,521943E+23	1,264387E+23	2,786330E+23
536	7,609951E+22	7,609947E+22	6,321846E+22	6,321953E+22	1,521990E+23	1,264380E+23	2,786370E+23
537	7,609780E+22	7,609715E+22	6,321913E+22	6,321856E+22	1,521949E+23	1,264377E+23	2,786326E+23
538	7,609782E+22	7,609836E+22	6,321975E+22	6,321965E+22	1,521962E+23	1,264394E+23	2,786356E+23
539	7,610103E+22	7,609867E+22	6,321933E+22	6,321977E+22	1,521997E+23	1,264391E+23	2,786388E+23
540	7,609719E+22	7,609795E+22	6,322087E+22	6,322009E+22	1,521951E+23	1,264410E+23	2,786361E+23
541	7,609833E+22	7,610073E+22	6,322077E+22	6,322166E+22	1,521991E+23	1,264424E+23	2,786415E+23
542	7,609965E+22	7,609897E+22	6,322138E+22	6,322119E+22	1,521986E+23	1,264426E+23	2,786412E+23
543	7,609654E+22	7,609806E+22	6,322311E+22	6,322186E+22	1,521946E+23	1,264450E+23	2,786396E+23
544	7,610004E+22	7,609983E+22	6,322235E+22	6,322251E+22	1,521999E+23	1,264449E+23	2,786447E+23
545	7,609912E+22	7,609764E+22	6,322248E+22	6,322168E+22	1,521968E+23	1,264442E+23	2,786409E+23
546	7,609742E+22	7,609868E+22	6,322235E+22	6,322254E+22	1,521961E+23	1,264449E+23	2,786410E+23
547	7,610077E+22	7,609993E+22	6,322094E+22	6,322230E+22	1,522007E+23	1,264432E+23	2,786439E+23
548	7,609749E+22	7,609793E+22	6,322170E+22	6,322097E+22	1,521954E+23	1,264427E+23	2,786381E+23
549	7,609799E+22	7,609999E+22	6,322115E+22	6,322093E+22	1,521980E+23	1,264421E+23	2,786401E+23
550	7,610062E+22	7,609882E+22	6,322055E+22	6,321978E+22	1,521994E+23	1,264403E+23	2,786398E+23
551	7,609674E+22	7,609717E+22	6,322125E+22	6,321988E+22	1,521939E+23	1,264411E+23	2,786350E+23
552	7,609878E+22	7,609992E+22	6,321996E+22	6,322054E+22	1,521987E+23	1,264405E+23	2,786392E+23
553	7,609848E+22	7,609792E+22	6,321976E+22	6,321961E+22	1,521964E+23	1,264394E+23	2,786358E+23
554	7,609611E+22	7,609762E+22	6,322017E+22	6,322014E+22	1,521937E+23	1,264403E+23	2,786340E+23
555	7,610025E+22	7,609919E+22	6,321937E+22	6,322028E+22	1,521994E+23	1,264397E+23	2,786391E+23
556	7,609818E+22	7,609684E+22	6,322056E+22	6,321966E+22	1,521950E+23	1,264402E+23	2,786353E+23
557	7,609757E+22	7,609914E+22	6,322081E+22	6,322064E+22	1,521967E+23	1,264414E+23	2,786382E+23
558	7,610059E+22	7,609974E+22	6,322072E+22	6,322117E+22	1,522003E+23	1,264419E+23	2,786422E+23
559	7,609662E+22	7,609775E+22	6,322251E+22	6,322191E+22	1,521944E+23	1,264444E+23	2,786388E+23
560	7,609814E+22	7,610037E+22	6,322273E+22	6,322286E+22	1,521985E+23	1,264456E+23	2,786441E+23
561	7,609960E+22	7,609854E+22	6,322327E+22	6,322248E+22	1,521981E+23	1,264457E+23	2,786439E+23
562	7,609696E+22	7,609719E+22	6,322404E+22	6,322321E+22	1,521941E+23	1,264472E+23	2,786414E+23
563	7,610051E+22	7,609976E+22	6,322299E+22	6,322393E+22	1,522003E+23	1,264469E+23	2,786472E+23
564	7,609887E+22	7,609782E+22	6,322334E+22	6,322332E+22	1,521967E+23	1,264467E+23	2,786434E+23
565	7,609703E+22	7,609939E+22	6,322295E+22	6,322331E+22	1,521964E+23	1,264463E+23	2,786427E+23
566	7,610085E+22	7,610025E+22	6,322219E+22	6,322277E+22	1,522011E+23	1,264450E+23	2,786461E+23
567	7,609773E+22	7,609721E+22	6,322313E+22	6,322177E+22	1,521949E+23	1,264449E+23	2,786398E+23
568	7,609818E+22	7,609956E+22	6,322256E+22	6,322152E+22	1,521977E+23	1,264441E+23	2,786418E+23
569	7,610001E+22	7,609898E+22	6,322177E+22	6,322104E+22	1,521990E+23	1,264428E+23	2,786418E+23
570	7,609623E+22	7,609705E+22	6,322166E+22	6,322141E+22	1,521933E+23	1,264431E+23	2,786363E+23
571	7,609864E+22	7,609984E+22	6,322066E+22	6,322184E+22	1,521985E+23	1,264425E+23	2,786410E+23
572	7,609841E+22	7,609753E+22	6,322110E+22	6,322091E+22	1,521959E+23	1,264420E+23	2,786379E+23
573	7,609632E+22	7,609773E+22	6,322114E+22	6,322077E+22	1,521941E+23	1,264419E+23	2,786360E+23
574	7,610075E+22	7,609950E+22	6,322074E+22	6,322122E+22	1,522002E+23	1,264420E+23	2,786422E+23
575	7,609818E+22	7,609675E+22	6,322189E+22	6,322134E+22	1,521949E+23	1,264432E+23	2,786382E+23
576	7,609715E+22	7,609951E+22	6,322231E+22	6,322204E+22	1,521967E+23	1,264444E+23	2,786410E+23
577	7,609990E+22	7,610004E+22	6,322249E+22	6,322267E+22	1,521999E+23	1,264452E+23	2,786451E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
578	7,609664E+22	7,609696E+22	6,322377E+22	6,322322E+22	1,521936E+23	1,264470E+23	2,786406E+23
579	7,609871E+22	7,609971E+22	6,322406E+22	6,322400E+22	1,521984E+23	1,264481E+23	2,786465E+23
580	7,609986E+22	7,609805E+22	6,322463E+22	6,322404E+22	1,521979E+23	1,264487E+23	2,786466E+23
581	7,609678E+22	7,609777E+22	6,322462E+22	6,322440E+22	1,521945E+23	1,264490E+23	2,786436E+23
582	7,610045E+22	7,610066E+22	6,322388E+22	6,322516E+22	1,522011E+23	1,264490E+23	2,786502E+23
583	7,609871E+22	7,609770E+22	6,322449E+22	6,322451E+22	1,521964E+23	1,264490E+23	2,786454E+23
584	7,609703E+22	7,609932E+22	6,322453E+22	6,322376E+22	1,521964E+23	1,264483E+23	2,786446E+23
585	7,610073E+22	7,610020E+22	6,322383E+22	6,322342E+22	1,522009E+23	1,264472E+23	2,786482E+23
586	7,609770E+22	7,609647E+22	6,322398E+22	6,322290E+22	1,521942E+23	1,264469E+23	2,786411E+23
587	7,609795E+22	7,609946E+22	6,322329E+22	6,322298E+22	1,521974E+23	1,264463E+23	2,786437E+23
588	7,609928E+22	7,609889E+22	6,322263E+22	6,322288E+22	1,521982E+23	1,264455E+23	2,786437E+23
589	7,609578E+22	7,609721E+22	6,322215E+22	6,322237E+22	1,521930E+23	1,264445E+23	2,786375E+23
590	7,609914E+22	7,609973E+22	6,322169E+22	6,322252E+22	1,521989E+23	1,264442E+23	2,786431E+23
591	7,609902E+22	7,609679E+22	6,322231E+22	6,322181E+22	1,521958E+23	1,264441E+23	2,786399E+23
592	7,609679E+22	7,609778E+22	6,322253E+22	6,322143E+22	1,521946E+23	1,264440E+23	2,786385E+23
593	7,610032E+22	7,610022E+22	6,322225E+22	6,322244E+22	1,522005E+23	1,264447E+23	2,786452E+23
594	7,609768E+22	7,609693E+22	6,322300E+22	6,322296E+22	1,521946E+23	1,264460E+23	2,786406E+23
595	7,609685E+22	7,609951E+22	6,322385E+22	6,322351E+22	1,521964E+23	1,264474E+23	2,786437E+23
596	7,609952E+22	7,609957E+22	6,322443E+22	6,322439E+22	1,521991E+23	1,264488E+23	2,786479E+23
597	7,609673E+22	7,609675E+22	6,322500E+22	6,322441E+22	1,521935E+23	1,264494E+23	2,786429E+23
598	7,609925E+22	7,609955E+22	6,322525E+22	6,322545E+22	1,521988E+23	1,264507E+23	2,786495E+23
599	7,609990E+22	7,609790E+22	6,322555E+22	6,322591E+22	1,521978E+23	1,264515E+23	2,786493E+23
600	7,609674E+22	7,609822E+22	6,322549E+22	6,322548E+22	1,521950E+23	1,264510E+23	2,786459E+23
601	7,610006E+22	7,610102E+22	6,322524E+22	6,322594E+22	1,522011E+23	1,264512E+23	2,786523E+23
602	7,609885E+22	7,609725E+22	6,322553E+22	6,322514E+22	1,521961E+23	1,264507E+23	2,786468E+23
603	7,609735E+22	7,609888E+22	6,322578E+22	6,322433E+22	1,521962E+23	1,264501E+23	2,786463E+23
604	7,610030E+22	7,609995E+22	6,322515E+22	6,322476E+22	1,522003E+23	1,264499E+23	2,786502E+23
605	7,609701E+22	7,609689E+22	6,322449E+22	6,322410E+22	1,521939E+23	1,264486E+23	2,786425E+23
606	7,609764E+22	7,609972E+22	6,322409E+22	6,322435E+22	1,521974E+23	1,264484E+23	2,786458E+23
607	7,609911E+22	7,609834E+22	6,322370E+22	6,322424E+22	1,521975E+23	1,264479E+23	2,786454E+23
608	7,609618E+22	7,609693E+22	6,322341E+22	6,322289E+22	1,521931E+23	1,264463E+23	2,786394E+23
609	7,609948E+22	7,609969E+22	6,322322E+22	6,322319E+22	1,521992E+23	1,264464E+23	2,786456E+23
610	7,609937E+22	7,609653E+22	6,322322E+22	6,322298E+22	1,521959E+23	1,264462E+23	2,786421E+23
611	7,609666E+22	7,609816E+22	6,322367E+22	6,322287E+22	1,521948E+23	1,264465E+23	2,786414E+23
612	7,609941E+22	7,610056E+22	6,322374E+22	6,322437E+22	1,522000E+23	1,264481E+23	2,786481E+23
613	7,609704E+22	7,609707E+22	6,322424E+22	6,322425E+22	1,521941E+23	1,264485E+23	2,786426E+23
614	7,609718E+22	7,609916E+22	6,322545E+22	6,322481E+22	1,521963E+23	1,264503E+23	2,786466E+23
615	7,609990E+22	7,609859E+22	6,322585E+22	6,322592E+22	1,521985E+23	1,264518E+23	2,786503E+23
616	7,609710E+22	7,609667E+22	6,322613E+22	6,322555E+22	1,521938E+23	1,264517E+23	2,786455E+23
617	7,609906E+22	7,610019E+22	6,322636E+22	6,322676E+22	1,521993E+23	1,264531E+23	2,786524E+23
618	7,609974E+22	7,609803E+22	6,322625E+22	6,322718E+22	1,521978E+23	1,264534E+23	2,786512E+23
619	7,609678E+22	7,609836E+22	6,322685E+22	6,322628E+22	1,521951E+23	1,264531E+23	2,786483E+23
620	7,609975E+22	7,610083E+22	6,322699E+22	6,322694E+22	1,522006E+23	1,264539E+23	2,786545E+23
621	7,609866E+22	7,609716E+22	6,322671E+22	6,322586E+22	1,521958E+23	1,264526E+23	2,786484E+23
622	7,609740E+22	7,609876E+22	6,322689E+22	6,322566E+22	1,521962E+23	1,264525E+23	2,786487E+23
623	7,609970E+22	7,609959E+22	6,322598E+22	6,322661E+22	1,521993E+23	1,264526E+23	2,786519E+23
624	7,609674E+22	7,609691E+22	6,322522E+22	6,322524E+22	1,521937E+23	1,264505E+23	2,786441E+23
625	7,609760E+22	7,609953E+22	6,322522E+22	6,322512E+22	1,521971E+23	1,264503E+23	2,786475E+23
626	7,609972E+22	7,609761E+22	6,322447E+22	6,322489E+22	1,521973E+23	1,264494E+23	2,786467E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
627	7,609696E+22	7,609672E+22	6,322451E+22	6,322342E+22	1,521937E+23	1,264479E+23	2,786416E+23
628	7,609915E+22	7,610000E+22	6,322457E+22	6,322450E+22	1,521991E+23	1,264491E+23	2,786482E+23
629	7,609866E+22	7,609748E+22	6,322413E+22	6,322424E+22	1,521961E+23	1,264484E+23	2,786445E+23
630	7,609623E+22	7,609856E+22	6,322506E+22	6,322447E+22	1,521948E+23	1,264495E+23	2,786443E+23
631	7,609881E+22	7,610007E+22	6,322548E+22	6,322614E+22	1,521989E+23	1,264516E+23	2,786505E+23
632	7,609726E+22	7,609663E+22	6,322586E+22	6,322535E+22	1,521939E+23	1,264512E+23	2,786451E+23
633	7,609744E+22	7,609864E+22	6,322711E+22	6,322605E+22	1,521961E+23	1,264532E+23	2,786492E+23
634	7,610029E+22	7,609812E+22	6,322667E+22	6,322753E+22	1,521984E+23	1,264542E+23	2,786526E+23
635	7,609732E+22	7,609696E+22	6,322699E+22	6,322694E+22	1,521943E+23	1,264539E+23	2,786482E+23
636	7,609854E+22	7,610058E+22	6,322761E+22	6,322824E+22	1,521991E+23	1,264558E+23	2,786550E+23
637	7,609950E+22	7,609838E+22	6,322732E+22	6,322779E+22	1,521979E+23	1,264551E+23	2,786530E+23
638	7,609716E+22	7,609820E+22	6,322834E+22	6,322702E+22	1,521954E+23	1,264554E+23	2,786507E+23
639	7,609959E+22	7,610022E+22	6,322847E+22	6,322815E+22	1,521998E+23	1,264566E+23	2,786564E+23
640	7,609846E+22	7,609721E+22	6,322781E+22	6,322694E+22	1,521957E+23	1,264548E+23	2,786504E+23
641	7,609682E+22	7,609899E+22	6,322799E+22	6,322701E+22	1,521958E+23	1,264550E+23	2,786508E+23
642	7,609948E+22	7,609918E+22	6,322656E+22	6,322798E+22	1,521987E+23	1,264545E+23	2,786532E+23
643	7,609706E+22	7,609663E+22	6,322624E+22	6,322601E+22	1,521937E+23	1,264522E+23	2,786459E+23
644	7,609774E+22	7,609930E+22	6,322649E+22	6,322606E+22	1,521970E+23	1,264525E+23	2,786496E+23
645	7,609989E+22	7,609772E+22	6,322531E+22	6,322550E+22	1,521976E+23	1,264508E+23	2,786484E+23
646	7,609718E+22	7,609713E+22	6,322557E+22	6,322474E+22	1,521943E+23	1,264503E+23	2,786446E+23
647	7,609835E+22	7,610013E+22	6,322572E+22	6,322625E+22	1,521985E+23	1,264520E+23	2,786505E+23
648	7,609807E+22	7,609766E+22	6,322546E+22	6,322549E+22	1,521957E+23	1,264509E+23	2,786467E+23
649	7,609602E+22	7,609820E+22	6,322684E+22	6,322558E+22	1,521942E+23	1,264524E+23	2,786466E+23
650	7,609923E+22	7,609892E+22	6,322668E+22	6,322735E+22	1,521981E+23	1,264540E+23	2,786522E+23
651	7,609800E+22	7,609610E+22	6,322713E+22	6,322645E+22	1,521941E+23	1,264536E+23	2,786477E+23
652	7,609737E+22	7,609880E+22	6,322823E+22	6,322772E+22	1,521962E+23	1,264560E+23	2,786521E+23
653	7,609992E+22	7,609891E+22	6,322738E+22	6,322873E+22	1,521988E+23	1,264561E+23	2,786549E+23
654	7,609737E+22	7,609756E+22	6,322826E+22	6,322821E+22	1,521949E+23	1,264565E+23	2,786514E+23
655	7,609813E+22	7,610042E+22	6,322937E+22	6,322944E+22	1,521985E+23	1,264588E+23	2,786574E+23
656	7,609959E+22	7,609833E+22	6,322906E+22	6,322854E+22	1,521979E+23	1,264576E+23	2,786555E+23
657	7,609714E+22	7,609790E+22	6,323009E+22	6,322815E+22	1,521950E+23	1,264582E+23	2,786533E+23
658	7,609936E+22	7,609970E+22	6,322925E+22	6,322984E+22	1,521991E+23	1,264591E+23	2,786582E+23
659	7,609832E+22	7,609718E+22	6,322851E+22	6,322844E+22	1,521955E+23	1,264569E+23	2,786525E+23
660	7,609632E+22	7,609885E+22	6,322885E+22	6,322848E+22	1,521952E+23	1,264573E+23	2,786525E+23
661	7,609961E+22	7,609906E+22	6,322719E+22	6,322846E+22	1,521987E+23	1,264557E+23	2,786543E+23
662	7,609797E+22	7,609641E+22	6,322711E+22	6,322650E+22	1,521944E+23	1,264536E+23	2,786480E+23
663	7,609775E+22	7,609908E+22	6,322762E+22	6,322695E+22	1,521968E+23	1,264546E+23	2,786514E+23
664	7,609971E+22	7,609839E+22	6,322630E+22	6,322630E+22	1,521981E+23	1,264526E+23	2,786507E+23
665	7,609648E+22	7,609758E+22	6,322704E+22	6,322596E+22	1,521941E+23	1,264530E+23	2,786471E+23
666	7,609776E+22	7,609975E+22	6,322699E+22	6,322773E+22	1,521975E+23	1,264547E+23	2,786522E+23
667	7,609819E+22	7,609711E+22	6,322710E+22	6,322664E+22	1,521953E+23	1,264537E+23	2,786490E+23
668	7,609605E+22	7,609754E+22	6,322847E+22	6,322709E+22	1,521936E+23	1,264556E+23	2,786491E+23
669	7,609951E+22	7,609865E+22	6,322761E+22	6,322854E+22	1,521982E+23	1,264562E+23	2,786543E+23
670	7,609846E+22	7,609643E+22	6,322795E+22	6,322811E+22	1,521949E+23	1,264561E+23	2,786509E+23
671	7,609691E+22	7,609918E+22	6,322927E+22	6,322950E+22	1,521961E+23	1,264588E+23	2,786549E+23
672	7,609976E+22	7,609946E+22	6,322871E+22	6,322968E+22	1,521992E+23	1,264584E+23	2,786576E+23
673	7,609741E+22	7,609757E+22	6,323024E+22	6,322899E+22	1,521950E+23	1,264592E+23	2,786542E+23
674	7,609829E+22	7,609968E+22	6,323082E+22	6,323047E+22	1,521980E+23	1,264613E+23	2,786593E+23
675	7,609980E+22	7,609798E+22	6,323050E+22	6,322969E+22	1,521978E+23	1,264602E+23	2,786580E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
676	7,609657E+22	7,609795E+22	6,323117E+22	6,322995E+22	1,521945E+23	1,264611E+23	2,786556E+23
677	7,609879E+22	7,609984E+22	6,322970E+22	6,323109E+22	1,521986E+23	1,264608E+23	2,786594E+23
678	7,609852E+22	7,609726E+22	6,322924E+22	6,322960E+22	1,521958E+23	1,264588E+23	2,786546E+23
679	7,609636E+22	7,609843E+22	6,322985E+22	6,322935E+22	1,521948E+23	1,264592E+23	2,786540E+23
680	7,610003E+22	7,609898E+22	6,322827E+22	6,322874E+22	1,521990E+23	1,264570E+23	2,786560E+23
681	7,609818E+22	7,609651E+22	6,322854E+22	6,322717E+22	1,521947E+23	1,264557E+23	2,786504E+23
682	7,609739E+22	7,609898E+22	6,322843E+22	6,322825E+22	1,521964E+23	1,264567E+23	2,786530E+23
683	7,609928E+22	7,609857E+22	6,322746E+22	6,322761E+22	1,521979E+23	1,264551E+23	2,786529E+23
684	7,609581E+22	7,609735E+22	6,322845E+22	6,322754E+22	1,521932E+23	1,264560E+23	2,786491E+23
685	7,609766E+22	7,609918E+22	6,322809E+22	6,322863E+22	1,521968E+23	1,264567E+23	2,786536E+23
686	7,609896E+22	7,609669E+22	6,322820E+22	6,322788E+22	1,521957E+23	1,264561E+23	2,786517E+23
687	7,609612E+22	7,609728E+22	6,322956E+22	6,322867E+22	1,521934E+23	1,264582E+23	2,786516E+23
688	7,609952E+22	7,609936E+22	6,322858E+22	6,322979E+22	1,521989E+23	1,264584E+23	2,786573E+23
689	7,609824E+22	7,609717E+22	6,322947E+22	6,322938E+22	1,521954E+23	1,264588E+23	2,786543E+23
690	7,609667E+22	7,609915E+22	6,323071E+22	6,323078E+22	1,521958E+23	1,264615E+23	2,786573E+23
691	7,610002E+22	7,609931E+22	6,323063E+22	6,323064E+22	1,521993E+23	1,264613E+23	2,786606E+23
692	7,609725E+22	7,609715E+22	6,323213E+22	6,323048E+22	1,521944E+23	1,264626E+23	2,786570E+23
693	7,609810E+22	7,609941E+22	6,323191E+22	6,323179E+22	1,521975E+23	1,264637E+23	2,786612E+23
694	7,609985E+22	7,609806E+22	6,323113E+22	6,323148E+22	1,521979E+23	1,264626E+23	2,786605E+23
695	7,609593E+22	7,609779E+22	6,323185E+22	6,323165E+22	1,521937E+23	1,264635E+23	2,786572E+23
696	7,609888E+22	7,609985E+22	6,323047E+22	6,323170E+22	1,521987E+23	1,264622E+23	2,786609E+23
697	7,609901E+22	7,609700E+22	6,323051E+22	6,322985E+22	1,521960E+23	1,264604E+23	2,786564E+23
698	7,609683E+22	7,609789E+22	6,323073E+22	6,322985E+22	1,521947E+23	1,264606E+23	2,786553E+23
699	7,610032E+22	7,609908E+22	6,322939E+22	6,322936E+22	1,521994E+23	1,264588E+23	2,786582E+23
700	7,609739E+22	7,609700E+22	6,322972E+22	6,322864E+22	1,521944E+23	1,264584E+23	2,786527E+23
701	7,609646E+22	7,609925E+22	6,322933E+22	6,322942E+22	1,521957E+23	1,264588E+23	2,786545E+23
702	7,609908E+22	7,609852E+22	6,322866E+22	6,322906E+22	1,521976E+23	1,264577E+23	2,786553E+23
703	7,609557E+22	7,609672E+22	6,322988E+22	6,322902E+22	1,521923E+23	1,264589E+23	2,786512E+23
704	7,609811E+22	7,609879E+22	6,322934E+22	6,322964E+22	1,521969E+23	1,264590E+23	2,786559E+23
705	7,609936E+22	7,609673E+22	6,322956E+22	6,322920E+22	1,521961E+23	1,264588E+23	2,786549E+23
706	7,609612E+22	7,609739E+22	6,323027E+22	6,323034E+22	1,521935E+23	1,264606E+23	2,786541E+23
707	7,609950E+22	7,609973E+22	6,322989E+22	6,323110E+22	1,521992E+23	1,264610E+23	2,786602E+23
708	7,609796E+22	7,609733E+22	6,323122E+22	6,323073E+22	1,521953E+23	1,264620E+23	2,786572E+23
709	7,609669E+22	7,609874E+22	6,323216E+22	6,323149E+22	1,521954E+23	1,264637E+23	2,786591E+23
710	7,610044E+22	7,609908E+22	6,323200E+22	6,323191E+22	1,521995E+23	1,264639E+23	2,786634E+23
711	7,609689E+22	7,609693E+22	6,323331E+22	6,323218E+22	1,521938E+23	1,264655E+23	2,786593E+23
712	7,609768E+22	7,609965E+22	6,323276E+22	6,323308E+22	1,521973E+23	1,264658E+23	2,786632E+23
713	7,609958E+22	7,609831E+22	6,323233E+22	6,323267E+22	1,521979E+23	1,264650E+23	2,786629E+23
714	7,609598E+22	7,609735E+22	6,323267E+22	6,323263E+22	1,521933E+23	1,264653E+23	2,786586E+23
715	7,609946E+22	7,609949E+22	6,323178E+22	6,323218E+22	1,521990E+23	1,264640E+23	2,786629E+23
716	7,609912E+22	7,609691E+22	6,323182E+22	6,323075E+22	1,521960E+23	1,264626E+23	2,786586E+23
717	7,609658E+22	7,609797E+22	6,323150E+22	6,323067E+22	1,521946E+23	1,264622E+23	2,786567E+23
718	7,609995E+22	7,609966E+22	6,323007E+22	6,323089E+22	1,521996E+23	1,264610E+23	2,786606E+23
719	7,609640E+22	7,609700E+22	6,323078E+22	6,323035E+22	1,521934E+23	1,264611E+23	2,786545E+23
720	7,609619E+22	7,609898E+22	6,323060E+22	6,323035E+22	1,521952E+23	1,264610E+23	2,786561E+23
721	7,609943E+22	7,609797E+22	6,323024E+22	6,322993E+22	1,521974E+23	1,264602E+23	2,786576E+23
722	7,609605E+22	7,609597E+22	6,323080E+22	6,323022E+22	1,521920E+23	1,264610E+23	2,786530E+23
723	7,609867E+22	7,609878E+22	6,323044E+22	6,323082E+22	1,521975E+23	1,264613E+23	2,786587E+23
724	7,609901E+22	7,609731E+22	6,323072E+22	6,323081E+22	1,521963E+23	1,264615E+23	2,786579E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
725	7,609575E+22	7,609782E+22	6,323141E+22	6,323142E+22	1,521936E+23	1,264628E+23	2,786564E+23
726	7,609961E+22	7,609998E+22	6,323135E+22	6,323230E+22	1,521996E+23	1,264636E+23	2,786632E+23
727	7,609762E+22	7,609696E+22	6,323311E+22	6,323215E+22	1,521946E+23	1,264653E+23	2,786598E+23
728	7,609671E+22	7,609852E+22	6,323379E+22	6,323263E+22	1,521952E+23	1,264664E+23	2,786617E+23
729	7,610029E+22	7,609901E+22	6,323348E+22	6,323348E+22	1,521993E+23	1,264670E+23	2,786663E+23
730	7,609652E+22	7,609672E+22	6,323394E+22	6,323406E+22	1,521932E+23	1,264680E+23	2,786612E+23
731	7,609779E+22	7,609944E+22	6,323374E+22	6,323430E+22	1,521972E+23	1,264680E+23	2,786653E+23
732	7,609958E+22	7,609814E+22	6,323353E+22	6,323364E+22	1,521977E+23	1,264672E+23	2,786649E+23
733	7,609640E+22	7,609701E+22	6,323350E+22	6,323290E+22	1,521934E+23	1,264664E+23	2,786598E+23
734	7,609996E+22	7,609962E+22	6,323261E+22	6,323294E+22	1,521996E+23	1,264655E+23	2,786651E+23
735	7,609851E+22	7,609725E+22	6,323287E+22	6,323205E+22	1,521958E+23	1,264649E+23	2,786607E+23
736	7,609585E+22	7,609852E+22	6,323250E+22	6,323173E+22	1,521944E+23	1,264642E+23	2,786586E+23
737	7,609928E+22	7,609985E+22	6,323158E+22	6,323207E+22	1,521991E+23	1,264636E+23	2,786628E+23
738	7,609623E+22	7,609630E+22	6,323193E+22	6,323166E+22	1,521925E+23	1,264636E+23	2,786561E+23
739	7,609677E+22	7,609807E+22	6,323210E+22	6,323134E+22	1,521948E+23	1,264634E+23	2,786583E+23
740	7,609974E+22	7,609759E+22	6,323158E+22	6,323134E+22	1,521973E+23	1,264629E+23	2,786602E+23
741	7,609625E+22	7,609592E+22	6,323135E+22	6,323137E+22	1,521922E+23	1,264627E+23	2,786549E+23
742	7,609868E+22	7,609944E+22	6,323105E+22	6,323237E+22	1,521981E+23	1,264634E+23	2,786615E+23
743	7,609843E+22	7,609769E+22	6,323199E+22	6,323227E+22	1,521961E+23	1,264643E+23	2,786604E+23
744	7,609563E+22	7,609781E+22	6,323307E+22	6,323213E+22	1,521934E+23	1,264652E+23	2,786586E+23
745	7,609969E+22	7,609982E+22	6,323341E+22	6,323322E+22	1,521995E+23	1,264666E+23	2,786661E+23
746	7,609764E+22	7,609641E+22	6,323446E+22	6,323370E+22	1,521940E+23	1,264682E+23	2,786622E+23
747	7,609672E+22	7,609829E+22	6,323516E+22	6,323425E+22	1,521950E+23	1,264694E+23	2,786644E+23
748	7,609968E+22	7,609927E+22	6,323464E+22	6,323533E+22	1,521989E+23	1,264700E+23	2,786689E+23
749	7,609635E+22	7,609663E+22	6,323469E+22	6,323514E+22	1,521930E+23	1,264698E+23	2,786628E+23
750	7,609825E+22	7,609947E+22	6,323466E+22	6,323528E+22	1,521977E+23	1,264699E+23	2,786677E+23
751	7,609964E+22	7,609796E+22	6,323484E+22	6,323458E+22	1,521976E+23	1,264694E+23	2,786670E+23
752	7,609657E+22	7,609713E+22	6,323474E+22	6,323351E+22	1,521937E+23	1,264682E+23	2,786619E+23
753	7,609963E+22	7,610006E+22	6,323391E+22	6,323401E+22	1,521997E+23	1,264679E+23	2,786676E+23
754	7,609777E+22	7,609725E+22	6,323369E+22	6,323364E+22	1,521950E+23	1,264673E+23	2,786623E+23
755	7,609570E+22	7,609804E+22	6,323382E+22	6,323289E+22	1,521937E+23	1,264667E+23	2,786604E+23
756	7,609910E+22	7,609918E+22	6,323298E+22	6,323316E+22	1,521983E+23	1,264661E+23	2,786644E+23
757	7,609671E+22	7,609550E+22	6,323270E+22	6,323234E+22	1,521922E+23	1,264650E+23	2,786572E+23
758	7,609750E+22	7,609797E+22	6,323260E+22	6,323244E+22	1,521955E+23	1,264650E+23	2,786605E+23
759	7,609934E+22	7,609795E+22	6,323241E+22	6,323280E+22	1,521973E+23	1,264652E+23	2,786625E+23
760	7,609586E+22	7,609674E+22	6,323241E+22	6,323236E+22	1,521926E+23	1,264648E+23	2,786574E+23
761	7,609828E+22	7,609996E+22	6,323283E+22	6,323336E+22	1,521982E+23	1,264662E+23	2,786644E+23
762	7,609820E+22	7,609740E+22	6,323370E+22	6,323359E+22	1,521956E+23	1,264673E+23	2,786629E+23
763	7,609600E+22	7,609712E+22	6,323511E+22	6,323337E+22	1,521931E+23	1,264685E+23	2,786616E+23
764	7,609940E+22	7,609948E+22	6,323516E+22	6,323500E+22	1,521989E+23	1,264702E+23	2,786691E+23
765	7,609744E+22	7,609622E+22	6,323522E+22	6,323544E+22	1,521937E+23	1,264707E+23	2,786643E+23
766	7,609672E+22	7,609848E+22	6,323570E+22	6,323611E+22	1,521952E+23	1,264718E+23	2,786670E+23
767	7,609938E+22	7,609918E+22	6,323576E+22	6,323677E+22	1,521986E+23	1,264725E+23	2,786711E+23
768	7,609680E+22	7,609654E+22	6,323589E+22	6,323551E+22	1,521933E+23	1,264714E+23	2,786647E+23
769	7,609875E+22	7,609951E+22	6,323616E+22	6,323568E+22	1,521983E+23	1,264718E+23	2,786701E+23
770	7,609971E+22	7,609793E+22	6,323585E+22	6,323558E+22	1,521976E+23	1,264714E+23	2,786691E+23
771	7,609640E+22	7,609720E+22	6,323602E+22	6,323463E+22	1,521936E+23	1,264706E+23	2,786643E+23
772	7,609861E+22	7,610038E+22	6,323526E+22	6,323545E+22	1,521990E+23	1,264707E+23	2,786697E+23
773	7,609737E+22	7,609680E+22	6,323455E+22	6,323466E+22	1,521942E+23	1,264692E+23	2,786634E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
774	7,609595E+22	7,609751E+22	6,323468E+22	6,323403E+22	1,521935E+23	1,264687E+23	2,786622E+23
775	7,609916E+22	7,609860E+22	6,323410E+22	6,323438E+22	1,521978E+23	1,264685E+23	2,786662E+23
776	7,609702E+22	7,609546E+22	6,323350E+22	6,323316E+22	1,521925E+23	1,264667E+23	2,786591E+23
777	7,609743E+22	7,609863E+22	6,323354E+22	6,323363E+22	1,521961E+23	1,264672E+23	2,786632E+23
778	7,609891E+22	7,609832E+22	6,323324E+22	6,323427E+22	1,521972E+23	1,264675E+23	2,786647E+23
779	7,609593E+22	7,609657E+22	6,323416E+22	6,323337E+22	1,521925E+23	1,264675E+23	2,786600E+23
780	7,609798E+22	7,609971E+22	6,323488E+22	6,323442E+22	1,521977E+23	1,264693E+23	2,786670E+23
781	7,609838E+22	7,609675E+22	6,323510E+22	6,323468E+22	1,521951E+23	1,264698E+23	2,786649E+23
782	7,609627E+22	7,609698E+22	6,323616E+22	6,323511E+22	1,521933E+23	1,264713E+23	2,786645E+23
783	7,609880E+22	7,609958E+22	6,323631E+22	6,323702E+22	1,521984E+23	1,264733E+23	2,786717E+23
784	7,609721E+22	7,609660E+22	6,323626E+22	6,323672E+22	1,521938E+23	1,264730E+23	2,786668E+23
785	7,609686E+22	7,609876E+22	6,323711E+22	6,323713E+22	1,521956E+23	1,264742E+23	2,786699E+23
786	7,609962E+22	7,609889E+22	6,323708E+22	6,323780E+22	1,521985E+23	1,264749E+23	2,786734E+23
787	7,609755E+22	7,609617E+22	6,323760E+22	6,323627E+22	1,521937E+23	1,264739E+23	2,786676E+23
788	7,609845E+22	7,609958E+22	6,323765E+22	6,323679E+22	1,521980E+23	1,264744E+23	2,786725E+23
789	7,609919E+22	7,609805E+22	6,323650E+22	6,323687E+22	1,521972E+23	1,264734E+23	2,786706E+23
790	7,609604E+22	7,609733E+22	6,323655E+22	6,323614E+22	1,521934E+23	1,264727E+23	2,786661E+23
791	7,609788E+22	7,609986E+22	6,323636E+22	6,323673E+22	1,521977E+23	1,264731E+23	2,786708E+23
792	7,609757E+22	7,609631E+22	6,323556E+22	6,323516E+22	1,521939E+23	1,264707E+23	2,786646E+23
793	7,609650E+22	7,609726E+22	6,323567E+22	6,323471E+22	1,521938E+23	1,264704E+23	2,786641E+23
794	7,609928E+22	7,609848E+22	6,323477E+22	6,323558E+22	1,521978E+23	1,264703E+23	2,786681E+23
795	7,609718E+22	7,609576E+22	6,323457E+22	6,323421E+22	1,521929E+23	1,264688E+23	2,786617E+23
796	7,609672E+22	7,609919E+22	6,323502E+22	6,323473E+22	1,521959E+23	1,264697E+23	2,786657E+23
797	7,609870E+22	7,609826E+22	6,323455E+22	6,323521E+22	1,521970E+23	1,264698E+23	2,786667E+23
798	7,609620E+22	7,609628E+22	6,323567E+22	6,323468E+22	1,521925E+23	1,264703E+23	2,786628E+23
799	7,609768E+22	7,609919E+22	6,323670E+22	6,323610E+22	1,521969E+23	1,264728E+23	2,786697E+23
800	7,609834E+22	7,609666E+22	6,323638E+22	6,323619E+22	1,521950E+23	1,264726E+23	2,786676E+23
801	7,609610E+22	7,609734E+22	6,323722E+22	6,323694E+22	1,521934E+23	1,264742E+23	2,786676E+23
802	7,609861E+22	7,609951E+22	6,323721E+22	6,323880E+22	1,521981E+23	1,264760E+23	2,786741E+23
803	7,609783E+22	7,609619E+22	6,323774E+22	6,323762E+22	1,521940E+23	1,264754E+23	2,786694E+23
804	7,609712E+22	7,609870E+22	6,323877E+22	6,323779E+22	1,521958E+23	1,264766E+23	2,786724E+23
805	7,610007E+22	7,609867E+22	6,323804E+22	6,323845E+22	1,521987E+23	1,264765E+23	2,786752E+23
806	7,609755E+22	7,609648E+22	6,323845E+22	6,323754E+22	1,521940E+23	1,264760E+23	2,786700E+23
807	7,609730E+22	7,609998E+22	6,323881E+22	6,323838E+22	1,521973E+23	1,264772E+23	2,786745E+23
808	7,609842E+22	7,609823E+22	6,323754E+22	6,323790E+22	1,521966E+23	1,264754E+23	2,786721E+23
809	7,609585E+22	7,609718E+22	6,323779E+22	6,323716E+22	1,521930E+23	1,264749E+23	2,786680E+23
810	7,609804E+22	7,609904E+22	6,323738E+22	6,323782E+22	1,521971E+23	1,264752E+23	2,786723E+23
811	7,609840E+22	7,609560E+22	6,323677E+22	6,323597E+22	1,521940E+23	1,264727E+23	2,786667E+23
812	7,609646E+22	7,609747E+22	6,323668E+22	6,323576E+22	1,521939E+23	1,264724E+23	2,786664E+23
813	7,609911E+22	7,609878E+22	6,323520E+22	6,323671E+22	1,521979E+23	1,264719E+23	2,786698E+23
814	7,609711E+22	7,609616E+22	6,323542E+22	6,323547E+22	1,521933E+23	1,264709E+23	2,786642E+23
815	7,609617E+22	7,609900E+22	6,323671E+22	6,323585E+22	1,521952E+23	1,264726E+23	2,786677E+23
816	7,609873E+22	7,609800E+22	6,323617E+22	6,323595E+22	1,521967E+23	1,264721E+23	2,786689E+23
817	7,609644E+22	7,609619E+22	6,323717E+22	6,323602E+22	1,521926E+23	1,264732E+23	2,786658E+23
818	7,609740E+22	7,609893E+22	6,323784E+22	6,323804E+22	1,521963E+23	1,264759E+23	2,786722E+23
819	7,609843E+22	7,609672E+22	6,323769E+22	6,323789E+22	1,521952E+23	1,264756E+23	2,786707E+23
820	7,609580E+22	7,609758E+22	6,323859E+22	6,323830E+22	1,521934E+23	1,264769E+23	2,786703E+23
821	7,609885E+22	7,609926E+22	6,323830E+22	6,323978E+22	1,521981E+23	1,264781E+23	2,786762E+23
822	7,609851E+22	7,609618E+22	6,323894E+22	6,323860E+22	1,521947E+23	1,264775E+23	2,786722E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
823	7,609688E+22	7,609855E+22	6,324034E+22	6,323897E+22	1,521954E+23	1,264793E+23	2,786748E+23
824	7,609968E+22	7,609905E+22	6,323917E+22	6,323954E+22	1,521987E+23	1,264787E+23	2,786775E+23
825	7,609699E+22	7,609701E+22	6,323941E+22	6,323908E+22	1,521940E+23	1,264785E+23	2,786725E+23
826	7,609657E+22	7,609956E+22	6,323983E+22	6,323991E+22	1,521961E+23	1,264797E+23	2,786759E+23
827	7,609876E+22	7,609738E+22	6,323892E+22	6,323871E+22	1,521961E+23	1,264776E+23	2,786738E+23
828	7,609612E+22	7,609663E+22	6,323901E+22	6,323775E+22	1,521927E+23	1,264768E+23	2,786695E+23
829	7,609865E+22	7,609852E+22	6,323786E+22	6,323856E+22	1,521972E+23	1,264764E+23	2,786736E+23
830	7,609873E+22	7,609601E+22	6,323718E+22	6,323707E+22	1,521947E+23	1,264742E+23	2,786690E+23
831	7,609569E+22	7,609807E+22	6,323771E+22	6,323702E+22	1,521938E+23	1,264747E+23	2,786685E+23
832	7,609858E+22	7,609931E+22	6,323643E+22	6,323746E+22	1,521979E+23	1,264739E+23	2,786718E+23
833	7,609694E+22	7,609640E+22	6,323707E+22	6,323658E+22	1,521933E+23	1,264736E+23	2,786670E+23
834	7,609600E+22	7,609837E+22	6,323842E+22	6,323735E+22	1,521944E+23	1,264758E+23	2,786701E+23
835	7,609911E+22	7,609728E+22	6,323789E+22	6,323742E+22	1,521964E+23	1,264753E+23	2,786717E+23
836	7,609612E+22	7,609627E+22	6,323846E+22	6,323777E+22	1,521924E+23	1,264762E+23	2,786686E+23
837	7,609735E+22	7,609883E+22	6,323832E+22	6,323976E+22	1,521962E+23	1,264781E+23	2,786743E+23
838	7,609867E+22	7,609676E+22	6,323849E+22	6,323929E+22	1,521954E+23	1,264778E+23	2,786732E+23
839	7,609577E+22	7,609744E+22	6,324013E+22	6,323931E+22	1,521932E+23	1,264794E+23	2,786727E+23
840	7,609920E+22	7,609924E+22	6,323970E+22	6,324024E+22	1,521984E+23	1,264799E+23	2,786784E+23
841	7,609870E+22	7,609662E+22	6,324033E+22	6,323966E+22	1,521953E+23	1,264800E+23	2,786753E+23
842	7,609626E+22	7,609869E+22	6,324158E+22	6,324057E+22	1,521949E+23	1,264821E+23	2,786771E+23
843	7,609925E+22	7,609909E+22	6,324061E+22	6,324090E+22	1,521983E+23	1,264815E+23	2,786798E+23
844	7,609635E+22	7,609700E+22	6,324090E+22	6,324026E+22	1,521933E+23	1,264812E+23	2,786745E+23
845	7,609673E+22	7,609871E+22	6,324073E+22	6,324091E+22	1,521954E+23	1,264816E+23	2,786771E+23
846	7,609946E+22	7,609685E+22	6,323978E+22	6,323972E+22	1,521963E+23	1,264795E+23	2,786758E+23
847	7,609618E+22	7,609638E+22	6,323998E+22	6,323888E+22	1,521926E+23	1,264789E+23	2,786714E+23
848	7,609847E+22	7,609903E+22	6,323841E+22	6,323946E+22	1,521975E+23	1,264779E+23	2,786754E+23
849	7,609844E+22	7,609695E+22	6,323787E+22	6,323830E+22	1,521954E+23	1,264762E+23	2,786716E+23
850	7,609511E+22	7,609794E+22	6,323899E+22	6,323822E+22	1,521930E+23	1,264772E+23	2,786703E+23
851	7,609876E+22	7,609882E+22	6,323827E+22	6,323821E+22	1,521976E+23	1,264765E+23	2,786741E+23
852	7,609694E+22	7,609602E+22	6,323876E+22	6,323751E+22	1,521930E+23	1,264763E+23	2,786692E+23
853	7,609610E+22	7,609767E+22	6,323934E+22	6,323881E+22	1,521938E+23	1,264781E+23	2,786719E+23
854	7,609913E+22	7,609741E+22	6,323864E+22	6,323920E+22	1,521965E+23	1,264778E+23	2,786744E+23
855	7,609552E+22	7,609645E+22	6,323956E+22	6,323945E+22	1,521920E+23	1,264790E+23	2,786710E+23
856	7,609726E+22	7,609903E+22	6,323949E+22	6,324069E+22	1,521963E+23	1,264802E+23	2,786765E+23
857	7,609907E+22	7,609712E+22	6,323991E+22	6,324030E+22	1,521962E+23	1,264802E+23	2,786764E+23
858	7,609592E+22	7,609709E+22	6,324186E+22	6,324051E+22	1,521930E+23	1,264824E+23	2,786754E+23
859	7,609946E+22	7,609908E+22	6,324152E+22	6,324139E+22	1,521985E+23	1,264829E+23	2,786815E+23
860	7,609805E+22	7,609707E+22	6,324182E+22	6,324118E+22	1,521951E+23	1,264830E+23	2,786781E+23
861	7,609575E+22	7,609846E+22	6,324239E+22	6,324226E+22	1,521942E+23	1,264846E+23	2,786789E+23
862	7,609919E+22	7,609871E+22	6,324158E+22	6,324225E+22	1,521979E+23	1,264838E+23	2,786817E+23
863	7,609630E+22	7,609636E+22	6,324215E+22	6,324128E+22	1,521927E+23	1,264834E+23	2,786761E+23
864	7,609723E+22	7,609833E+22	6,324150E+22	6,324143E+22	1,521956E+23	1,264829E+23	2,786785E+23
865	7,609981E+22	7,609732E+22	6,324038E+22	6,324072E+22	1,521971E+23	1,264811E+23	2,786782E+23
866	7,609579E+22	7,609679E+22	6,324079E+22	6,324017E+22	1,521926E+23	1,264810E+23	2,786735E+23
867	7,609821E+22	7,609932E+22	6,323967E+22	6,324029E+22	1,521975E+23	1,264800E+23	2,786775E+23
868	7,609782E+22	7,609726E+22	6,323955E+22	6,323908E+22	1,521951E+23	1,264786E+23	2,786737E+23
869	7,609514E+22	7,609723E+22	6,324024E+22	6,323924E+22	1,521924E+23	1,264795E+23	2,786718E+23
870	7,609897E+22	7,609815E+22	6,323959E+22	6,323948E+22	1,521971E+23	1,264791E+23	2,786762E+23
871	7,609662E+22	7,609565E+22	6,324009E+22	6,323923E+22	1,521923E+23	1,264793E+23	2,786716E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
872	7,609586E+22	7,609775E+22	6,324000E+22	6,324030E+22	1,521936E+23	1,264803E+23	2,786739E+23
873	7,609905E+22	7,609795E+22	6,323938E+22	6,324083E+22	1,521970E+23	1,264802E+23	2,786772E+23
874	7,609551E+22	7,609621E+22	6,324088E+22	6,324070E+22	1,521917E+23	1,264816E+23	2,786733E+23
875	7,609791E+22	7,609870E+22	6,324128E+22	6,324129E+22	1,521966E+23	1,264826E+23	2,786792E+23
876	7,609926E+22	7,609735E+22	6,324176E+22	6,324107E+22	1,521966E+23	1,264828E+23	2,786794E+23
877	7,609594E+22	7,609696E+22	6,324305E+22	6,324195E+22	1,521929E+23	1,264850E+23	2,786779E+23
878	7,609899E+22	7,609943E+22	6,324273E+22	6,324310E+22	1,521984E+23	1,264858E+23	2,786843E+23
879	7,609711E+22	7,609715E+22	6,324328E+22	6,324295E+22	1,521943E+23	1,264862E+23	2,786805E+23
880	7,609541E+22	7,609816E+22	6,324354E+22	6,324337E+22	1,521936E+23	1,264869E+23	2,786805E+23
881	7,609958E+22	7,609859E+22	6,324258E+22	6,324342E+22	1,521982E+23	1,264860E+23	2,786842E+23
882	7,609665E+22	7,609568E+22	6,324322E+22	6,324241E+22	1,521923E+23	1,264856E+23	2,786780E+23
883	7,609771E+22	7,609826E+22	6,324251E+22	6,324228E+22	1,521960E+23	1,264848E+23	2,786808E+23
884	7,609943E+22	7,609810E+22	6,324123E+22	6,324161E+22	1,521975E+23	1,264828E+23	2,786804E+23
885	7,609544E+22	7,609670E+22	6,324145E+22	6,324124E+22	1,521921E+23	1,264827E+23	2,786748E+23
886	7,609805E+22	7,609909E+22	6,324094E+22	6,324105E+22	1,521971E+23	1,264820E+23	2,786791E+23
887	7,609755E+22	7,609666E+22	6,324116E+22	6,324000E+22	1,521942E+23	1,264812E+23	2,786754E+23
888	7,609521E+22	7,609667E+22	6,324134E+22	6,324013E+22	1,521919E+23	1,264815E+23	2,786734E+23
889	7,609899E+22	7,609839E+22	6,324033E+22	6,324107E+22	1,521974E+23	1,264814E+23	2,786788E+23
890	7,609618E+22	7,609569E+22	6,324102E+22	6,324099E+22	1,521919E+23	1,264820E+23	2,786739E+23
891	7,609593E+22	7,609786E+22	6,324128E+22	6,324148E+22	1,521938E+23	1,264828E+23	2,786765E+23
892	7,609898E+22	7,609831E+22	6,324107E+22	6,324171E+22	1,521973E+23	1,264828E+23	2,786801E+23
893	7,609599E+22	7,609579E+22	6,324235E+22	6,324181E+22	1,521918E+23	1,264842E+23	2,786759E+23
894	7,609826E+22	7,609853E+22	6,324297E+22	6,324250E+22	1,521968E+23	1,264855E+23	2,786823E+23
895	7,609873E+22	7,609752E+22	6,324344E+22	6,324286E+22	1,521963E+23	1,264863E+23	2,786826E+23
896	7,609533E+22	7,609724E+22	6,324403E+22	6,324366E+22	1,521926E+23	1,264877E+23	2,786803E+23
897	7,609852E+22	7,609974E+22	6,324368E+22	6,324491E+22	1,521983E+23	1,264886E+23	2,786868E+23
898	7,609702E+22	7,609649E+22	6,324466E+22	6,324434E+22	1,521935E+23	1,264890E+23	2,786825E+23
899	7,609622E+22	7,609736E+22	6,324481E+22	6,324396E+22	1,521936E+23	1,264888E+23	2,786824E+23
900	7,609994E+22	7,609859E+22	6,324375E+22	6,324399E+22	1,521985E+23	1,264877E+23	2,786863E+23
901	7,609695E+22	7,609567E+22	6,324369E+22	6,324338E+22	1,521926E+23	1,264871E+23	2,786797E+23
902	7,609745E+22	7,609868E+22	6,324329E+22	6,324317E+22	1,521961E+23	1,264865E+23	2,786826E+23
903	7,609860E+22	7,609845E+22	6,324259E+22	6,324261E+22	1,521970E+23	1,264852E+23	2,786823E+23
904	7,609508E+22	7,609652E+22	6,324266E+22	6,324195E+22	1,521916E+23	1,264846E+23	2,786762E+23
905	7,609799E+22	7,609894E+22	6,324216E+22	6,324221E+22	1,521969E+23	1,264844E+23	2,786813E+23
906	7,609747E+22	7,609590E+22	6,324255E+22	6,324153E+22	1,521934E+23	1,264841E+23	2,786774E+23
907	7,609536E+22	7,609636E+22	6,324238E+22	6,324155E+22	1,521917E+23	1,264839E+23	2,786756E+23
908	7,609864E+22	7,609889E+22	6,324130E+22	6,324249E+22	1,521975E+23	1,264838E+23	2,786813E+23
909	7,609632E+22	7,609547E+22	6,324174E+22	6,324237E+22	1,521918E+23	1,264841E+23	2,786759E+23
910	7,609638E+22	7,609767E+22	6,324266E+22	6,324229E+22	1,521940E+23	1,264849E+23	2,786790E+23
911	7,609914E+22	7,609822E+22	6,324284E+22	6,324266E+22	1,521974E+23	1,264855E+23	2,786829E+23
912	7,609609E+22	7,609580E+22	6,324372E+22	6,324289E+22	1,521919E+23	1,264866E+23	2,786785E+23
913	7,609792E+22	7,609924E+22	6,324414E+22	6,324429E+22	1,521972E+23	1,264884E+23	2,786856E+23
914	7,609796E+22	7,609751E+22	6,324491E+22	6,324483E+22	1,521955E+23	1,264897E+23	2,786852E+23
915	7,609514E+22	7,609700E+22	6,324555E+22	6,324501E+22	1,521921E+23	1,264906E+23	2,786827E+23
916	7,609851E+22	7,609959E+22	6,324521E+22	6,324581E+22	1,521981E+23	1,264910E+23	2,786891E+23
917	7,609766E+22	7,609557E+22	6,324560E+22	6,324539E+22	1,521932E+23	1,264910E+23	2,786842E+23
918	7,609687E+22	7,609702E+22	6,324582E+22	6,324484E+22	1,521939E+23	1,264907E+23	2,786846E+23
919	7,609966E+22	7,609891E+22	6,324471E+22	6,324519E+22	1,521986E+23	1,264899E+23	2,786885E+23
920	7,609645E+22	7,609618E+22	6,324423E+22	6,324438E+22	1,521926E+23	1,264886E+23	2,786812E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
921	7,609698E+22	7,609920E+22	6,324410E+22	6,324421E+22	1,521962E+23	1,264883E+23	2,786845E+23
922	7,609823E+22	7,609788E+22	6,324410E+22	6,324357E+22	1,521961E+23	1,264877E+23	2,786838E+23
923	7,609540E+22	7,609585E+22	6,324408E+22	6,324265E+22	1,521913E+23	1,264867E+23	2,786780E+23
924	7,609789E+22	7,609886E+22	6,324343E+22	6,324322E+22	1,521968E+23	1,264866E+23	2,786834E+23
925	7,609747E+22	7,609565E+22	6,324312E+22	6,324317E+22	1,521931E+23	1,264863E+23	2,786794E+23
926	7,609532E+22	7,609650E+22	6,324320E+22	6,324289E+22	1,521918E+23	1,264861E+23	2,786779E+23
927	7,609829E+22	7,609908E+22	6,324268E+22	6,324374E+22	1,521974E+23	1,264864E+23	2,786838E+23
928	7,609655E+22	7,609548E+22	6,324298E+22	6,324317E+22	1,521920E+23	1,264861E+23	2,786782E+23
929	7,609671E+22	7,609786E+22	6,324405E+22	6,324341E+22	1,521946E+23	1,264875E+23	2,786820E+23
930	7,609906E+22	7,609801E+22	6,324467E+22	6,324426E+22	1,521971E+23	1,264889E+23	2,786860E+23
931	7,609597E+22	7,609590E+22	6,324515E+22	6,324447E+22	1,521919E+23	1,264896E+23	2,786815E+23
932	7,609712E+22	7,609964E+22	6,324557E+22	6,324588E+22	1,521968E+23	1,264915E+23	2,786882E+23
933	7,609788E+22	7,609691E+22	6,324597E+22	6,324644E+22	1,521948E+23	1,264924E+23	2,786872E+23
934	7,609567E+22	7,609619E+22	6,324685E+22	6,324591E+22	1,521919E+23	1,264928E+23	2,786846E+23
935	7,609885E+22	7,609913E+22	6,324658E+22	6,324675E+22	1,521980E+23	1,264933E+23	2,786913E+23
936	7,609802E+22	7,609566E+22	6,324622E+22	6,324619E+22	1,521937E+23	1,264924E+23	2,786861E+23
937	7,609670E+22	7,609796E+22	6,324632E+22	6,324605E+22	1,521947E+23	1,264924E+23	2,786870E+23
938	7,609891E+22	7,609931E+22	6,324591E+22	6,324647E+22	1,521982E+23	1,264924E+23	2,786906E+23
939	7,609609E+22	7,609627E+22	6,324566E+22	6,324518E+22	1,521924E+23	1,264908E+23	2,786832E+23
940	7,609654E+22	7,609919E+22	6,324579E+22	6,324493E+22	1,521957E+23	1,264907E+23	2,786864E+23
941	7,609843E+22	7,609690E+22	6,324525E+22	6,324484E+22	1,521953E+23	1,264901E+23	2,786854E+23
942	7,609573E+22	7,609520E+22	6,324514E+22	6,324393E+22	1,521909E+23	1,264891E+23	2,786800E+23
943	7,609758E+22	7,609887E+22	6,324429E+22	6,324485E+22	1,521965E+23	1,264891E+23	2,786856E+23
944	7,609728E+22	7,609584E+22	6,324349E+22	6,324447E+22	1,521931E+23	1,264880E+23	2,786811E+23
945	7,609550E+22	7,609693E+22	6,324392E+22	6,324398E+22	1,521924E+23	1,264879E+23	2,786803E+23
946	7,609852E+22	7,609864E+22	6,324427E+22	6,324459E+22	1,521972E+23	1,264889E+23	2,786860E+23
947	7,609703E+22	7,609534E+22	6,324462E+22	6,324385E+22	1,521924E+23	1,264885E+23	2,786808E+23
948	7,609646E+22	7,609834E+22	6,324571E+22	6,324446E+22	1,521948E+23	1,264902E+23	2,786850E+23
949	7,609858E+22	7,609793E+22	6,324581E+22	6,324613E+22	1,521965E+23	1,264919E+23	2,786884E+23
950	7,609559E+22	7,609583E+22	6,324661E+22	6,324611E+22	1,521914E+23	1,264927E+23	2,786841E+23
951	7,609667E+22	7,609936E+22	6,324721E+22	6,324744E+22	1,521960E+23	1,264947E+23	2,786907E+23
952	7,609812E+22	7,609646E+22	6,324704E+22	6,324758E+22	1,521946E+23	1,264946E+23	2,786892E+23
953	7,609628E+22	7,609622E+22	6,324769E+22	6,324714E+22	1,521925E+23	1,264948E+23	2,786873E+23
954	7,609894E+22	7,609898E+22	6,324782E+22	6,324812E+22	1,521979E+23	1,264959E+23	2,786939E+23
955	7,609791E+22	7,609629E+22	6,324713E+22	6,324729E+22	1,521942E+23	1,264944E+23	2,786886E+23
956	7,609600E+22	7,609874E+22	6,324755E+22	6,324696E+22	1,521947E+23	1,264945E+23	2,786892E+23
957	7,609865E+22	7,609884E+22	6,324708E+22	6,324755E+22	1,521975E+23	1,264946E+23	2,786921E+23
958	7,609637E+22	7,609546E+22	6,324715E+22	6,324587E+22	1,521918E+23	1,264930E+23	2,786849E+23
959	7,609644E+22	7,609853E+22	6,324721E+22	6,324601E+22	1,521950E+23	1,264932E+23	2,786882E+23
960	7,609845E+22	7,609666E+22	6,324576E+22	6,324607E+22	1,521951E+23	1,264918E+23	2,786869E+23
961	7,609564E+22	7,609570E+22	6,324535E+22	6,324539E+22	1,521913E+23	1,264907E+23	2,786821E+23
962	7,609724E+22	7,609891E+22	6,324535E+22	6,324620E+22	1,521962E+23	1,264915E+23	2,786877E+23
963	7,609747E+22	7,609606E+22	6,324466E+22	6,324509E+22	1,521935E+23	1,264898E+23	2,786833E+23
964	7,609549E+22	7,609717E+22	6,324564E+22	6,324449E+22	1,521927E+23	1,264901E+23	2,786828E+23
965	7,609872E+22	7,609815E+22	6,324578E+22	6,324583E+22	1,521969E+23	1,264916E+23	2,786885E+23
966	7,609707E+22	7,609511E+22	6,324623E+22	6,324531E+22	1,521922E+23	1,264915E+23	2,786837E+23
967	7,609560E+22	7,609851E+22	6,324721E+22	6,324648E+22	1,521941E+23	1,264937E+23	2,786878E+23
968	7,609802E+22	7,609789E+22	6,324667E+22	6,324789E+22	1,521959E+23	1,264946E+23	2,786905E+23
969	7,609571E+22	7,609574E+22	6,324752E+22	6,324758E+22	1,521914E+23	1,264951E+23	2,786866E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
970	7,609705E+22	7,609858E+22	6,324875E+22	6,324865E+22	1,521956E+23	1,264974E+23	2,786930E+23
971	7,609878E+22	7,609640E+22	6,324821E+22	6,324837E+22	1,521952E+23	1,264966E+23	2,786918E+23
972	7,609630E+22	7,609697E+22	6,324893E+22	6,324803E+22	1,521933E+23	1,264970E+23	2,786902E+23
973	7,609866E+22	7,609922E+22	6,324876E+22	6,324953E+22	1,521979E+23	1,264983E+23	2,786962E+23
974	7,609758E+22	7,609644E+22	6,324861E+22	6,324830E+22	1,521940E+23	1,264969E+23	2,786909E+23
975	7,609541E+22	7,609858E+22	6,324929E+22	6,324802E+22	1,521940E+23	1,264973E+23	2,786913E+23
976	7,609852E+22	7,609821E+22	6,324817E+22	6,324851E+22	1,521967E+23	1,264967E+23	2,786934E+23
977	7,609669E+22	7,609517E+22	6,324793E+22	6,324719E+22	1,521919E+23	1,264951E+23	2,786870E+23
978	7,609639E+22	7,609792E+22	6,324815E+22	6,324758E+22	1,521943E+23	1,264957E+23	2,786900E+23
979	7,609827E+22	7,609698E+22	6,324623E+22	6,324727E+22	1,521953E+23	1,264935E+23	2,786888E+23
980	7,609538E+22	7,609634E+22	6,324620E+22	6,324618E+22	1,521917E+23	1,264924E+23	2,786841E+23
981	7,609741E+22	7,609841E+22	6,324638E+22	6,324702E+22	1,521958E+23	1,264934E+23	2,786892E+23
982	7,609799E+22	7,609568E+22	6,324629E+22	6,324559E+22	1,521937E+23	1,264919E+23	2,786855E+23
983	7,609535E+22	7,609709E+22	6,324739E+22	6,324560E+22	1,521924E+23	1,264930E+23	2,786854E+23
984	7,609822E+22	7,609830E+22	6,324681E+22	6,324735E+22	1,521965E+23	1,264942E+23	2,786907E+23
985	7,609655E+22	7,609568E+22	6,324712E+22	6,324728E+22	1,521922E+23	1,264944E+23	2,786866E+23
986	7,609501E+22	7,609813E+22	6,324883E+22	6,324840E+22	1,521931E+23	1,264972E+23	2,786904E+23
987	7,609809E+22	7,609772E+22	6,324811E+22	6,324909E+22	1,521958E+23	1,264972E+23	2,786930E+23
988	7,609613E+22	7,609573E+22	6,324909E+22	6,324849E+22	1,521919E+23	1,264976E+23	2,786894E+23
989	7,609768E+22	7,609800E+22	6,324999E+22	6,325001E+22	1,521957E+23	1,265000E+23	2,786957E+23
990	7,609916E+22	7,609653E+22	6,324951E+22	6,324955E+22	1,521957E+23	1,264991E+23	2,786948E+23
991	7,609566E+22	7,609754E+22	6,325027E+22	6,324952E+22	1,521932E+23	1,264998E+23	2,786930E+23
992	7,609809E+22	7,609935E+22	6,324971E+22	6,325069E+22	1,521974E+23	1,265004E+23	2,786978E+23
993	7,609758E+22	7,609627E+22	6,324965E+22	6,324932E+22	1,521939E+23	1,264990E+23	2,786928E+23
994	7,609540E+22	7,609759E+22	6,325084E+22	6,324911E+22	1,521930E+23	1,265000E+23	2,786929E+23
995	7,609867E+22	7,609796E+22	6,324899E+22	6,324936E+22	1,521966E+23	1,264983E+23	2,786950E+23
996	7,609646E+22	7,609557E+22	6,324864E+22	6,324819E+22	1,521920E+23	1,264968E+23	2,786889E+23
997	7,609617E+22	7,609782E+22	6,324868E+22	6,324898E+22	1,521940E+23	1,264977E+23	2,786916E+23
998	7,609833E+22	7,609698E+22	6,324736E+22	6,324803E+22	1,521953E+23	1,264954E+23	2,786907E+23
999	7,609519E+22	7,609637E+22	6,324780E+22	6,324696E+22	1,521916E+23	1,264948E+23	2,786863E+23
1000	7,609746E+22	7,609814E+22	6,324756E+22	6,324779E+22	1,521956E+23	1,264953E+23	2,786909E+23
1001	7,609815E+22	7,609576E+22	6,324744E+22	6,324694E+22	1,521939E+23	1,264944E+23	2,786883E+23
1002	7,609486E+22	7,609683E+22	6,324893E+22	6,324755E+22	1,521917E+23	1,264965E+23	2,786882E+23
1003	7,609755E+22	7,609863E+22	6,324785E+22	6,324905E+22	1,521962E+23	1,264969E+23	2,786931E+23
1004	7,609624E+22	7,609589E+22	6,324851E+22	6,324866E+22	1,521921E+23	1,264972E+23	2,786893E+23
1005	7,609545E+22	7,609712E+22	6,325015E+22	6,324976E+22	1,521926E+23	1,264999E+23	2,786925E+23
1006	7,609900E+22	7,609708E+22	6,324970E+22	6,324993E+22	1,521961E+23	1,264996E+23	2,786957E+23
1007	7,609645E+22	7,609587E+22	6,325058E+22	6,324963E+22	1,521923E+23	1,265002E+23	2,786925E+23
1008	7,609749E+22	7,609840E+22	6,325078E+22	6,325127E+22	1,521959E+23	1,265021E+23	2,786979E+23
1009	7,609883E+22	7,609745E+22	6,325043E+22	6,325101E+22	1,521963E+23	1,265014E+23	2,786977E+23
1010	7,609505E+22	7,609738E+22	6,325195E+22	6,325092E+22	1,521924E+23	1,265029E+23	2,786953E+23
1011	7,609763E+22	7,609924E+22	6,325113E+22	6,325155E+22	1,521969E+23	1,265027E+23	2,786995E+23
1012	7,609758E+22	7,609612E+22	6,325109E+22	6,325023E+22	1,521937E+23	1,265013E+23	2,786950E+23
1013	7,609560E+22	7,609656E+22	6,325175E+22	6,325059E+22	1,521922E+23	1,265023E+23	2,786945E+23
1014	7,609882E+22	7,609773E+22	6,324982E+22	6,325059E+22	1,521965E+23	1,265004E+23	2,786970E+23
1015	7,609608E+22	7,609593E+22	6,324939E+22	6,324942E+22	1,521920E+23	1,264988E+23	2,786908E+23
1016	7,609605E+22	7,609777E+22	6,324918E+22	6,324973E+22	1,521938E+23	1,264989E+23	2,786927E+23
1017	7,609873E+22	7,609706E+22	6,324828E+22	6,324860E+22	1,521958E+23	1,264969E+23	2,786927E+23
1018	7,609533E+22	7,609582E+22	6,324949E+22	6,324788E+22	1,521912E+23	1,264974E+23	2,786885E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1019	7,609718E+22	7,609838E+22	6,324884E+22	6,324875E+22	1,521956E+23	1,264976E+23	2,786931E+23
1020	7,609761E+22	7,609640E+22	6,324877E+22	6,324838E+22	1,521940E+23	1,264972E+23	2,786912E+23
1021	7,609438E+22	7,609644E+22	6,325016E+22	6,324951E+22	1,521908E+23	1,264997E+23	2,786905E+23
1022	7,609763E+22	7,609821E+22	6,324947E+22	6,325039E+22	1,521958E+23	1,264999E+23	2,786957E+23
1023	7,609636E+22	7,609560E+22	6,325023E+22	6,324993E+22	1,521920E+23	1,265002E+23	2,786921E+23
1024	7,609603E+22	7,609670E+22	6,325120E+22	6,325094E+22	1,521927E+23	1,265021E+23	2,786949E+23
1025	7,609960E+22	7,609731E+22	6,325063E+22	6,325128E+22	1,521969E+23	1,265019E+23	2,786988E+23
1026	7,609613E+22	7,609609E+22	6,325198E+22	6,325137E+22	1,521922E+23	1,265034E+23	2,786956E+23
1027	7,609675E+22	7,609921E+22	6,325181E+22	6,325247E+22	1,521960E+23	1,265043E+23	2,787002E+23
1028	7,609834E+22	7,609777E+22	6,325193E+22	6,325197E+22	1,521961E+23	1,265039E+23	2,787000E+23
1029	7,609509E+22	7,609631E+22	6,325343E+22	6,325211E+22	1,521914E+23	1,265055E+23	2,786969E+23
1030	7,609806E+22	7,609836E+22	6,325256E+22	6,325237E+22	1,521964E+23	1,265049E+23	2,787014E+23
1031	7,609751E+22	7,609596E+22	6,325219E+22	6,325143E+22	1,521935E+23	1,265036E+23	2,786971E+23
1032	7,609545E+22	7,609658E+22	6,325193E+22	6,325183E+22	1,521920E+23	1,265038E+23	2,786958E+23
1033	7,609878E+22	7,609820E+22	6,325024E+22	6,325167E+22	1,521970E+23	1,265019E+23	2,786989E+23
1034	7,609591E+22	7,609581E+22	6,325074E+22	6,325035E+22	1,521917E+23	1,265011E+23	2,786928E+23
1035	7,609594E+22	7,609797E+22	6,325040E+22	6,325008E+22	1,521939E+23	1,265005E+23	2,786944E+23
1036	7,609885E+22	7,609728E+22	6,324984E+22	6,324932E+22	1,521961E+23	1,264992E+23	2,786953E+23
1037	7,609529E+22	7,609518E+22	6,325084E+22	6,324954E+22	1,521905E+23	1,265004E+23	2,786908E+23
1038	7,609681E+22	7,609829E+22	6,325018E+22	6,325038E+22	1,521951E+23	1,265006E+23	2,786957E+23
1039	7,609698E+22	7,609657E+22	6,325010E+22	6,325017E+22	1,521936E+23	1,265003E+23	2,786938E+23
1040	7,609442E+22	7,609581E+22	6,325097E+22	6,325086E+22	1,521902E+23	1,265018E+23	2,786920E+23
1041	7,609838E+22	7,609788E+22	6,325053E+22	6,325144E+22	1,521963E+23	1,265020E+23	2,786982E+23
1042	7,609691E+22	7,609520E+22	6,325167E+22	6,325109E+22	1,521921E+23	1,265028E+23	2,786949E+23
1043	7,609594E+22	7,609733E+22	6,325217E+22	6,325189E+22	1,521933E+23	1,265041E+23	2,786973E+23
1044	7,609919E+22	7,609846E+22	6,325193E+22	6,325255E+22	1,521977E+23	1,265045E+23	2,787021E+23
1045	7,609559E+22	7,609601E+22	6,325348E+22	6,325304E+22	1,521916E+23	1,265065E+23	2,786981E+23
1046	7,609646E+22	7,609891E+22	6,325375E+22	6,325351E+22	1,521954E+23	1,265073E+23	2,787026E+23
1047	7,609815E+22	7,609740E+22	6,325379E+22	6,325313E+22	1,521955E+23	1,265069E+23	2,787025E+23
1048	7,609536E+22	7,609541E+22	6,325433E+22	6,325334E+22	1,521908E+23	1,265077E+23	2,786984E+23
1049	7,609846E+22	7,609818E+22	6,325316E+22	6,325374E+22	1,521966E+23	1,265069E+23	2,787035E+23
1050	7,609728E+22	7,609597E+22	6,325294E+22	6,325301E+22	1,521932E+23	1,265059E+23	2,786992E+23
1051	7,609505E+22	7,609722E+22	6,325236E+22	6,325262E+22	1,521923E+23	1,265050E+23	2,786972E+23
1052	7,609884E+22	7,609860E+22	6,325135E+22	6,325212E+22	1,521974E+23	1,265035E+23	2,787009E+23
1053	7,609619E+22	7,609511E+22	6,325213E+22	6,325111E+22	1,521913E+23	1,265032E+23	2,786945E+23
1054	7,609620E+22	7,609763E+22	6,325199E+22	6,325069E+22	1,521938E+23	1,265027E+23	2,786965E+23
1055	7,609833E+22	7,609751E+22	6,325130E+22	6,325066E+22	1,521958E+23	1,265020E+23	2,786978E+23
1056	7,609477E+22	7,609517E+22	6,325153E+22	6,325127E+22	1,521899E+23	1,265028E+23	2,786927E+23
1057	7,609663E+22	7,609828E+22	6,325104E+22	6,325194E+22	1,521949E+23	1,265030E+23	2,786979E+23
1058	7,609682E+22	7,609607E+22	6,325160E+22	6,325169E+22	1,521929E+23	1,265033E+23	2,786962E+23
1059	7,609463E+22	7,609585E+22	6,325200E+22	6,325166E+22	1,521905E+23	1,265037E+23	2,786941E+23
1060	7,609890E+22	7,609805E+22	6,325188E+22	6,325242E+22	1,521969E+23	1,265043E+23	2,787012E+23
1061	7,609707E+22	7,609502E+22	6,325301E+22	6,325273E+22	1,521921E+23	1,265057E+23	2,786978E+23
1062	7,609570E+22	7,609774E+22	6,325363E+22	6,325321E+22	1,521934E+23	1,265068E+23	2,787003E+23
1063	7,609848E+22	7,609889E+22	6,325365E+22	6,325397E+22	1,521974E+23	1,265076E+23	2,787050E+23
1064	7,609549E+22	7,609539E+22	6,325474E+22	6,325427E+22	1,521909E+23	1,265090E+23	2,786999E+23
1065	7,609686E+22	7,609827E+22	6,325505E+22	6,325457E+22	1,521951E+23	1,265096E+23	2,787047E+23
1066	7,609828E+22	7,609676E+22	6,325515E+22	6,325457E+22	1,521950E+23	1,265097E+23	2,787048E+23
1067	7,609518E+22	7,609578E+22	6,325478E+22	6,325442E+22	1,521910E+23	1,265092E+23	2,787002E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1068	7,609830E+22	7,609894E+22	6,325385E+22	6,325489E+22	1,521972E+23	1,265087E+23	2,787060E+23
1069	7,609711E+22	7,609589E+22	6,325392E+22	6,325420E+22	1,521930E+23	1,265081E+23	2,787011E+23
1070	7,609512E+22	7,609717E+22	6,325385E+22	6,325308E+22	1,521923E+23	1,265069E+23	2,786992E+23
1071	7,609877E+22	7,609867E+22	6,325305E+22	6,325280E+22	1,521974E+23	1,265059E+23	2,787033E+23
1072	7,609631E+22	7,609451E+22	6,325311E+22	6,325225E+22	1,521908E+23	1,265054E+23	2,786962E+23
1073	7,609603E+22	7,609758E+22	6,325290E+22	6,325221E+22	1,521936E+23	1,265051E+23	2,786987E+23
1074	7,609760E+22	7,609747E+22	6,325232E+22	6,325259E+22	1,521951E+23	1,265049E+23	2,787000E+23
1075	7,609418E+22	7,609529E+22	6,325213E+22	6,325243E+22	1,521895E+23	1,265046E+23	2,786940E+23
1076	7,609696E+22	7,609813E+22	6,325225E+22	6,325284E+22	1,521951E+23	1,265051E+23	2,787002E+23
1077	7,609747E+22	7,609522E+22	6,325290E+22	6,325276E+22	1,521927E+23	1,265057E+23	2,786983E+23
1078	7,609524E+22	7,609576E+22	6,325347E+22	6,325243E+22	1,521910E+23	1,265059E+23	2,786969E+23
1079	7,609864E+22	7,609877E+22	6,325341E+22	6,325368E+22	1,521974E+23	1,265071E+23	2,787045E+23
1080	7,609662E+22	7,609534E+22	6,325408E+22	6,325430E+22	1,521920E+23	1,265084E+23	2,787003E+23
1081	7,609536E+22	7,609794E+22	6,325516E+22	6,325463E+22	1,521933E+23	1,265098E+23	2,787031E+23
1082	7,609801E+22	7,609848E+22	6,325560E+22	6,325556E+22	1,521965E+23	1,265112E+23	2,787077E+23
1083	7,609538E+22	7,609517E+22	6,325598E+22	6,325540E+22	1,521905E+23	1,265114E+23	2,787019E+23
1084	7,609723E+22	7,609804E+22	6,325625E+22	6,325594E+22	1,521953E+23	1,265122E+23	2,787075E+23
1085	7,609830E+22	7,609638E+22	6,325601E+22	6,325639E+22	1,521947E+23	1,265124E+23	2,787071E+23
1086	7,609518E+22	7,609614E+22	6,325556E+22	6,325556E+22	1,521913E+23	1,265111E+23	2,787024E+23
1087	7,609801E+22	7,609929E+22	6,325502E+22	6,325572E+22	1,521973E+23	1,265107E+23	2,787080E+23
1088	7,609735E+22	7,609550E+22	6,325483E+22	6,325479E+22	1,521928E+23	1,265096E+23	2,787025E+23
1089	7,609559E+22	7,609682E+22	6,325500E+22	6,325353E+22	1,521924E+23	1,265085E+23	2,787009E+23
1090	7,609837E+22	7,609836E+22	6,325441E+22	6,325398E+22	1,521967E+23	1,265084E+23	2,787051E+23
1091	7,609556E+22	7,609498E+22	6,325373E+22	6,325343E+22	1,521905E+23	1,265072E+23	2,786977E+23
1092	7,609554E+22	7,609785E+22	6,325381E+22	6,325367E+22	1,521934E+23	1,265075E+23	2,787009E+23
1093	7,609729E+22	7,609687E+22	6,325355E+22	6,325416E+22	1,521942E+23	1,265077E+23	2,787019E+23
1094	7,609458E+22	7,609492E+22	6,325351E+22	6,325319E+22	1,521895E+23	1,265067E+23	2,786962E+23
1095	7,609733E+22	7,609800E+22	6,325385E+22	6,325370E+22	1,521953E+23	1,265075E+23	2,787029E+23
1096	7,609796E+22	7,609496E+22	6,325389E+22	6,325402E+22	1,521929E+23	1,265079E+23	2,787008E+23
1097	7,609530E+22	7,609617E+22	6,325462E+22	6,325388E+22	1,521915E+23	1,265085E+23	2,787000E+23
1098	7,609778E+22	7,609921E+22	6,325495E+22	6,325558E+22	1,521970E+23	1,265105E+23	2,787075E+23
1099	7,609593E+22	7,609568E+22	6,325534E+22	6,325559E+22	1,521916E+23	1,265109E+23	2,787025E+23
1100	7,609545E+22	7,609767E+22	6,325683E+22	6,325589E+22	1,521931E+23	1,265127E+23	2,787058E+23
1101	7,609826E+22	7,609751E+22	6,325714E+22	6,325711E+22	1,521958E+23	1,265142E+23	2,787100E+23
1102	7,609577E+22	7,609492E+22	6,325718E+22	6,325657E+22	1,521907E+23	1,265137E+23	2,787044E+23
1103	7,609710E+22	7,609852E+22	6,325734E+22	6,325729E+22	1,521956E+23	1,265146E+23	2,787103E+23
1104	7,609826E+22	7,609647E+22	6,325651E+22	6,325764E+22	1,521947E+23	1,265141E+23	2,787089E+23
1105	7,609527E+22	7,609628E+22	6,325664E+22	6,325627E+22	1,521915E+23	1,265129E+23	2,787045E+23
1106	7,609776E+22	7,609915E+22	6,325656E+22	6,325652E+22	1,521969E+23	1,265131E+23	2,787100E+23
1107	7,609712E+22	7,609547E+22	6,325588E+22	6,325531E+22	1,521926E+23	1,265112E+23	2,787038E+23
1108	7,609556E+22	7,609674E+22	6,325621E+22	6,325470E+22	1,521923E+23	1,265109E+23	2,787032E+23
1109	7,609776E+22	7,609800E+22	6,325538E+22	6,325582E+22	1,521958E+23	1,265112E+23	2,787070E+23
1110	7,609519E+22	7,609499E+22	6,325462E+22	6,325476E+22	1,521902E+23	1,265094E+23	2,786996E+23
1111	7,609538E+22	7,609766E+22	6,325508E+22	6,325472E+22	1,521930E+23	1,265098E+23	2,787028E+23
1112	7,609785E+22	7,609605E+22	6,325441E+22	6,325505E+22	1,521939E+23	1,265095E+23	2,787034E+23
1113	7,609544E+22	7,609466E+22	6,325465E+22	6,325387E+22	1,521901E+23	1,265085E+23	2,786986E+23
1114	7,609723E+22	7,609820E+22	6,325521E+22	6,325504E+22	1,521954E+23	1,265102E+23	2,787057E+23
1115	7,609730E+22	7,609597E+22	6,325481E+22	6,325528E+22	1,521933E+23	1,265101E+23	2,787034E+23
1116	7,609483E+22	7,609681E+22	6,325611E+22	6,325550E+22	1,521916E+23	1,265116E+23	2,787033E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1117	7,609712E+22	7,609882E+22	6,325685E+22	6,325739E+22	1,521959E+23	1,265142E+23	2,787102E+23
1118	7,609607E+22	7,609530E+22	6,325721E+22	6,325682E+22	1,521914E+23	1,265140E+23	2,787054E+23
1119	7,609570E+22	7,609709E+22	6,325861E+22	6,325723E+22	1,521928E+23	1,265158E+23	2,787086E+23
1120	7,609868E+22	7,609687E+22	6,325798E+22	6,325874E+22	1,521955E+23	1,265167E+23	2,787123E+23
1121	7,609611E+22	7,609511E+22	6,325781E+22	6,325789E+22	1,521912E+23	1,265157E+23	2,787069E+23
1122	7,609660E+22	7,609877E+22	6,325828E+22	6,325867E+22	1,521954E+23	1,265169E+23	2,787123E+23
1123	7,609794E+22	7,609688E+22	6,325731E+22	6,325810E+22	1,521948E+23	1,265154E+23	2,787102E+23
1124	7,609562E+22	7,609616E+22	6,325795E+22	6,325678E+22	1,521918E+23	1,265147E+23	2,787065E+23
1125	7,609762E+22	7,609851E+22	6,325803E+22	6,325751E+22	1,521961E+23	1,265155E+23	2,787117E+23
1126	7,609698E+22	7,609550E+22	6,325704E+22	6,325626E+22	1,521925E+23	1,265133E+23	2,787058E+23
1127	7,609489E+22	7,609696E+22	6,325737E+22	6,325608E+22	1,521919E+23	1,265135E+23	2,787053E+23
1128	7,609739E+22	7,609764E+22	6,325604E+22	6,325733E+22	1,521950E+23	1,265134E+23	2,787084E+23
1129	7,609542E+22	7,609469E+22	6,325566E+22	6,325572E+22	1,521901E+23	1,265114E+23	2,787015E+23
1130	7,609547E+22	7,609731E+22	6,325642E+22	6,325585E+22	1,521928E+23	1,265123E+23	2,787050E+23
1131	7,609808E+22	7,609617E+22	6,325530E+22	6,325580E+22	1,521942E+23	1,265111E+23	2,787053E+23
1132	7,609574E+22	7,609503E+22	6,325585E+22	6,325522E+22	1,521908E+23	1,265111E+23	2,787018E+23
1133	7,609661E+22	7,609844E+22	6,325657E+22	6,325689E+22	1,521951E+23	1,265135E+23	2,787085E+23
1134	7,609685E+22	7,609633E+22	6,325633E+22	6,325668E+22	1,521932E+23	1,265130E+23	2,787062E+23
1135	7,609459E+22	7,609662E+22	6,325813E+22	6,325679E+22	1,521912E+23	1,265149E+23	2,787061E+23
1136	7,609750E+22	7,609775E+22	6,325818E+22	6,325867E+22	1,521953E+23	1,265169E+23	2,787121E+23
1137	7,609674E+22	7,609466E+22	6,325850E+22	6,325796E+22	1,521914E+23	1,265165E+23	2,787079E+23
1138	7,609563E+22	7,609707E+22	6,325968E+22	6,325887E+22	1,521927E+23	1,265186E+23	2,787113E+23
1139	7,609826E+22	7,609753E+22	6,325847E+22	6,325988E+22	1,521958E+23	1,265183E+23	2,787141E+23
1140	7,609609E+22	7,609569E+22	6,325886E+22	6,325902E+22	1,521918E+23	1,265179E+23	2,787097E+23
1141	7,609627E+22	7,609861E+22	6,325980E+22	6,325969E+22	1,521949E+23	1,265195E+23	2,787144E+23
1142	7,609806E+22	7,609686E+22	6,325890E+22	6,325864E+22	1,521949E+23	1,265175E+23	2,787125E+23
1143	7,609557E+22	7,609593E+22	6,325967E+22	6,325771E+22	1,521915E+23	1,265174E+23	2,787089E+23
1144	7,609736E+22	7,609796E+22	6,325884E+22	6,325904E+22	1,521953E+23	1,265179E+23	2,787132E+23
1145	7,609674E+22	7,609548E+22	6,325778E+22	6,325776E+22	1,521922E+23	1,265155E+23	2,787078E+23
1146	7,609431E+22	7,609677E+22	6,325823E+22	6,325768E+22	1,521911E+23	1,265159E+23	2,787070E+23
1147	7,609733E+22	7,609745E+22	6,325669E+22	6,325799E+22	1,521948E+23	1,265147E+23	2,787095E+23
1148	7,609628E+22	7,609446E+22	6,325665E+22	6,325639E+22	1,521907E+23	1,265130E+23	2,787038E+23
1149	7,609568E+22	7,609699E+22	6,325766E+22	6,325689E+22	1,521927E+23	1,265145E+23	2,787072E+23
1150	7,609815E+22	7,609682E+22	6,325650E+22	6,325676E+22	1,521950E+23	1,265133E+23	2,787082E+23
1151	7,609524E+22	7,609561E+22	6,325745E+22	6,325656E+22	1,521909E+23	1,265140E+23	2,787049E+23
1152	7,609604E+22	7,609822E+22	6,325797E+22	6,325846E+22	1,521943E+23	1,265164E+23	2,787107E+23
1153	7,609692E+22	7,609595E+22	6,325806E+22	6,325789E+22	1,521929E+23	1,265159E+23	2,787088E+23
1154	7,609447E+22	7,609589E+22	6,325984E+22	6,325836E+22	1,521904E+23	1,265182E+23	2,787086E+23
1155	7,609761E+22	7,609743E+22	6,325919E+22	6,325992E+22	1,521950E+23	1,265191E+23	2,787142E+23
1156	7,609719E+22	7,609484E+22	6,325934E+22	6,325961E+22	1,521920E+23	1,265189E+23	2,787110E+23
1157	7,609524E+22	7,609731E+22	6,326060E+22	6,326065E+22	1,521926E+23	1,265213E+23	2,787138E+23
1158	7,609818E+22	7,609808E+22	6,325959E+22	6,326079E+22	1,521963E+23	1,265204E+23	2,787166E+23
1159	7,609612E+22	7,609575E+22	6,326063E+22	6,325964E+22	1,521919E+23	1,265203E+23	2,787121E+23
1160	7,609646E+22	7,609795E+22	6,326112E+22	6,326046E+22	1,521944E+23	1,265216E+23	2,787160E+23
1161	7,609831E+22	7,609656E+22	6,326022E+22	6,325951E+22	1,521949E+23	1,265197E+23	2,787146E+23
1162	7,609491E+22	7,609592E+22	6,326075E+22	6,325937E+22	1,521908E+23	1,265201E+23	2,787110E+23
1163	7,609658E+22	7,609820E+22	6,325929E+22	6,326030E+22	1,521948E+23	1,265196E+23	2,787144E+23
1164	7,609672E+22	7,609553E+22	6,325859E+22	6,325905E+22	1,521922E+23	1,265176E+23	2,787099E+23
1165	7,609431E+22	7,609629E+22	6,325937E+22	6,325879E+22	1,521906E+23	1,265182E+23	2,787088E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1166	7,609793E+22	7,609728E+22	6,325788E+22	6,325847E+22	1,521952E+23	1,265164E+23	2,787116E+23
1167	7,609670E+22	7,609454E+22	6,325819E+22	6,325717E+22	1,521912E+23	1,265154E+23	2,787066E+23
1168	7,609562E+22	7,609694E+22	6,325853E+22	6,325819E+22	1,521926E+23	1,265167E+23	2,787093E+23
1169	7,609779E+22	7,609714E+22	6,325769E+22	6,325811E+22	1,521949E+23	1,265158E+23	2,787107E+23
1170	7,609447E+22	7,609558E+22	6,325900E+22	6,325826E+22	1,521901E+23	1,265173E+23	2,787073E+23
1171	7,609571E+22	7,609775E+22	6,325921E+22	6,325948E+22	1,521935E+23	1,265187E+23	2,787121E+23
1172	7,609750E+22	7,609547E+22	6,325940E+22	6,325922E+22	1,521930E+23	1,265186E+23	2,787116E+23
1173	7,609460E+22	7,609544E+22	6,326104E+22	6,326002E+22	1,521900E+23	1,265211E+23	2,787111E+23
1174	7,609771E+22	7,609792E+22	6,326018E+22	6,326121E+22	1,521956E+23	1,265214E+23	2,787170E+23
1175	7,609700E+22	7,609557E+22	6,326072E+22	6,326086E+22	1,521926E+23	1,265216E+23	2,787142E+23
1176	7,609508E+22	7,609728E+22	6,326180E+22	6,326183E+22	1,521924E+23	1,265236E+23	2,787160E+23
1177	7,609842E+22	7,609800E+22	6,326131E+22	6,326156E+22	1,521964E+23	1,265229E+23	2,787193E+23
1178	7,609595E+22	7,609542E+22	6,326236E+22	6,326090E+22	1,521914E+23	1,265233E+23	2,787146E+23
1179	7,609611E+22	7,609769E+22	6,326215E+22	6,326154E+22	1,521938E+23	1,265237E+23	2,787175E+23
1180	7,609823E+22	7,609666E+22	6,326096E+22	6,326120E+22	1,521949E+23	1,265222E+23	2,787171E+23
1181	7,609425E+22	7,609571E+22	6,326148E+22	6,326116E+22	1,521900E+23	1,265226E+23	2,787126E+23
1182	7,609664E+22	7,609815E+22	6,326013E+22	6,326114E+22	1,521948E+23	1,265213E+23	2,787161E+23
1183	7,609725E+22	7,609520E+22	6,325984E+22	6,325945E+22	1,521925E+23	1,265193E+23	2,787117E+23
1184	7,609491E+22	7,609564E+22	6,326019E+22	6,325936E+22	1,521906E+23	1,265195E+23	2,787101E+23
1185	7,609840E+22	7,609739E+22	6,325894E+22	6,325908E+22	1,521958E+23	1,265180E+23	2,787138E+23
1186	7,609601E+22	7,609503E+22	6,325934E+22	6,325863E+22	1,521910E+23	1,265180E+23	2,787090E+23
1187	7,609460E+22	7,609741E+22	6,325954E+22	6,325940E+22	1,521920E+23	1,265189E+23	2,787109E+23
1188	7,609749E+22	7,609726E+22	6,325908E+22	6,325964E+22	1,521947E+23	1,265187E+23	2,787135E+23
1189	7,609412E+22	7,609497E+22	6,326069E+22	6,325991E+22	1,521891E+23	1,265206E+23	2,787097E+23
1190	7,609609E+22	7,609733E+22	6,326069E+22	6,326066E+22	1,521934E+23	1,265214E+23	2,787148E+23
1191	7,609789E+22	7,609534E+22	6,326092E+22	6,326064E+22	1,521932E+23	1,265216E+23	2,787148E+23
1192	7,609472E+22	7,609541E+22	6,326178E+22	6,326176E+22	1,521901E+23	1,265235E+23	2,787137E+23
1193	7,609781E+22	7,609829E+22	6,326131E+22	6,326252E+22	1,521961E+23	1,265238E+23	2,787199E+23
1194	7,609668E+22	7,609577E+22	6,326229E+22	6,326215E+22	1,521924E+23	1,265244E+23	2,787169E+23
1195	7,609503E+22	7,609707E+22	6,326314E+22	6,326238E+22	1,521921E+23	1,265255E+23	2,787176E+23
1196	7,609881E+22	7,609782E+22	6,326268E+22	6,326261E+22	1,521966E+23	1,265253E+23	2,787219E+23
1197	7,609560E+22	7,609518E+22	6,326364E+22	6,326250E+22	1,521908E+23	1,265261E+23	2,787169E+23
1198	7,609572E+22	7,609788E+22	6,326302E+22	6,326282E+22	1,521936E+23	1,265258E+23	2,787194E+23
1199	7,609783E+22	7,609688E+22	6,326214E+22	6,326243E+22	1,521947E+23	1,265246E+23	2,787193E+23
1200	7,609429E+22	7,609522E+22	6,326216E+22	6,326218E+22	1,521895E+23	1,265243E+23	2,787138E+23
1201	7,609719E+22	7,609766E+22	6,326128E+22	6,326163E+22	1,521948E+23	1,265229E+23	2,787178E+23
1202	7,609737E+22	7,609506E+22	6,326107E+22	6,326037E+22	1,521924E+23	1,265214E+23	2,787139E+23
1203	7,609475E+22	7,609571E+22	6,326093E+22	6,326012E+22	1,521905E+23	1,265210E+23	2,787115E+23
1204	7,609813E+22	7,609799E+22	6,325975E+22	6,326058E+22	1,521961E+23	1,265203E+23	2,787164E+23
1205	7,609508E+22	7,609520E+22	6,326055E+22	6,326043E+22	1,521903E+23	1,265210E+23	2,787113E+23
1206	7,609426E+22	7,609725E+22	6,326099E+22	6,326048E+22	1,521915E+23	1,265215E+23	2,787130E+23
1207	7,609768E+22	7,609677E+22	6,326092E+22	6,326065E+22	1,521944E+23	1,265216E+23	2,787160E+23
1208	7,609462E+22	7,609408E+22	6,326176E+22	6,326123E+22	1,521887E+23	1,265230E+23	2,787117E+23
1209	7,609668E+22	7,609713E+22	6,326189E+22	6,326195E+22	1,521938E+23	1,265238E+23	2,787177E+23
1210	7,609758E+22	7,609586E+22	6,326204E+22	6,326237E+22	1,521934E+23	1,265244E+23	2,787179E+23
1211	7,609430E+22	7,609588E+22	6,326276E+22	6,326289E+22	1,521902E+23	1,265256E+23	2,787158E+23
1212	7,609794E+22	7,609866E+22	6,326276E+22	6,326372E+22	1,521966E+23	1,265265E+23	2,787231E+23
1213	7,609644E+22	7,609551E+22	6,326415E+22	6,326349E+22	1,521920E+23	1,265276E+23	2,787196E+23
1214	7,609512E+22	7,609692E+22	6,326481E+22	6,326339E+22	1,521920E+23	1,265282E+23	2,787202E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1215	7,609870E+22	7,609776E+22	6,326417E+22	6,326397E+22	1,521965E+23	1,265281E+23	2,787246E+23
1216	7,609518E+22	7,609487E+22	6,326419E+22	6,326429E+22	1,521901E+23	1,265285E+23	2,787185E+23
1217	7,609568E+22	7,609768E+22	6,326385E+22	6,326404E+22	1,521934E+23	1,265279E+23	2,787212E+23
1218	7,609765E+22	7,609657E+22	6,326314E+22	6,326346E+22	1,521942E+23	1,265266E+23	2,787208E+23
1219	7,609460E+22	7,609480E+22	6,326286E+22	6,326244E+22	1,521894E+23	1,265253E+23	2,787147E+23
1220	7,609782E+22	7,609772E+22	6,326204E+22	6,326232E+22	1,521955E+23	1,265244E+23	2,787199E+23
1221	7,609695E+22	7,609535E+22	6,326212E+22	6,326160E+22	1,521923E+23	1,265237E+23	2,787160E+23
1222	7,609414E+22	7,609638E+22	6,326202E+22	6,326117E+22	1,521905E+23	1,265232E+23	2,787137E+23
1223	7,609740E+22	7,609833E+22	6,326142E+22	6,326178E+22	1,521957E+23	1,265232E+23	2,787189E+23
1224	7,609480E+22	7,609458E+22	6,326192E+22	6,326188E+22	1,521894E+23	1,265238E+23	2,787132E+23
1225	7,609474E+22	7,609637E+22	6,326267E+22	6,326163E+22	1,521911E+23	1,265243E+23	2,787154E+23
1226	7,609783E+22	7,609627E+22	6,326243E+22	6,326226E+22	1,521941E+23	1,265247E+23	2,787188E+23
1227	7,609480E+22	7,609400E+22	6,326247E+22	6,326257E+22	1,521888E+23	1,265250E+23	2,787138E+23
1228	7,609683E+22	7,609774E+22	6,326258E+22	6,326370E+22	1,521946E+23	1,265263E+23	2,787209E+23
1229	7,609713E+22	7,609632E+22	6,326335E+22	6,326403E+22	1,521935E+23	1,265274E+23	2,787208E+23
1230	7,609436E+22	7,609600E+22	6,326438E+22	6,326363E+22	1,521904E+23	1,265280E+23	2,787184E+23
1231	7,609805E+22	7,609854E+22	6,326483E+22	6,326448E+22	1,521966E+23	1,265293E+23	2,787259E+23
1232	7,609654E+22	7,609498E+22	6,326543E+22	6,326481E+22	1,521915E+23	1,265302E+23	2,787218E+23
1233	7,609507E+22	7,609659E+22	6,326607E+22	6,326478E+22	1,521917E+23	1,265309E+23	2,787225E+23
1234	7,609787E+22	7,609795E+22	6,326522E+22	6,326575E+22	1,521958E+23	1,265310E+23	2,787268E+23
1235	7,609480E+22	7,609474E+22	6,326475E+22	6,326533E+22	1,521895E+23	1,265301E+23	2,787196E+23
1236	7,609606E+22	7,609755E+22	6,326465E+22	6,326501E+22	1,521936E+23	1,265297E+23	2,787233E+23
1237	7,609777E+22	7,609630E+22	6,326432E+22	6,326436E+22	1,521941E+23	1,265287E+23	2,787228E+23
1238	7,609492E+22	7,609483E+22	6,326399E+22	6,326293E+22	1,521898E+23	1,265269E+23	2,787167E+23
1239	7,609762E+22	7,609814E+22	6,326339E+22	6,326323E+22	1,521958E+23	1,265266E+23	2,787224E+23
1240	7,609635E+22	7,609544E+22	6,326294E+22	6,326314E+22	1,521918E+23	1,265261E+23	2,787179E+23
1241	7,609388E+22	7,609606E+22	6,326343E+22	6,326241E+22	1,521899E+23	1,265258E+23	2,787158E+23
1242	7,609700E+22	7,609780E+22	6,326301E+22	6,326309E+22	1,521948E+23	1,265261E+23	2,787209E+23
1243	7,609508E+22	7,609378E+22	6,326292E+22	6,326279E+22	1,521889E+23	1,265257E+23	2,787146E+23
1244	7,609549E+22	7,609615E+22	6,326349E+22	6,326303E+22	1,521916E+23	1,265265E+23	2,787182E+23
1245	7,609765E+22	7,609647E+22	6,326342E+22	6,326400E+22	1,521941E+23	1,265274E+23	2,787215E+23
1246	7,609459E+22	7,609482E+22	6,326356E+22	6,326375E+22	1,521894E+23	1,265273E+23	2,787167E+23
1247	7,609658E+22	7,609836E+22	6,326430E+22	6,326472E+22	1,521949E+23	1,265290E+23	2,787240E+23
1248	7,609696E+22	7,609609E+22	6,326497E+22	6,326527E+22	1,521931E+23	1,265302E+23	2,787233E+23
1249	7,609468E+22	7,609548E+22	6,326640E+22	6,326472E+22	1,521902E+23	1,265311E+23	2,787213E+23
1250	7,609767E+22	7,609819E+22	6,326658E+22	6,326611E+22	1,521959E+23	1,265327E+23	2,787285E+23
1251	7,609621E+22	7,609473E+22	6,326624E+22	6,326640E+22	1,521909E+23	1,265326E+23	2,787236E+23
1252	7,609499E+22	7,609673E+22	6,326657E+22	6,326661E+22	1,521917E+23	1,265332E+23	2,787249E+23
1253	7,609746E+22	7,609778E+22	6,326618E+22	6,326722E+22	1,521952E+23	1,265334E+23	2,787286E+23
1254	7,609520E+22	7,609459E+22	6,326579E+22	6,326567E+22	1,521898E+23	1,265315E+23	2,787212E+23
1255	7,609662E+22	7,609746E+22	6,326599E+22	6,326527E+22	1,521941E+23	1,265313E+23	2,787253E+23
1256	7,609798E+22	7,609617E+22	6,326521E+22	6,326520E+22	1,521942E+23	1,265304E+23	2,787246E+23
1257	7,609488E+22	7,609499E+22	6,326519E+22	6,326392E+22	1,521899E+23	1,265291E+23	2,787190E+23
1258	7,609650E+22	7,609856E+22	6,326474E+22	6,326468E+22	1,521951E+23	1,265294E+23	2,787245E+23
1259	7,609576E+22	7,609523E+22	6,326399E+22	6,326428E+22	1,521910E+23	1,265283E+23	2,787193E+23
1260	7,609405E+22	7,609559E+22	6,326457E+22	6,326380E+22	1,521896E+23	1,265284E+23	2,787180E+23
1261	7,609704E+22	7,609719E+22	6,326441E+22	6,326462E+22	1,521942E+23	1,265290E+23	2,787233E+23
1262	7,609554E+22	7,609362E+22	6,326390E+22	6,326382E+22	1,521892E+23	1,265277E+23	2,787169E+23
1263	7,609556E+22	7,609661E+22	6,326455E+22	6,326436E+22	1,521922E+23	1,265289E+23	2,787211E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1264	7,609739E+22	7,609686E+22	6,326420E+22	6,326558E+22	1,521942E+23	1,265298E+23	2,787240E+23
1265	7,609471E+22	7,609473E+22	6,326520E+22	6,326479E+22	1,521894E+23	1,265300E+23	2,787194E+23
1266	7,609624E+22	7,609820E+22	6,326635E+22	6,326576E+22	1,521944E+23	1,265321E+23	2,787265E+23
1267	7,609711E+22	7,609554E+22	6,326639E+22	6,326622E+22	1,521927E+23	1,265326E+23	2,787253E+23
1268	7,609494E+22	7,609529E+22	6,326754E+22	6,326635E+22	1,521902E+23	1,265339E+23	2,787241E+23
1269	7,609699E+22	7,609824E+22	6,326772E+22	6,326808E+22	1,521952E+23	1,265358E+23	2,787310E+23
1270	7,609585E+22	7,609504E+22	6,326716E+22	6,326766E+22	1,521909E+23	1,265348E+23	2,787257E+23
1271	7,609500E+22	7,609688E+22	6,326787E+22	6,326758E+22	1,521919E+23	1,265354E+23	2,787273E+23
1272	7,609774E+22	7,609735E+22	6,326727E+22	6,326815E+22	1,521951E+23	1,265354E+23	2,787305E+23
1273	7,609595E+22	7,609416E+22	6,326728E+22	6,326625E+22	1,521901E+23	1,265335E+23	2,787236E+23
1274	7,609639E+22	7,609756E+22	6,326737E+22	6,326625E+22	1,521940E+23	1,265336E+23	2,787276E+23
1275	7,609751E+22	7,609638E+22	6,326585E+22	6,326637E+22	1,521939E+23	1,265322E+23	2,787261E+23
1276	7,609453E+22	7,609531E+22	6,326587E+22	6,326555E+22	1,521898E+23	1,265314E+23	2,787213E+23
1277	7,609573E+22	7,609819E+22	6,326599E+22	6,326615E+22	1,521939E+23	1,265321E+23	2,787261E+23
1278	7,609587E+22	7,609476E+22	6,326521E+22	6,326498E+22	1,521906E+23	1,265302E+23	2,787208E+23
1279	7,609461E+22	7,609523E+22	6,326575E+22	6,326459E+22	1,521898E+23	1,265303E+23	2,787202E+23
1280	7,609725E+22	7,609682E+22	6,326516E+22	6,326594E+22	1,521941E+23	1,265311E+23	2,787252E+23
1281	7,609577E+22	7,609388E+22	6,326501E+22	6,326499E+22	1,521896E+23	1,265300E+23	2,787196E+23
1282	7,609492E+22	7,609720E+22	6,326597E+22	6,326561E+22	1,521921E+23	1,265316E+23	2,787237E+23
1283	7,609716E+22	7,609690E+22	6,326555E+22	6,326657E+22	1,521941E+23	1,265321E+23	2,787262E+23
1284	7,609501E+22	7,609462E+22	6,326681E+22	6,326611E+22	1,521896E+23	1,265329E+23	2,787225E+23
1285	7,609590E+22	7,609776E+22	6,326827E+22	6,326738E+22	1,521937E+23	1,265357E+23	2,787293E+23
1286	7,609704E+22	7,609546E+22	6,326782E+22	6,326764E+22	1,521925E+23	1,265355E+23	2,787280E+23
1287	7,609473E+22	7,609553E+22	6,326867E+22	6,326810E+22	1,521903E+23	1,265368E+23	2,787270E+23
1288	7,609668E+22	7,609810E+22	6,326852E+22	6,326987E+22	1,521948E+23	1,265384E+23	2,787332E+23
1289	7,609635E+22	7,609465E+22	6,326846E+22	6,326858E+22	1,521910E+23	1,265370E+23	2,787280E+23
1290	7,609518E+22	7,609668E+22	6,326931E+22	6,326822E+22	1,521919E+23	1,265375E+23	2,787294E+23
1291	7,609823E+22	7,609710E+22	6,326811E+22	6,326867E+22	1,521953E+23	1,265368E+23	2,787321E+23
1292	7,609619E+22	7,609445E+22	6,326805E+22	6,326738E+22	1,521906E+23	1,265354E+23	2,787261E+23
1293	7,609537E+22	7,609803E+22	6,326850E+22	6,326775E+22	1,521934E+23	1,265362E+23	2,787296E+23
1294	7,609677E+22	7,609672E+22	6,326686E+22	6,326733E+22	1,521935E+23	1,265342E+23	2,787277E+23
1295	7,609419E+22	7,609515E+22	6,326722E+22	6,326658E+22	1,521893E+23	1,265338E+23	2,787231E+23
1296	7,609576E+22	7,609736E+22	6,326712E+22	6,326735E+22	1,521931E+23	1,265345E+23	2,787276E+23
1297	7,609662E+22	7,609392E+22	6,326651E+22	6,326593E+22	1,521905E+23	1,265324E+23	2,787230E+23
1298	7,609460E+22	7,609523E+22	6,326687E+22	6,326582E+22	1,521898E+23	1,265327E+23	2,787225E+23
1299	7,609721E+22	7,609706E+22	6,326564E+22	6,326720E+22	1,521943E+23	1,265328E+23	2,787271E+23
1300	7,609580E+22	7,609438E+22	6,326587E+22	6,326641E+22	1,521902E+23	1,265323E+23	2,787224E+23
1301	7,609441E+22	7,609719E+22	6,326770E+22	6,326684E+22	1,521916E+23	1,265345E+23	2,787261E+23
1302	7,609721E+22	7,609676E+22	6,326728E+22	6,326728E+22	1,521940E+23	1,265346E+23	2,787285E+23
1303	7,609522E+22	7,609453E+22	6,326853E+22	6,326738E+22	1,521897E+23	1,265359E+23	2,787257E+23
1304	7,609562E+22	7,609747E+22	6,326949E+22	6,326929E+22	1,521931E+23	1,265388E+23	2,787319E+23
1305	7,609696E+22	7,609547E+22	6,326915E+22	6,326936E+22	1,521924E+23	1,265385E+23	2,787309E+23
1306	7,609426E+22	7,609577E+22	6,327000E+22	6,326960E+22	1,521900E+23	1,265396E+23	2,787296E+23
1307	7,609686E+22	7,609777E+22	6,326952E+22	6,327089E+22	1,521946E+23	1,265404E+23	2,787350E+23
1308	7,609710E+22	7,609463E+22	6,326956E+22	6,326956E+22	1,521917E+23	1,265391E+23	2,787309E+23
1309	7,609516E+22	7,609652E+22	6,327068E+22	6,326926E+22	1,521917E+23	1,265399E+23	2,787316E+23
1310	7,609799E+22	7,609746E+22	6,326914E+22	6,326951E+22	1,521955E+23	1,265387E+23	2,787341E+23
1311	7,609569E+22	7,609508E+22	6,326896E+22	6,326869E+22	1,521908E+23	1,265376E+23	2,787284E+23
1312	7,609454E+22	7,609769E+22	6,326942E+22	6,326921E+22	1,521922E+23	1,265386E+23	2,787309E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1313	7,609686E+22	7,609596E+22	6,326832E+22	6,326818E+22	1,521928E+23	1,265365E+23	2,787293E+23
1314	7,609431E+22	7,609451E+22	6,326853E+22	6,326731E+22	1,521888E+23	1,265358E+23	2,787247E+23
1315	7,609632E+22	7,609665E+22	6,326773E+22	6,326818E+22	1,521930E+23	1,265359E+23	2,787289E+23
1316	7,609707E+22	7,609423E+22	6,326699E+22	6,326719E+22	1,521913E+23	1,265342E+23	2,787255E+23
1317	7,609394E+22	7,609582E+22	6,326786E+22	6,326724E+22	1,521898E+23	1,265351E+23	2,787249E+23
1318	7,609674E+22	7,609771E+22	6,326690E+22	6,326804E+22	1,521944E+23	1,265349E+23	2,787294E+23
1319	7,609567E+22	7,609472E+22	6,326763E+22	6,326750E+22	1,521904E+23	1,265351E+23	2,787255E+23
1320	7,609421E+22	7,609666E+22	6,326953E+22	6,326832E+22	1,521909E+23	1,265379E+23	2,787287E+23
1321	7,609753E+22	7,609616E+22	6,326921E+22	6,326876E+22	1,521937E+23	1,265380E+23	2,787317E+23
1322	7,609483E+22	7,609451E+22	6,327003E+22	6,326924E+22	1,521893E+23	1,265393E+23	2,787286E+23
1323	7,609549E+22	7,609734E+22	6,327014E+22	6,327116E+22	1,521928E+23	1,265413E+23	2,787341E+23
1324	7,609723E+22	7,609550E+22	6,326991E+22	6,327096E+22	1,521927E+23	1,265409E+23	2,787336E+23
1325	7,609427E+22	7,609557E+22	6,327137E+22	6,327070E+22	1,521898E+23	1,265421E+23	2,787319E+23
1326	7,609736E+22	7,609769E+22	6,327069E+22	6,327118E+22	1,521951E+23	1,265419E+23	2,787369E+23
1327	7,609739E+22	7,609493E+22	6,327074E+22	6,327030E+22	1,521923E+23	1,265410E+23	2,787334E+23
1328	7,609462E+22	7,609667E+22	6,327173E+22	6,327056E+22	1,521913E+23	1,265423E+23	2,787336E+23
1329	7,609750E+22	7,609757E+22	6,327044E+22	6,327065E+22	1,521951E+23	1,265411E+23	2,787362E+23
1330	7,609484E+22	7,609510E+22	6,327042E+22	6,326983E+22	1,521899E+23	1,265403E+23	2,787302E+23
1331	7,609451E+22	7,609686E+22	6,327037E+22	6,327022E+22	1,521914E+23	1,265406E+23	2,787320E+23
1332	7,609743E+22	7,609537E+22	6,326924E+22	6,326930E+22	1,521928E+23	1,265385E+23	2,787314E+23
1333	7,609437E+22	7,609416E+22	6,326954E+22	6,326857E+22	1,521885E+23	1,265381E+23	2,787266E+23
1334	7,609631E+22	7,609700E+22	6,326833E+22	6,326915E+22	1,521933E+23	1,265375E+23	2,787308E+23
1335	7,609686E+22	7,609517E+22	6,326773E+22	6,326852E+22	1,521920E+23	1,265363E+23	2,787283E+23
1336	7,609345E+22	7,609588E+22	6,326912E+22	6,326857E+22	1,521893E+23	1,265377E+23	2,787270E+23
1337	7,609689E+22	7,609734E+22	6,326888E+22	6,326887E+22	1,521942E+23	1,265377E+23	2,787320E+23
1338	7,609562E+22	7,609447E+22	6,326962E+22	6,326857E+22	1,521901E+23	1,265382E+23	2,787283E+23
1339	7,609436E+22	7,609599E+22	6,327075E+22	6,326987E+22	1,521903E+23	1,265406E+23	2,787310E+23
1340	7,609757E+22	7,609631E+22	6,327020E+22	6,327072E+22	1,521939E+23	1,265409E+23	2,787348E+23
1341	7,609426E+22	7,609467E+22	6,327113E+22	6,327109E+22	1,521889E+23	1,265422E+23	2,787312E+23
1342	7,609536E+22	7,609744E+22	6,327124E+22	6,327218E+22	1,521928E+23	1,265434E+23	2,787362E+23
1343	7,609762E+22	7,609581E+22	6,327121E+22	6,327190E+22	1,521934E+23	1,265431E+23	2,787365E+23
1344	7,609447E+22	7,609516E+22	6,327282E+22	6,327172E+22	1,521896E+23	1,265445E+23	2,787342E+23
1345	7,609769E+22	7,609749E+22	6,327238E+22	6,327206E+22	1,521952E+23	1,265444E+23	2,787396E+23
1346	7,609679E+22	7,609538E+22	6,327212E+22	6,327157E+22	1,521922E+23	1,265437E+23	2,787359E+23
1347	7,609403E+22	7,609653E+22	6,327246E+22	6,327206E+22	1,521906E+23	1,265445E+23	2,787351E+23
1348	7,609727E+22	7,609736E+22	6,327135E+22	6,327199E+22	1,521946E+23	1,265433E+23	2,787380E+23
1349	7,609460E+22	7,609442E+22	6,327165E+22	6,327091E+22	1,521890E+23	1,265426E+23	2,787316E+23
1350	7,609492E+22	7,609632E+22	6,327120E+22	6,327076E+22	1,521912E+23	1,265420E+23	2,787332E+23
1351	7,609786E+22	7,609561E+22	6,326988E+22	6,327031E+22	1,521935E+23	1,265402E+23	2,787337E+23
1352	7,609407E+22	7,609444E+22	6,327027E+22	6,326991E+22	1,521885E+23	1,265402E+23	2,787287E+23
1353	7,609613E+22	7,609740E+22	6,326959E+22	6,327011E+22	1,521935E+23	1,265397E+23	2,787332E+23
1354	7,609628E+22	7,609559E+22	6,326949E+22	6,326946E+22	1,521919E+23	1,265390E+23	2,787308E+23
1355	7,609351E+22	7,609534E+22	6,327064E+22	6,326971E+22	1,521889E+23	1,265404E+23	2,787292E+23
1356	7,609718E+22	7,609683E+22	6,327043E+22	6,327027E+22	1,521940E+23	1,265407E+23	2,787347E+23
1357	7,609533E+22	7,609407E+22	6,327118E+22	6,327042E+22	1,521894E+23	1,265416E+23	2,787310E+23
1358	7,609415E+22	7,609601E+22	6,327156E+22	6,327145E+22	1,521902E+23	1,265430E+23	2,787332E+23
1359	7,609739E+22	7,609672E+22	6,327096E+22	6,327247E+22	1,521941E+23	1,265434E+23	2,787375E+23
1360	7,609417E+22	7,609443E+22	6,327234E+22	6,327246E+22	1,521886E+23	1,265448E+23	2,787334E+23
1361	7,609605E+22	7,609702E+22	6,327290E+22	6,327276E+22	1,521931E+23	1,265457E+23	2,787387E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1362	7,609785E+22	7,609594E+22	6,327294E+22	6,327254E+22	1,521938E+23	1,265455E+23	2,787393E+23
1363	7,609462E+22	7,609505E+22	6,327388E+22	6,327289E+22	1,521897E+23	1,265468E+23	2,787364E+23
1364	7,609726E+22	7,609792E+22	6,327343E+22	6,327355E+22	1,521952E+23	1,265470E+23	2,787422E+23
1365	7,609572E+22	7,609560E+22	6,327346E+22	6,327320E+22	1,521913E+23	1,265467E+23	2,787380E+23
1366	7,609354E+22	7,609624E+22	6,327356E+22	6,327306E+22	1,521898E+23	1,265466E+23	2,787364E+23
1367	7,609741E+22	7,609715E+22	6,327238E+22	6,327313E+22	1,521946E+23	1,265455E+23	2,787401E+23
1368	7,609488E+22	7,609369E+22	6,327267E+22	6,327207E+22	1,521886E+23	1,265447E+23	2,787333E+23
1369	7,609546E+22	7,609602E+22	6,327224E+22	6,327167E+22	1,521915E+23	1,265439E+23	2,787354E+23
1370	7,609761E+22	7,609630E+22	6,327083E+22	6,327135E+22	1,521939E+23	1,265422E+23	2,787361E+23
1371	7,609392E+22	7,609448E+22	6,327097E+22	6,327111E+22	1,521884E+23	1,265421E+23	2,787305E+23
1372	7,609608E+22	7,609740E+22	6,327095E+22	6,327105E+22	1,521935E+23	1,265420E+23	2,787355E+23
1373	7,609609E+22	7,609515E+22	6,327121E+22	6,327046E+22	1,521912E+23	1,265417E+23	2,787329E+23
1374	7,609355E+22	7,609479E+22	6,327195E+22	6,327063E+22	1,521883E+23	1,265426E+23	2,787309E+23
1375	7,609712E+22	7,609705E+22	6,327141E+22	6,327193E+22	1,521942E+23	1,265433E+23	2,787375E+23
1376	7,609481E+22	7,609403E+22	6,327218E+22	6,327234E+22	1,521888E+23	1,265445E+23	2,787334E+23
1377	7,609414E+22	7,609602E+22	6,327292E+22	6,327281E+22	1,521902E+23	1,265457E+23	2,787359E+23
1378	7,609731E+22	7,609700E+22	6,327264E+22	6,327348E+22	1,521943E+23	1,265461E+23	2,787404E+23
1379	7,609470E+22	7,609399E+22	6,327370E+22	6,327352E+22	1,521887E+23	1,265472E+23	2,787359E+23
1380	7,609653E+22	7,609693E+22	6,327444E+22	6,327384E+22	1,521935E+23	1,265483E+23	2,787417E+23
1381	7,609745E+22	7,609609E+22	6,327449E+22	6,327408E+22	1,521935E+23	1,265486E+23	2,787421E+23
1382	7,609400E+22	7,609537E+22	6,327481E+22	6,327433E+22	1,521894E+23	1,265491E+23	2,787385E+23
1383	7,609665E+22	7,609832E+22	6,327428E+22	6,327520E+22	1,521950E+23	1,265495E+23	2,787445E+23
1384	7,609536E+22	7,609493E+22	6,327473E+22	6,327456E+22	1,521903E+23	1,265493E+23	2,787396E+23
1385	7,609419E+22	7,609535E+22	6,327487E+22	6,327369E+22	1,521895E+23	1,265486E+23	2,787381E+23
1386	7,609778E+22	7,609692E+22	6,327357E+22	6,327375E+22	1,521947E+23	1,265473E+23	2,787420E+23
1387	7,609534E+22	7,609354E+22	6,327315E+22	6,327310E+22	1,521889E+23	1,265462E+23	2,787351E+23
1388	7,609545E+22	7,609649E+22	6,327288E+22	6,327264E+22	1,521919E+23	1,265455E+23	2,787375E+23
1389	7,609685E+22	7,609674E+22	6,327209E+22	6,327243E+22	1,521936E+23	1,265445E+23	2,787381E+23
1390	7,609358E+22	7,609449E+22	6,327222E+22	6,327179E+22	1,521881E+23	1,265440E+23	2,787321E+23
1391	7,609592E+22	7,609733E+22	6,327232E+22	6,327220E+22	1,521932E+23	1,265445E+23	2,787378E+23
1392	7,609589E+22	7,609447E+22	6,327282E+22	6,327206E+22	1,521904E+23	1,265449E+23	2,787352E+23
1393	7,609371E+22	7,609437E+22	6,327326E+22	6,327217E+22	1,521881E+23	1,265454E+23	2,787335E+23
1394	7,609670E+22	7,609743E+22	6,327257E+22	6,327357E+22	1,521941E+23	1,265461E+23	2,787403E+23
1395	7,609493E+22	7,609385E+22	6,327295E+22	6,327394E+22	1,521888E+23	1,265469E+23	2,787357E+23
1396	7,609461E+22	7,609584E+22	6,327422E+22	6,327382E+22	1,521905E+23	1,265480E+23	2,787385E+23
1397	7,609751E+22	7,609687E+22	6,327436E+22	6,327444E+22	1,521944E+23	1,265488E+23	2,787432E+23
1398	7,609494E+22	7,609399E+22	6,327501E+22	6,327438E+22	1,521889E+23	1,265494E+23	2,787383E+23
1399	7,609622E+22	7,609762E+22	6,327557E+22	6,327537E+22	1,521938E+23	1,265509E+23	2,787448E+23
1400	7,609661E+22	7,609627E+22	6,327585E+22	6,327589E+22	1,521929E+23	1,265517E+23	2,787446E+23
1401	7,609367E+22	7,609516E+22	6,327632E+22	6,327563E+22	1,521888E+23	1,265520E+23	2,787408E+23
1402	7,609642E+22	7,609816E+22	6,327589E+22	6,327617E+22	1,521946E+23	1,265521E+23	2,787466E+23
1403	7,609598E+22	7,609396E+22	6,327566E+22	6,327563E+22	1,521899E+23	1,265513E+23	2,787412E+23
1404	7,609491E+22	7,609490E+22	6,327580E+22	6,327462E+22	1,521898E+23	1,265504E+23	2,787402E+23
1405	7,609767E+22	7,609709E+22	6,327438E+22	6,327490E+22	1,521948E+23	1,265493E+23	2,787440E+23
1406	7,609492E+22	7,609401E+22	6,327354E+22	6,327400E+22	1,521889E+23	1,265475E+23	2,787365E+23
1407	7,609497E+22	7,609717E+22	6,327362E+22	6,327367E+22	1,521921E+23	1,265473E+23	2,787394E+23
1408	7,609644E+22	7,609632E+22	6,327359E+22	6,327339E+22	1,521928E+23	1,265470E+23	2,787397E+23
1409	7,609387E+22	7,609382E+22	6,327388E+22	6,327254E+22	1,521877E+23	1,265464E+23	2,787341E+23
1410	7,609579E+22	7,609720E+22	6,327385E+22	6,327328E+22	1,521930E+23	1,265471E+23	2,787401E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1411	7,609588E+22	7,609414E+22	6,327361E+22	6,327382E+22	1,521900E+23	1,265474E+23	2,787375E+23
1412	7,609365E+22	7,609451E+22	6,327418E+22	6,327376E+22	1,521882E+23	1,265479E+23	2,787361E+23
1413	7,609635E+22	7,609751E+22	6,327396E+22	6,327502E+22	1,521939E+23	1,265490E+23	2,787428E+23
1414	7,609512E+22	7,609383E+22	6,327420E+22	6,327480E+22	1,521890E+23	1,265490E+23	2,787380E+23
1415	7,609502E+22	7,609610E+22	6,327555E+22	6,327493E+22	1,521911E+23	1,265505E+23	2,787416E+23
1416	7,609749E+22	7,609667E+22	6,327614E+22	6,327592E+22	1,521942E+23	1,265521E+23	2,787462E+23
1417	7,609492E+22	7,609413E+22	6,327656E+22	6,327586E+22	1,521891E+23	1,265524E+23	2,787415E+23
1418	7,609541E+22	7,609811E+22	6,327706E+22	6,327693E+22	1,521935E+23	1,265540E+23	2,787475E+23
1419	7,609644E+22	7,609578E+22	6,327693E+22	6,327753E+22	1,521922E+23	1,265545E+23	2,787467E+23
1420	7,609414E+22	7,609438E+22	6,327751E+22	6,327655E+22	1,521885E+23	1,265541E+23	2,787426E+23
1421	7,609667E+22	7,609749E+22	6,327712E+22	6,327705E+22	1,521942E+23	1,265542E+23	2,787483E+23
1422	7,609635E+22	7,609391E+22	6,327611E+22	6,327628E+22	1,521903E+23	1,265524E+23	2,787426E+23
1423	7,609480E+22	7,609570E+22	6,327606E+22	6,327571E+22	1,521905E+23	1,265518E+23	2,787423E+23
1424	7,609694E+22	7,609752E+22	6,327540E+22	6,327610E+22	1,521945E+23	1,265515E+23	2,787460E+23
1425	7,609463E+22	7,609419E+22	6,327494E+22	6,327475E+22	1,521888E+23	1,265497E+23	2,787385E+23
1426	7,609447E+22	7,609724E+22	6,327543E+22	6,327435E+22	1,521917E+23	1,265498E+23	2,787415E+23
1427	7,609661E+22	7,609549E+22	6,327492E+22	6,327466E+22	1,521921E+23	1,265496E+23	2,787417E+23
1428	7,609417E+22	7,609318E+22	6,327515E+22	6,327393E+22	1,521874E+23	1,265491E+23	2,787364E+23
1429	7,609542E+22	7,609708E+22	6,327496E+22	6,327508E+22	1,521925E+23	1,265500E+23	2,787425E+23
1430	7,609565E+22	7,609432E+22	6,327410E+22	6,327531E+22	1,521900E+23	1,265494E+23	2,787394E+23
1431	7,609373E+22	7,609492E+22	6,327493E+22	6,327510E+22	1,521887E+23	1,265500E+23	2,787387E+23
1432	7,609658E+22	7,609715E+22	6,327559E+22	6,327607E+22	1,521937E+23	1,265517E+23	2,787454E+23
1433	7,609576E+22	7,609367E+22	6,327595E+22	6,327553E+22	1,521894E+23	1,265515E+23	2,787409E+23
1434	7,609493E+22	7,609660E+22	6,327737E+22	6,327596E+22	1,521915E+23	1,265533E+23	2,787449E+23
1435	7,609721E+22	7,609670E+22	6,327731E+22	6,327770E+22	1,521939E+23	1,265550E+23	2,787489E+23
1436	7,609450E+22	7,609420E+22	6,327798E+22	6,327750E+22	1,521887E+23	1,265555E+23	2,787442E+23
1437	7,609479E+22	7,609786E+22	6,327862E+22	6,327842E+22	1,521927E+23	1,265570E+23	2,787497E+23
1438	7,609643E+22	7,609523E+22	6,327790E+22	6,327854E+22	1,521917E+23	1,265564E+23	2,787481E+23
1439	7,609459E+22	7,609428E+22	6,327823E+22	6,327770E+22	1,521889E+23	1,265559E+23	2,787448E+23
1440	7,609683E+22	7,609713E+22	6,327815E+22	6,327830E+22	1,521940E+23	1,265564E+23	2,787504E+23
1441	7,609638E+22	7,609434E+22	6,327690E+22	6,327724E+22	1,521907E+23	1,265541E+23	2,787449E+23
1442	7,609420E+22	7,609653E+22	6,327712E+22	6,327652E+22	1,521907E+23	1,265536E+23	2,787444E+23
1443	7,609670E+22	7,609721E+22	6,327647E+22	6,327709E+22	1,521939E+23	1,265536E+23	2,787475E+23
1444	7,609486E+22	7,609355E+22	6,327648E+22	6,327543E+22	1,521884E+23	1,265519E+23	2,787403E+23
1445	7,609433E+22	7,609655E+22	6,327699E+22	6,327543E+22	1,521909E+23	1,265524E+23	2,787433E+23
1446	7,609650E+22	7,609519E+22	6,327564E+22	6,327592E+22	1,521917E+23	1,265516E+23	2,787432E+23
1447	7,609401E+22	7,609367E+22	6,327551E+22	6,327561E+22	1,521877E+23	1,265511E+23	2,787388E+23
1448	7,609503E+22	7,609705E+22	6,327608E+22	6,327670E+22	1,521921E+23	1,265528E+23	2,787449E+23
1449	7,609588E+22	7,609449E+22	6,327545E+22	6,327624E+22	1,521904E+23	1,265517E+23	2,787421E+23
1450	7,609388E+22	7,609518E+22	6,327674E+22	6,327581E+22	1,521891E+23	1,265526E+23	2,787416E+23
1451	7,609700E+22	7,609677E+22	6,327719E+22	6,327738E+22	1,521938E+23	1,265546E+23	2,787483E+23
1452	7,609602E+22	7,609356E+22	6,327759E+22	6,327692E+22	1,521896E+23	1,265545E+23	2,787441E+23
1453	7,609409E+22	7,609678E+22	6,327889E+22	6,327788E+22	1,521909E+23	1,265568E+23	2,787476E+23
1454	7,609647E+22	7,609683E+22	6,327818E+22	6,327938E+22	1,521933E+23	1,265576E+23	2,787509E+23
1455	7,609439E+22	7,609414E+22	6,327883E+22	6,327899E+22	1,521885E+23	1,265578E+23	2,787463E+23
1456	7,609499E+22	7,609695E+22	6,328011E+22	6,327961E+22	1,521919E+23	1,265597E+23	2,787517E+23
1457	7,609714E+22	7,609492E+22	6,327900E+22	6,327924E+22	1,521921E+23	1,265582E+23	2,787503E+23
1458	7,609470E+22	7,609481E+22	6,327928E+22	6,327844E+22	1,521895E+23	1,265577E+23	2,787472E+23
1459	7,609668E+22	7,609736E+22	6,327886E+22	6,327954E+22	1,521940E+23	1,265584E+23	2,787524E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1460	7,609612E+22	7,609460E+22	6,327814E+22	6,327811E+22	1,521907E+23	1,265563E+23	2,787470E+23
1461	7,609353E+22	7,609646E+22	6,327880E+22	6,327746E+22	1,521900E+23	1,265563E+23	2,787463E+23
1462	7,609645E+22	7,609674E+22	6,327761E+22	6,327793E+22	1,521932E+23	1,265555E+23	2,787487E+23
1463	7,609500E+22	7,609330E+22	6,327739E+22	6,327681E+22	1,521883E+23	1,265542E+23	2,787425E+23
1464	7,609419E+22	7,609591E+22	6,327818E+22	6,327717E+22	1,521901E+23	1,265553E+23	2,787454E+23
1465	7,609638E+22	7,609536E+22	6,327638E+22	6,327740E+22	1,521917E+23	1,265538E+23	2,787455E+23
1466	7,609379E+22	7,609430E+22	6,327651E+22	6,327674E+22	1,521881E+23	1,265533E+23	2,787413E+23
1467	7,609539E+22	7,609660E+22	6,327712E+22	6,327779E+22	1,521920E+23	1,265549E+23	2,787469E+23
1468	7,609653E+22	7,609414E+22	6,327709E+22	6,327687E+22	1,521907E+23	1,265540E+23	2,787446E+23
1469	7,609390E+22	7,609514E+22	6,327851E+22	6,327685E+22	1,521890E+23	1,265554E+23	2,787444E+23
1470	7,609654E+22	7,609691E+22	6,327826E+22	6,327874E+22	1,521935E+23	1,265570E+23	2,787505E+23
1471	7,609542E+22	7,609423E+22	6,327857E+22	6,327886E+22	1,521897E+23	1,265574E+23	2,787471E+23
1472	7,609336E+22	7,609646E+22	6,328052E+22	6,327980E+22	1,521898E+23	1,265603E+23	2,787501E+23
1473	7,609639E+22	7,609656E+22	6,327968E+22	6,328060E+22	1,521930E+23	1,265603E+23	2,787532E+23
1474	7,609470E+22	7,609404E+22	6,328034E+22	6,327988E+22	1,521887E+23	1,265602E+23	2,787490E+23
1475	7,609567E+22	7,609619E+22	6,328118E+22	6,328087E+22	1,521919E+23	1,265621E+23	2,787539E+23
1476	7,609762E+22	7,609492E+22	6,328011E+22	6,328028E+22	1,521925E+23	1,265604E+23	2,787529E+23
1477	7,609418E+22	7,609532E+22	6,328035E+22	6,327972E+22	1,521895E+23	1,265601E+23	2,787496E+23
1478	7,609604E+22	7,609761E+22	6,327960E+22	6,328050E+22	1,521936E+23	1,265601E+23	2,787537E+23
1479	7,609598E+22	7,609468E+22	6,327910E+22	6,327907E+22	1,521907E+23	1,265582E+23	2,787488E+23
1480	7,609342E+22	7,609552E+22	6,328042E+22	6,327854E+22	1,521889E+23	1,265590E+23	2,787479E+23
1481	7,609657E+22	7,609644E+22	6,327871E+22	6,327888E+22	1,521930E+23	1,265576E+23	2,787506E+23
1482	7,609483E+22	7,609361E+22	6,327830E+22	6,327798E+22	1,521884E+23	1,265563E+23	2,787447E+23
1483	7,609405E+22	7,609576E+22	6,327881E+22	6,327882E+22	1,521898E+23	1,265576E+23	2,787474E+23
1484	7,609652E+22	7,609537E+22	6,327750E+22	6,327840E+22	1,521919E+23	1,265559E+23	2,787478E+23
1485	7,609361E+22	7,609425E+22	6,327808E+22	6,327765E+22	1,521879E+23	1,265557E+23	2,787436E+23
1486	7,609547E+22	7,609641E+22	6,327836E+22	6,327858E+22	1,521919E+23	1,265569E+23	2,787488E+23
1487	7,609677E+22	7,609431E+22	6,327830E+22	6,327821E+22	1,521911E+23	1,265565E+23	2,787476E+23
1488	7,609347E+22	7,609490E+22	6,328024E+22	6,327876E+22	1,521884E+23	1,265590E+23	2,787474E+23
1489	7,609590E+22	7,609732E+22	6,327949E+22	6,328044E+22	1,521932E+23	1,265599E+23	2,787532E+23
1490	7,609495E+22	7,609452E+22	6,328004E+22	6,328033E+22	1,521895E+23	1,265604E+23	2,787498E+23
1491	7,609368E+22	7,609547E+22	6,328188E+22	6,328126E+22	1,521892E+23	1,265631E+23	2,787523E+23
1492	7,609725E+22	7,609577E+22	6,328121E+22	6,328144E+22	1,521930E+23	1,265626E+23	2,787557E+23
1493	7,609501E+22	7,609396E+22	6,328168E+22	6,328092E+22	1,521890E+23	1,265626E+23	2,787516E+23
1494	7,609558E+22	7,609654E+22	6,328172E+22	6,328195E+22	1,521921E+23	1,265637E+23	2,787558E+23
1495	7,609726E+22	7,609588E+22	6,328075E+22	6,328158E+22	1,521931E+23	1,265623E+23	2,787555E+23
1496	7,609353E+22	7,609530E+22	6,328194E+22	6,328101E+22	1,521888E+23	1,265629E+23	2,787518E+23
1497	7,609561E+22	7,609755E+22	6,328107E+22	6,328127E+22	1,521932E+23	1,265623E+23	2,787555E+23
1498	7,609592E+22	7,609458E+22	6,328067E+22	6,327995E+22	1,521905E+23	1,265606E+23	2,787511E+23
1499	7,609371E+22	7,609446E+22	6,328140E+22	6,328002E+22	1,521882E+23	1,265614E+23	2,787496E+23
1500	7,609671E+22	7,609603E+22	6,327962E+22	6,328020E+22	1,521927E+23	1,265598E+23	2,787526E+23
1501	7,609442E+22	7,609390E+22	6,327904E+22	6,327935E+22	1,521883E+23	1,265584E+23	2,787467E+23
1502	7,609388E+22	7,609567E+22	6,327923E+22	6,327972E+22	1,521896E+23	1,265590E+23	2,787485E+23
1503	7,609690E+22	7,609547E+22	6,327843E+22	6,327914E+22	1,521924E+23	1,265576E+23	2,787499E+23
1504	7,609388E+22	7,609372E+22	6,327985E+22	6,327858E+22	1,521876E+23	1,265584E+23	2,787460E+23
1505	7,609535E+22	7,609662E+22	6,327981E+22	6,327950E+22	1,521920E+23	1,265593E+23	2,787513E+23
1506	7,609628E+22	7,609505E+22	6,327980E+22	6,327964E+22	1,521913E+23	1,265594E+23	2,787508E+23
1507	7,609298E+22	7,609461E+22	6,328156E+22	6,328079E+22	1,521876E+23	1,265624E+23	2,787499E+23
1508	7,609579E+22	7,609695E+22	6,328122E+22	6,328190E+22	1,521927E+23	1,265631E+23	2,787559E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1509	7,609493E+22	7,609417E+22	6,328177E+22	6,328168E+22	1,521891E+23	1,265635E+23	2,787526E+23
1510	7,609411E+22	7,609493E+22	6,328287E+22	6,328244E+22	1,521890E+23	1,265653E+23	2,787544E+23
1511	7,609785E+22	7,609595E+22	6,328205E+22	6,328280E+22	1,521938E+23	1,265649E+23	2,787587E+23
1512	7,609485E+22	7,609410E+22	6,328295E+22	6,328255E+22	1,521889E+23	1,265655E+23	2,787544E+23
1513	7,609501E+22	7,609740E+22	6,328266E+22	6,328306E+22	1,521924E+23	1,265657E+23	2,787581E+23
1514	7,609686E+22	7,609638E+22	6,328211E+22	6,328242E+22	1,521932E+23	1,265645E+23	2,787578E+23
1515	7,609357E+22	7,609435E+22	6,328336E+22	6,328208E+22	1,521879E+23	1,265654E+23	2,787534E+23
1516	7,609598E+22	7,609672E+22	6,328249E+22	6,328195E+22	1,521927E+23	1,265644E+23	2,787571E+23
1517	7,609573E+22	7,609424E+22	6,328178E+22	6,328108E+22	1,521900E+23	1,265629E+23	2,787528E+23
1518	7,609344E+22	7,609437E+22	6,328162E+22	6,328130E+22	1,521878E+23	1,265629E+23	2,787507E+23
1519	7,609663E+22	7,609644E+22	6,327998E+22	6,328144E+22	1,521931E+23	1,265614E+23	2,787545E+23
1520	7,609424E+22	7,609373E+22	6,328038E+22	6,328041E+22	1,521880E+23	1,265608E+23	2,787488E+23
1521	7,609390E+22	7,609590E+22	6,328050E+22	6,328017E+22	1,521898E+23	1,265607E+23	2,787505E+23
1522	7,609709E+22	7,609577E+22	6,328008E+22	6,327987E+22	1,521929E+23	1,265599E+23	2,787528E+23
1523	7,609396E+22	7,609319E+22	6,328139E+22	6,328025E+22	1,521871E+23	1,265616E+23	2,787488E+23
1524	7,609504E+22	7,609658E+22	6,328135E+22	6,328116E+22	1,521916E+23	1,265625E+23	2,787541E+23
1525	7,609549E+22	7,609528E+22	6,328128E+22	6,328155E+22	1,521908E+23	1,265628E+23	2,787536E+23
1526	7,609282E+22	7,609409E+22	6,328249E+22	6,328231E+22	1,521869E+23	1,265648E+23	2,787517E+23
1527	7,609638E+22	7,609655E+22	6,328233E+22	6,328314E+22	1,521929E+23	1,265655E+23	2,787584E+23
1528	7,609550E+22	7,609364E+22	6,328329E+22	6,328295E+22	1,521891E+23	1,265662E+23	2,787554E+23
1529	7,609430E+22	7,609538E+22	6,328380E+22	6,328339E+22	1,521897E+23	1,265672E+23	2,787569E+23
1530	7,609762E+22	7,609707E+22	6,328322E+22	6,328397E+22	1,521947E+23	1,265672E+23	2,787619E+23
1531	7,609448E+22	7,609415E+22	6,328418E+22	6,328401E+22	1,521886E+23	1,265682E+23	2,787568E+23
1532	7,609467E+22	7,609713E+22	6,328441E+22	6,328386E+22	1,521918E+23	1,265683E+23	2,787601E+23
1533	7,609649E+22	7,609609E+22	6,328387E+22	6,328336E+22	1,521926E+23	1,265672E+23	2,787598E+23
1534	7,609367E+22	7,609342E+22	6,328419E+22	6,328315E+22	1,521871E+23	1,265673E+23	2,787544E+23
1535	7,609623E+22	7,609640E+22	6,328311E+22	6,328331E+22	1,521926E+23	1,265664E+23	2,787591E+23
1536	7,609549E+22	7,609410E+22	6,328254E+22	6,328269E+22	1,521896E+23	1,265652E+23	2,787548E+23
1537	7,609307E+22	7,609491E+22	6,328201E+22	6,328222E+22	1,521880E+23	1,265642E+23	2,787522E+23
1538	7,609669E+22	7,609687E+22	6,328106E+22	6,328201E+22	1,521936E+23	1,265631E+23	2,787566E+23
1539	7,609466E+22	7,609307E+22	6,328176E+22	6,328122E+22	1,521877E+23	1,265630E+23	2,787507E+23
1540	7,609427E+22	7,609558E+22	6,328220E+22	6,328077E+22	1,521899E+23	1,265630E+23	2,787528E+23
1541	7,609665E+22	7,609608E+22	6,328165E+22	6,328121E+22	1,521927E+23	1,265629E+23	2,787556E+23
1542	7,609333E+22	7,609327E+22	6,328225E+22	6,328205E+22	1,521866E+23	1,265643E+23	2,787509E+23
1543	7,609467E+22	7,609676E+22	6,328243E+22	6,328298E+22	1,521914E+23	1,265654E+23	2,787568E+23
1544	7,609523E+22	7,609476E+22	6,328303E+22	6,328330E+22	1,521900E+23	1,265663E+23	2,787563E+23
1545	7,609307E+22	7,609404E+22	6,328374E+22	6,328337E+22	1,521871E+23	1,265671E+23	2,787542E+23
1546	7,609704E+22	7,609663E+22	6,328371E+22	6,328418E+22	1,521937E+23	1,265679E+23	2,787616E+23
1547	7,609586E+22	7,609335E+22	6,328454E+22	6,328451E+22	1,521892E+23	1,265690E+23	2,787583E+23
1548	7,609425E+22	7,609582E+22	6,328506E+22	6,328455E+22	1,521901E+23	1,265696E+23	2,787597E+23
1549	7,609688E+22	7,609756E+22	6,328468E+22	6,328519E+22	1,521944E+23	1,265699E+23	2,787643E+23
1550	7,609418E+22	7,609369E+22	6,328532E+22	6,328505E+22	1,521879E+23	1,265704E+23	2,787582E+23
1551	7,609489E+22	7,609657E+22	6,328563E+22	6,328478E+22	1,521915E+23	1,265704E+23	2,787619E+23
1552	7,609648E+22	7,609533E+22	6,328525E+22	6,328465E+22	1,521918E+23	1,265699E+23	2,787617E+23
1553	7,609347E+22	7,609364E+22	6,328465E+22	6,328419E+22	1,521871E+23	1,265688E+23	2,787559E+23
1554	7,609602E+22	7,609703E+22	6,328372E+22	6,328447E+22	1,521931E+23	1,265682E+23	2,787612E+23
1555	7,609534E+22	7,609398E+22	6,328341E+22	6,328395E+22	1,521893E+23	1,265674E+23	2,787567E+23
1556	7,609322E+22	7,609484E+22	6,328339E+22	6,328272E+22	1,521881E+23	1,265661E+23	2,787542E+23
1557	7,609661E+22	7,609695E+22	6,328275E+22	6,328269E+22	1,521936E+23	1,265654E+23	2,787590E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1558	7,609480E+22	7,609264E+22	6,328286E+22	6,328236E+22	1,521874E+23	1,265652E+23	2,787527E+23
1559	7,609414E+22	7,609561E+22	6,328333E+22	6,328236E+22	1,521898E+23	1,265657E+23	2,787554E+23
1560	7,609593E+22	7,609613E+22	6,328300E+22	6,328331E+22	1,521921E+23	1,265663E+23	2,787584E+23
1561	7,609278E+22	7,609347E+22	6,328310E+22	6,328350E+22	1,521862E+23	1,265666E+23	2,787528E+23
1562	7,609491E+22	7,609660E+22	6,328383E+22	6,328413E+22	1,521915E+23	1,265680E+23	2,787595E+23
1563	7,609595E+22	7,609385E+22	6,328438E+22	6,328451E+22	1,521898E+23	1,265689E+23	2,787587E+23
1564	7,609377E+22	7,609373E+22	6,328512E+22	6,328416E+22	1,521875E+23	1,265693E+23	2,787568E+23
1565	7,609687E+22	7,609725E+22	6,328513E+22	6,328538E+22	1,521941E+23	1,265705E+23	2,787646E+23
1566	7,609546E+22	7,609374E+22	6,328540E+22	6,328592E+22	1,521892E+23	1,265713E+23	2,787605E+23
1567	7,609384E+22	7,609617E+22	6,328642E+22	6,328580E+22	1,521900E+23	1,265722E+23	2,787622E+23
1568	7,609635E+22	7,609725E+22	6,328657E+22	6,328656E+22	1,521936E+23	1,265731E+23	2,787667E+23
1569	7,609395E+22	7,609349E+22	6,328655E+22	6,328603E+22	1,521874E+23	1,265726E+23	2,787600E+23
1570	7,609510E+22	7,609631E+22	6,328685E+22	6,328602E+22	1,521914E+23	1,265729E+23	2,787643E+23
1571	7,609650E+22	7,609477E+22	6,328607E+22	6,328639E+22	1,521913E+23	1,265725E+23	2,787637E+23
1572	7,609344E+22	7,609384E+22	6,328531E+22	6,328533E+22	1,521873E+23	1,265706E+23	2,787579E+23
1573	7,609572E+22	7,609738E+22	6,328471E+22	6,328537E+22	1,521931E+23	1,265701E+23	2,787632E+23
1574	7,609554E+22	7,609362E+22	6,328423E+22	6,328458E+22	1,521892E+23	1,265688E+23	2,787580E+23
1575	7,609375E+22	7,609463E+22	6,328461E+22	6,328324E+22	1,521884E+23	1,265679E+23	2,787562E+23
1576	7,609641E+22	7,609668E+22	6,328432E+22	6,328389E+22	1,521931E+23	1,265682E+23	2,787613E+23
1577	7,609419E+22	7,609319E+22	6,328376E+22	6,328367E+22	1,521874E+23	1,265674E+23	2,787548E+23
1578	7,609366E+22	7,609601E+22	6,328444E+22	6,328395E+22	1,521897E+23	1,265684E+23	2,787581E+23
1579	7,609551E+22	7,609553E+22	6,328439E+22	6,328508E+22	1,521910E+23	1,265695E+23	2,787605E+23
1580	7,609309E+22	7,609306E+22	6,328461E+22	6,328445E+22	1,521862E+23	1,265691E+23	2,787552E+23
1581	7,609524E+22	7,609632E+22	6,328544E+22	6,328514E+22	1,521916E+23	1,265706E+23	2,787621E+23
1582	7,609646E+22	7,609350E+22	6,328539E+22	6,328582E+22	1,521900E+23	1,265712E+23	2,787612E+23
1583	7,609399E+22	7,609414E+22	6,328620E+22	6,328559E+22	1,521881E+23	1,265718E+23	2,787599E+23
1584	7,609613E+22	7,609771E+22	6,328659E+22	6,328717E+22	1,521938E+23	1,265738E+23	2,787676E+23
1585	7,609476E+22	7,609427E+22	6,328658E+22	6,328709E+22	1,521890E+23	1,265737E+23	2,787627E+23
1586	7,609381E+22	7,609598E+22	6,328806E+22	6,328688E+22	1,521898E+23	1,265749E+23	2,787647E+23
1587	7,609648E+22	7,609625E+22	6,328809E+22	6,328793E+22	1,521927E+23	1,265760E+23	2,787687E+23
1588	7,609430E+22	7,609307E+22	6,328767E+22	6,328706E+22	1,521874E+23	1,265747E+23	2,787621E+23
1589	7,609484E+22	7,609653E+22	6,328782E+22	6,328731E+22	1,521914E+23	1,265751E+23	2,787665E+23
1590	7,609635E+22	7,609482E+22	6,328643E+22	6,328768E+22	1,521912E+23	1,265741E+23	2,787653E+23
1591	7,609355E+22	7,609398E+22	6,328623E+22	6,328612E+22	1,521875E+23	1,265723E+23	2,787599E+23
1592	7,609559E+22	7,609724E+22	6,328625E+22	6,328621E+22	1,521928E+23	1,265725E+23	2,787653E+23
1593	7,609552E+22	7,609370E+22	6,328528E+22	6,328508E+22	1,521892E+23	1,265704E+23	2,787596E+23
1594	7,609381E+22	7,609462E+22	6,328596E+22	6,328436E+22	1,521884E+23	1,265703E+23	2,787587E+23
1595	7,609588E+22	7,609640E+22	6,328545E+22	6,328570E+22	1,521923E+23	1,265711E+23	2,787634E+23
1596	7,609373E+22	7,609319E+22	6,328479E+22	6,328512E+22	1,521869E+23	1,265699E+23	2,787568E+23
1597	7,609328E+22	7,609582E+22	6,328587E+22	6,328526E+22	1,521891E+23	1,265711E+23	2,787602E+23
1598	7,609595E+22	7,609467E+22	6,328536E+22	6,328620E+22	1,521906E+23	1,265716E+23	2,787622E+23
1599	7,609395E+22	7,609270E+22	6,328579E+22	6,328531E+22	1,521866E+23	1,265711E+23	2,787578E+23
1600	7,609533E+22	7,609641E+22	6,328683E+22	6,328653E+22	1,521917E+23	1,265734E+23	2,787651E+23
1601	7,609596E+22	7,609451E+22	6,328626E+22	6,328705E+22	1,521905E+23	1,265733E+23	2,787638E+23
1602	7,609355E+22	7,609496E+22	6,328766E+22	6,328710E+22	1,521885E+23	1,265748E+23	2,787633E+23
1603	7,609548E+22	7,609743E+22	6,328846E+22	6,328882E+22	1,521929E+23	1,265773E+23	2,787702E+23
1604	7,609476E+22	7,609389E+22	6,328847E+22	6,328819E+22	1,521887E+23	1,265767E+23	2,787653E+23
1605	7,609388E+22	7,609544E+22	6,328983E+22	6,328813E+22	1,521893E+23	1,265780E+23	2,787673E+23
1606	7,609675E+22	7,609548E+22	6,328890E+22	6,328950E+22	1,521922E+23	1,265784E+23	2,787706E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1607	7,609461E+22	7,609317E+22	6,328826E+22	6,328844E+22	1,521878E+23	1,265767E+23	2,787645E+23
1608	7,609449E+22	7,609668E+22	6,328861E+22	6,328874E+22	1,521912E+23	1,265774E+23	2,787685E+23
1609	7,609612E+22	7,609525E+22	6,328708E+22	6,328819E+22	1,521914E+23	1,265753E+23	2,787666E+23
1610	7,609400E+22	7,609395E+22	6,328741E+22	6,328651E+22	1,521880E+23	1,265739E+23	2,787619E+23
1611	7,609554E+22	7,609658E+22	6,328767E+22	6,328704E+22	1,521921E+23	1,265747E+23	2,787668E+23
1612	7,609542E+22	7,609376E+22	6,328652E+22	6,328595E+22	1,521892E+23	1,265725E+23	2,787617E+23
1613	7,609308E+22	7,609486E+22	6,328722E+22	6,328576E+22	1,521879E+23	1,265730E+23	2,787609E+23
1614	7,609532E+22	7,609609E+22	6,328626E+22	6,328736E+22	1,521914E+23	1,265736E+23	2,787650E+23
1615	7,609384E+22	7,609292E+22	6,328597E+22	6,328633E+22	1,521868E+23	1,265723E+23	2,787591E+23
1616	7,609335E+22	7,609532E+22	6,328735E+22	6,328660E+22	1,521887E+23	1,265740E+23	2,787626E+23
1617	7,609623E+22	7,609472E+22	6,328635E+22	6,328712E+22	1,521910E+23	1,265735E+23	2,787644E+23
1618	7,609441E+22	7,609300E+22	6,328703E+22	6,328667E+22	1,521874E+23	1,265737E+23	2,787611E+23
1619	7,609489E+22	7,609664E+22	6,328819E+22	6,328835E+22	1,521915E+23	1,265765E+23	2,787681E+23
1620	7,609560E+22	7,609502E+22	6,328774E+22	6,328840E+22	1,521906E+23	1,265761E+23	2,787667E+23
1621	7,609316E+22	7,609488E+22	6,328966E+22	6,328834E+22	1,521880E+23	1,265780E+23	2,787660E+23
1622	7,609567E+22	7,609648E+22	6,328989E+22	6,329008E+22	1,521922E+23	1,265800E+23	2,787721E+23
1623	7,609537E+22	7,609323E+22	6,328981E+22	6,328934E+22	1,521886E+23	1,265792E+23	2,787678E+23
1624	7,609384E+22	7,609521E+22	6,329096E+22	6,328979E+22	1,521891E+23	1,265807E+23	2,787698E+23
1625	7,609642E+22	7,609603E+22	6,328922E+22	6,329062E+22	1,521925E+23	1,265798E+23	2,787723E+23
1626	7,609458E+22	7,609369E+22	6,328905E+22	6,328948E+22	1,521883E+23	1,265785E+23	2,787668E+23
1627	7,609424E+22	7,609654E+22	6,328986E+22	6,328962E+22	1,521908E+23	1,265795E+23	2,787703E+23
1628	7,609627E+22	7,609521E+22	6,328848E+22	6,328854E+22	1,521915E+23	1,265770E+23	2,787685E+23
1629	7,609392E+22	7,609378E+22	6,328912E+22	6,328731E+22	1,521877E+23	1,265764E+23	2,787641E+23
1630	7,609527E+22	7,609608E+22	6,328858E+22	6,328847E+22	1,521914E+23	1,265771E+23	2,787684E+23
1631	7,609511E+22	7,609381E+22	6,328741E+22	6,328751E+22	1,521889E+23	1,265749E+23	2,787638E+23
1632	7,609241E+22	7,609469E+22	6,328824E+22	6,328755E+22	1,521871E+23	1,265758E+23	2,787629E+23
1633	7,609514E+22	7,609589E+22	6,328704E+22	6,328826E+22	1,521910E+23	1,265753E+23	2,787663E+23
1634	7,609462E+22	7,609264E+22	6,328710E+22	6,328717E+22	1,521873E+23	1,265743E+23	2,787615E+23
1635	7,609374E+22	7,609488E+22	6,328864E+22	6,328775E+22	1,521886E+23	1,265764E+23	2,787650E+23
1636	7,609643E+22	7,609525E+22	6,328760E+22	6,328812E+22	1,521917E+23	1,265757E+23	2,787674E+23
1637	7,609396E+22	7,609374E+22	6,328869E+22	6,328805E+22	1,521877E+23	1,265767E+23	2,787644E+23
1638	7,609432E+22	7,609659E+22	6,328965E+22	6,328995E+22	1,521909E+23	1,265796E+23	2,787705E+23
1639	7,609562E+22	7,609484E+22	6,328962E+22	6,328969E+22	1,521905E+23	1,265793E+23	2,787698E+23
1640	7,609306E+22	7,609419E+22	6,329148E+22	6,328996E+22	1,521872E+23	1,265814E+23	2,787687E+23
1641	7,609568E+22	7,609615E+22	6,329094E+22	6,329134E+22	1,521918E+23	1,265823E+23	2,787741E+23
1642	7,609579E+22	7,609330E+22	6,329059E+22	6,329090E+22	1,521891E+23	1,265815E+23	2,787706E+23
1643	7,609347E+22	7,609521E+22	6,329165E+22	6,329148E+22	1,521887E+23	1,265831E+23	2,787718E+23
1644	7,609633E+22	7,609648E+22	6,329011E+22	6,329145E+22	1,521928E+23	1,265816E+23	2,787744E+23
1645	7,609459E+22	7,609375E+22	6,329055E+22	6,328993E+22	1,521883E+23	1,265805E+23	2,787688E+23
1646	7,609445E+22	7,609589E+22	6,329103E+22	6,329019E+22	1,521903E+23	1,265812E+23	2,787716E+23
1647	7,609658E+22	7,609500E+22	6,328973E+22	6,328922E+22	1,521916E+23	1,265789E+23	2,787705E+23
1648	7,609328E+22	7,609374E+22	6,329026E+22	6,328888E+22	1,521870E+23	1,265791E+23	2,787662E+23
1649	7,609435E+22	7,609641E+22	6,328913E+22	6,328978E+22	1,521908E+23	1,265789E+23	2,787697E+23
1650	7,609494E+22	7,609385E+22	6,328833E+22	6,328892E+22	1,521888E+23	1,265772E+23	2,787660E+23
1651	7,609231E+22	7,609408E+22	6,328950E+22	6,328885E+22	1,521864E+23	1,265783E+23	2,787647E+23
1652	7,609576E+22	7,609562E+22	6,328831E+22	6,328894E+22	1,521914E+23	1,265773E+23	2,787686E+23
1653	7,609508E+22	7,609264E+22	6,328871E+22	6,328808E+22	1,521877E+23	1,265768E+23	2,787645E+23
1654	7,609386E+22	7,609487E+22	6,328965E+22	6,328918E+22	1,521887E+23	1,265788E+23	2,787676E+23
1655	7,609629E+22	7,609573E+22	6,328889E+22	6,328960E+22	1,521920E+23	1,265785E+23	2,787705E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1656	7,609327E+22	7,609389E+22	6,329039E+22	6,328988E+22	1,521872E+23	1,265803E+23	2,787674E+23
1657	7,609394E+22	7,609633E+22	6,329098E+22	6,329100E+22	1,521903E+23	1,265820E+23	2,787722E+23
1658	7,609604E+22	7,609434E+22	6,329105E+22	6,329099E+22	1,521904E+23	1,265820E+23	2,787724E+23
1659	7,609313E+22	7,609362E+22	6,329271E+22	6,329157E+22	1,521868E+23	1,265843E+23	2,787710E+23
1660	7,609577E+22	7,609638E+22	6,329181E+22	6,329256E+22	1,521921E+23	1,265844E+23	2,787765E+23
1661	7,609553E+22	7,609393E+22	6,329179E+22	6,329208E+22	1,521895E+23	1,265839E+23	2,787733E+23
1662	7,609335E+22	7,609517E+22	6,329258E+22	6,329254E+22	1,521885E+23	1,265851E+23	2,787736E+23
1663	7,609660E+22	7,609643E+22	6,329160E+22	6,329204E+22	1,521930E+23	1,265836E+23	2,787767E+23
1664	7,609446E+22	7,609349E+22	6,329217E+22	6,329098E+22	1,521879E+23	1,265832E+23	2,787711E+23
1665	7,609409E+22	7,609570E+22	6,329201E+22	6,329105E+22	1,521898E+23	1,265831E+23	2,787728E+23
1666	7,609642E+22	7,609513E+22	6,329057E+22	6,329076E+22	1,521916E+23	1,265813E+23	2,787729E+23
1667	7,609258E+22	7,609356E+22	6,329105E+22	6,329070E+22	1,521861E+23	1,265817E+23	2,787679E+23
1668	7,609423E+22	7,609629E+22	6,329007E+22	6,329079E+22	1,521905E+23	1,265809E+23	2,787714E+23
1669	7,609531E+22	7,609353E+22	6,328974E+22	6,328959E+22	1,521888E+23	1,265793E+23	2,787682E+23
1670	7,609299E+22	7,609335E+22	6,329042E+22	6,328967E+22	1,521863E+23	1,265801E+23	2,787664E+23
1671	7,609646E+22	7,609569E+22	6,328952E+22	6,328977E+22	1,521921E+23	1,265793E+23	2,787714E+23
1672	7,609469E+22	7,609316E+22	6,328993E+22	6,328964E+22	1,521878E+23	1,265796E+23	2,787674E+23
1673	7,609293E+22	7,609552E+22	6,329069E+22	6,329043E+22	1,521884E+23	1,265811E+23	2,787696E+23
1674	7,609596E+22	7,609607E+22	6,329037E+22	6,329109E+22	1,521920E+23	1,265815E+23	2,787735E+23
1675	7,609282E+22	7,609327E+22	6,329218E+22	6,329152E+22	1,521861E+23	1,265837E+23	2,787698E+23
1676	7,609415E+22	7,609585E+22	6,329261E+22	6,329221E+22	1,521900E+23	1,265848E+23	2,787748E+23
1677	7,609632E+22	7,609408E+22	6,329263E+22	6,329240E+22	1,521904E+23	1,265850E+23	2,787754E+23
1678	7,609327E+22	7,609339E+22	6,329338E+22	6,329330E+22	1,521867E+23	1,265867E+23	2,787733E+23
1679	7,609595E+22	7,609670E+22	6,329274E+22	6,329383E+22	1,521926E+23	1,265866E+23	2,787792E+23
1680	7,609524E+22	7,609411E+22	6,329307E+22	6,329327E+22	1,521893E+23	1,265863E+23	2,787757E+23
1681	7,609327E+22	7,609507E+22	6,329369E+22	6,329288E+22	1,521883E+23	1,265866E+23	2,787749E+23
1682	7,609701E+22	7,609629E+22	6,329283E+22	6,329280E+22	1,521933E+23	1,265856E+23	2,787789E+23
1683	7,609408E+22	7,609320E+22	6,329340E+22	6,329236E+22	1,521873E+23	1,265858E+23	2,787730E+23
1684	7,609361E+22	7,609592E+22	6,329292E+22	6,329226E+22	1,521895E+23	1,265852E+23	2,787747E+23
1685	7,609581E+22	7,609535E+22	6,329181E+22	6,329206E+22	1,521912E+23	1,265839E+23	2,787750E+23
1686	7,609252E+22	7,609305E+22	6,329186E+22	6,329195E+22	1,521856E+23	1,265838E+23	2,787694E+23
1687	7,609486E+22	7,609576E+22	6,329129E+22	6,329153E+22	1,521906E+23	1,265828E+23	2,787734E+23
1688	7,609556E+22	7,609333E+22	6,329104E+22	6,329072E+22	1,521889E+23	1,265818E+23	2,787707E+23
1689	7,609303E+22	7,609348E+22	6,329116E+22	6,329049E+22	1,521865E+23	1,265817E+23	2,787682E+23
1690	7,609631E+22	7,609629E+22	6,329039E+22	6,329126E+22	1,521926E+23	1,265816E+23	2,787742E+23
1691	7,609381E+22	7,609348E+22	6,329124E+22	6,329148E+22	1,521873E+23	1,265827E+23	2,787700E+23
1692	7,609253E+22	7,609547E+22	6,329227E+22	6,329157E+22	1,521880E+23	1,265838E+23	2,787718E+23
1693	7,609597E+22	7,609564E+22	6,329243E+22	6,329215E+22	1,521916E+23	1,265846E+23	2,787762E+23
1694	7,609329E+22	7,609235E+22	6,329342E+22	6,329292E+22	1,521856E+23	1,265863E+23	2,787720E+23
1695	7,609474E+22	7,609550E+22	6,329387E+22	6,329356E+22	1,521902E+23	1,265874E+23	2,787777E+23
1696	7,609603E+22	7,609448E+22	6,329370E+22	6,329419E+22	1,521905E+23	1,265879E+23	2,787784E+23
1697	7,609286E+22	7,609386E+22	6,329412E+22	6,329438E+22	1,521867E+23	1,265885E+23	2,787752E+23
1698	7,609606E+22	7,609706E+22	6,329398E+22	6,329489E+22	1,521931E+23	1,265889E+23	2,787820E+23
1699	7,609504E+22	7,609392E+22	6,329472E+22	6,329437E+22	1,521890E+23	1,265891E+23	2,787781E+23
1700	7,609332E+22	7,609492E+22	6,329524E+22	6,329365E+22	1,521882E+23	1,265889E+23	2,787771E+23
1701	7,609679E+22	7,609629E+22	6,329439E+22	6,329398E+22	1,521931E+23	1,265884E+23	2,787815E+23
1702	7,609368E+22	7,609288E+22	6,329404E+22	6,329415E+22	1,521866E+23	1,265882E+23	2,787747E+23
1703	7,609353E+22	7,609573E+22	6,329382E+22	6,329364E+22	1,521893E+23	1,265875E+23	2,787767E+23
1704	7,609563E+22	7,609499E+22	6,329282E+22	6,329327E+22	1,521906E+23	1,265861E+23	2,787767E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1705	7,609278E+22	7,609256E+22	6,329249E+22	6,329232E+22	1,521853E+23	1,265848E+23	2,787702E+23
1706	7,609561E+22	7,609574E+22	6,329203E+22	6,329224E+22	1,521914E+23	1,265843E+23	2,787756E+23
1707	7,609530E+22	7,609351E+22	6,329205E+22	6,329194E+22	1,521888E+23	1,265840E+23	2,787728E+23
1708	7,609250E+22	7,609419E+22	6,329233E+22	6,329154E+22	1,521867E+23	1,265839E+23	2,787706E+23
1709	7,609557E+22	7,609678E+22	6,329218E+22	6,329247E+22	1,521923E+23	1,265847E+23	2,787770E+23
1710	7,609348E+22	7,609296E+22	6,329280E+22	6,329301E+22	1,521864E+23	1,265858E+23	2,787723E+23
1711	7,609292E+22	7,609469E+22	6,329414E+22	6,329283E+22	1,521876E+23	1,265870E+23	2,787746E+23
1712	7,609603E+22	7,609506E+22	6,329406E+22	6,329389E+22	1,521911E+23	1,265879E+23	2,787790E+23
1713	7,609339E+22	7,609217E+22	6,329418E+22	6,329433E+22	1,521856E+23	1,265885E+23	2,787741E+23
1714	7,609497E+22	7,609598E+22	6,329450E+22	6,329532E+22	1,521909E+23	1,265898E+23	2,787808E+23
1715	7,609558E+22	7,609487E+22	6,329482E+22	6,329583E+22	1,521904E+23	1,265907E+23	2,787811E+23
1716	7,609292E+22	7,609408E+22	6,329557E+22	6,329505E+22	1,521870E+23	1,265906E+23	2,787776E+23
1717	7,609618E+22	7,609698E+22	6,329596E+22	6,329547E+22	1,521932E+23	1,265914E+23	2,787846E+23
1718	7,609522E+22	7,609345E+22	6,329601E+22	6,329555E+22	1,521887E+23	1,265916E+23	2,787802E+23
1719	7,609338E+22	7,609464E+22	6,329648E+22	6,329490E+22	1,521880E+23	1,265914E+23	2,787794E+23
1720	7,609588E+22	7,609648E+22	6,329541E+22	6,329574E+22	1,521924E+23	1,265912E+23	2,787835E+23
1721	7,609314E+22	7,609281E+22	6,329450E+22	6,329519E+22	1,521860E+23	1,265897E+23	2,787756E+23
1722	7,609378E+22	7,609544E+22	6,329455E+22	6,329464E+22	1,521892E+23	1,265892E+23	2,787784E+23
1723	7,609570E+22	7,609458E+22	6,329397E+22	6,329425E+22	1,521903E+23	1,265882E+23	2,787785E+23
1724	7,609321E+22	7,609251E+22	6,329357E+22	6,329283E+22	1,521857E+23	1,265864E+23	2,787721E+23
1725	7,609554E+22	7,609612E+22	6,329345E+22	6,329312E+22	1,521917E+23	1,265866E+23	2,787782E+23
1726	7,609489E+22	7,609373E+22	6,329295E+22	6,329350E+22	1,521886E+23	1,265865E+23	2,787751E+23
1727	7,609227E+22	7,609407E+22	6,329387E+22	6,329288E+22	1,521863E+23	1,265867E+23	2,787731E+23
1728	7,609503E+22	7,609641E+22	6,329398E+22	6,329394E+22	1,521914E+23	1,265879E+23	2,787794E+23
1729	7,609361E+22	7,609221E+22	6,329398E+22	6,329404E+22	1,521858E+23	1,265880E+23	2,787738E+23
1730	7,609357E+22	7,609432E+22	6,329514E+22	6,329437E+22	1,521879E+23	1,265895E+23	2,787774E+23
1731	7,609585E+22	7,609513E+22	6,329511E+22	6,329575E+22	1,521910E+23	1,265909E+23	2,787818E+23
1732	7,609322E+22	7,609289E+22	6,329519E+22	6,329559E+22	1,521861E+23	1,265908E+23	2,787769E+23
1733	7,609476E+22	7,609664E+22	6,329617E+22	6,329638E+22	1,521914E+23	1,265925E+23	2,787839E+23
1734	7,609559E+22	7,609469E+22	6,329635E+22	6,329702E+22	1,521903E+23	1,265934E+23	2,787837E+23
1735	7,609336E+22	7,609368E+22	6,329754E+22	6,329601E+22	1,521870E+23	1,265935E+23	2,787806E+23
1736	7,609586E+22	7,609670E+22	6,329761E+22	6,329689E+22	1,521926E+23	1,265945E+23	2,787871E+23
1737	7,609478E+22	7,609317E+22	6,329672E+22	6,329691E+22	1,521879E+23	1,265936E+23	2,787816E+23
1738	7,609318E+22	7,609474E+22	6,329692E+22	6,329661E+22	1,521879E+23	1,265935E+23	2,787815E+23
1739	7,609532E+22	7,609620E+22	6,329622E+22	6,329721E+22	1,521915E+23	1,265934E+23	2,787849E+23
1740	7,609342E+22	7,609253E+22	6,329545E+22	6,329556E+22	1,521860E+23	1,265910E+23	2,787770E+23
1741	7,609437E+22	7,609523E+22	6,329584E+22	6,329490E+22	1,521896E+23	1,265907E+23	2,787803E+23
1742	7,609608E+22	7,609434E+22	6,329481E+22	6,329507E+22	1,521904E+23	1,265899E+23	2,787803E+23
1743	7,609334E+22	7,609272E+22	6,329479E+22	6,329379E+22	1,521861E+23	1,265886E+23	2,787746E+23
1744	7,609448E+22	7,609665E+22	6,329484E+22	6,329459E+22	1,521911E+23	1,265894E+23	2,787806E+23
1745	7,609417E+22	7,609372E+22	6,329411E+22	6,329469E+22	1,521879E+23	1,265888E+23	2,787767E+23
1746	7,609234E+22	7,609371E+22	6,329521E+22	6,329437E+22	1,521860E+23	1,265896E+23	2,787756E+23
1747	7,609487E+22	7,609577E+22	6,329558E+22	6,329565E+22	1,521906E+23	1,265912E+23	2,787819E+23
1748	7,609397E+22	7,609201E+22	6,329521E+22	6,329531E+22	1,521860E+23	1,265905E+23	2,787765E+23
1749	7,609372E+22	7,609461E+22	6,329640E+22	6,329589E+22	1,521883E+23	1,265923E+23	2,787806E+23
1750	7,609580E+22	7,609545E+22	6,329598E+22	6,329755E+22	1,521912E+23	1,265935E+23	2,787848E+23
1751	7,609355E+22	7,609292E+22	6,329672E+22	6,329668E+22	1,521865E+23	1,265934E+23	2,787799E+23
1752	7,609451E+22	7,609654E+22	6,329809E+22	6,329734E+22	1,521911E+23	1,265954E+23	2,787865E+23
1753	7,609575E+22	7,609431E+22	6,329764E+22	6,329770E+22	1,521901E+23	1,265953E+23	2,787854E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1754	7,609357E+22	7,609346E+22	6,329858E+22	6,329737E+22	1,521870E+23	1,265960E+23	2,787830E+23
1755	7,609502E+22	7,609670E+22	6,329872E+22	6,329869E+22	1,521917E+23	1,265974E+23	2,787891E+23
1756	7,609425E+22	7,609344E+22	6,329755E+22	6,329809E+22	1,521877E+23	1,265956E+23	2,787833E+23
1757	7,609301E+22	7,609475E+22	6,329815E+22	6,329755E+22	1,521878E+23	1,265957E+23	2,787835E+23
1758	7,609560E+22	7,609565E+22	6,329719E+22	6,329815E+22	1,521913E+23	1,265953E+23	2,787866E+23
1759	7,609423E+22	7,609205E+22	6,329679E+22	6,329610E+22	1,521863E+23	1,265929E+23	2,787792E+23
1760	7,609425E+22	7,609530E+22	6,329713E+22	6,329584E+22	1,521895E+23	1,265930E+23	2,787825E+23
1761	7,609572E+22	7,609460E+22	6,329542E+22	6,329614E+22	1,521903E+23	1,265916E+23	2,787819E+23
1762	7,609298E+22	7,609316E+22	6,329554E+22	6,329543E+22	1,521861E+23	1,265910E+23	2,787771E+23
1763	7,609359E+22	7,609647E+22	6,329626E+22	6,329619E+22	1,521901E+23	1,265924E+23	2,787825E+23
1764	7,609413E+22	7,609330E+22	6,329559E+22	6,329558E+22	1,521874E+23	1,265912E+23	2,787786E+23
1765	7,609283E+22	7,609328E+22	6,329675E+22	6,329540E+22	1,521861E+23	1,265921E+23	2,787783E+23
1766	7,609527E+22	7,609525E+22	6,329653E+22	6,329721E+22	1,521905E+23	1,265937E+23	2,787842E+23
1767	7,609435E+22	7,609219E+22	6,329640E+22	6,329668E+22	1,521865E+23	1,265931E+23	2,787796E+23
1768	7,609324E+22	7,609522E+22	6,329769E+22	6,329728E+22	1,521885E+23	1,265950E+23	2,787834E+23
1769	7,609556E+22	7,609551E+22	6,329718E+22	6,329848E+22	1,521911E+23	1,265957E+23	2,787867E+23
1770	7,609385E+22	7,609291E+22	6,329826E+22	6,329786E+22	1,521868E+23	1,265961E+23	2,787829E+23
1771	7,609415E+22	7,609615E+22	6,329991E+22	6,329876E+22	1,521903E+23	1,265987E+23	2,787890E+23
1772	7,609560E+22	7,609422E+22	6,329907E+22	6,329891E+22	1,521898E+23	1,265980E+23	2,787878E+23
1773	7,609329E+22	7,609365E+22	6,329974E+22	6,329895E+22	1,521869E+23	1,265987E+23	2,787856E+23
1774	7,609462E+22	7,609649E+22	6,329941E+22	6,330045E+22	1,521911E+23	1,265999E+23	2,787910E+23
1775	7,609462E+22	7,609303E+22	6,329872E+22	6,329902E+22	1,521877E+23	1,265977E+23	2,787854E+23
1776	7,609316E+22	7,609442E+22	6,329939E+22	6,329820E+22	1,521876E+23	1,265976E+23	2,787852E+23
1777	7,609607E+22	7,609530E+22	6,329789E+22	6,329856E+22	1,521914E+23	1,265964E+23	2,787878E+23
1778	7,609460E+22	7,609236E+22	6,329744E+22	6,329711E+22	1,521870E+23	1,265945E+23	2,787815E+23
1779	7,609328E+22	7,609580E+22	6,329821E+22	6,329726E+22	1,521891E+23	1,265955E+23	2,787846E+23
1780	7,609494E+22	7,609516E+22	6,329658E+22	6,329715E+22	1,521901E+23	1,265937E+23	2,787838E+23
1781	7,609260E+22	7,609311E+22	6,329719E+22	6,329661E+22	1,521857E+23	1,265938E+23	2,787795E+23
1782	7,609360E+22	7,609568E+22	6,329770E+22	6,329764E+22	1,521893E+23	1,265953E+23	2,787846E+23
1783	7,609492E+22	7,609247E+22	6,329710E+22	6,329674E+22	1,521874E+23	1,265938E+23	2,787812E+23
1784	7,609285E+22	7,609310E+22	6,329798E+22	6,329684E+22	1,521860E+23	1,265948E+23	2,787808E+23
1785	7,609530E+22	7,609543E+22	6,329704E+22	6,329857E+22	1,521907E+23	1,265956E+23	2,787863E+23
1786	7,609445E+22	7,609270E+22	6,329717E+22	6,329816E+22	1,521872E+23	1,265953E+23	2,787825E+23
1787	7,609274E+22	7,609529E+22	6,329936E+22	6,329853E+22	1,521880E+23	1,265979E+23	2,787859E+23
1788	7,609564E+22	7,609548E+22	6,329890E+22	6,329909E+22	1,521911E+23	1,265980E+23	2,787891E+23
1789	7,609403E+22	7,609284E+22	6,330007E+22	6,329897E+22	1,521869E+23	1,265990E+23	2,787859E+23
1790	7,609386E+22	7,609587E+22	6,330116E+22	6,330053E+22	1,521897E+23	1,266017E+23	2,787914E+23
1791	7,609544E+22	7,609419E+22	6,330034E+22	6,330051E+22	1,521896E+23	1,266008E+23	2,787905E+23
1792	7,609264E+22	7,609381E+22	6,330095E+22	6,330043E+22	1,521865E+23	1,266014E+23	2,787878E+23
1793	7,609469E+22	7,609605E+22	6,330021E+22	6,330136E+22	1,521907E+23	1,266016E+23	2,787923E+23
1794	7,609529E+22	7,609288E+22	6,329961E+22	6,329992E+22	1,521882E+23	1,265995E+23	2,787877E+23
1795	7,609317E+22	7,609425E+22	6,330059E+22	6,329918E+22	1,521874E+23	1,265998E+23	2,787872E+23
1796	7,609597E+22	7,609563E+22	6,329886E+22	6,329929E+22	1,521916E+23	1,265982E+23	2,787898E+23
1797	7,609424E+22	7,609305E+22	6,329849E+22	6,329838E+22	1,521873E+23	1,265969E+23	2,787842E+23
1798	7,609259E+22	7,609564E+22	6,329920E+22	6,329878E+22	1,521882E+23	1,265980E+23	2,787862E+23
1799	7,609499E+22	7,609453E+22	6,329819E+22	6,329811E+22	1,521895E+23	1,265963E+23	2,787858E+23
1800	7,609265E+22	7,609250E+22	6,329864E+22	6,329750E+22	1,521851E+23	1,265961E+23	2,787813E+23
1801	7,609406E+22	7,609480E+22	6,329842E+22	6,329859E+22	1,521889E+23	1,265970E+23	2,787859E+23
1802	7,609536E+22	7,609265E+22	6,329769E+22	6,329819E+22	1,521880E+23	1,265959E+23	2,787839E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1803	7,609226E+22	7,609362E+22	6,329893E+22	6,329844E+22	1,521859E+23	1,265974E+23	2,787832E+23
1804	7,609488E+22	7,609609E+22	6,329829E+22	6,329951E+22	1,521910E+23	1,265978E+23	2,787888E+23
1805	7,609440E+22	7,609315E+22	6,329899E+22	6,329922E+22	1,521875E+23	1,265982E+23	2,787858E+23
1806	7,609261E+22	7,609488E+22	6,330121E+22	6,329994E+22	1,521875E+23	1,266011E+23	2,787886E+23
1807	7,609594E+22	7,609500E+22	6,330091E+22	6,330045E+22	1,521909E+23	1,266014E+23	2,787923E+23
1808	7,609360E+22	7,609278E+22	6,330161E+22	6,330075E+22	1,521864E+23	1,266024E+23	2,787887E+23
1809	7,609354E+22	7,609566E+22	6,330181E+22	6,330232E+22	1,521892E+23	1,266041E+23	2,787933E+23
1810	7,609554E+22	7,609425E+22	6,330099E+22	6,330215E+22	1,521898E+23	1,266031E+23	2,787929E+23
1811	7,609253E+22	7,609349E+22	6,330212E+22	6,330155E+22	1,521860E+23	1,266037E+23	2,787897E+23
1812	7,609522E+22	7,609589E+22	6,330129E+22	6,330163E+22	1,521911E+23	1,266029E+23	2,787940E+23
1813	7,609578E+22	7,609310E+22	6,330073E+22	6,330054E+22	1,521889E+23	1,266013E+23	2,787901E+23
1814	7,609287E+22	7,609442E+22	6,330157E+22	6,330037E+22	1,521873E+23	1,266019E+23	2,787892E+23
1815	7,609562E+22	7,609590E+22	6,330009E+22	6,330030E+22	1,521915E+23	1,266004E+23	2,787919E+23
1816	7,609328E+22	7,609314E+22	6,329995E+22	6,329953E+22	1,521864E+23	1,265995E+23	2,787859E+23
1817	7,609237E+22	7,609490E+22	6,330027E+22	6,329981E+22	1,521873E+23	1,266001E+23	2,787874E+23
1818	7,609539E+22	7,609394E+22	6,329921E+22	6,329936E+22	1,521893E+23	1,265986E+23	2,787879E+23
1819	7,609260E+22	7,609202E+22	6,329979E+22	6,329894E+22	1,521846E+23	1,265987E+23	2,787834E+23
1820	7,609414E+22	7,609501E+22	6,329916E+22	6,329971E+22	1,521891E+23	1,265989E+23	2,787880E+23
1821	7,609526E+22	7,609349E+22	6,329853E+22	6,329965E+22	1,521888E+23	1,265982E+23	2,787869E+23
1822	7,609191E+22	7,609379E+22	6,330018E+22	6,329989E+22	1,521857E+23	1,266001E+23	2,787858E+23
1823	7,609512E+22	7,609582E+22	6,330030E+22	6,330036E+22	1,521909E+23	1,266007E+23	2,787916E+23
1824	7,609433E+22	7,609296E+22	6,330107E+22	6,330025E+22	1,521873E+23	1,266013E+23	2,787886E+23
1825	7,609274E+22	7,609428E+22	6,330249E+22	6,330135E+22	1,521870E+23	1,266038E+23	2,787909E+23
1826	7,609585E+22	7,609513E+22	6,330193E+22	6,330236E+22	1,521910E+23	1,266043E+23	2,787953E+23
1827	7,609286E+22	7,609294E+22	6,330272E+22	6,330269E+22	1,521858E+23	1,266054E+23	2,787912E+23
1828	7,609334E+22	7,609566E+22	6,330288E+22	6,330340E+22	1,521890E+23	1,266063E+23	2,787953E+23
1829	7,609595E+22	7,609441E+22	6,330227E+22	6,330311E+22	1,521904E+23	1,266054E+23	2,787957E+23
1830	7,609294E+22	7,609304E+22	6,330332E+22	6,330248E+22	1,521860E+23	1,266058E+23	2,787918E+23
1831	7,609570E+22	7,609563E+22	6,330276E+22	6,330232E+22	1,521913E+23	1,266051E+23	2,787964E+23
1832	7,609529E+22	7,609360E+22	6,330193E+22	6,330157E+22	1,521889E+23	1,266035E+23	2,787924E+23
1833	7,609225E+22	7,609434E+22	6,330216E+22	6,330166E+22	1,521866E+23	1,266038E+23	2,787904E+23
1834	7,609519E+22	7,609584E+22	6,330102E+22	6,330162E+22	1,521910E+23	1,266026E+23	2,787937E+23
1835	7,609287E+22	7,609251E+22	6,330124E+22	6,330070E+22	1,521854E+23	1,266019E+23	2,787873E+23
1836	7,609265E+22	7,609425E+22	6,330128E+22	6,330048E+22	1,521869E+23	1,266018E+23	2,787886E+23
1837	7,609583E+22	7,609401E+22	6,330004E+22	6,330052E+22	1,521898E+23	1,266006E+23	2,787904E+23
1838	7,609244E+22	7,609219E+22	6,330053E+22	6,330043E+22	1,521846E+23	1,266010E+23	2,787856E+23
1839	7,609409E+22	7,609542E+22	6,330044E+22	6,330081E+22	1,521895E+23	1,266012E+23	2,787907E+23
1840	7,609477E+22	7,609398E+22	6,330029E+22	6,330067E+22	1,521887E+23	1,266010E+23	2,787897E+23
1841	7,609195E+22	7,609335E+22	6,330178E+22	6,330100E+22	1,521853E+23	1,266028E+23	2,787881E+23
1842	7,609538E+22	7,609553E+22	6,330198E+22	6,330177E+22	1,521909E+23	1,266038E+23	2,787947E+23
1843	7,609398E+22	7,609259E+22	6,330280E+22	6,330215E+22	1,521866E+23	1,266050E+23	2,787915E+23
1844	7,609250E+22	7,609429E+22	6,330355E+22	6,330302E+22	1,521868E+23	1,266066E+23	2,787934E+23
1845	7,609569E+22	7,609551E+22	6,330280E+22	6,330422E+22	1,521912E+23	1,266070E+23	2,787982E+23
1846	7,609278E+22	7,609267E+22	6,330382E+22	6,330418E+22	1,521855E+23	1,266080E+23	2,787934E+23
1847	7,609410E+22	7,609518E+22	6,330433E+22	6,330393E+22	1,521893E+23	1,266083E+23	2,787975E+23
1848	7,609620E+22	7,609437E+22	6,330373E+22	6,330358E+22	1,521906E+23	1,266073E+23	2,787979E+23
1849	7,609314E+22	7,609289E+22	6,330416E+22	6,330335E+22	1,521860E+23	1,266075E+23	2,787935E+23
1850	7,609533E+22	7,609611E+22	6,330359E+22	6,330355E+22	1,521914E+23	1,266071E+23	2,787986E+23
1851	7,609412E+22	7,609389E+22	6,330316E+22	6,330305E+22	1,521880E+23	1,266062E+23	2,787942E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1852	7,609164E+22	7,609414E+22	6,330330E+22	6,330258E+22	1,521858E+23	1,266059E+23	2,787917E+23
1853	7,609517E+22	7,609560E+22	6,330219E+22	6,330278E+22	1,521908E+23	1,266050E+23	2,787957E+23
1854	7,609306E+22	7,609173E+22	6,330235E+22	6,330200E+22	1,521848E+23	1,266044E+23	2,787891E+23
1855	7,609326E+22	7,609374E+22	6,330240E+22	6,330151E+22	1,521870E+23	1,266039E+23	2,787909E+23
1856	7,609564E+22	7,609452E+22	6,330105E+22	6,330171E+22	1,521902E+23	1,266028E+23	2,787929E+23
1857	7,609239E+22	7,609232E+22	6,330119E+22	6,330172E+22	1,521847E+23	1,266029E+23	2,787876E+23
1858	7,609408E+22	7,609556E+22	6,330179E+22	6,330187E+22	1,521896E+23	1,266037E+23	2,787933E+23
1859	7,609456E+22	7,609373E+22	6,330218E+22	6,330179E+22	1,521883E+23	1,266040E+23	2,787923E+23
1860	7,609207E+22	7,609290E+22	6,330335E+22	6,330199E+22	1,521850E+23	1,266053E+23	2,787903E+23
1861	7,609534E+22	7,609577E+22	6,330327E+22	6,330352E+22	1,521911E+23	1,266068E+23	2,787979E+23
1862	7,609353E+22	7,609258E+22	6,330387E+22	6,330418E+22	1,521861E+23	1,266080E+23	2,787941E+23
1863	7,609242E+22	7,609418E+22	6,330488E+22	6,330447E+22	1,521866E+23	1,266094E+23	2,787960E+23
1864	7,609551E+22	7,609569E+22	6,330436E+22	6,330524E+22	1,521912E+23	1,266096E+23	2,788008E+23
1865	7,609328E+22	7,609214E+22	6,330493E+22	6,330509E+22	1,521854E+23	1,266100E+23	2,787954E+23
1866	7,609461E+22	7,609507E+22	6,330563E+22	6,330485E+22	1,521897E+23	1,266105E+23	2,788002E+23
1867	7,609587E+22	7,609451E+22	6,330508E+22	6,330488E+22	1,521904E+23	1,266100E+23	2,788003E+23
1868	7,609256E+22	7,609323E+22	6,330501E+22	6,330453E+22	1,521858E+23	1,266095E+23	2,787953E+23
1869	7,609465E+22	7,609663E+22	6,330444E+22	6,330505E+22	1,521913E+23	1,266095E+23	2,788008E+23
1870	7,609364E+22	7,609330E+22	6,330439E+22	6,330436E+22	1,521869E+23	1,266088E+23	2,787957E+23
1871	7,609216E+22	7,609318E+22	6,330471E+22	6,330325E+22	1,521853E+23	1,266080E+23	2,787933E+23
1872	7,609548E+22	7,609520E+22	6,330343E+22	6,330347E+22	1,521907E+23	1,266069E+23	2,787976E+23
1873	7,609349E+22	7,609142E+22	6,330283E+22	6,330310E+22	1,521849E+23	1,266059E+23	2,787908E+23
1874	7,609331E+22	7,609426E+22	6,330303E+22	6,330269E+22	1,521876E+23	1,266057E+23	2,787933E+23
1875	7,609496E+22	7,609500E+22	6,330234E+22	6,330299E+22	1,521900E+23	1,266053E+23	2,787953E+23
1876	7,609215E+22	7,609247E+22	6,330266E+22	6,330255E+22	1,521846E+23	1,266052E+23	2,787898E+23
1877	7,609406E+22	7,609563E+22	6,330337E+22	6,330308E+22	1,521897E+23	1,266065E+23	2,787961E+23
1878	7,609441E+22	7,609317E+22	6,330395E+22	6,330346E+22	1,521876E+23	1,266074E+23	2,787950E+23
1879	7,609227E+22	7,609248E+22	6,330487E+22	6,330356E+22	1,521847E+23	1,266084E+23	2,787932E+23
1880	7,609480E+22	7,609600E+22	6,330451E+22	6,330523E+22	1,521908E+23	1,266097E+23	2,788005E+23
1881	7,609350E+22	7,609235E+22	6,330463E+22	6,330586E+22	1,521858E+23	1,266105E+23	2,787963E+23
1882	7,609286E+22	7,609396E+22	6,330602E+22	6,330556E+22	1,521868E+23	1,266116E+23	2,787984E+23
1883	7,609571E+22	7,609541E+22	6,330593E+22	6,330615E+22	1,521911E+23	1,266121E+23	2,788032E+23
1884	7,609363E+22	7,609212E+22	6,330607E+22	6,330570E+22	1,521858E+23	1,266118E+23	2,787975E+23
1885	7,609443E+22	7,609573E+22	6,330660E+22	6,330609E+22	1,521902E+23	1,266127E+23	2,788028E+23
1886	7,609505E+22	7,609481E+22	6,330627E+22	6,330644E+22	1,521899E+23	1,266127E+23	2,788026E+23
1887	7,609216E+22	7,609307E+22	6,330644E+22	6,330566E+22	1,521852E+23	1,266121E+23	2,787973E+23
1888	7,609415E+22	7,609642E+22	6,330604E+22	6,330595E+22	1,521906E+23	1,266120E+23	2,788026E+23
1889	7,609406E+22	7,609234E+22	6,330533E+22	6,330544E+22	1,521864E+23	1,266108E+23	2,787972E+23
1890	7,609280E+22	7,609262E+22	6,330561E+22	6,330429E+22	1,521854E+23	1,266099E+23	2,787953E+23
1891	7,609543E+22	7,609521E+22	6,330434E+22	6,330479E+22	1,521906E+23	1,266091E+23	2,787998E+23
1892	7,609330E+22	7,609188E+22	6,330329E+22	6,330413E+22	1,521852E+23	1,266074E+23	2,787926E+23
1893	7,609300E+22	7,609507E+22	6,330384E+22	6,330389E+22	1,521881E+23	1,266077E+23	2,787958E+23
1894	7,609470E+22	7,609481E+22	6,330384E+22	6,330403E+22	1,521895E+23	1,266079E+23	2,787974E+23
1895	7,609246E+22	7,609185E+22	6,330448E+22	6,330333E+22	1,521843E+23	1,266078E+23	2,787921E+23
1896	7,609384E+22	7,609554E+22	6,330513E+22	6,330419E+22	1,521894E+23	1,266093E+23	2,787987E+23
1897	7,609433E+22	7,609281E+22	6,330490E+22	6,330526E+22	1,521871E+23	1,266102E+23	2,787973E+23
1898	7,609210E+22	7,609260E+22	6,330589E+22	6,330531E+22	1,521847E+23	1,266112E+23	2,787959E+23
1899	7,609437E+22	7,609601E+22	6,330592E+22	6,330683E+22	1,521904E+23	1,266127E+23	2,788031E+23
1900	7,609366E+22	7,609227E+22	6,330586E+22	6,330675E+22	1,521859E+23	1,266126E+23	2,787985E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1901	7,609332E+22	7,609422E+22	6,330726E+22	6,330663E+22	1,521875E+23	1,266139E+23	2,788014E+23
1902	7,609582E+22	7,609521E+22	6,330751E+22	6,330746E+22	1,521910E+23	1,266150E+23	2,788060E+23
1903	7,609370E+22	7,609224E+22	6,330754E+22	6,330692E+22	1,521859E+23	1,266145E+23	2,788004E+23
1904	7,609359E+22	7,609630E+22	6,330796E+22	6,330739E+22	1,521899E+23	1,266154E+23	2,788052E+23
1905	7,609467E+22	7,609443E+22	6,330723E+22	6,330792E+22	1,521891E+23	1,266151E+23	2,788042E+23
1906	7,609240E+22	7,609240E+22	6,330763E+22	6,330663E+22	1,521848E+23	1,266143E+23	2,787991E+23
1907	7,609430E+22	7,609562E+22	6,330731E+22	6,330692E+22	1,521899E+23	1,266142E+23	2,788041E+23
1908	7,609447E+22	7,609213E+22	6,330589E+22	6,330619E+22	1,521866E+23	1,266121E+23	2,787987E+23
1909	7,609291E+22	7,609332E+22	6,330582E+22	6,330547E+22	1,521862E+23	1,266113E+23	2,787975E+23
1910	7,609485E+22	7,609563E+22	6,330522E+22	6,330606E+22	1,521905E+23	1,266113E+23	2,788018E+23
1911	7,609313E+22	7,609217E+22	6,330466E+22	6,330485E+22	1,521853E+23	1,266095E+23	2,787948E+23
1912	7,609250E+22	7,609517E+22	6,330569E+22	6,330451E+22	1,521877E+23	1,266102E+23	2,787979E+23
1913	7,609480E+22	7,609411E+22	6,330534E+22	6,330529E+22	1,521889E+23	1,266106E+23	2,787995E+23
1914	7,609272E+22	7,609129E+22	6,330595E+22	6,330481E+22	1,521840E+23	1,266108E+23	2,787948E+23
1915	7,609339E+22	7,609531E+22	6,330647E+22	6,330614E+22	1,521887E+23	1,266126E+23	2,788013E+23
1916	7,609404E+22	7,609297E+22	6,330555E+22	6,330689E+22	1,521870E+23	1,266124E+23	2,787995E+23
1917	7,609216E+22	7,609296E+22	6,330663E+22	6,330684E+22	1,521851E+23	1,266135E+23	2,787986E+23
1918	7,609461E+22	7,609561E+22	6,330749E+22	6,330795E+22	1,521902E+23	1,266154E+23	2,788057E+23
1919	7,609444E+22	7,609203E+22	6,330750E+22	6,330736E+22	1,521865E+23	1,266149E+23	2,788013E+23
1920	7,609328E+22	7,609465E+22	6,330895E+22	6,330745E+22	1,521879E+23	1,266164E+23	2,788043E+23
1921	7,609558E+22	7,609536E+22	6,330857E+22	6,330901E+22	1,521909E+23	1,266176E+23	2,788085E+23
1922	7,609320E+22	7,609246E+22	6,330885E+22	6,330845E+22	1,521857E+23	1,266173E+23	2,788030E+23
1923	7,609280E+22	7,609611E+22	6,330955E+22	6,330889E+22	1,521889E+23	1,266184E+23	2,788073E+23
1924	7,609457E+22	7,609388E+22	6,330824E+22	6,330890E+22	1,521884E+23	1,266171E+23	2,788056E+23
1925	7,609281E+22	7,609221E+22	6,330833E+22	6,330782E+22	1,521850E+23	1,266161E+23	2,788012E+23
1926	7,609454E+22	7,609514E+22	6,330821E+22	6,330814E+22	1,521897E+23	1,266163E+23	2,788060E+23
1927	7,609462E+22	7,609233E+22	6,330658E+22	6,330709E+22	1,521869E+23	1,266137E+23	2,788006E+23
1928	7,609235E+22	7,609415E+22	6,330679E+22	6,330627E+22	1,521865E+23	1,266131E+23	2,787996E+23
1929	7,609467E+22	7,609545E+22	6,330622E+22	6,330703E+22	1,521901E+23	1,266132E+23	2,788034E+23
1930	7,609335E+22	7,609169E+22	6,330629E+22	6,330558E+22	1,521850E+23	1,266119E+23	2,787969E+23
1931	7,609233E+22	7,609457E+22	6,330746E+22	6,330563E+22	1,521869E+23	1,266131E+23	2,788000E+23
1932	7,609463E+22	7,609382E+22	6,330633E+22	6,330659E+22	1,521885E+23	1,266129E+23	2,788014E+23
1933	7,609249E+22	7,609178E+22	6,330654E+22	6,330668E+22	1,521843E+23	1,266132E+23	2,787975E+23
1934	7,609295E+22	7,609522E+22	6,330765E+22	6,330797E+22	1,521882E+23	1,266156E+23	2,788038E+23
1935	7,609422E+22	7,609301E+22	6,330698E+22	6,330799E+22	1,521872E+23	1,266150E+23	2,788022E+23
1936	7,609233E+22	7,609321E+22	6,330839E+22	6,330762E+22	1,521855E+23	1,266160E+23	2,788015E+23
1937	7,609510E+22	7,609522E+22	6,330898E+22	6,330921E+22	1,521903E+23	1,266182E+23	2,788085E+23
1938	7,609479E+22	7,609203E+22	6,330915E+22	6,330869E+22	1,521868E+23	1,266178E+23	2,788047E+23
1939	7,609258E+22	7,609485E+22	6,331047E+22	6,330924E+22	1,521874E+23	1,266197E+23	2,788072E+23
1940	7,609483E+22	7,609563E+22	6,330946E+22	6,331058E+22	1,521905E+23	1,266200E+23	2,788105E+23
1941	7,609302E+22	7,609250E+22	6,330961E+22	6,330991E+22	1,521855E+23	1,266195E+23	2,788050E+23
1942	7,609284E+22	7,609508E+22	6,331092E+22	6,331001E+22	1,521879E+23	1,266209E+23	2,788089E+23
1943	7,609522E+22	7,609338E+22	6,330926E+22	6,330950E+22	1,521886E+23	1,266188E+23	2,788074E+23
1944	7,609292E+22	7,609249E+22	6,330918E+22	6,330844E+22	1,521854E+23	1,266176E+23	2,788030E+23
1945	7,609447E+22	7,609527E+22	6,330873E+22	6,330931E+22	1,521897E+23	1,266180E+23	2,788078E+23
1946	7,609444E+22	7,609269E+22	6,330764E+22	6,330794E+22	1,521871E+23	1,266156E+23	2,788027E+23
1947	7,609170E+22	7,609414E+22	6,330845E+22	6,330718E+22	1,521858E+23	1,266156E+23	2,788015E+23
1948	7,609438E+22	7,609515E+22	6,330750E+22	6,330781E+22	1,521895E+23	1,266153E+23	2,788048E+23
1949	7,609345E+22	7,609153E+22	6,330738E+22	6,330702E+22	1,521850E+23	1,266144E+23	2,787994E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1950	7,609212E+22	7,609391E+22	6,330888E+22	6,330747E+22	1,521860E+23	1,266164E+23	2,788024E+23
1951	7,609451E+22	7,609390E+22	6,330728E+22	6,330823E+22	1,521884E+23	1,266155E+23	2,788039E+23
1952	7,609214E+22	7,609232E+22	6,330761E+22	6,330804E+22	1,521845E+23	1,266156E+23	2,788001E+23
1953	7,609330E+22	7,609481E+22	6,330875E+22	6,330931E+22	1,521881E+23	1,266181E+23	2,788062E+23
1954	7,609496E+22	7,609267E+22	6,330865E+22	6,330881E+22	1,521876E+23	1,266175E+23	2,788051E+23
1955	7,609252E+22	7,609316E+22	6,331023E+22	6,330873E+22	1,521857E+23	1,266190E+23	2,788046E+23
1956	7,609489E+22	7,609544E+22	6,331008E+22	6,331044E+22	1,521903E+23	1,266205E+23	2,788109E+23
1957	7,609426E+22	7,609282E+22	6,331008E+22	6,331051E+22	1,521871E+23	1,266206E+23	2,788077E+23
1958	7,609177E+22	7,609469E+22	6,331200E+22	6,331100E+22	1,521865E+23	1,266230E+23	2,788095E+23
1959	7,609456E+22	7,609526E+22	6,331089E+22	6,331165E+22	1,521898E+23	1,266225E+23	2,788124E+23
1960	7,609308E+22	7,609228E+22	6,331107E+22	6,331071E+22	1,521854E+23	1,266218E+23	2,788071E+23
1961	7,609348E+22	7,609417E+22	6,331183E+22	6,331119E+22	1,521876E+23	1,266230E+23	2,788107E+23
1962	7,609575E+22	7,609318E+22	6,331023E+22	6,331048E+22	1,521889E+23	1,266207E+23	2,788096E+23
1963	7,609253E+22	7,609293E+22	6,331008E+22	6,330963E+22	1,521855E+23	1,266197E+23	2,788052E+23
1964	7,609390E+22	7,609562E+22	6,330932E+22	6,331018E+22	1,521895E+23	1,266195E+23	2,788090E+23
1965	7,609428E+22	7,609297E+22	6,330857E+22	6,330888E+22	1,521872E+23	1,266175E+23	2,788047E+23
1966	7,609157E+22	7,609331E+22	6,331014E+22	6,330822E+22	1,521849E+23	1,266184E+23	2,788032E+23
1967	7,609442E+22	7,609479E+22	6,330883E+22	6,330877E+22	1,521892E+23	1,266176E+23	2,788068E+23
1968	7,609317E+22	7,609183E+22	6,330851E+22	6,330832E+22	1,521850E+23	1,266168E+23	2,788018E+23
1969	7,609194E+22	7,609367E+22	6,330965E+22	6,330935E+22	1,521856E+23	1,266190E+23	2,788046E+23
1970	7,609462E+22	7,609389E+22	6,330856E+22	6,330957E+22	1,521885E+23	1,266181E+23	2,788066E+23
1971	7,609209E+22	7,609222E+22	6,330926E+22	6,330920E+22	1,521843E+23	1,266185E+23	2,788028E+23
1972	7,609354E+22	7,609466E+22	6,331003E+22	6,331021E+22	1,521882E+23	1,266202E+23	2,788084E+23
1973	7,609539E+22	7,609298E+22	6,330981E+22	6,331012E+22	1,521884E+23	1,266199E+23	2,788083E+23
1974	7,609219E+22	7,609292E+22	6,331192E+22	6,331047E+22	1,521851E+23	1,266224E+23	2,788075E+23
1975	7,609427E+22	7,609589E+22	6,331135E+22	6,331197E+22	1,521902E+23	1,266233E+23	2,788135E+23
1976	7,609363E+22	7,609316E+22	6,331149E+22	6,331186E+22	1,521868E+23	1,266234E+23	2,788101E+23
1977	7,609191E+22	7,609369E+22	6,331331E+22	6,331241E+22	1,521856E+23	1,266257E+23	2,788113E+23
1978	7,609530E+22	7,609439E+22	6,331233E+22	6,331245E+22	1,521897E+23	1,266248E+23	2,788145E+23
1979	7,609337E+22	7,609198E+22	6,331225E+22	6,331166E+22	1,521854E+23	1,266239E+23	2,788093E+23
1980	7,609346E+22	7,609441E+22	6,331218E+22	6,331214E+22	1,521879E+23	1,266243E+23	2,788122E+23
1981	7,609547E+22	7,609413E+22	6,331060E+22	6,331168E+22	1,521896E+23	1,266223E+23	2,788119E+23
1982	7,609187E+22	7,609298E+22	6,331150E+22	6,331079E+22	1,521849E+23	1,266223E+23	2,788071E+23
1983	7,609349E+22	7,609565E+22	6,331079E+22	6,331080E+22	1,521891E+23	1,266216E+23	2,788107E+23
1984	7,609407E+22	7,609295E+22	6,331023E+22	6,330971E+22	1,521870E+23	1,266199E+23	2,788070E+23
1985	7,609178E+22	7,609233E+22	6,331137E+22	6,330982E+22	1,521841E+23	1,266212E+23	2,788053E+23
1986	7,609458E+22	7,609433E+22	6,331002E+22	6,331032E+22	1,521889E+23	1,266203E+23	2,788092E+23
1987	7,609279E+22	7,609205E+22	6,330949E+22	6,331003E+22	1,521848E+23	1,266195E+23	2,788044E+23
1988	7,609188E+22	7,609362E+22	6,331015E+22	6,331054E+22	1,521855E+23	1,266207E+23	2,788062E+23
1989	7,609506E+22	7,609399E+22	6,330950E+22	6,331054E+22	1,521890E+23	1,266200E+23	2,788091E+23
1990	7,609248E+22	7,609175E+22	6,331102E+22	6,331012E+22	1,521842E+23	1,266211E+23	2,788054E+23
1991	7,609359E+22	7,609481E+22	6,331150E+22	6,331103E+22	1,521884E+23	1,266225E+23	2,788109E+23
1992	7,609491E+22	7,609375E+22	6,331138E+22	6,331143E+22	1,521887E+23	1,266228E+23	2,788115E+23
1993	7,609168E+22	7,609276E+22	6,331324E+22	6,331244E+22	1,521844E+23	1,266257E+23	2,788101E+23
1994	7,609397E+22	7,609557E+22	6,331309E+22	6,331343E+22	1,521895E+23	1,266265E+23	2,788161E+23
1995	7,609343E+22	7,609277E+22	6,331322E+22	6,331322E+22	1,521862E+23	1,266264E+23	2,788126E+23
1996	7,609223E+22	7,609303E+22	6,331420E+22	6,331353E+22	1,521853E+23	1,266277E+23	2,788130E+23
1997	7,609587E+22	7,609442E+22	6,331302E+22	6,331375E+22	1,521903E+23	1,266268E+23	2,788171E+23
1998	7,609332E+22	7,609197E+22	6,331328E+22	6,331307E+22	1,521853E+23	1,266264E+23	2,788116E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1999	7,609298E+22	7,609517E+22	6,331290E+22	6,331306E+22	1,521881E+23	1,266260E+23	2,788141E+23
2000	7,609501E+22	7,609482E+22	6,331182E+22	6,331239E+22	1,521898E+23	1,266242E+23	2,788140E+23
2001	7,609191E+22	7,609217E+22	6,331291E+22	6,331181E+22	1,521841E+23	1,266247E+23	2,788088E+23
2002	7,609382E+22	7,609489E+22	6,331242E+22	6,331155E+22	1,521887E+23	1,266240E+23	2,788127E+23
2003	7,609394E+22	7,609256E+22	6,331154E+22	6,331095E+22	1,521865E+23	1,266225E+23	2,788090E+23
2004	7,609153E+22	7,609218E+22	6,331176E+22	6,331125E+22	1,521837E+23	1,266230E+23	2,788067E+23
2005	7,609449E+22	7,609475E+22	6,331040E+22	6,331177E+22	1,521892E+23	1,266222E+23	2,788114E+23
2006	7,609256E+22	7,609178E+22	6,331080E+22	6,331125E+22	1,521843E+23	1,266221E+23	2,788064E+23
2007	7,609196E+22	7,609378E+22	6,331147E+22	6,331111E+22	1,521857E+23	1,266226E+23	2,788083E+23
2008	7,609530E+22	7,609432E+22	6,331116E+22	6,331129E+22	1,521896E+23	1,266225E+23	2,788121E+23
2009	7,609269E+22	7,609127E+22	6,331265E+22	6,331175E+22	1,521840E+23	1,266244E+23	2,788084E+23
2010	7,609337E+22	7,609486E+22	6,331317E+22	6,331263E+22	1,521882E+23	1,266258E+23	2,788140E+23
2011	7,609406E+22	7,609407E+22	6,331293E+22	6,331334E+22	1,521881E+23	1,266263E+23	2,788144E+23
2012	7,609133E+22	7,609238E+22	6,331423E+22	6,331401E+22	1,521837E+23	1,266282E+23	2,788120E+23
2013	7,609437E+22	7,609516E+22	6,331416E+22	6,331472E+22	1,521895E+23	1,266289E+23	2,788184E+23
2014	7,609387E+22	7,609206E+22	6,331467E+22	6,331444E+22	1,521859E+23	1,266291E+23	2,788150E+23
2015	7,609250E+22	7,609329E+22	6,331498E+22	6,331436E+22	1,521858E+23	1,266293E+23	2,788151E+23
2016	7,609568E+22	7,609540E+22	6,331397E+22	6,331475E+22	1,521911E+23	1,266287E+23	2,788198E+23
2017	7,609303E+22	7,609212E+22	6,331435E+22	6,331443E+22	1,521851E+23	1,266288E+23	2,788139E+23
2018	7,609274E+22	7,609502E+22	6,331457E+22	6,331378E+22	1,521878E+23	1,266283E+23	2,788161E+23
2019	7,609465E+22	7,609463E+22	6,331362E+22	6,331329E+22	1,521893E+23	1,266269E+23	2,788162E+23
2020	7,609200E+22	7,609138E+22	6,331380E+22	6,331285E+22	1,521834E+23	1,266266E+23	2,788100E+23
2021	7,609395E+22	7,609454E+22	6,331312E+22	6,331297E+22	1,521885E+23	1,266261E+23	2,788146E+23
2022	7,609363E+22	7,609234E+22	6,331243E+22	6,331264E+22	1,521860E+23	1,266251E+23	2,788110E+23
2023	7,609116E+22	7,609259E+22	6,331216E+22	6,331234E+22	1,521837E+23	1,266245E+23	2,788083E+23
2024	7,609449E+22	7,609514E+22	6,331153E+22	6,331255E+22	1,521896E+23	1,266241E+23	2,788137E+23
2025	7,609309E+22	7,609116E+22	6,331221E+22	6,331217E+22	1,521842E+23	1,266244E+23	2,788086E+23
2026	7,609247E+22	7,609346E+22	6,331324E+22	6,331175E+22	1,521859E+23	1,266250E+23	2,788109E+23
2027	7,609500E+22	7,609467E+22	6,331286E+22	6,331262E+22	1,521897E+23	1,266255E+23	2,788151E+23
2028	7,609209E+22	7,609146E+22	6,331362E+22	6,331352E+22	1,521836E+23	1,266271E+23	2,788107E+23
2029	7,609283E+22	7,609519E+22	6,331432E+22	6,331451E+22	1,521880E+23	1,266288E+23	2,788168E+23
2030	7,609363E+22	7,609357E+22	6,331474E+22	6,331510E+22	1,521872E+23	1,266298E+23	2,788170E+23
2031	7,609143E+22	7,609216E+22	6,331550E+22	6,331509E+22	1,521836E+23	1,266306E+23	2,788142E+23
2032	7,609494E+22	7,609513E+22	6,331553E+22	6,331576E+22	1,521901E+23	1,266313E+23	2,788214E+23
2033	7,609438E+22	7,609162E+22	6,331579E+22	6,331596E+22	1,521860E+23	1,266317E+23	2,788177E+23
2034	7,609266E+22	7,609365E+22	6,331612E+22	6,331546E+22	1,521863E+23	1,266316E+23	2,788179E+23
2035	7,609513E+22	7,609597E+22	6,331519E+22	6,331585E+22	1,521911E+23	1,266310E+23	2,788221E+23
2036	7,609272E+22	7,609184E+22	6,331530E+22	6,331532E+22	1,521846E+23	1,266306E+23	2,788152E+23
2037	7,609287E+22	7,609463E+22	6,331567E+22	6,331453E+22	1,521875E+23	1,266302E+23	2,788177E+23
2038	7,609450E+22	7,609379E+22	6,331499E+22	6,331440E+22	1,521883E+23	1,266294E+23	2,788177E+23
2039	7,609171E+22	7,609145E+22	6,331437E+22	6,331386E+22	1,521832E+23	1,266282E+23	2,788114E+23
2040	7,609366E+22	7,609505E+22	6,331378E+22	6,331420E+22	1,521887E+23	1,266280E+23	2,788167E+23
2041	7,609346E+22	7,609215E+22	6,331330E+22	6,331409E+22	1,521856E+23	1,266274E+23	2,788130E+23
2042	7,609137E+22	7,609251E+22	6,331357E+22	6,331301E+22	1,521839E+23	1,266266E+23	2,788105E+23
2043	7,609450E+22	7,609520E+22	6,331325E+22	6,331334E+22	1,521897E+23	1,266266E+23	2,788163E+23
2044	7,609330E+22	7,609087E+22	6,331341E+22	6,331332E+22	1,521842E+23	1,266267E+23	2,788109E+23
2045	7,609245E+22	7,609359E+22	6,331449E+22	6,331332E+22	1,521860E+23	1,266278E+23	2,788138E+23
2046	7,609425E+22	7,609475E+22	6,331439E+22	6,331469E+22	1,521890E+23	1,266291E+23	2,788181E+23
2047	7,609144E+22	7,609179E+22	6,331464E+22	6,331510E+22	1,521832E+23	1,266297E+23	2,788130E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2048	7,609286E+22	7,609504E+22	6,331586E+22	6,331581E+22	1,521879E+23	1,266317E+23	2,788196E+23
2049	7,609430E+22	7,609259E+22	6,331625E+22	6,331648E+22	1,521869E+23	1,266327E+23	2,788196E+23
2050	7,609230E+22	7,609169E+22	6,331688E+22	6,331595E+22	1,521840E+23	1,266328E+23	2,788168E+23
2051	7,609496E+22	7,609559E+22	6,331682E+22	6,331694E+22	1,521905E+23	1,266338E+23	2,788243E+23
2052	7,609413E+22	7,609210E+22	6,331636E+22	6,331718E+22	1,521862E+23	1,266335E+23	2,788198E+23
2053	7,609223E+22	7,609409E+22	6,331715E+22	6,331651E+22	1,521863E+23	1,266337E+23	2,788200E+23
2054	7,609449E+22	7,609574E+22	6,331694E+22	6,331695E+22	1,521902E+23	1,266339E+23	2,788241E+23
2055	7,609239E+22	7,609165E+22	6,331646E+22	6,331608E+22	1,521840E+23	1,266325E+23	2,788166E+23
2056	7,609289E+22	7,609433E+22	6,331695E+22	6,331565E+22	1,521872E+23	1,266326E+23	2,788198E+23
2057	7,609449E+22	7,609313E+22	6,331590E+22	6,331613E+22	1,521876E+23	1,266320E+23	2,788196E+23
2058	7,609169E+22	7,609148E+22	6,331506E+22	6,331511E+22	1,521832E+23	1,266302E+23	2,788133E+23
2059	7,609336E+22	7,609535E+22	6,331474E+22	6,331528E+22	1,521887E+23	1,266300E+23	2,788187E+23
2060	7,609370E+22	7,609182E+22	6,331405E+22	6,331484E+22	1,521855E+23	1,266289E+23	2,788144E+23
2061	7,609193E+22	7,609235E+22	6,331478E+22	6,331361E+22	1,521843E+23	1,266284E+23	2,788127E+23
2062	7,609444E+22	7,609497E+22	6,331490E+22	6,331449E+22	1,521894E+23	1,266294E+23	2,788188E+23
2063	7,609275E+22	7,609143E+22	6,331448E+22	6,331461E+22	1,521842E+23	1,266291E+23	2,788133E+23
2064	7,609186E+22	7,609415E+22	6,331585E+22	6,331502E+22	1,521860E+23	1,266309E+23	2,788169E+23
2065	7,609378E+22	7,609426E+22	6,331598E+22	6,331666E+22	1,521880E+23	1,266326E+23	2,788207E+23
2066	7,609171E+22	7,609135E+22	6,331637E+22	6,331631E+22	1,521831E+23	1,266327E+23	2,788157E+23
2067	7,609324E+22	7,609468E+22	6,331750E+22	6,331697E+22	1,521879E+23	1,266345E+23	2,788224E+23
2068	7,609484E+22	7,609213E+22	6,331715E+22	6,331780E+22	1,521870E+23	1,266350E+23	2,788219E+23
2069	7,609264E+22	7,609209E+22	6,331774E+22	6,331727E+22	1,521847E+23	1,266350E+23	2,788197E+23
2070	7,609432E+22	7,609598E+22	6,331802E+22	6,331850E+22	1,521903E+23	1,266365E+23	2,788268E+23
2071	7,609338E+22	7,609274E+22	6,331735E+22	6,331815E+22	1,521861E+23	1,266355E+23	2,788216E+23
2072	7,609207E+22	7,609405E+22	6,331868E+22	6,331735E+22	1,521861E+23	1,266360E+23	2,788222E+23
2073	7,609452E+22	7,609475E+22	6,331845E+22	6,331814E+22	1,521893E+23	1,266366E+23	2,788259E+23
2074	7,609269E+22	7,609114E+22	6,331765E+22	6,331702E+22	1,521838E+23	1,266347E+23	2,788185E+23
2075	7,609260E+22	7,609437E+22	6,331791E+22	6,331695E+22	1,521870E+23	1,266349E+23	2,788218E+23
2076	7,609425E+22	7,609311E+22	6,331621E+22	6,331749E+22	1,521874E+23	1,266337E+23	2,788211E+23
2077	7,609178E+22	7,609164E+22	6,331581E+22	6,331600E+22	1,521834E+23	1,266318E+23	2,788152E+23
2078	7,609323E+22	7,609513E+22	6,331623E+22	6,331617E+22	1,521884E+23	1,266324E+23	2,788208E+23
2079	7,609373E+22	7,609202E+22	6,331517E+22	6,331541E+22	1,521857E+23	1,266306E+23	2,788163E+23
2080	7,609207E+22	7,609244E+22	6,331631E+22	6,331476E+22	1,521845E+23	1,266311E+23	2,788156E+23
2081	7,609405E+22	7,609476E+22	6,331636E+22	6,331640E+22	1,521888E+23	1,266328E+23	2,788216E+23
2082	7,609242E+22	7,609153E+22	6,331577E+22	6,331626E+22	1,521840E+23	1,266320E+23	2,788160E+23
2083	7,609141E+22	7,609404E+22	6,331744E+22	6,331659E+22	1,521855E+23	1,266340E+23	2,788195E+23
2084	7,609410E+22	7,609346E+22	6,331702E+22	6,331794E+22	1,521876E+23	1,266350E+23	2,788225E+23
2085	7,609250E+22	7,609085E+22	6,331749E+22	6,331726E+22	1,521834E+23	1,266347E+23	2,788181E+23
2086	7,609340E+22	7,609455E+22	6,331885E+22	6,331832E+22	1,521879E+23	1,266372E+23	2,788251E+23
2087	7,609448E+22	7,609304E+22	6,331786E+22	6,331891E+22	1,521875E+23	1,266368E+23	2,788243E+23
2088	7,609222E+22	7,609295E+22	6,331901E+22	6,331858E+22	1,521852E+23	1,266376E+23	2,788228E+23
2089	7,609371E+22	7,609582E+22	6,331974E+22	6,331992E+22	1,521895E+23	1,266397E+23	2,788292E+23
2090	7,609333E+22	7,609239E+22	6,331916E+22	6,331903E+22	1,521857E+23	1,266382E+23	2,788239E+23
2091	7,609200E+22	7,609352E+22	6,332042E+22	6,331844E+22	1,521855E+23	1,266389E+23	2,788244E+23
2092	7,609467E+22	7,609392E+22	6,331920E+22	6,331958E+22	1,521886E+23	1,266388E+23	2,788274E+23
2093	7,609287E+22	7,609110E+22	6,331816E+22	6,331839E+22	1,521840E+23	1,266365E+23	2,788205E+23
2094	7,609222E+22	7,609442E+22	6,331859E+22	6,331843E+22	1,521866E+23	1,266370E+23	2,788237E+23
2095	7,609398E+22	7,609349E+22	6,331676E+22	6,331812E+22	1,521875E+23	1,266349E+23	2,788223E+23
2096	7,609224E+22	7,609168E+22	6,331705E+22	6,331650E+22	1,521839E+23	1,266336E+23	2,788175E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2097	7,609343E+22	7,609451E+22	6,331775E+22	6,331705E+22	1,521879E+23	1,266348E+23	2,788227E+23
2098	7,609387E+22	7,609212E+22	6,331662E+22	6,331634E+22	1,521860E+23	1,266330E+23	2,788189E+23
2099	7,609146E+22	7,609280E+22	6,331771E+22	6,331623E+22	1,521843E+23	1,266339E+23	2,788182E+23
2100	7,609335E+22	7,609458E+22	6,331727E+22	6,331819E+22	1,521879E+23	1,266355E+23	2,788234E+23
2101	7,609233E+22	7,609137E+22	6,331705E+22	6,331766E+22	1,521837E+23	1,266347E+23	2,788184E+23
2102	7,609137E+22	7,609339E+22	6,331903E+22	6,331807E+22	1,521848E+23	1,266371E+23	2,788219E+23
2103	7,609432E+22	7,609337E+22	6,331810E+22	6,331898E+22	1,521877E+23	1,266371E+23	2,788248E+23
2104	7,609304E+22	7,609108E+22	6,331873E+22	6,331859E+22	1,521841E+23	1,266373E+23	2,788214E+23
2105	7,609318E+22	7,609469E+22	6,332014E+22	6,332005E+22	1,521879E+23	1,266402E+23	2,788281E+23
2106	7,609425E+22	7,609364E+22	6,331922E+22	6,332014E+22	1,521879E+23	1,266394E+23	2,788272E+23
2107	7,609180E+22	7,609303E+22	6,332086E+22	6,331968E+22	1,521848E+23	1,266405E+23	2,788254E+23
2108	7,609372E+22	7,609499E+22	6,332110E+22	6,332100E+22	1,521887E+23	1,266421E+23	2,788308E+23
2109	7,609380E+22	7,609177E+22	6,332042E+22	6,332001E+22	1,521856E+23	1,266404E+23	2,788260E+23
2110	7,609183E+22	7,609307E+22	6,332149E+22	6,331998E+22	1,521849E+23	1,266415E+23	2,788264E+23
2111	7,609423E+22	7,609437E+22	6,331948E+22	6,332073E+22	1,521886E+23	1,266402E+23	2,788288E+23
2112	7,609280E+22	7,609158E+22	6,331885E+22	6,331951E+22	1,521844E+23	1,266384E+23	2,788227E+23
2113	7,609209E+22	7,609424E+22	6,331980E+22	6,331944E+22	1,521863E+23	1,266392E+23	2,788256E+23
2114	7,609436E+22	7,609346E+22	6,331812E+22	6,331849E+22	1,521878E+23	1,266366E+23	2,788244E+23
2115	7,609228E+22	7,609159E+22	6,331877E+22	6,331728E+22	1,521839E+23	1,266360E+23	2,788199E+23
2116	7,609325E+22	7,609414E+22	6,331876E+22	6,331839E+22	1,521874E+23	1,266371E+23	2,788245E+23
2117	7,609354E+22	7,609221E+22	6,331760E+22	6,331790E+22	1,521857E+23	1,266355E+23	2,788212E+23
2118	7,609067E+22	7,609265E+22	6,331893E+22	6,331816E+22	1,521833E+23	1,266371E+23	2,788204E+23
2119	7,609300E+22	7,609441E+22	6,331818E+22	6,331931E+22	1,521874E+23	1,266375E+23	2,788249E+23
2120	7,609298E+22	7,609101E+22	6,331835E+22	6,331869E+22	1,521840E+23	1,266370E+23	2,788210E+23
2121	7,609189E+22	7,609280E+22	6,332039E+22	6,331934E+22	1,521847E+23	1,266397E+23	2,788244E+23
2122	7,609473E+22	7,609370E+22	6,331936E+22	6,332001E+22	1,521884E+23	1,266394E+23	2,788278E+23
2123	7,609270E+22	7,609185E+22	6,332030E+22	6,331990E+22	1,521846E+23	1,266402E+23	2,788247E+23
2124	7,609266E+22	7,609479E+22	6,332140E+22	6,332149E+22	1,521875E+23	1,266429E+23	2,788303E+23
2125	7,609413E+22	7,609360E+22	6,332096E+22	6,332126E+22	1,521877E+23	1,266422E+23	2,788300E+23
2126	7,609153E+22	7,609244E+22	6,332266E+22	6,332116E+22	1,521840E+23	1,266438E+23	2,788278E+23
2127	7,609354E+22	7,609463E+22	6,332214E+22	6,332216E+22	1,521882E+23	1,266443E+23	2,788325E+23
2128	7,609411E+22	7,609174E+22	6,332129E+22	6,332155E+22	1,521858E+23	1,266428E+23	2,788287E+23
2129	7,609161E+22	7,609290E+22	6,332215E+22	6,332171E+22	1,521845E+23	1,266439E+23	2,788284E+23
2130	7,609424E+22	7,609473E+22	6,332024E+22	6,332165E+22	1,521890E+23	1,266419E+23	2,788309E+23
2131	7,609288E+22	7,609171E+22	6,332013E+22	6,331994E+22	1,521846E+23	1,266401E+23	2,788247E+23
2132	7,609235E+22	7,609360E+22	6,332080E+22	6,331990E+22	1,521860E+23	1,266407E+23	2,788266E+23
2133	7,609473E+22	7,609333E+22	6,331935E+22	6,331906E+22	1,521881E+23	1,266384E+23	2,788265E+23
2134	7,609171E+22	7,609154E+22	6,332000E+22	6,331877E+22	1,521833E+23	1,266388E+23	2,788220E+23
2135	7,609221E+22	7,609455E+22	6,331950E+22	6,331976E+22	1,521868E+23	1,266393E+23	2,788260E+23
2136	7,609319E+22	7,609237E+22	6,331873E+22	6,331946E+22	1,521856E+23	1,266382E+23	2,788238E+23
2137	7,609049E+22	7,609197E+22	6,332038E+22	6,331967E+22	1,521825E+23	1,266401E+23	2,788225E+23
2138	7,609361E+22	7,609404E+22	6,331964E+22	6,332021E+22	1,521876E+23	1,266398E+23	2,788275E+23
2139	7,609349E+22	7,609093E+22	6,331999E+22	6,331972E+22	1,521844E+23	1,266397E+23	2,788241E+23
2140	7,609214E+22	7,609272E+22	6,332138E+22	6,332081E+22	1,521849E+23	1,266422E+23	2,788271E+23
2141	7,609472E+22	7,609431E+22	6,332055E+22	6,332145E+22	1,521890E+23	1,266420E+23	2,788310E+23
2142	7,609199E+22	7,609212E+22	6,332191E+22	6,332168E+22	1,521841E+23	1,266436E+23	2,788277E+23
2143	7,609212E+22	7,609476E+22	6,332279E+22	6,332252E+22	1,521869E+23	1,266453E+23	2,788322E+23
2144	7,609447E+22	7,609317E+22	6,332250E+22	6,332249E+22	1,521876E+23	1,266450E+23	2,788326E+23
2145	7,609165E+22	7,609173E+22	6,332399E+22	6,332273E+22	1,521834E+23	1,266467E+23	2,788301E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2146	7,609373E+22	7,609468E+22	6,332294E+22	6,332332E+22	1,521884E+23	1,266463E+23	2,788347E+23
2147	7,609380E+22	7,609222E+22	6,332226E+22	6,332268E+22	1,521860E+23	1,266449E+23	2,788310E+23
2148	7,609147E+22	7,609286E+22	6,332276E+22	6,332269E+22	1,521843E+23	1,266455E+23	2,788298E+23
2149	7,609450E+22	7,609463E+22	6,332144E+22	6,332209E+22	1,521891E+23	1,266435E+23	2,788327E+23
2150	7,609276E+22	7,609143E+22	6,332165E+22	6,332084E+22	1,521842E+23	1,266425E+23	2,788267E+23
2151	7,609202E+22	7,609352E+22	6,332177E+22	6,332061E+22	1,521855E+23	1,266424E+23	2,788279E+23
2152	7,609457E+22	7,609350E+22	6,332035E+22	6,332051E+22	1,521881E+23	1,266409E+23	2,788289E+23
2153	7,609102E+22	7,609141E+22	6,332099E+22	6,332067E+22	1,521824E+23	1,266417E+23	2,788241E+23
2154	7,609200E+22	7,609444E+22	6,332058E+22	6,332098E+22	1,521864E+23	1,266416E+23	2,788280E+23
2155	7,609337E+22	7,609204E+22	6,332031E+22	6,332038E+22	1,521854E+23	1,266407E+23	2,788261E+23
2156	7,609118E+22	7,609116E+22	6,332136E+22	6,332066E+22	1,521823E+23	1,266420E+23	2,788244E+23
2157	7,609437E+22	7,609395E+22	6,332086E+22	6,332115E+22	1,521883E+23	1,266420E+23	2,788303E+23
2158	7,609323E+22	7,609144E+22	6,332126E+22	6,332134E+22	1,521847E+23	1,266426E+23	2,788273E+23
2159	7,609129E+22	7,609353E+22	6,332240E+22	6,332210E+22	1,521848E+23	1,266445E+23	2,788293E+23
2160	7,609441E+22	7,609485E+22	6,332214E+22	6,332297E+22	1,521893E+23	1,266451E+23	2,788344E+23
2161	7,609163E+22	7,609161E+22	6,332380E+22	6,332331E+22	1,521832E+23	1,266471E+23	2,788303E+23
2162	7,609228E+22	7,609429E+22	6,332449E+22	6,332369E+22	1,521866E+23	1,266482E+23	2,788347E+23
2163	7,609466E+22	7,609287E+22	6,332406E+22	6,332378E+22	1,521875E+23	1,266478E+23	2,788354E+23
2164	7,609174E+22	7,609126E+22	6,332452E+22	6,332433E+22	1,521830E+23	1,266488E+23	2,788318E+23
2165	7,609388E+22	7,609487E+22	6,332365E+22	6,332451E+22	1,521887E+23	1,266482E+23	2,788369E+23
2166	7,609350E+22	7,609235E+22	6,332325E+22	6,332379E+22	1,521859E+23	1,266470E+23	2,788329E+23
2167	7,609135E+22	7,609280E+22	6,332366E+22	6,332292E+22	1,521841E+23	1,266466E+23	2,788307E+23
2168	7,609495E+22	7,609456E+22	6,332261E+22	6,332266E+22	1,521895E+23	1,266453E+23	2,788348E+23
2169	7,609250E+22	7,609113E+22	6,332291E+22	6,332207E+22	1,521836E+23	1,266450E+23	2,788286E+23
2170	7,609156E+22	7,609377E+22	6,332280E+22	6,332177E+22	1,521853E+23	1,266446E+23	2,788299E+23
2171	7,609382E+22	7,609381E+22	6,332168E+22	6,332186E+22	1,521876E+23	1,266435E+23	2,788312E+23
2172	7,609076E+22	7,609091E+22	6,332190E+22	6,332210E+22	1,521817E+23	1,266440E+23	2,788257E+23
2173	7,609253E+22	7,609389E+22	6,332192E+22	6,332193E+22	1,521864E+23	1,266438E+23	2,788303E+23
2174	7,609361E+22	7,609170E+22	6,332171E+22	6,332173E+22	1,521853E+23	1,266434E+23	2,788287E+23
2175	7,609130E+22	7,609128E+22	6,332223E+22	6,332169E+22	1,521826E+23	1,266439E+23	2,788265E+23
2176	7,609450E+22	7,609454E+22	6,332187E+22	6,332274E+22	1,521890E+23	1,266446E+23	2,788337E+23
2177	7,609259E+22	7,609187E+22	6,332265E+22	6,332325E+22	1,521845E+23	1,266459E+23	2,788304E+23
2178	7,609101E+22	7,609369E+22	6,332398E+22	6,332323E+22	1,521847E+23	1,266472E+23	2,788319E+23
2179	7,609427E+22	7,609450E+22	6,332422E+22	6,332395E+22	1,521888E+23	1,266482E+23	2,788369E+23
2180	7,609198E+22	7,609069E+22	6,332508E+22	6,332461E+22	1,521827E+23	1,266497E+23	2,788324E+23
2181	7,609279E+22	7,609375E+22	6,332569E+22	6,332492E+22	1,521865E+23	1,266506E+23	2,788372E+23
2182	7,609429E+22	7,609304E+22	6,332502E+22	6,332551E+22	1,521873E+23	1,266505E+23	2,788379E+23
2183	7,609126E+22	7,609171E+22	6,332497E+22	6,332534E+22	1,521830E+23	1,266503E+23	2,788333E+23
2184	7,609398E+22	7,609518E+22	6,332465E+22	6,332546E+22	1,521892E+23	1,266501E+23	2,788393E+23
2185	7,609337E+22	7,609218E+22	6,332471E+22	6,332472E+22	1,521856E+23	1,266494E+23	2,788350E+23
2186	7,609149E+22	7,609268E+22	6,332507E+22	6,332347E+22	1,521842E+23	1,266485E+23	2,788327E+23
2187	7,609470E+22	7,609461E+22	6,332420E+22	6,332364E+22	1,521893E+23	1,266478E+23	2,788372E+23
2188	7,609211E+22	7,609087E+22	6,332361E+22	6,332378E+22	1,521830E+23	1,266474E+23	2,788304E+23
2189	7,609132E+22	7,609360E+22	6,332377E+22	6,332326E+22	1,521849E+23	1,266470E+23	2,788319E+23
2190	7,609343E+22	7,609349E+22	6,332285E+22	6,332338E+22	1,521869E+23	1,266462E+23	2,788331E+23
2191	7,609094E+22	7,609041E+22	6,332268E+22	6,332277E+22	1,521813E+23	1,266454E+23	2,788268E+23
2192	7,609342E+22	7,609376E+22	6,332287E+22	6,332289E+22	1,521872E+23	1,266458E+23	2,788329E+23
2193	7,609371E+22	7,609180E+22	6,332279E+22	6,332308E+22	1,521855E+23	1,266459E+23	2,788314E+23
2194	7,609103E+22	7,609200E+22	6,332342E+22	6,332279E+22	1,521830E+23	1,266462E+23	2,788292E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2195	7,609382E+22	7,609525E+22	6,332367E+22	6,332391E+22	1,521891E+23	1,266476E+23	2,788366E+23
2196	7,609220E+22	7,609145E+22	6,332424E+22	6,332473E+22	1,521837E+23	1,266490E+23	2,788326E+23
2197	7,609124E+22	7,609299E+22	6,332596E+22	6,332447E+22	1,521842E+23	1,266504E+23	2,788346E+23
2198	7,609418E+22	7,609390E+22	6,332592E+22	6,332568E+22	1,521881E+23	1,266516E+23	2,788397E+23
2199	7,609196E+22	7,609040E+22	6,332586E+22	6,332601E+22	1,521824E+23	1,266519E+23	2,788342E+23
2200	7,609304E+22	7,609408E+22	6,332628E+22	6,332665E+22	1,521871E+23	1,266529E+23	2,788400E+23
2201	7,609390E+22	7,609333E+22	6,332591E+22	6,332712E+22	1,521872E+23	1,266530E+23	2,788403E+23
2202	7,609134E+22	7,609194E+22	6,332616E+22	6,332591E+22	1,521833E+23	1,266521E+23	2,788353E+23
2203	7,609412E+22	7,609512E+22	6,332640E+22	6,332580E+22	1,521892E+23	1,266522E+23	2,788414E+23
2204	7,609356E+22	7,609168E+22	6,332586E+22	6,332562E+22	1,521852E+23	1,266515E+23	2,788367E+23
2205	7,609155E+22	7,609246E+22	6,332630E+22	6,332454E+22	1,521840E+23	1,266508E+23	2,788349E+23
2206	7,609370E+22	7,609480E+22	6,332527E+22	6,332539E+22	1,521885E+23	1,266507E+23	2,788392E+23
2207	7,609139E+22	7,609090E+22	6,332420E+22	6,332501E+22	1,521823E+23	1,266492E+23	2,788315E+23
2208	7,609155E+22	7,609327E+22	6,332466E+22	6,332450E+22	1,521848E+23	1,266492E+23	2,788340E+23
2209	7,609358E+22	7,609295E+22	6,332412E+22	6,332459E+22	1,521865E+23	1,266487E+23	2,788352E+23
2210	7,609154E+22	7,609031E+22	6,332375E+22	6,332338E+22	1,521819E+23	1,266471E+23	2,788290E+23
2211	7,609349E+22	7,609402E+22	6,332428E+22	6,332379E+22	1,521875E+23	1,266481E+23	2,788356E+23
2212	7,609344E+22	7,609208E+22	6,332374E+22	6,332463E+22	1,521855E+23	1,266484E+23	2,788339E+23
2213	7,609083E+22	7,609207E+22	6,332497E+22	6,332414E+22	1,521829E+23	1,266491E+23	2,788320E+23
2214	7,609315E+22	7,609501E+22	6,332559E+22	6,332545E+22	1,521882E+23	1,266510E+23	2,788392E+23
2215	7,609217E+22	7,609083E+22	6,332557E+22	6,332579E+22	1,521830E+23	1,266514E+23	2,788344E+23
2216	7,609181E+22	7,609251E+22	6,332711E+22	6,332603E+22	1,521843E+23	1,266531E+23	2,788375E+23
2217	7,609401E+22	7,609380E+22	6,332701E+22	6,332756E+22	1,521878E+23	1,266546E+23	2,788424E+23
2218	7,609182E+22	7,609099E+22	6,332668E+22	6,332726E+22	1,521828E+23	1,266539E+23	2,788368E+23
2219	7,609278E+22	7,609468E+22	6,332770E+22	6,332763E+22	1,521875E+23	1,266553E+23	2,788428E+23
2220	7,609395E+22	7,609319E+22	6,332718E+22	6,332813E+22	1,521871E+23	1,266553E+23	2,788424E+23
2221	7,609177E+22	7,609158E+22	6,332792E+22	6,332662E+22	1,521834E+23	1,266545E+23	2,788379E+23
2222	7,609379E+22	7,609490E+22	6,332804E+22	6,332705E+22	1,521887E+23	1,266551E+23	2,788438E+23
2223	7,609314E+22	7,609147E+22	6,332664E+22	6,332686E+22	1,521846E+23	1,266535E+23	2,788381E+23
2224	7,609138E+22	7,609258E+22	6,332688E+22	6,332629E+22	1,521840E+23	1,266532E+23	2,788371E+23
2225	7,609313E+22	7,609457E+22	6,332607E+22	6,332700E+22	1,521877E+23	1,266531E+23	2,788408E+23
2226	7,609156E+22	7,609057E+22	6,332513E+22	6,332556E+22	1,521821E+23	1,266507E+23	2,788328E+23
2227	7,609210E+22	7,609299E+22	6,332598E+22	6,332484E+22	1,521851E+23	1,266508E+23	2,788359E+23
2228	7,609409E+22	7,609253E+22	6,332494E+22	6,332546E+22	1,521866E+23	1,266504E+23	2,788370E+23
2229	7,609182E+22	7,609049E+22	6,332500E+22	6,332436E+22	1,521823E+23	1,266494E+23	2,788317E+23
2230	7,609255E+22	7,609466E+22	6,332569E+22	6,332531E+22	1,521872E+23	1,266510E+23	2,788382E+23
2231	7,609265E+22	7,609228E+22	6,332497E+22	6,332588E+22	1,521849E+23	1,266508E+23	2,788358E+23
2232	7,609083E+22	7,609186E+22	6,332652E+22	6,332569E+22	1,521827E+23	1,266522E+23	2,788349E+23
2233	7,609289E+22	7,609438E+22	6,332734E+22	6,332722E+22	1,521873E+23	1,266546E+23	2,788418E+23
2234	7,609244E+22	7,609054E+22	6,332694E+22	6,332713E+22	1,521830E+23	1,266541E+23	2,788371E+23
2235	7,609197E+22	7,609261E+22	6,332841E+22	6,332754E+22	1,521846E+23	1,266560E+23	2,788405E+23
2236	7,609398E+22	7,609392E+22	6,332775E+22	6,332936E+22	1,521879E+23	1,266571E+23	2,788450E+23
2237	7,609216E+22	7,609110E+22	6,332801E+22	6,332833E+22	1,521833E+23	1,266563E+23	2,788396E+23
2238	7,609258E+22	7,609461E+22	6,332940E+22	6,332853E+22	1,521872E+23	1,266579E+23	2,788451E+23
2239	7,609414E+22	7,609291E+22	6,332837E+22	6,332865E+22	1,521870E+23	1,266570E+23	2,788441E+23
2240	7,609215E+22	7,609141E+22	6,332892E+22	6,332777E+22	1,521836E+23	1,266567E+23	2,788403E+23
2241	7,609298E+22	7,609489E+22	6,332910E+22	6,332869E+22	1,521879E+23	1,266578E+23	2,788457E+23
2242	7,609253E+22	7,609180E+22	6,332738E+22	6,332796E+22	1,521843E+23	1,266553E+23	2,788397E+23
2243	7,609100E+22	7,609248E+22	6,332804E+22	6,332723E+22	1,521835E+23	1,266553E+23	2,788387E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2244	7,609328E+22	7,609388E+22	6,332705E+22	6,332800E+22	1,521872E+23	1,266551E+23	2,788422E+23
2245	7,609237E+22	7,609002E+22	6,332641E+22	6,332616E+22	1,521824E+23	1,266526E+23	2,788350E+23
2246	7,609208E+22	7,609296E+22	6,332726E+22	6,332588E+22	1,521850E+23	1,266531E+23	2,788382E+23
2247	7,609387E+22	7,609285E+22	6,332561E+22	6,332654E+22	1,521867E+23	1,266522E+23	2,788389E+23
2248	7,609158E+22	7,609105E+22	6,332586E+22	6,332605E+22	1,521826E+23	1,266519E+23	2,788345E+23
2249	7,609162E+22	7,609468E+22	6,332724E+22	6,332701E+22	1,521863E+23	1,266543E+23	2,788406E+23
2250	7,609252E+22	7,609199E+22	6,332660E+22	6,332684E+22	1,521845E+23	1,266534E+23	2,788380E+23
2251	7,609116E+22	7,609137E+22	6,332830E+22	6,332678E+22	1,521825E+23	1,266551E+23	2,788376E+23
2252	7,609326E+22	7,609377E+22	6,332844E+22	6,332886E+22	1,521870E+23	1,266573E+23	2,788443E+23
2253	7,609283E+22	7,609058E+22	6,332816E+22	6,332860E+22	1,521834E+23	1,266568E+23	2,788402E+23
2254	7,609151E+22	7,609318E+22	6,332966E+22	6,332912E+22	1,521847E+23	1,266588E+23	2,788435E+23
2255	7,609382E+22	7,609403E+22	6,332883E+22	6,333032E+22	1,521879E+23	1,266592E+23	2,788470E+23
2256	7,609257E+22	7,609117E+22	6,332943E+22	6,332941E+22	1,521837E+23	1,266588E+23	2,788426E+23
2257	7,609234E+22	7,609434E+22	6,333104E+22	6,332970E+22	1,521867E+23	1,266607E+23	2,788474E+23
2258	7,609397E+22	7,609283E+22	6,332966E+22	6,332957E+22	1,521868E+23	1,266592E+23	2,788460E+23
2259	7,609178E+22	7,609158E+22	6,333009E+22	6,332911E+22	1,521834E+23	1,266592E+23	2,788426E+23
2260	7,609245E+22	7,609463E+22	6,332970E+22	6,333038E+22	1,521871E+23	1,266601E+23	2,788471E+23
2261	7,609268E+22	7,609136E+22	6,332850E+22	6,332895E+22	1,521840E+23	1,266574E+23	2,788415E+23
2262	7,609106E+22	7,609206E+22	6,332922E+22	6,332799E+22	1,521831E+23	1,266572E+23	2,788403E+23
2263	7,609378E+22	7,609339E+22	6,332772E+22	6,332844E+22	1,521872E+23	1,266562E+23	2,788433E+23
2264	7,609293E+22	7,609027E+22	6,332708E+22	6,332715E+22	1,521832E+23	1,266542E+23	2,788374E+23
2265	7,609132E+22	7,609347E+22	6,332830E+22	6,332728E+22	1,521848E+23	1,266556E+23	2,788404E+23
2266	7,609312E+22	7,609356E+22	6,332680E+22	6,332756E+22	1,521867E+23	1,266544E+23	2,788411E+23
2267	7,609112E+22	7,609118E+22	6,332767E+22	6,332725E+22	1,521823E+23	1,266549E+23	2,788372E+23
2268	7,609147E+22	7,609391E+22	6,332888E+22	6,332855E+22	1,521854E+23	1,266574E+23	2,788428E+23
2269	7,609315E+22	7,609120E+22	6,332840E+22	6,332818E+22	1,521844E+23	1,266566E+23	2,788409E+23
2270	7,609120E+22	7,609103E+22	6,332973E+22	6,332847E+22	1,521822E+23	1,266582E+23	2,788404E+23
2271	7,609339E+22	7,609382E+22	6,332909E+22	6,333041E+22	1,521872E+23	1,266595E+23	2,788467E+23
2272	7,609313E+22	7,609114E+22	6,332882E+22	6,333019E+22	1,521843E+23	1,266590E+23	2,788433E+23
2273	7,609110E+22	7,609333E+22	6,333108E+22	6,333039E+22	1,521844E+23	1,266615E+23	2,788459E+23
2274	7,609394E+22	7,609413E+22	6,333035E+22	6,333074E+22	1,521881E+23	1,266611E+23	2,788492E+23
2275	7,609273E+22	7,609108E+22	6,333112E+22	6,333019E+22	1,521838E+23	1,266613E+23	2,788451E+23
2276	7,609202E+22	7,609400E+22	6,333223E+22	6,333119E+22	1,521860E+23	1,266634E+23	2,788494E+23
2277	7,609372E+22	7,609281E+22	6,333085E+22	6,333098E+22	1,521865E+23	1,266618E+23	2,788484E+23
2278	7,609093E+22	7,609169E+22	6,333119E+22	6,333059E+22	1,521826E+23	1,266618E+23	2,788444E+23
2279	7,609234E+22	7,609416E+22	6,333042E+22	6,333129E+22	1,521865E+23	1,266617E+23	2,788482E+23
2280	7,609332E+22	7,609110E+22	6,332931E+22	6,332988E+22	1,521844E+23	1,266592E+23	2,788436E+23
2281	7,609112E+22	7,609181E+22	6,333032E+22	6,332899E+22	1,521829E+23	1,266593E+23	2,788422E+23
2282	7,609384E+22	7,609366E+22	6,332864E+22	6,332910E+22	1,521875E+23	1,266577E+23	2,788452E+23
2283	7,609265E+22	7,609094E+22	6,332820E+22	6,332834E+22	1,521836E+23	1,266565E+23	2,788401E+23
2284	7,609067E+22	7,609352E+22	6,332939E+22	6,332884E+22	1,521842E+23	1,266582E+23	2,788424E+23
2285	7,609308E+22	7,609314E+22	6,332859E+22	6,332867E+22	1,521862E+23	1,266573E+23	2,788435E+23
2286	7,609105E+22	7,609064E+22	6,332947E+22	6,332843E+22	1,521817E+23	1,266579E+23	2,788396E+23
2287	7,609194E+22	7,609301E+22	6,332989E+22	6,332971E+22	1,521850E+23	1,266596E+23	2,788446E+23
2288	7,609369E+22	7,609126E+22	6,332917E+22	6,332985E+22	1,521849E+23	1,266590E+23	2,788440E+23
2289	7,609075E+22	7,609150E+22	6,333060E+22	6,333020E+22	1,521822E+23	1,266608E+23	2,788431E+23
2290	7,609301E+22	7,609442E+22	6,333017E+22	6,333139E+22	1,521874E+23	1,266616E+23	2,788490E+23
2291	7,609305E+22	7,609161E+22	6,333057E+22	6,333112E+22	1,521847E+23	1,266617E+23	2,788464E+23
2292	7,609105E+22	7,609297E+22	6,333278E+22	6,333156E+22	1,521840E+23	1,266643E+23	2,788484E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2293	7,609424E+22	7,609370E+22	6,333232E+22	6,333185E+22	1,521879E+23	1,266642E+23	2,788521E+23
2294	7,609226E+22	7,609101E+22	6,333266E+22	6,333179E+22	1,521833E+23	1,266644E+23	2,788477E+23
2295	7,609159E+22	7,609373E+22	6,333284E+22	6,333282E+22	1,521853E+23	1,266657E+23	2,788510E+23
2296	7,609366E+22	7,609287E+22	6,333141E+22	6,333260E+22	1,521865E+23	1,266640E+23	2,788505E+23
2297	7,609070E+22	7,609129E+22	6,333215E+22	6,333172E+22	1,521820E+23	1,266639E+23	2,788459E+23
2298	7,609281E+22	7,609383E+22	6,333135E+22	6,333151E+22	1,521866E+23	1,266629E+23	2,788495E+23
2299	7,609388E+22	7,609122E+22	6,333034E+22	6,333037E+22	1,521851E+23	1,266607E+23	2,788458E+23
2300	7,609098E+22	7,609190E+22	6,333120E+22	6,333009E+22	1,521829E+23	1,266613E+23	2,788442E+23
2301	7,609358E+22	7,609406E+22	6,332994E+22	6,333014E+22	1,521876E+23	1,266601E+23	2,788477E+23
2302	7,609174E+22	7,609122E+22	6,332978E+22	6,332965E+22	1,521830E+23	1,266594E+23	2,788424E+23
2303	7,609039E+22	7,609293E+22	6,333071E+22	6,333004E+22	1,521833E+23	1,266608E+23	2,788441E+23
2304	7,609347E+22	7,609267E+22	6,332981E+22	6,333008E+22	1,521861E+23	1,266599E+23	2,788460E+23
2305	7,609094E+22	7,609009E+22	6,333073E+22	6,333005E+22	1,521810E+23	1,266608E+23	2,788418E+23
2306	7,609206E+22	7,609308E+22	6,333076E+22	6,333095E+22	1,521851E+23	1,266617E+23	2,788468E+23
2307	7,609364E+22	7,609194E+22	6,333005E+22	6,333138E+22	1,521856E+23	1,266614E+23	2,788470E+23
2308	7,609046E+22	7,609169E+22	6,333176E+22	6,333175E+22	1,521822E+23	1,266635E+23	2,788457E+23
2309	7,609332E+22	7,609426E+22	6,333209E+22	6,333222E+22	1,521876E+23	1,266643E+23	2,788519E+23
2310	7,609301E+22	7,609147E+22	6,333261E+22	6,333204E+22	1,521845E+23	1,266646E+23	2,788491E+23
2311	7,609119E+22	7,609243E+22	6,333407E+22	6,333273E+22	1,521836E+23	1,266668E+23	2,788504E+23
2312	7,609415E+22	7,609382E+22	6,333329E+22	6,333355E+22	1,521880E+23	1,266668E+23	2,788548E+23
2313	7,609136E+22	7,609116E+22	6,333368E+22	6,333365E+22	1,521825E+23	1,266673E+23	2,788498E+23
2314	7,609121E+22	7,609370E+22	6,333376E+22	6,333384E+22	1,521849E+23	1,266676E+23	2,788525E+23
2315	7,609386E+22	7,609285E+22	6,333259E+22	6,333351E+22	1,521867E+23	1,266661E+23	2,788528E+23
2316	7,609109E+22	7,609078E+22	6,333321E+22	6,333264E+22	1,521819E+23	1,266659E+23	2,788477E+23
2317	7,609345E+22	7,609350E+22	6,333272E+22	6,333218E+22	1,521869E+23	1,266649E+23	2,788519E+23
2318	7,609358E+22	7,609170E+22	6,333159E+22	6,333142E+22	1,521853E+23	1,266630E+23	2,788483E+23
2319	7,609057E+22	7,609198E+22	6,333182E+22	6,333136E+22	1,521825E+23	1,266632E+23	2,788457E+23
2320	7,609316E+22	7,609423E+22	6,333093E+22	6,333153E+22	1,521874E+23	1,266625E+23	2,788499E+23
2321	7,609122E+22	7,609076E+22	6,333118E+22	6,333093E+22	1,521820E+23	1,266621E+23	2,788441E+23
2322	7,609052E+22	7,609219E+22	6,333188E+22	6,333079E+22	1,521827E+23	1,266627E+23	2,788454E+23
2323	7,609381E+22	7,609255E+22	6,333090E+22	6,333134E+22	1,521864E+23	1,266622E+23	2,788486E+23
2324	7,609087E+22	7,609009E+22	6,333151E+22	6,333168E+22	1,521810E+23	1,266632E+23	2,788442E+23
2325	7,609210E+22	7,609340E+22	6,333203E+22	6,333221E+22	1,521855E+23	1,266642E+23	2,788497E+23
2326	7,609320E+22	7,609249E+22	6,333176E+22	6,333251E+22	1,521857E+23	1,266643E+23	2,788500E+23
2327	7,609055E+22	7,609135E+22	6,333332E+22	6,333279E+22	1,521819E+23	1,266661E+23	2,788480E+23
2328	7,609360E+22	7,609410E+22	6,333378E+22	6,333350E+22	1,521877E+23	1,266673E+23	2,788550E+23
2329	7,609266E+22	7,609115E+22	6,333430E+22	6,333376E+22	1,521838E+23	1,266681E+23	2,788519E+23
2330	7,609084E+22	7,609236E+22	6,333516E+22	6,333422E+22	1,521832E+23	1,266694E+23	2,788526E+23
2331	7,609382E+22	7,609421E+22	6,333414E+22	6,333532E+22	1,521880E+23	1,266695E+23	2,788575E+23
2332	7,609113E+22	7,609084E+22	6,333459E+22	6,333518E+22	1,521820E+23	1,266698E+23	2,788517E+23
2333	7,609191E+22	7,609312E+22	6,333515E+22	6,333446E+22	1,521850E+23	1,266696E+23	2,788546E+23
2334	7,609424E+22	7,609266E+22	6,333394E+22	6,333399E+22	1,521869E+23	1,266679E+23	2,788548E+23
2335	7,609150E+22	7,609056E+22	6,333393E+22	6,333339E+22	1,521821E+23	1,266673E+23	2,788494E+23
2336	7,609331E+22	7,609408E+22	6,333338E+22	6,333326E+22	1,521874E+23	1,266666E+23	2,788540E+23
2337	7,609242E+22	7,609210E+22	6,333267E+22	6,333281E+22	1,521845E+23	1,266655E+23	2,788500E+23
2338	7,608982E+22	7,609195E+22	6,333303E+22	6,333223E+22	1,521818E+23	1,266653E+23	2,788470E+23
2339	7,609295E+22	7,609400E+22	6,333229E+22	6,333270E+22	1,521870E+23	1,266650E+23	2,788519E+23
2340	7,609128E+22	7,608993E+22	6,333248E+22	6,333239E+22	1,521812E+23	1,266649E+23	2,788461E+23
2341	7,609116E+22	7,609155E+22	6,333322E+22	6,333201E+22	1,521827E+23	1,266652E+23	2,788479E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2342	7,609371E+22	7,609283E+22	6,333205E+22	6,333275E+22	1,521865E+23	1,266648E+23	2,788513E+23
2343	7,609092E+22	7,609025E+22	6,333219E+22	6,333309E+22	1,521812E+23	1,266653E+23	2,788465E+23
2344	7,609222E+22	7,609369E+22	6,333326E+22	6,333339E+22	1,521859E+23	1,266667E+23	2,788526E+23
2345	7,609298E+22	7,609236E+22	6,333363E+22	6,333363E+22	1,521853E+23	1,266673E+23	2,788526E+23
2346	7,609067E+22	7,609103E+22	6,333494E+22	6,333363E+22	1,521817E+23	1,266686E+23	2,788503E+23
2347	7,609348E+22	7,609429E+22	6,333519E+22	6,333509E+22	1,521878E+23	1,266703E+23	2,788580E+23
2348	7,609212E+22	7,609115E+22	6,333545E+22	6,333579E+22	1,521833E+23	1,266712E+23	2,788545E+23
2349	7,609070E+22	7,609221E+22	6,333648E+22	6,333575E+22	1,521829E+23	1,266722E+23	2,788551E+23
2350	7,609356E+22	7,609428E+22	6,333566E+22	6,333646E+22	1,521878E+23	1,266721E+23	2,788600E+23
2351	7,609169E+22	7,609027E+22	6,333549E+22	6,333600E+22	1,521820E+23	1,266715E+23	2,788535E+23
2352	7,609252E+22	7,609295E+22	6,333615E+22	6,333525E+22	1,521855E+23	1,266714E+23	2,788569E+23
2353	7,609402E+22	7,609278E+22	6,333504E+22	6,333506E+22	1,521868E+23	1,266701E+23	2,788569E+23
2354	7,609100E+22	7,609086E+22	6,333464E+22	6,333430E+22	1,521819E+23	1,266689E+23	2,788508E+23
2355	7,609256E+22	7,609467E+22	6,333425E+22	6,333460E+22	1,521872E+23	1,266689E+23	2,788561E+23
2356	7,609184E+22	7,609168E+22	6,333389E+22	6,333413E+22	1,521835E+23	1,266680E+23	2,788515E+23
2357	7,609022E+22	7,609097E+22	6,333460E+22	6,333300E+22	1,521812E+23	1,266676E+23	2,788488E+23
2358	7,609317E+22	7,609350E+22	6,333373E+22	6,333354E+22	1,521867E+23	1,266673E+23	2,788539E+23
2359	7,609174E+22	7,608947E+22	6,333307E+22	6,333360E+22	1,521812E+23	1,266667E+23	2,788479E+23
2360	7,609129E+22	7,609200E+22	6,333386E+22	6,333339E+22	1,521833E+23	1,266672E+23	2,788505E+23
2361	7,609309E+22	7,609334E+22	6,333325E+22	6,333418E+22	1,521864E+23	1,266674E+23	2,788539E+23
2362	7,609066E+22	7,609046E+22	6,333365E+22	6,333395E+22	1,521811E+23	1,266676E+23	2,788487E+23
2363	7,609219E+22	7,609392E+22	6,333498E+22	6,333457E+22	1,521861E+23	1,266695E+23	2,788557E+23
2364	7,609287E+22	7,609193E+22	6,333549E+22	6,333529E+22	1,521848E+23	1,266708E+23	2,788556E+23
2365	7,609091E+22	7,609063E+22	6,333671E+22	6,333525E+22	1,521815E+23	1,266720E+23	2,788535E+23
2366	7,609297E+22	7,609450E+22	6,333656E+22	6,333686E+22	1,521875E+23	1,266734E+23	2,788609E+23
2367	7,609203E+22	7,609094E+22	6,333616E+22	6,333754E+22	1,521830E+23	1,266737E+23	2,788567E+23
2368	7,609109E+22	7,609203E+22	6,333740E+22	6,333687E+22	1,521831E+23	1,266743E+23	2,788574E+23
2369	7,609370E+22	7,609381E+22	6,333696E+22	6,333727E+22	1,521875E+23	1,266742E+23	2,788617E+23
2370	7,609208E+22	7,609014E+22	6,333645E+22	6,333635E+22	1,521822E+23	1,266728E+23	2,788550E+23
2371	7,609249E+22	7,609353E+22	6,333693E+22	6,333618E+22	1,521860E+23	1,266731E+23	2,788591E+23
2372	7,609326E+22	7,609314E+22	6,333606E+22	6,333641E+22	1,521864E+23	1,266725E+23	2,788589E+23
2373	7,609058E+22	7,609086E+22	6,333604E+22	6,333533E+22	1,521814E+23	1,266714E+23	2,788528E+23
2374	7,609189E+22	7,609450E+22	6,333593E+22	6,333552E+22	1,521864E+23	1,266714E+23	2,788578E+23
2375	7,609208E+22	7,609076E+22	6,333499E+22	6,333527E+22	1,521828E+23	1,266703E+23	2,788531E+23
2376	7,609080E+22	7,609037E+22	6,333557E+22	6,333419E+22	1,521812E+23	1,266698E+23	2,788509E+23
2377	7,609311E+22	7,609330E+22	6,333473E+22	6,333503E+22	1,521864E+23	1,266698E+23	2,788562E+23
2378	7,609162E+22	7,608991E+22	6,333358E+22	6,333474E+22	1,521815E+23	1,266683E+23	2,788499E+23
2379	7,609104E+22	7,609284E+22	6,333467E+22	6,333474E+22	1,521839E+23	1,266694E+23	2,788533E+23
2380	7,609288E+22	7,609331E+22	6,333485E+22	6,333541E+22	1,521862E+23	1,266703E+23	2,788565E+23
2381	7,609113E+22	7,608994E+22	6,333569E+22	6,333482E+22	1,521811E+23	1,266705E+23	2,788516E+23
2382	7,609206E+22	7,609386E+22	6,333697E+22	6,333572E+22	1,521859E+23	1,266727E+23	2,788586E+23
2383	7,609289E+22	7,609163E+22	6,333653E+22	6,333702E+22	1,521845E+23	1,266735E+23	2,788581E+23
2384	7,609068E+22	7,609074E+22	6,333768E+22	6,333703E+22	1,521814E+23	1,266747E+23	2,788561E+23
2385	7,609236E+22	7,609448E+22	6,333785E+22	6,333848E+22	1,521868E+23	1,266763E+23	2,788632E+23
2386	7,609205E+22	7,609073E+22	6,333723E+22	6,333834E+22	1,521828E+23	1,266756E+23	2,788583E+23
2387	7,609151E+22	7,609213E+22	6,333848E+22	6,333781E+22	1,521836E+23	1,266763E+23	2,788599E+23
2388	7,609390E+22	7,609355E+22	6,333828E+22	6,333837E+22	1,521875E+23	1,266767E+23	2,788641E+23
2389	7,609228E+22	7,609016E+22	6,333777E+22	6,333730E+22	1,521824E+23	1,266751E+23	2,788575E+23
2390	7,609170E+22	7,609415E+22	6,333819E+22	6,333726E+22	1,521859E+23	1,266754E+23	2,788613E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2391	7,609282E+22	7,609293E+22	6,333690E+22	6,333774E+22	1,521857E+23	1,266746E+23	2,788604E+23
2392	7,609062E+22	7,609033E+22	6,333723E+22	6,333634E+22	1,521809E+23	1,266736E+23	2,788545E+23
2393	7,609185E+22	7,609367E+22	6,333725E+22	6,333655E+22	1,521855E+23	1,266738E+23	2,788593E+23
2394	7,609235E+22	7,609036E+22	6,333566E+22	6,333608E+22	1,521827E+23	1,266717E+23	2,788545E+23
2395	7,609093E+22	7,609094E+22	6,333591E+22	6,333554E+22	1,521819E+23	1,266714E+23	2,788533E+23
2396	7,609268E+22	7,609368E+22	6,333562E+22	6,333652E+22	1,521864E+23	1,266721E+23	2,788585E+23
2397	7,609162E+22	7,609027E+22	6,333507E+22	6,333568E+22	1,521819E+23	1,266708E+23	2,788526E+23
2398	7,609073E+22	7,609308E+22	6,333663E+22	6,333546E+22	1,521838E+23	1,266721E+23	2,788559E+23
2399	7,609307E+22	7,609277E+22	6,333646E+22	6,333667E+22	1,521858E+23	1,266731E+23	2,788590E+23
2400	7,609142E+22	7,608957E+22	6,333728E+22	6,333629E+22	1,521810E+23	1,266736E+23	2,788546E+23
2401	7,609150E+22	7,609354E+22	6,333842E+22	6,333766E+22	1,521850E+23	1,266761E+23	2,788611E+23
2402	7,609243E+22	7,609173E+22	6,333732E+22	6,333867E+22	1,521842E+23	1,266760E+23	2,788602E+23
2403	7,609064E+22	7,609106E+22	6,333837E+22	6,333865E+22	1,521817E+23	1,266770E+23	2,788587E+23
2404	7,609254E+22	7,609398E+22	6,333928E+22	6,333964E+22	1,521865E+23	1,266789E+23	2,788654E+23
2405	7,609290E+22	7,609040E+22	6,333875E+22	6,333885E+22	1,521833E+23	1,266776E+23	2,788609E+23
2406	7,609160E+22	7,609245E+22	6,333996E+22	6,333841E+22	1,521841E+23	1,266784E+23	2,788624E+23
2407	7,609376E+22	7,609372E+22	6,333915E+22	6,333964E+22	1,521875E+23	1,266788E+23	2,788663E+23
2408	7,609179E+22	7,609054E+22	6,333885E+22	6,333863E+22	1,521823E+23	1,266775E+23	2,788598E+23
2409	7,609067E+22	7,609402E+22	6,333966E+22	6,333863E+22	1,521847E+23	1,266783E+23	2,788630E+23
2410	7,609247E+22	7,609247E+22	6,333797E+22	6,333862E+22	1,521849E+23	1,266766E+23	2,788615E+23
2411	7,609088E+22	7,609006E+22	6,333801E+22	6,333758E+22	1,521809E+23	1,266756E+23	2,788565E+23
2412	7,609209E+22	7,609305E+22	6,333829E+22	6,333795E+22	1,521851E+23	1,266762E+23	2,788614E+23
2413	7,609276E+22	7,609037E+22	6,333648E+22	6,333717E+22	1,521831E+23	1,266737E+23	2,788568E+23
2414	7,609058E+22	7,609174E+22	6,333690E+22	6,333653E+22	1,521823E+23	1,266734E+23	2,788557E+23
2415	7,609269E+22	7,609369E+22	6,333654E+22	6,333758E+22	1,521864E+23	1,266741E+23	2,788605E+23
2416	7,609187E+22	7,608995E+22	6,333668E+22	6,333645E+22	1,521818E+23	1,266731E+23	2,788549E+23
2417	7,609053E+22	7,609256E+22	6,333854E+22	6,333654E+22	1,521831E+23	1,266751E+23	2,788582E+23
2418	7,609286E+22	7,609251E+22	6,333763E+22	6,333788E+22	1,521854E+23	1,266755E+23	2,788609E+23
2419	7,609110E+22	7,609000E+22	6,333807E+22	6,333823E+22	1,521811E+23	1,266763E+23	2,788574E+23
2420	7,609097E+22	7,609344E+22	6,333965E+22	6,333962E+22	1,521844E+23	1,266793E+23	2,788637E+23
2421	7,609255E+22	7,609165E+22	6,333877E+22	6,333989E+22	1,521842E+23	1,266787E+23	2,788629E+23
2422	7,609077E+22	7,609123E+22	6,334004E+22	6,333945E+22	1,521820E+23	1,266795E+23	2,788615E+23
2423	7,609314E+22	7,609354E+22	6,334055E+22	6,334076E+22	1,521867E+23	1,266813E+23	2,788680E+23
2424	7,609333E+22	7,609042E+22	6,334017E+22	6,333996E+22	1,521837E+23	1,266801E+23	2,788639E+23
2425	7,609096E+22	7,609270E+22	6,334131E+22	6,333991E+22	1,521837E+23	1,266812E+23	2,788649E+23
2426	7,609291E+22	7,609407E+22	6,333993E+22	6,334097E+22	1,521870E+23	1,266809E+23	2,788679E+23
2427	7,609141E+22	7,609073E+22	6,333964E+22	6,334007E+22	1,521821E+23	1,266797E+23	2,788619E+23
2428	7,609060E+22	7,609299E+22	6,334108E+22	6,333982E+22	1,521836E+23	1,266809E+23	2,788645E+23
2429	7,609313E+22	7,609180E+22	6,333917E+22	6,333933E+22	1,521849E+23	1,266785E+23	2,788634E+23
2430	7,609113E+22	7,609019E+22	6,333886E+22	6,333826E+22	1,521813E+23	1,266771E+23	2,788584E+23
2431	7,609219E+22	7,609306E+22	6,333872E+22	6,333917E+22	1,521853E+23	1,266779E+23	2,788631E+23
2432	7,609267E+22	7,609086E+22	6,333741E+22	6,333809E+22	1,521835E+23	1,266755E+23	2,788590E+23
2433	7,608993E+22	7,609178E+22	6,333848E+22	6,333747E+22	1,521817E+23	1,266760E+23	2,788577E+23
2434	7,609234E+22	7,609350E+22	6,333797E+22	6,333833E+22	1,521858E+23	1,266763E+23	2,788621E+23
2435	7,609194E+22	7,608993E+22	6,333796E+22	6,333791E+22	1,521819E+23	1,266759E+23	2,788577E+23
2436	7,609028E+22	7,609191E+22	6,334018E+22	6,333844E+22	1,521822E+23	1,266786E+23	2,788608E+23
2437	7,609273E+22	7,609253E+22	6,333884E+22	6,333962E+22	1,521853E+23	1,266785E+23	2,788637E+23
2438	7,609069E+22	7,609049E+22	6,333922E+22	6,333976E+22	1,521812E+23	1,266790E+23	2,788602E+23
2439	7,609126E+22	7,609300E+22	6,334072E+22	6,334111E+22	1,521843E+23	1,266818E+23	2,788661E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2440	7,609331E+22	7,609128E+22	6,334029E+22	6,334074E+22	1,521846E+23	1,266810E+23	2,788656E+23
2441	7,609100E+22	7,609103E+22	6,334169E+22	6,334043E+22	1,521820E+23	1,266821E+23	2,788641E+23
2442	7,609303E+22	7,609377E+22	6,334153E+22	6,334174E+22	1,521868E+23	1,266833E+23	2,788701E+23
2443	7,609286E+22	7,609127E+22	6,334097E+22	6,334157E+22	1,521841E+23	1,266825E+23	2,788667E+23
2444	7,609011E+22	7,609267E+22	6,334277E+22	6,334156E+22	1,521828E+23	1,266843E+23	2,788671E+23
2445	7,609263E+22	7,609375E+22	6,334137E+22	6,334196E+22	1,521864E+23	1,266833E+23	2,788697E+23
2446	7,609135E+22	7,609046E+22	6,334110E+22	6,334086E+22	1,521818E+23	1,266820E+23	2,788638E+23
2447	7,609123E+22	7,609201E+22	6,334190E+22	6,334096E+22	1,521832E+23	1,266829E+23	2,788661E+23
2448	7,609365E+22	7,609139E+22	6,334001E+22	6,334032E+22	1,521850E+23	1,266803E+23	2,788654E+23
2449	7,609077E+22	7,609047E+22	6,333967E+22	6,333946E+22	1,521812E+23	1,266791E+23	2,788604E+23
2450	7,609169E+22	7,609349E+22	6,333918E+22	6,334003E+22	1,521852E+23	1,266792E+23	2,788644E+23
2451	7,609251E+22	7,609129E+22	6,333834E+22	6,333910E+22	1,521838E+23	1,266774E+23	2,788612E+23
2452	7,608982E+22	7,609112E+22	6,334030E+22	6,333852E+22	1,521809E+23	1,266788E+23	2,788598E+23
2453	7,609243E+22	7,609313E+22	6,333957E+22	6,333930E+22	1,521856E+23	1,266789E+23	2,788644E+23
2454	7,609163E+22	7,609022E+22	6,333936E+22	6,333930E+22	1,521818E+23	1,266787E+23	2,788605E+23
2455	7,609008E+22	7,609165E+22	6,334106E+22	6,334047E+22	1,521817E+23	1,266815E+23	2,788633E+23
2456	7,609269E+22	7,609250E+22	6,334016E+22	6,334117E+22	1,521852E+23	1,266813E+23	2,788665E+23
2457	7,609055E+22	7,609036E+22	6,334084E+22	6,334105E+22	1,521809E+23	1,266819E+23	2,788628E+23
2458	7,609151E+22	7,609279E+22	6,334195E+22	6,334202E+22	1,521843E+23	1,266840E+23	2,788683E+23
2459	7,609381E+22	7,609161E+22	6,334145E+22	6,334205E+22	1,521854E+23	1,266835E+23	2,788689E+23
2460	7,609089E+22	7,609082E+22	6,334334E+22	6,334204E+22	1,521817E+23	1,266854E+23	2,788671E+23
2461	7,609259E+22	7,609423E+22	6,334283E+22	6,334312E+22	1,521868E+23	1,266859E+23	2,788728E+23
2462	7,609224E+22	7,609179E+22	6,334225E+22	6,334278E+22	1,521840E+23	1,266850E+23	2,788691E+23
2463	7,609010E+22	7,609172E+22	6,334393E+22	6,334287E+22	1,521818E+23	1,266868E+23	2,788686E+23
2464	7,609316E+22	7,609288E+22	6,334272E+22	6,334269E+22	1,521860E+23	1,266854E+23	2,788714E+23
2465	7,609152E+22	7,608993E+22	6,334214E+22	6,334174E+22	1,521815E+23	1,266839E+23	2,788653E+23
2466	7,609119E+22	7,609204E+22	6,334217E+22	6,334186E+22	1,521832E+23	1,266840E+23	2,788673E+23
2467	7,609345E+22	7,609230E+22	6,334025E+22	6,334154E+22	1,521857E+23	1,266818E+23	2,788675E+23
2468	7,609020E+22	7,609058E+22	6,334097E+22	6,334061E+22	1,521808E+23	1,266816E+23	2,788624E+23
2469	7,609138E+22	7,609360E+22	6,334072E+22	6,334062E+22	1,521850E+23	1,266813E+23	2,788663E+23
2470	7,609233E+22	7,609139E+22	6,334010E+22	6,333988E+22	1,521837E+23	1,266800E+23	2,788637E+23
2471	7,609001E+22	7,609023E+22	6,334173E+22	6,334014E+22	1,521802E+23	1,266819E+23	2,788621E+23
2472	7,609251E+22	7,609270E+22	6,334095E+22	6,334094E+22	1,521852E+23	1,266819E+23	2,788671E+23
2473	7,609110E+22	7,609030E+22	6,334050E+22	6,334121E+22	1,521814E+23	1,266817E+23	2,788631E+23
2474	7,608991E+22	7,609161E+22	6,334170E+22	6,334192E+22	1,521815E+23	1,266836E+23	2,788651E+23
2475	7,609315E+22	7,609256E+22	6,334116E+22	6,334243E+22	1,521857E+23	1,266836E+23	2,788693E+23
2476	7,609108E+22	7,608986E+22	6,334264E+22	6,334209E+22	1,521809E+23	1,266847E+23	2,788657E+23
2477	7,609191E+22	7,609291E+22	6,334338E+22	6,334275E+22	1,521848E+23	1,266861E+23	2,788709E+23
2478	7,609348E+22	7,609243E+22	6,334292E+22	6,334316E+22	1,521859E+23	1,266861E+23	2,788720E+23
2479	7,609042E+22	7,609087E+22	6,334450E+22	6,334378E+22	1,521813E+23	1,266883E+23	2,788696E+23
2480	7,609209E+22	7,609400E+22	6,334439E+22	6,334440E+22	1,521861E+23	1,266888E+23	2,788749E+23
2481	7,609174E+22	7,609134E+22	6,334392E+22	6,334402E+22	1,521831E+23	1,266879E+23	2,788710E+23
2482	7,609023E+22	7,609098E+22	6,334474E+22	6,334386E+22	1,521812E+23	1,266886E+23	2,788698E+23
2483	7,609364E+22	7,609274E+22	6,334330E+22	6,334395E+22	1,521864E+23	1,266873E+23	2,788736E+23
2484	7,609154E+22	7,608979E+22	6,334306E+22	6,334307E+22	1,521813E+23	1,266861E+23	2,788675E+23
2485	7,609090E+22	7,609270E+22	6,334275E+22	6,334273E+22	1,521836E+23	1,266855E+23	2,788691E+23
2486	7,609302E+22	7,609309E+22	6,334137E+22	6,334222E+22	1,521861E+23	1,266836E+23	2,788697E+23
2487	7,609030E+22	7,608993E+22	6,334234E+22	6,334160E+22	1,521802E+23	1,266839E+23	2,788642E+23
2488	7,609164E+22	7,609290E+22	6,334249E+22	6,334134E+22	1,521845E+23	1,266838E+23	2,788684E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2489	7,609212E+22	7,609105E+22	6,334163E+22	6,334118E+22	1,521832E+23	1,266828E+23	2,788660E+23
2490	7,608968E+22	7,609004E+22	6,334236E+22	6,334172E+22	1,521797E+23	1,266841E+23	2,788638E+23
2491	7,609235E+22	7,609314E+22	6,334156E+22	6,334275E+22	1,521855E+23	1,266843E+23	2,788698E+23
2492	7,609092E+22	7,609003E+22	6,334192E+22	6,334272E+22	1,521809E+23	1,266846E+23	2,788656E+23
2493	7,609014E+22	7,609168E+22	6,334310E+22	6,334272E+22	1,521818E+23	1,266858E+23	2,788676E+23
2494	7,609353E+22	7,609293E+22	6,334278E+22	6,334318E+22	1,521865E+23	1,266860E+23	2,788724E+23
2495	7,609143E+22	7,608940E+22	6,334415E+22	6,334358E+22	1,521808E+23	1,266877E+23	2,788686E+23
2496	7,609176E+22	7,609302E+22	6,334502E+22	6,334414E+22	1,521848E+23	1,266892E+23	2,788739E+23
2497	7,609260E+22	7,609281E+22	6,334437E+22	6,334489E+22	1,521854E+23	1,266893E+23	2,788747E+23
2498	7,608986E+22	7,609059E+22	6,334544E+22	6,334525E+22	1,521804E+23	1,266907E+23	2,788711E+23
2499	7,609227E+22	7,609362E+22	6,334540E+22	6,334565E+22	1,521859E+23	1,266910E+23	2,788769E+23
2500	7,609206E+22	7,609045E+22	6,334529E+22	6,334515E+22	1,521825E+23	1,266904E+23	2,788729E+23
2501	7,609058E+22	7,609099E+22	6,334541E+22	6,334460E+22	1,521816E+23	1,266900E+23	2,788716E+23
2502	7,609355E+22	7,609353E+22	6,334403E+22	6,334480E+22	1,521871E+23	1,266888E+23	2,788759E+23
2503	7,609132E+22	7,608995E+22	6,334388E+22	6,334429E+22	1,521813E+23	1,266882E+23	2,788694E+23
2504	7,609070E+22	7,609271E+22	6,334424E+22	6,334334E+22	1,521834E+23	1,266876E+23	2,788710E+23
2505	7,609258E+22	7,609296E+22	6,334315E+22	6,334303E+22	1,521855E+23	1,266862E+23	2,788717E+23
2506	7,609028E+22	7,608930E+22	6,334344E+22	6,334267E+22	1,521796E+23	1,266861E+23	2,788657E+23
2507	7,609174E+22	7,609260E+22	6,334344E+22	6,334293E+22	1,521843E+23	1,266864E+23	2,788707E+23
2508	7,609183E+22	7,609076E+22	6,334282E+22	6,334310E+22	1,521826E+23	1,266859E+23	2,788685E+23
2509	7,608945E+22	7,609041E+22	6,334289E+22	6,334305E+22	1,521799E+23	1,266859E+23	2,788658E+23
2510	7,609233E+22	7,609348E+22	6,334271E+22	6,334374E+22	1,521858E+23	1,266865E+23	2,788723E+23
2511	7,609150E+22	7,608947E+22	6,334330E+22	6,334375E+22	1,521810E+23	1,266871E+23	2,788680E+23
2512	7,609076E+22	7,609133E+22	6,334480E+22	6,334335E+22	1,521821E+23	1,266882E+23	2,788702E+23
2513	7,609331E+22	7,609323E+22	6,334448E+22	6,334442E+22	1,521865E+23	1,266889E+23	2,788754E+23
2514	7,609088E+22	7,608971E+22	6,334511E+22	6,334520E+22	1,521806E+23	1,266903E+23	2,788709E+23
2515	7,609111E+22	7,609348E+22	6,334613E+22	6,334595E+22	1,521846E+23	1,266921E+23	2,788767E+23
2516	7,609201E+22	7,609238E+22	6,334618E+22	6,334655E+22	1,521844E+23	1,266927E+23	2,788771E+23
2517	7,608985E+22	7,609025E+22	6,334670E+22	6,334623E+22	1,521801E+23	1,266929E+23	2,788730E+23
2518	7,609268E+22	7,609344E+22	6,334670E+22	6,334660E+22	1,521861E+23	1,266933E+23	2,788794E+23
2519	7,609261E+22	7,608987E+22	6,334622E+22	6,334653E+22	1,521825E+23	1,266928E+23	2,788752E+23
2520	7,609078E+22	7,609117E+22	6,334633E+22	6,334558E+22	1,521819E+23	1,266919E+23	2,788739E+23
2521	7,609302E+22	7,609414E+22	6,334507E+22	6,334585E+22	1,521872E+23	1,266909E+23	2,788781E+23
2522	7,609103E+22	7,608984E+22	6,334472E+22	6,334513E+22	1,521809E+23	1,266898E+23	2,788707E+23
2523	7,609082E+22	7,609250E+22	6,334545E+22	6,334413E+22	1,521833E+23	1,266896E+23	2,788729E+23
2524	7,609252E+22	7,609221E+22	6,334469E+22	6,334415E+22	1,521847E+23	1,266888E+23	2,788736E+23
2525	7,609005E+22	7,608932E+22	6,334423E+22	6,334379E+22	1,521794E+23	1,266880E+23	2,788674E+23
2526	7,609140E+22	7,609310E+22	6,334423E+22	6,334427E+22	1,521845E+23	1,266885E+23	2,788730E+23
2527	7,609159E+22	7,609049E+22	6,334371E+22	6,334473E+22	1,521821E+23	1,266884E+23	2,788705E+23
2528	7,608961E+22	7,609025E+22	6,334434E+22	6,334391E+22	1,521799E+23	1,266882E+23	2,788681E+23
2529	7,609240E+22	7,609346E+22	6,334442E+22	6,334464E+22	1,521859E+23	1,266891E+23	2,788749E+23
2530	7,609178E+22	7,608921E+22	6,334453E+22	6,334488E+22	1,521810E+23	1,266894E+23	2,788704E+23
2531	7,609087E+22	7,609157E+22	6,334608E+22	6,334486E+22	1,521824E+23	1,266909E+23	2,788734E+23
2532	7,609264E+22	7,609334E+22	6,334608E+22	6,334637E+22	1,521860E+23	1,266924E+23	2,788784E+23
2533	7,609019E+22	7,609014E+22	6,334620E+22	6,334674E+22	1,521803E+23	1,266929E+23	2,788733E+23
2534	7,609094E+22	7,609340E+22	6,334765E+22	6,334720E+22	1,521843E+23	1,266948E+23	2,788792E+23
2535	7,609248E+22	7,609131E+22	6,334764E+22	6,334788E+22	1,521838E+23	1,266955E+23	2,788793E+23
2536	7,609066E+22	7,608965E+22	6,334796E+22	6,334702E+22	1,521803E+23	1,266950E+23	2,788753E+23
2537	7,609274E+22	7,609364E+22	6,334779E+22	6,334768E+22	1,521864E+23	1,266955E+23	2,788818E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2538	7,609241E+22	7,609032E+22	6,334662E+22	6,334768E+22	1,521827E+23	1,266943E+23	2,788770E+23
2539	7,609048E+22	7,609173E+22	6,334713E+22	6,334660E+22	1,521822E+23	1,266937E+23	2,788759E+23
2540	7,609247E+22	7,609401E+22	6,334675E+22	6,334685E+22	1,521865E+23	1,266936E+23	2,788801E+23
2541	7,609079E+22	7,608979E+22	6,334588E+22	6,334577E+22	1,521806E+23	1,266917E+23	2,788722E+23
2542	7,609073E+22	7,609223E+22	6,334678E+22	6,334516E+22	1,521830E+23	1,266919E+23	2,788749E+23
2543	7,609243E+22	7,609154E+22	6,334576E+22	6,334587E+22	1,521840E+23	1,266916E+23	2,788756E+23
2544	7,608998E+22	7,608923E+22	6,334504E+22	6,334515E+22	1,521792E+23	1,266902E+23	2,788694E+23
2545	7,609104E+22	7,609327E+22	6,334527E+22	6,334560E+22	1,521843E+23	1,266909E+23	2,788752E+23
2546	7,609182E+22	7,609018E+22	6,334449E+22	6,334569E+22	1,521820E+23	1,266902E+23	2,788722E+23
2547	7,609026E+22	7,609011E+22	6,334555E+22	6,334466E+22	1,521804E+23	1,266902E+23	2,788706E+23
2548	7,609252E+22	7,609323E+22	6,334616E+22	6,334578E+22	1,521858E+23	1,266919E+23	2,788777E+23
2549	7,609142E+22	7,608981E+22	6,334568E+22	6,334608E+22	1,521812E+23	1,266918E+23	2,788730E+23
2550	7,609023E+22	7,609226E+22	6,334753E+22	6,334647E+22	1,521825E+23	1,266940E+23	2,788765E+23
2551	7,609206E+22	7,609302E+22	6,334769E+22	6,334830E+22	1,521851E+23	1,266960E+23	2,788811E+23
2552	7,609025E+22	7,608964E+22	6,334798E+22	6,334798E+22	1,521799E+23	1,266960E+23	2,788758E+23
2553	7,609113E+22	7,609292E+22	6,334935E+22	6,334844E+22	1,521841E+23	1,266978E+23	2,788818E+23
2554	7,609302E+22	7,609072E+22	6,334848E+22	6,334923E+22	1,521837E+23	1,266977E+23	2,788815E+23
2555	7,609114E+22	7,608993E+22	6,334868E+22	6,334835E+22	1,521811E+23	1,266970E+23	2,788781E+23
2556	7,609237E+22	7,609399E+22	6,334875E+22	6,334910E+22	1,521864E+23	1,266979E+23	2,788842E+23
2557	7,609178E+22	7,609104E+22	6,334735E+22	6,334848E+22	1,521828E+23	1,266958E+23	2,788786E+23
2558	7,609029E+22	7,609187E+22	6,334850E+22	6,334718E+22	1,521822E+23	1,266957E+23	2,788778E+23
2559	7,609242E+22	7,609304E+22	6,334820E+22	6,334781E+22	1,521855E+23	1,266960E+23	2,788815E+23
2560	7,609098E+22	7,608920E+22	6,334718E+22	6,334663E+22	1,521802E+23	1,266938E+23	2,788740E+23
2561	7,609037E+22	7,609214E+22	6,334782E+22	6,334650E+22	1,521825E+23	1,266943E+23	2,788768E+23
2562	7,609209E+22	7,609145E+22	6,334613E+22	6,334738E+22	1,521835E+23	1,266935E+23	2,788770E+23
2563	7,609002E+22	7,608941E+22	6,334577E+22	6,334626E+22	1,521794E+23	1,266920E+23	2,788715E+23
2564	7,609098E+22	7,609296E+22	6,334677E+22	6,334663E+22	1,521839E+23	1,266934E+23	2,788773E+23
2565	7,609195E+22	7,609039E+22	6,334567E+22	6,334634E+22	1,521823E+23	1,266920E+23	2,788743E+23
2566	7,609049E+22	7,609028E+22	6,334714E+22	6,334576E+22	1,521808E+23	1,266929E+23	2,788737E+23
2567	7,609221E+22	7,609305E+22	6,334773E+22	6,334763E+22	1,521853E+23	1,266954E+23	2,788806E+23
2568	7,609109E+22	7,609005E+22	6,334714E+22	6,334776E+22	1,521811E+23	1,266949E+23	2,788760E+23
2569	7,608964E+22	7,609223E+22	6,334922E+22	6,334817E+22	1,521819E+23	1,266974E+23	2,788793E+23
2570	7,609221E+22	7,609229E+22	6,334889E+22	6,334976E+22	1,521845E+23	1,266986E+23	2,788831E+23
2571	7,609104E+22	7,608911E+22	6,334910E+22	6,334908E+22	1,521802E+23	1,266982E+23	2,788783E+23
2572	7,609142E+22	7,609259E+22	6,335062E+22	6,334980E+22	1,521840E+23	1,267004E+23	2,788844E+23
2573	7,609285E+22	7,609154E+22	6,334896E+22	6,335019E+22	1,521844E+23	1,266992E+23	2,788835E+23
2574	7,609075E+22	7,609077E+22	6,334962E+22	6,334941E+22	1,521815E+23	1,266990E+23	2,788805E+23
2575	7,609178E+22	7,609390E+22	6,335023E+22	6,335026E+22	1,521857E+23	1,267005E+23	2,788862E+23
2576	7,609169E+22	7,609075E+22	6,334903E+22	6,334909E+22	1,521824E+23	1,266981E+23	2,788806E+23
2577	7,609008E+22	7,609136E+22	6,335025E+22	6,334813E+22	1,521814E+23	1,266984E+23	2,788798E+23
2578	7,609244E+22	7,609225E+22	6,334902E+22	6,334918E+22	1,521847E+23	1,266982E+23	2,788829E+23
2579	7,609109E+22	7,608908E+22	6,334775E+22	6,334809E+22	1,521802E+23	1,266958E+23	2,788760E+23
2580	7,608997E+22	7,609207E+22	6,334858E+22	6,334813E+22	1,521820E+23	1,266967E+23	2,788788E+23
2581	7,609185E+22	7,609177E+22	6,334665E+22	6,334820E+22	1,521836E+23	1,266949E+23	2,788785E+23
2582	7,609044E+22	7,608947E+22	6,334702E+22	6,334686E+22	1,521799E+23	1,266939E+23	2,788738E+23
2583	7,609133E+22	7,609240E+22	6,334831E+22	6,334754E+22	1,521837E+23	1,266959E+23	2,788796E+23
2584	7,609220E+22	7,609047E+22	6,334723E+22	6,334727E+22	1,521827E+23	1,266945E+23	2,788772E+23
2585	7,608993E+22	7,609073E+22	6,334877E+22	6,334732E+22	1,521807E+23	1,266961E+23	2,788767E+23
2586	7,609150E+22	7,609303E+22	6,334883E+22	6,334953E+22	1,521845E+23	1,266984E+23	2,788829E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2587	7,609093E+22	7,609001E+22	6,334859E+22	6,334937E+22	1,521809E+23	1,266980E+23	2,788789E+23
2588	7,608961E+22	7,609154E+22	6,335088E+22	6,334975E+22	1,521812E+23	1,267006E+23	2,788818E+23
2589	7,609238E+22	7,609207E+22	6,334993E+22	6,335082E+22	1,521845E+23	1,267008E+23	2,788852E+23
2590	7,609158E+22	7,608926E+22	6,335022E+22	6,335028E+22	1,521808E+23	1,267005E+23	2,788813E+23
2591	7,609135E+22	7,609255E+22	6,335166E+22	6,335133E+22	1,521839E+23	1,267030E+23	2,788869E+23
2592	7,609267E+22	7,609208E+22	6,335011E+22	6,335122E+22	1,521848E+23	1,267013E+23	2,788861E+23
2593	7,609032E+22	7,609097E+22	6,335123E+22	6,335030E+22	1,521813E+23	1,267015E+23	2,788828E+23
2594	7,609170E+22	7,609317E+22	6,335148E+22	6,335111E+22	1,521849E+23	1,267026E+23	2,788874E+23
2595	7,609207E+22	7,609022E+22	6,335025E+22	6,334992E+22	1,521823E+23	1,267002E+23	2,788825E+23
2596	7,608987E+22	7,609078E+22	6,335133E+22	6,334957E+22	1,521807E+23	1,267009E+23	2,788815E+23
2597	7,609189E+22	7,609260E+22	6,334933E+22	6,335037E+22	1,521845E+23	1,266997E+23	2,788842E+23
2598	7,609089E+22	7,608954E+22	6,334838E+22	6,334928E+22	1,521804E+23	1,266977E+23	2,788781E+23
2599	7,608981E+22	7,609178E+22	6,334972E+22	6,334927E+22	1,521816E+23	1,266990E+23	2,788806E+23
2600	7,609227E+22	7,609171E+22	6,334808E+22	6,334872E+22	1,521840E+23	1,266968E+23	2,788808E+23
2601	7,609061E+22	7,608942E+22	6,334881E+22	6,334774E+22	1,521800E+23	1,266965E+23	2,788766E+23
2602	7,609131E+22	7,609216E+22	6,334954E+22	6,334897E+22	1,521835E+23	1,266985E+23	2,788820E+23
2603	7,609206E+22	7,609074E+22	6,334837E+22	6,334892E+22	1,521828E+23	1,266973E+23	2,788801E+23
2604	7,608915E+22	7,609068E+22	6,335016E+22	6,334938E+22	1,521798E+23	1,266995E+23	2,788794E+23
2605	7,609102E+22	7,609302E+22	6,334984E+22	6,335079E+22	1,521840E+23	1,267006E+23	2,788847E+23
2606	7,609137E+22	7,608957E+22	6,334995E+22	6,335047E+22	1,521809E+23	1,267004E+23	2,788814E+23
2607	7,609011E+22	7,609075E+22	6,335228E+22	6,335106E+22	1,521809E+23	1,267033E+23	2,788842E+23
2608	7,609291E+22	7,609218E+22	6,335111E+22	6,335179E+22	1,521851E+23	1,267029E+23	2,788880E+23
2609	7,609131E+22	7,608995E+22	6,335158E+22	6,335147E+22	1,521813E+23	1,267030E+23	2,788843E+23
2610	7,609089E+22	7,609279E+22	6,335268E+22	6,335258E+22	1,521837E+23	1,267053E+23	2,788889E+23
2611	7,609254E+22	7,609218E+22	6,335161E+22	6,335214E+22	1,521847E+23	1,267038E+23	2,788885E+23
2612	7,608996E+22	7,609044E+22	6,335297E+22	6,335156E+22	1,521804E+23	1,267045E+23	2,788849E+23
2613	7,609136E+22	7,609285E+22	6,335245E+22	6,335210E+22	1,521842E+23	1,267045E+23	2,788888E+23
2614	7,609216E+22	7,609009E+22	6,335115E+22	6,335135E+22	1,521822E+23	1,267025E+23	2,788847E+23
2615	7,608961E+22	7,609049E+22	6,335199E+22	6,335129E+22	1,521801E+23	1,267033E+23	2,788834E+23
2616	7,609189E+22	7,609279E+22	6,335005E+22	6,335140E+22	1,521847E+23	1,267014E+23	2,788861E+23
2617	7,609097E+22	7,608967E+22	6,334968E+22	6,334992E+22	1,521806E+23	1,266996E+23	2,788802E+23
2618	7,609026E+22	7,609120E+22	6,335072E+22	6,334987E+22	1,521815E+23	1,267006E+23	2,788820E+23
2619	7,609286E+22	7,609167E+22	6,334937E+22	6,334938E+22	1,521845E+23	1,266987E+23	2,788833E+23
2620	7,609027E+22	7,608946E+22	6,335014E+22	6,334921E+22	1,521797E+23	1,266993E+23	2,788791E+23
2621	7,609025E+22	7,609265E+22	6,335037E+22	6,335034E+22	1,521829E+23	1,267007E+23	2,788836E+23
2622	7,609153E+22	7,609106E+22	6,334968E+22	6,335053E+22	1,521826E+23	1,267002E+23	2,788828E+23
2623	7,608885E+22	7,608995E+22	6,335174E+22	6,335100E+22	1,521788E+23	1,267027E+23	2,788815E+23
2624	7,609152E+22	7,609247E+22	6,335145E+22	6,335182E+22	1,521840E+23	1,267033E+23	2,788872E+23
2625	7,609186E+22	7,608939E+22	6,335160E+22	6,335158E+22	1,521813E+23	1,267032E+23	2,788844E+23
2626	7,609048E+22	7,609056E+22	6,335317E+22	6,335253E+22	1,521810E+23	1,267057E+23	2,788867E+23
2627	7,609304E+22	7,609280E+22	6,335214E+22	6,335314E+22	1,521858E+23	1,267053E+23	2,788911E+23
2628	7,609069E+22	7,609031E+22	6,335297E+22	6,335306E+22	1,521810E+23	1,267060E+23	2,788870E+23
2629	7,609024E+22	7,609292E+22	6,335391E+22	6,335339E+22	1,521832E+23	1,267073E+23	2,788905E+23
2630	7,609272E+22	7,609189E+22	6,335307E+22	6,335310E+22	1,521846E+23	1,267062E+23	2,788908E+23
2631	7,608994E+22	7,608963E+22	6,335427E+22	6,335296E+22	1,521796E+23	1,267072E+23	2,788868E+23
2632	7,609145E+22	7,609275E+22	6,335332E+22	6,335324E+22	1,521842E+23	1,267066E+23	2,788908E+23
2633	7,609181E+22	7,609044E+22	6,335210E+22	6,335257E+22	1,521823E+23	1,267047E+23	2,788869E+23
2634	7,608952E+22	7,609042E+22	6,335254E+22	6,335244E+22	1,521799E+23	1,267050E+23	2,788849E+23
2635	7,609232E+22	7,609272E+22	6,335114E+22	6,335193E+22	1,521850E+23	1,267031E+23	2,788881E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2636	7,609099E+22	7,608939E+22	6,335114E+22	6,335081E+22	1,521804E+23	1,267019E+23	2,788823E+23
2637	7,609002E+22	7,609128E+22	6,335171E+22	6,335049E+22	1,521813E+23	1,267022E+23	2,788835E+23
2638	7,609271E+22	7,609189E+22	6,335048E+22	6,335074E+22	1,521846E+23	1,267012E+23	2,788858E+23
2639	7,608954E+22	7,608937E+22	6,335135E+22	6,335116E+22	1,521789E+23	1,267025E+23	2,788814E+23
2640	7,608993E+22	7,609260E+22	6,335164E+22	6,335173E+22	1,521825E+23	1,267034E+23	2,788859E+23
2641	7,609151E+22	7,609073E+22	6,335144E+22	6,335166E+22	1,521822E+23	1,267031E+23	2,788853E+23
2642	7,608950E+22	7,608909E+22	6,335284E+22	6,335216E+22	1,521786E+23	1,267050E+23	2,788836E+23
2643	7,609237E+22	7,609224E+22	6,335266E+22	6,335286E+22	1,521846E+23	1,267055E+23	2,788901E+23
2644	7,609172E+22	7,608978E+22	6,335281E+22	6,335319E+22	1,521815E+23	1,267060E+23	2,788875E+23
2645	7,608973E+22	7,609144E+22	6,335397E+22	6,335370E+22	1,521812E+23	1,267077E+23	2,788888E+23
2646	7,609266E+22	7,609341E+22	6,335356E+22	6,335447E+22	1,521861E+23	1,267080E+23	2,788941E+23
2647	7,609027E+22	7,608993E+22	6,335480E+22	6,335449E+22	1,521802E+23	1,267093E+23	2,788895E+23
2648	7,609031E+22	7,609243E+22	6,335560E+22	6,335439E+22	1,521827E+23	1,267100E+23	2,788927E+23
2649	7,609276E+22	7,609157E+22	6,335470E+22	6,335434E+22	1,521843E+23	1,267090E+23	2,788934E+23
2650	7,609009E+22	7,608905E+22	6,335478E+22	6,335454E+22	1,521791E+23	1,267093E+23	2,788885E+23
2651	7,609165E+22	7,609284E+22	6,335391E+22	6,335449E+22	1,521845E+23	1,267084E+23	2,788929E+23
2652	7,609158E+22	7,609056E+22	6,335287E+22	6,335370E+22	1,521821E+23	1,267066E+23	2,788887E+23
2653	7,608938E+22	7,609035E+22	6,335320E+22	6,335265E+22	1,521797E+23	1,267058E+23	2,788856E+23
2654	7,609278E+22	7,609268E+22	6,335228E+22	6,335239E+22	1,521855E+23	1,267047E+23	2,788901E+23
2655	7,609087E+22	7,608910E+22	6,335241E+22	6,335192E+22	1,521800E+23	1,267043E+23	2,788843E+23
2656	7,608961E+22	7,609153E+22	6,335290E+22	6,335162E+22	1,521811E+23	1,267045E+23	2,788857E+23
2657	7,609187E+22	7,609234E+22	6,335198E+22	6,335215E+22	1,521842E+23	1,267041E+23	2,788883E+23
2658	7,608916E+22	7,608893E+22	6,335244E+22	6,335278E+22	1,521781E+23	1,267052E+23	2,788833E+23
2659	7,609034E+22	7,609205E+22	6,335316E+22	6,335289E+22	1,521824E+23	1,267060E+23	2,788884E+23
2660	7,609173E+22	7,609027E+22	6,335292E+22	6,335318E+22	1,521820E+23	1,267061E+23	2,788881E+23
2661	7,608962E+22	7,608914E+22	6,335371E+22	6,335329E+22	1,521788E+23	1,267070E+23	2,788857E+23
2662	7,609261E+22	7,609281E+22	6,335366E+22	6,335442E+22	1,521854E+23	1,267081E+23	2,788935E+23
2663	7,609120E+22	7,609022E+22	6,335412E+22	6,335502E+22	1,521814E+23	1,267091E+23	2,788905E+23
2664	7,608948E+22	7,609175E+22	6,335556E+22	6,335478E+22	1,521812E+23	1,267103E+23	2,788916E+23
2665	7,609253E+22	7,609319E+22	6,335567E+22	6,335536E+22	1,521857E+23	1,267110E+23	2,788968E+23
2666	7,609062E+22	7,608904E+22	6,335614E+22	6,335573E+22	1,521797E+23	1,267119E+23	2,788915E+23
2667	7,609085E+22	7,609189E+22	6,335672E+22	6,335552E+22	1,521827E+23	1,267122E+23	2,788950E+23
2668	7,609232E+22	7,609156E+22	6,335554E+22	6,335599E+22	1,521839E+23	1,267115E+23	2,788954E+23
2669	7,608949E+22	7,608949E+22	6,335501E+22	6,335548E+22	1,521790E+23	1,267105E+23	2,788895E+23
2670	7,609169E+22	7,609304E+22	6,335466E+22	6,335535E+22	1,521847E+23	1,267100E+23	2,788947E+23
2671	7,609146E+22	7,609029E+22	6,335420E+22	6,335454E+22	1,521818E+23	1,267087E+23	2,788905E+23
2672	7,608963E+22	7,609025E+22	6,335455E+22	6,335308E+22	1,521799E+23	1,267076E+23	2,788875E+23
2673	7,609258E+22	7,609276E+22	6,335393E+22	6,335327E+22	1,521853E+23	1,267072E+23	2,788925E+23
2674	7,609055E+22	7,608894E+22	6,335329E+22	6,335360E+22	1,521795E+23	1,267069E+23	2,788864E+23
2675	7,608934E+22	7,609146E+22	6,335399E+22	6,335320E+22	1,521808E+23	1,267072E+23	2,788880E+23
2676	7,609130E+22	7,609206E+22	6,335332E+22	6,335386E+22	1,521834E+23	1,267072E+23	2,788905E+23
2677	7,608919E+22	7,608846E+22	6,335331E+22	6,335363E+22	1,521776E+23	1,267069E+23	2,788846E+23
2678	7,609118E+22	7,609173E+22	6,335422E+22	6,335400E+22	1,521829E+23	1,267082E+23	2,788911E+23
2679	7,609195E+22	7,609023E+22	6,335410E+22	6,335466E+22	1,521822E+23	1,267088E+23	2,788909E+23
2680	7,608957E+22	7,608979E+22	6,335489E+22	6,335446E+22	1,521794E+23	1,267093E+23	2,788887E+23
2681	7,609206E+22	7,609363E+22	6,335548E+22	6,335563E+22	1,521857E+23	1,267111E+23	2,788968E+23
2682	7,609096E+22	7,609000E+22	6,335566E+22	6,335643E+22	1,521810E+23	1,267121E+23	2,788931E+23
2683	7,608969E+22	7,609118E+22	6,335750E+22	6,335589E+22	1,521809E+23	1,267134E+23	2,788943E+23
2684	7,609233E+22	7,609267E+22	6,335731E+22	6,335692E+22	1,521850E+23	1,267142E+23	2,788992E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2685	7,609040E+22	7,608866E+22	6,335679E+22	6,335699E+22	1,521791E+23	1,267138E+23	2,788928E+23
2686	7,609096E+22	7,609200E+22	6,335725E+22	6,335713E+22	1,521830E+23	1,267144E+23	2,788973E+23
2687	7,609193E+22	7,609169E+22	6,335620E+22	6,335754E+22	1,521836E+23	1,267137E+23	2,788974E+23
2688	7,608957E+22	7,608964E+22	6,335596E+22	6,335600E+22	1,521792E+23	1,267120E+23	2,788912E+23
2689	7,609187E+22	7,609302E+22	6,335626E+22	6,335557E+22	1,521849E+23	1,267118E+23	2,788967E+23
2690	7,609177E+22	7,608983E+22	6,335526E+22	6,335529E+22	1,521816E+23	1,267106E+23	2,788922E+23
2691	7,608976E+22	7,609012E+22	6,335581E+22	6,335404E+22	1,521799E+23	1,267099E+23	2,788897E+23
2692	7,609157E+22	7,609301E+22	6,335507E+22	6,335498E+22	1,521846E+23	1,267101E+23	2,788946E+23
2693	7,608961E+22	7,608907E+22	6,335398E+22	6,335494E+22	1,521787E+23	1,267089E+23	2,788876E+23
2694	7,608938E+22	7,609117E+22	6,335509E+22	6,335462E+22	1,521806E+23	1,267097E+23	2,788903E+23
2695	7,609138E+22	7,609138E+22	6,335476E+22	6,335532E+22	1,521828E+23	1,267101E+23	2,788928E+23
2696	7,608984E+22	7,608827E+22	6,335457E+22	6,335451E+22	1,521781E+23	1,267091E+23	2,788872E+23
2697	7,609149E+22	7,609192E+22	6,335574E+22	6,335509E+22	1,521834E+23	1,267108E+23	2,788942E+23
2698	7,609196E+22	7,609054E+22	6,335510E+22	6,335632E+22	1,521825E+23	1,267114E+23	2,788939E+23
2699	7,608957E+22	7,609011E+22	6,335635E+22	6,335577E+22	1,521797E+23	1,267121E+23	2,788918E+23
2700	7,609135E+22	7,609352E+22	6,335733E+22	6,335708E+22	1,521849E+23	1,267144E+23	2,788993E+23
2701	7,609074E+22	7,608953E+22	6,335703E+22	6,335736E+22	1,521803E+23	1,267144E+23	2,788947E+23
2702	7,609012E+22	7,609064E+22	6,335866E+22	6,335730E+22	1,521808E+23	1,267160E+23	2,788967E+23
2703	7,609204E+22	7,609236E+22	6,335837E+22	6,335872E+22	1,521844E+23	1,267171E+23	2,789015E+23
2704	7,609023E+22	7,608910E+22	6,335747E+22	6,335817E+22	1,521793E+23	1,267156E+23	2,788950E+23
2705	7,609067E+22	7,609246E+22	6,335845E+22	6,335805E+22	1,521831E+23	1,267165E+23	2,788996E+23
2706	7,609204E+22	7,609149E+22	6,335725E+22	6,335843E+22	1,521835E+23	1,267157E+23	2,788992E+23
2707	7,609011E+22	7,608929E+22	6,335748E+22	6,335651E+22	1,521794E+23	1,267140E+23	2,788934E+23
2708	7,609156E+22	7,609282E+22	6,335779E+22	6,335663E+22	1,521844E+23	1,267144E+23	2,788988E+23
2709	7,609132E+22	7,608976E+22	6,335602E+22	6,335636E+22	1,521811E+23	1,267124E+23	2,788935E+23
2710	7,608950E+22	7,609024E+22	6,335651E+22	6,335577E+22	1,521797E+23	1,267123E+23	2,788920E+23
2711	7,609084E+22	7,609284E+22	6,335607E+22	6,335678E+22	1,521837E+23	1,267128E+23	2,788965E+23
2712	7,608971E+22	7,608872E+22	6,335509E+22	6,335579E+22	1,521784E+23	1,267109E+23	2,788893E+23
2713	7,608997E+22	7,609079E+22	6,335663E+22	6,335527E+22	1,521808E+23	1,267119E+23	2,788926E+23
2714	7,609215E+22	7,609088E+22	6,335567E+22	6,335639E+22	1,521830E+23	1,267121E+23	2,788951E+23
2715	7,609032E+22	7,608841E+22	6,335579E+22	6,335557E+22	1,521787E+23	1,267114E+23	2,788901E+23
2716	7,609070E+22	7,609266E+22	6,335708E+22	6,335660E+22	1,521834E+23	1,267137E+23	2,788970E+23
2717	7,609112E+22	7,609092E+22	6,335624E+22	6,335748E+22	1,521820E+23	1,267137E+23	2,788958E+23
2718	7,608945E+22	7,609001E+22	6,335800E+22	6,335725E+22	1,521795E+23	1,267152E+23	2,788947E+23
2719	7,609098E+22	7,609294E+22	6,335915E+22	6,335877E+22	1,521839E+23	1,267179E+23	2,789018E+23
2720	7,609090E+22	7,608918E+22	6,335845E+22	6,335866E+22	1,521801E+23	1,267171E+23	2,788972E+23
2721	7,609020E+22	7,609060E+22	6,336000E+22	6,335875E+22	1,521808E+23	1,267188E+23	2,788996E+23
2722	7,609206E+22	7,609230E+22	6,335898E+22	6,336046E+22	1,521844E+23	1,267194E+23	2,789038E+23
2723	7,609055E+22	7,608919E+22	6,335853E+22	6,335917E+22	1,521797E+23	1,267177E+23	2,788974E+23
2724	7,609051E+22	7,609240E+22	6,335983E+22	6,335883E+22	1,521829E+23	1,267187E+23	2,789016E+23
2725	7,609216E+22	7,609123E+22	6,335823E+22	6,335872E+22	1,521834E+23	1,267169E+23	2,789003E+23
2726	7,609051E+22	7,608920E+22	6,335846E+22	6,335747E+22	1,521797E+23	1,267159E+23	2,788956E+23
2727	7,609078E+22	7,609281E+22	6,335889E+22	6,335818E+22	1,521836E+23	1,267171E+23	2,789007E+23
2728	7,609066E+22	7,609016E+22	6,335693E+22	6,335756E+22	1,521808E+23	1,267145E+23	2,788953E+23
2729	7,608909E+22	7,609020E+22	6,335782E+22	6,335688E+22	1,521793E+23	1,267147E+23	2,788940E+23
2730	7,609099E+22	7,609210E+22	6,335719E+22	6,335802E+22	1,521831E+23	1,267152E+23	2,788983E+23
2731	7,609056E+22	7,608818E+22	6,335640E+22	6,335655E+22	1,521787E+23	1,267130E+23	2,788917E+23
2732	7,609000E+22	7,609062E+22	6,335787E+22	6,335645E+22	1,521806E+23	1,267143E+23	2,788949E+23
2733	7,609198E+22	7,609116E+22	6,335639E+22	6,335750E+22	1,521831E+23	1,267139E+23	2,788970E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2734	7,609022E+22	7,608903E+22	6,335669E+22	6,335723E+22	1,521793E+23	1,267139E+23	2,788932E+23
2735	7,608980E+22	7,609281E+22	6,335867E+22	6,335831E+22	1,521826E+23	1,267170E+23	2,788996E+23
2736	7,609095E+22	7,609079E+22	6,335798E+22	6,335844E+22	1,521817E+23	1,267164E+23	2,788982E+23
2737	7,608968E+22	7,608952E+22	6,335993E+22	6,335832E+22	1,521792E+23	1,267182E+23	2,788974E+23
2738	7,609129E+22	7,609224E+22	6,336034E+22	6,336040E+22	1,521835E+23	1,267207E+23	2,789043E+23
2739	7,609126E+22	7,608908E+22	6,335958E+22	6,336009E+22	1,521803E+23	1,267197E+23	2,789000E+23
2740	7,608967E+22	7,609102E+22	6,336103E+22	6,336032E+22	1,521807E+23	1,267214E+23	2,789020E+23
2741	7,609182E+22	7,609243E+22	6,335978E+22	6,336131E+22	1,521842E+23	1,267211E+23	2,789053E+23
2742	7,609095E+22	7,608922E+22	6,335972E+22	6,336005E+22	1,521802E+23	1,267198E+23	2,788999E+23
2743	7,609032E+22	7,609216E+22	6,336134E+22	6,335983E+22	1,521825E+23	1,267212E+23	2,789037E+23
2744	7,609213E+22	7,609122E+22	6,335946E+22	6,335949E+22	1,521833E+23	1,267189E+23	2,789023E+23
2745	7,609020E+22	7,608942E+22	6,335973E+22	6,335873E+22	1,521796E+23	1,267185E+23	2,788981E+23
2746	7,609030E+22	7,609265E+22	6,335951E+22	6,335986E+22	1,521830E+23	1,267194E+23	2,789023E+23
2747	7,609068E+22	7,608975E+22	6,335805E+22	6,335866E+22	1,521804E+23	1,267167E+23	2,788971E+23
2748	7,608900E+22	7,608974E+22	6,335904E+22	6,335781E+22	1,521787E+23	1,267169E+23	2,788956E+23
2749	7,609143E+22	7,609148E+22	6,335786E+22	6,335855E+22	1,521829E+23	1,267164E+23	2,788993E+23
2750	7,609119E+22	7,608831E+22	6,335714E+22	6,335762E+22	1,521795E+23	1,267148E+23	2,788943E+23
2751	7,608944E+22	7,609112E+22	6,335891E+22	6,335790E+22	1,521806E+23	1,267168E+23	2,788974E+23
2752	7,609135E+22	7,609197E+22	6,335761E+22	6,335856E+22	1,521833E+23	1,267162E+23	2,788995E+23
2753	7,608976E+22	7,608935E+22	6,335866E+22	6,335842E+22	1,521791E+23	1,267171E+23	2,788962E+23
2754	7,608963E+22	7,609214E+22	6,336046E+22	6,335985E+22	1,521818E+23	1,267203E+23	2,789021E+23
2755	7,609144E+22	7,609005E+22	6,335992E+22	6,335979E+22	1,521815E+23	1,267197E+23	2,789012E+23
2756	7,608962E+22	7,608912E+22	6,336141E+22	6,336006E+22	1,521787E+23	1,267215E+23	2,789002E+23
2757	7,609129E+22	7,609210E+22	6,336097E+22	6,336194E+22	1,521834E+23	1,267229E+23	2,789063E+23
2758	7,609154E+22	7,608959E+22	6,336016E+22	6,336172E+22	1,521811E+23	1,267219E+23	2,789030E+23
2759	7,608935E+22	7,609114E+22	6,336222E+22	6,336160E+22	1,521805E+23	1,267238E+23	2,789043E+23
2760	7,609206E+22	7,609254E+22	6,336118E+22	6,336166E+22	1,521846E+23	1,267228E+23	2,789074E+23
2761	7,609128E+22	7,608920E+22	6,336129E+22	6,336059E+22	1,521805E+23	1,267219E+23	2,789024E+23
2762	7,609013E+22	7,609184E+22	6,336242E+22	6,336108E+22	1,521820E+23	1,267235E+23	2,789055E+23
2763	7,609185E+22	7,609131E+22	6,336057E+22	6,336068E+22	1,521832E+23	1,267212E+23	2,789044E+23
2764	7,608917E+22	7,608949E+22	6,336074E+22	6,336017E+22	1,521787E+23	1,267209E+23	2,788996E+23
2765	7,608993E+22	7,609212E+22	6,336026E+22	6,336081E+22	1,521820E+23	1,267211E+23	2,789031E+23
2766	7,609123E+22	7,608939E+22	6,335889E+22	6,335968E+22	1,521806E+23	1,267186E+23	2,788992E+23
2767	7,608909E+22	7,608936E+22	6,336013E+22	6,335893E+22	1,521784E+23	1,267191E+23	2,788975E+23
2768	7,609165E+22	7,609168E+22	6,335882E+22	6,335929E+22	1,521833E+23	1,267181E+23	2,789014E+23
2769	7,609108E+22	7,608896E+22	6,335834E+22	6,335880E+22	1,521800E+23	1,267171E+23	2,788972E+23
2770	7,608892E+22	7,609131E+22	6,336007E+22	6,335948E+22	1,521802E+23	1,267195E+23	2,788998E+23
2771	7,609132E+22	7,609176E+22	6,335946E+22	6,335969E+22	1,521831E+23	1,267191E+23	2,789022E+23
2772	7,608952E+22	7,608887E+22	6,336061E+22	6,335969E+22	1,521784E+23	1,267203E+23	2,788987E+23
2773	7,608991E+22	7,609129E+22	6,336164E+22	6,336106E+22	1,521812E+23	1,267227E+23	2,789039E+23
2774	7,609190E+22	7,608997E+22	6,336083E+22	6,336156E+22	1,521819E+23	1,267224E+23	2,789043E+23
2775	7,608918E+22	7,608946E+22	6,336231E+22	6,336196E+22	1,521786E+23	1,267243E+23	2,789029E+23
2776	7,609105E+22	7,609265E+22	6,336192E+22	6,336301E+22	1,521837E+23	1,267249E+23	2,789086E+23
2777	7,609156E+22	7,609007E+22	6,336176E+22	6,336259E+22	1,521816E+23	1,267244E+23	2,789060E+23
2778	7,608948E+22	7,609087E+22	6,336366E+22	6,336255E+22	1,521804E+23	1,267262E+23	2,789066E+23
2779	7,609238E+22	7,609214E+22	6,336290E+22	6,336246E+22	1,521845E+23	1,267254E+23	2,789099E+23
2780	7,609074E+22	7,608916E+22	6,336275E+22	6,336194E+22	1,521799E+23	1,267247E+23	2,789046E+23
2781	7,608956E+22	7,609157E+22	6,336298E+22	6,336249E+22	1,521811E+23	1,267255E+23	2,789066E+23
2782	7,609160E+22	7,609138E+22	6,336113E+22	6,336228E+22	1,521830E+23	1,267234E+23	2,789064E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2783	7,608880E+22	7,608907E+22	6,336167E+22	6,336139E+22	1,521779E+23	1,267231E+23	2,789009E+23
2784	7,609037E+22	7,609165E+22	6,336121E+22	6,336113E+22	1,521820E+23	1,267223E+23	2,789044E+23
2785	7,609187E+22	7,608939E+22	6,335999E+22	6,336022E+22	1,521813E+23	1,267202E+23	2,789015E+23
2786	7,608918E+22	7,608939E+22	6,336095E+22	6,336007E+22	1,521786E+23	1,267210E+23	2,788996E+23
2787	7,609149E+22	7,609214E+22	6,336013E+22	6,336035E+22	1,521836E+23	1,267205E+23	2,789041E+23
2788	7,609017E+22	7,608945E+22	6,335996E+22	6,336016E+22	1,521796E+23	1,267201E+23	2,788997E+23
2789	7,608848E+22	7,609085E+22	6,336153E+22	6,336070E+22	1,521793E+23	1,267222E+23	2,789016E+23
2790	7,609155E+22	7,609141E+22	6,336096E+22	6,336124E+22	1,521830E+23	1,267222E+23	2,789052E+23
2791	7,608939E+22	7,608829E+22	6,336209E+22	6,336153E+22	1,521777E+23	1,267236E+23	2,789013E+23
2792	7,609008E+22	7,609122E+22	6,336273E+22	6,336250E+22	1,521813E+23	1,267252E+23	2,789065E+23
2793	7,609202E+22	7,609055E+22	6,336176E+22	6,336315E+22	1,521826E+23	1,267249E+23	2,789075E+23
2794	7,608904E+22	7,608961E+22	6,336324E+22	6,336353E+22	1,521786E+23	1,267268E+23	2,789054E+23
2795	7,609143E+22	7,609256E+22	6,336360E+22	6,336371E+22	1,521840E+23	1,267273E+23	2,789113E+23
2796	7,609151E+22	7,608991E+22	6,336355E+22	6,336327E+22	1,521814E+23	1,267268E+23	2,789082E+23
2797	7,608956E+22	7,609035E+22	6,336482E+22	6,336338E+22	1,521799E+23	1,267282E+23	2,789081E+23
2798	7,609228E+22	7,609230E+22	6,336378E+22	6,336389E+22	1,521846E+23	1,267277E+23	2,789122E+23
2799	7,608973E+22	7,608928E+22	6,336368E+22	6,336367E+22	1,521790E+23	1,267273E+23	2,789064E+23
2800	7,608901E+22	7,609153E+22	6,336385E+22	6,336348E+22	1,521805E+23	1,267273E+23	2,789079E+23
2801	7,609167E+22	7,609121E+22	6,336231E+22	6,336318E+22	1,521829E+23	1,267255E+23	2,789084E+23
2802	7,608916E+22	7,608845E+22	6,336265E+22	6,336236E+22	1,521776E+23	1,267250E+23	2,789026E+23
2803	7,609110E+22	7,609126E+22	6,336246E+22	6,336181E+22	1,521824E+23	1,267243E+23	2,789066E+23
2804	7,609164E+22	7,608977E+22	6,336119E+22	6,336130E+22	1,521814E+23	1,267225E+23	2,789039E+23
2805	7,608883E+22	7,608961E+22	6,336165E+22	6,336132E+22	1,521784E+23	1,267230E+23	2,789014E+23
2806	7,609114E+22	7,609250E+22	6,336123E+22	6,336184E+22	1,521836E+23	1,267231E+23	2,789067E+23
2807	7,608962E+22	7,608916E+22	6,336162E+22	6,336167E+22	1,521788E+23	1,267233E+23	2,789021E+23
2808	7,608864E+22	7,609019E+22	6,336297E+22	6,336163E+22	1,521788E+23	1,267246E+23	2,789034E+23
2809	7,609189E+22	7,609122E+22	6,336231E+22	6,336265E+22	1,521831E+23	1,267250E+23	2,789081E+23
2810	7,608941E+22	7,608823E+22	6,336291E+22	6,336326E+22	1,521776E+23	1,267262E+23	2,789038E+23
2811	7,609017E+22	7,609139E+22	6,336389E+22	6,336382E+22	1,521816E+23	1,267277E+23	2,789093E+23
2812	7,609155E+22	7,609104E+22	6,336335E+22	6,336430E+22	1,521826E+23	1,267277E+23	2,789102E+23
2813	7,608914E+22	7,608930E+22	6,336461E+22	6,336439E+22	1,521784E+23	1,267290E+23	2,789074E+23
2814	7,609175E+22	7,609246E+22	6,336516E+22	6,336479E+22	1,521842E+23	1,267299E+23	2,789142E+23
2815	7,609116E+22	7,608969E+22	6,336514E+22	6,336475E+22	1,521808E+23	1,267299E+23	2,789107E+23
2816	7,608917E+22	7,609027E+22	6,336588E+22	6,336463E+22	1,521794E+23	1,267305E+23	2,789100E+23
2817	7,609180E+22	7,609267E+22	6,336464E+22	6,336550E+22	1,521845E+23	1,267301E+23	2,789146E+23
2818	7,608938E+22	7,608896E+22	6,336444E+22	6,336519E+22	1,521783E+23	1,267296E+23	2,789080E+23
2819	7,608956E+22	7,609082E+22	6,336514E+22	6,336413E+22	1,521804E+23	1,267293E+23	2,789097E+23
2820	7,609200E+22	7,609090E+22	6,336358E+22	6,336371E+22	1,521829E+23	1,267273E+23	2,789102E+23
2821	7,608963E+22	7,608810E+22	6,336327E+22	6,336306E+22	1,521777E+23	1,267263E+23	2,789041E+23
2822	7,609114E+22	7,609185E+22	6,336314E+22	6,336294E+22	1,521830E+23	1,267261E+23	2,789091E+23
2823	7,609066E+22	7,609031E+22	6,336229E+22	6,336277E+22	1,521810E+23	1,267251E+23	2,789060E+23
2824	7,608816E+22	7,608976E+22	6,336302E+22	6,336230E+22	1,521779E+23	1,267253E+23	2,789032E+23
2825	7,609093E+22	7,609243E+22	6,336282E+22	6,336303E+22	1,521834E+23	1,267258E+23	2,789092E+23
2826	7,608961E+22	7,608834E+22	6,336306E+22	6,336323E+22	1,521779E+23	1,267263E+23	2,789042E+23
2827	7,608921E+22	7,608947E+22	6,336449E+22	6,336297E+22	1,521787E+23	1,267275E+23	2,789061E+23
2828	7,609175E+22	7,609129E+22	6,336354E+22	6,336419E+22	1,521830E+23	1,267277E+23	2,789108E+23
2829	7,608945E+22	7,608829E+22	6,336356E+22	6,336475E+22	1,521777E+23	1,267283E+23	2,789061E+23
2830	7,609038E+22	7,609176E+22	6,336496E+22	6,336506E+22	1,521821E+23	1,267300E+23	2,789122E+23
2831	7,609138E+22	7,609096E+22	6,336506E+22	6,336537E+22	1,521823E+23	1,267304E+23	2,789128E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2832	7,608932E+22	7,608909E+22	6,336618E+22	6,336502E+22	1,521784E+23	1,267312E+23	2,789096E+23
2833	7,609166E+22	7,609265E+22	6,336655E+22	6,336608E+22	1,521843E+23	1,267326E+23	2,789169E+23
2834	7,609056E+22	7,608969E+22	6,336620E+22	6,336658E+22	1,521802E+23	1,267328E+23	2,789130E+23
2835	7,608889E+22	7,609013E+22	6,336707E+22	6,336604E+22	1,521790E+23	1,267331E+23	2,789121E+23
2836	7,609128E+22	7,609261E+22	6,336602E+22	6,336664E+22	1,521839E+23	1,267327E+23	2,789165E+23
2837	7,608977E+22	7,608831E+22	6,336527E+22	6,336602E+22	1,521781E+23	1,267313E+23	2,789094E+23
2838	7,609027E+22	7,609057E+22	6,336601E+22	6,336499E+22	1,521808E+23	1,267310E+23	2,789118E+23
2839	7,609195E+22	7,609095E+22	6,336466E+22	6,336483E+22	1,521829E+23	1,267295E+23	2,789124E+23
2840	7,608943E+22	7,608846E+22	6,336398E+22	6,336392E+22	1,521779E+23	1,267279E+23	2,789058E+23
2841	7,609052E+22	7,609255E+22	6,336407E+22	6,336423E+22	1,521831E+23	1,267283E+23	2,789114E+23
2842	7,609009E+22	7,609014E+22	6,336355E+22	6,336411E+22	1,521802E+23	1,267277E+23	2,789079E+23
2843	7,608843E+22	7,608882E+22	6,336474E+22	6,336313E+22	1,521773E+23	1,267279E+23	2,789051E+23
2844	7,609095E+22	7,609185E+22	6,336450E+22	6,336403E+22	1,521828E+23	1,267285E+23	2,789113E+23
2845	7,609000E+22	7,608778E+22	6,336381E+22	6,336458E+22	1,521778E+23	1,267284E+23	2,789062E+23
2846	7,608938E+22	7,608981E+22	6,336519E+22	6,336457E+22	1,521792E+23	1,267298E+23	2,789089E+23
2847	7,609117E+22	7,609176E+22	6,336470E+22	6,336579E+22	1,521829E+23	1,267305E+23	2,789134E+23
2848	7,608925E+22	7,608854E+22	6,336495E+22	6,336560E+22	1,521778E+23	1,267306E+23	2,789083E+23
2849	7,609041E+22	7,609205E+22	6,336667E+22	6,336612E+22	1,521825E+23	1,267328E+23	2,789153E+23
2850	7,609133E+22	7,609065E+22	6,336679E+22	6,336683E+22	1,521820E+23	1,267336E+23	2,789156E+23
2851	7,608949E+22	7,608869E+22	6,336793E+22	6,336644E+22	1,521782E+23	1,267344E+23	2,789125E+23
2852	7,609100E+22	7,609285E+22	6,336793E+22	6,336772E+22	1,521838E+23	1,267357E+23	2,789195E+23
2853	7,609030E+22	7,608944E+22	6,336684E+22	6,336828E+22	1,521797E+23	1,267351E+23	2,789149E+23
2854	7,608917E+22	7,608992E+22	6,336792E+22	6,336727E+22	1,521791E+23	1,267352E+23	2,789143E+23
2855	7,609146E+22	7,609202E+22	6,336719E+22	6,336751E+22	1,521835E+23	1,267347E+23	2,789182E+23
2856	7,609028E+22	7,608808E+22	6,336609E+22	6,336630E+22	1,521784E+23	1,267324E+23	2,789108E+23
2857	7,609046E+22	7,609113E+22	6,336663E+22	6,336574E+22	1,521816E+23	1,267324E+23	2,789140E+23
2858	7,609131E+22	7,609131E+22	6,336547E+22	6,336603E+22	1,521826E+23	1,267315E+23	2,789141E+23
2859	7,608899E+22	7,608860E+22	6,336538E+22	6,336487E+22	1,521776E+23	1,267303E+23	2,789078E+23
2860	7,608970E+22	7,609247E+22	6,336583E+22	6,336514E+22	1,521822E+23	1,267310E+23	2,789132E+23
2861	7,609015E+22	7,608926E+22	6,336484E+22	6,336530E+22	1,521794E+23	1,267301E+23	2,789096E+23
2862	7,608893E+22	7,608825E+22	6,336588E+22	6,336449E+22	1,521772E+23	1,267304E+23	2,789075E+23
2863	7,609086E+22	7,609149E+22	6,336564E+22	6,336572E+22	1,521824E+23	1,267314E+23	2,789137E+23
2864	7,608993E+22	7,608814E+22	6,336445E+22	6,336586E+22	1,521781E+23	1,267303E+23	2,789084E+23
2865	7,608926E+22	7,609064E+22	6,336597E+22	6,336605E+22	1,521799E+23	1,267320E+23	2,789119E+23
2866	7,609101E+22	7,609181E+22	6,336622E+22	6,336709E+22	1,521828E+23	1,267333E+23	2,789161E+23
2867	7,608978E+22	7,608815E+22	6,336697E+22	6,336638E+22	1,521779E+23	1,267334E+23	2,789113E+23
2868	7,609025E+22	7,609199E+22	6,336868E+22	6,336712E+22	1,521822E+23	1,267358E+23	2,789180E+23
2869	7,609131E+22	7,609040E+22	6,336793E+22	6,336844E+22	1,521817E+23	1,267364E+23	2,789181E+23
2870	7,608927E+22	7,608883E+22	6,336890E+22	6,336822E+22	1,521781E+23	1,267371E+23	2,789152E+23
2871	7,609028E+22	7,609281E+22	6,336918E+22	6,336941E+22	1,521831E+23	1,267386E+23	2,789217E+23
2872	7,609029E+22	7,608922E+22	6,336778E+22	6,336903E+22	1,521795E+23	1,267368E+23	2,789163E+23
2873	7,608958E+22	7,608987E+22	6,336882E+22	6,336812E+22	1,521795E+23	1,267369E+23	2,789164E+23
2874	7,609173E+22	7,609170E+22	6,336826E+22	6,336845E+22	1,521834E+23	1,267367E+23	2,789202E+23
2875	7,609059E+22	7,608800E+22	6,336723E+22	6,336703E+22	1,521786E+23	1,267343E+23	2,789129E+23
2876	7,608971E+22	7,609173E+22	6,336782E+22	6,336667E+22	1,521814E+23	1,267345E+23	2,789159E+23
2877	7,609086E+22	7,609130E+22	6,336626E+22	6,336726E+22	1,521822E+23	1,267335E+23	2,789157E+23
2878	7,608893E+22	7,608825E+22	6,336664E+22	6,336596E+22	1,521772E+23	1,267326E+23	2,789098E+23
2879	7,608950E+22	7,609168E+22	6,336735E+22	6,336630E+22	1,521812E+23	1,267337E+23	2,789148E+23
2880	7,609035E+22	7,608877E+22	6,336572E+22	6,336623E+22	1,521791E+23	1,267319E+23	2,789111E+23



1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude <sup>⊙</sup>	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2881	7,608906E+22	7,608865E+22	6,336640E+22	6,336600E+22	1,521777E+23	1,267324E+23	2,789101E+23
2882	7,609053E+22	7,609178E+22	6,336650E+22	6,336737E+22	1,521823E+23	1,267339E+23	2,789162E+23
2883	7,608996E+22	7,608844E+22	6,336591E+22	6,336690E+22	1,521784E+23	1,267328E+23	2,789112E+23
2884	7,608898E+22	7,609095E+22	6,336795E+22	6,336682E+22	1,521799E+23	1,267348E+23	2,789147E+23
2885	7,609129E+22	7,609136E+22	6,336787E+22	6,336830E+22	1,521827E+23	1,267362E+23	2,789188E+23
2886	7,609014E+22	7,608793E+22	6,336869E+22	6,336789E+22	1,521781E+23	1,267366E+23	2,789146E+23
2887	7,608976E+22	7,609171E+22	6,337021E+22	6,336903E+22	1,521815E+23	1,267392E+23	2,789207E+23
2888	7,609081E+22	7,609051E+22	6,336876E+22	6,337003E+22	1,521813E+23	1,267388E+23	2,789201E+23
2889	7,608913E+22	7,608919E+22	6,336949E+22	6,336978E+22	1,521783E+23	1,267393E+23	2,789176E+23
2890	7,609035E+22	7,609216E+22	6,337035E+22	6,337050E+22	1,521825E+23	1,267408E+23	2,789234E+23
2891	7,609110E+22	7,608871E+22	6,336914E+22	6,336940E+22	1,521798E+23	1,267385E+23	2,789183E+23
2892	7,608974E+22	7,609005E+22	6,337004E+22	6,336853E+22	1,521798E+23	1,267386E+23	2,789184E+23
2893	7,609170E+22	7,609182E+22	6,336893E+22	6,336950E+22	1,521835E+23	1,267384E+23	2,789220E+23
2894	7,609017E+22	7,608855E+22	6,336815E+22	6,336821E+22	1,521787E+23	1,267364E+23	2,789151E+23
2895	7,608861E+22	7,609173E+22	6,336924E+22	6,336796E+22	1,521803E+23	1,267372E+23	2,789175E+23
2896	7,609034E+22	7,609097E+22	6,336748E+22	6,336810E+22	1,521813E+23	1,267356E+23	2,789169E+23
2897	7,608907E+22	7,608798E+22	6,336758E+22	6,336726E+22	1,521771E+23	1,267348E+23	2,789119E+23
2898	7,608964E+22	7,609094E+22	6,336852E+22	6,336783E+22	1,521806E+23	1,267364E+23	2,789169E+23
2899	7,609078E+22	7,608863E+22	6,336673E+22	6,336748E+22	1,521794E+23	1,267342E+23	2,789136E+23
2900	7,608877E+22	7,608932E+22	6,336743E+22	6,336719E+22	1,521781E+23	1,267346E+23	2,789127E+23
2901	7,609065E+22	7,609187E+22	6,336748E+22	6,336866E+22	1,521825E+23	1,267361E+23	2,789187E+23
2902	7,609039E+22	7,608832E+22	6,336757E+22	6,336783E+22	1,521787E+23	1,267354E+23	2,789141E+23
2903	7,608891E+22	7,609056E+22	6,336997E+22	6,336794E+22	1,521795E+23	1,267379E+23	2,789174E+23
2904	7,609120E+22	7,609126E+22	6,336914E+22	6,336939E+22	1,521825E+23	1,267385E+23	2,789210E+23
2905	7,608979E+22	7,608835E+22	6,336955E+22	6,336975E+22	1,521781E+23	1,267393E+23	2,789174E+23
2906	7,608906E+22	7,609163E+22	6,337141E+22	6,337096E+22	1,521807E+23	1,267424E+23	2,789231E+23
2907	7,609076E+22	7,609029E+22	6,337012E+22	6,337122E+22	1,521811E+23	1,267413E+23	2,789224E+23
2908	7,608912E+22	7,608916E+22	6,337101E+22	6,337054E+22	1,521783E+23	1,267416E+23	2,789198E+23
2909	7,609100E+22	7,609162E+22	6,337137E+22	6,337148E+22	1,521826E+23	1,267429E+23	2,789255E+23
2910	7,609162E+22	7,608869E+22	6,337029E+22	6,337033E+22	1,521803E+23	1,267406E+23	2,789209E+23
2911	7,608921E+22	7,609028E+22	6,337123E+22	6,336979E+22	1,521795E+23	1,267410E+23	2,789205E+23
2912	7,609091E+22	7,609226E+22	6,336960E+22	6,337056E+22	1,521832E+23	1,267402E+23	2,789233E+23
2913	7,608968E+22	7,608888E+22	6,336893E+22	6,336957E+22	1,521786E+23	1,267385E+23	2,789171E+23
2914	7,608838E+22	7,609080E+22	6,337067E+22	6,336915E+22	1,521792E+23	1,267398E+23	2,789190E+23
2915	7,609084E+22	7,609014E+22	6,336883E+22	6,336886E+22	1,521810E+23	1,267377E+23	2,789187E+23
2916	7,608924E+22	7,608796E+22	6,336861E+22	6,336811E+22	1,521772E+23	1,267367E+23	2,789139E+23
2917	7,608989E+22	7,609080E+22	6,336903E+22	6,336927E+22	1,521807E+23	1,267383E+23	2,789190E+23
2918	7,609086E+22	7,608916E+22	6,336769E+22	6,336870E+22	1,521800E+23	1,267364E+23	2,789164E+23
2919	7,608832E+22	7,608948E+22	6,336898E+22	6,336829E+22	1,521778E+23	1,267373E+23	2,789151E+23
2920	7,609041E+22	7,609180E+22	6,336897E+22	6,336941E+22	1,521822E+23	1,267384E+23	2,789206E+23
2921	7,609051E+22	7,608850E+22	6,336894E+22	6,336921E+22	1,521790E+23	1,267381E+23	2,789172E+23
2922	7,608861E+22	7,608995E+22	6,337165E+22	6,336975E+22	1,521786E+23	1,267414E+23	2,789200E+23
2923	7,609097E+22	7,609119E+22	6,337055E+22	6,337106E+22	1,521822E+23	1,267416E+23	2,789238E+23
2924	7,608925E+22	7,608880E+22	6,337072E+22	6,337131E+22	1,521781E+23	1,267420E+23	2,789201E+23
2925	7,608924E+22	7,609112E+22	6,337239E+22	6,337250E+22	1,521804E+23	1,267449E+23	2,789253E+23
2926	7,609148E+22	7,608989E+22	6,337149E+22	6,337208E+22	1,521814E+23	1,267436E+23	2,789249E+23
2927	7,608940E+22	7,608883E+22	6,337243E+22	6,337139E+22	1,521782E+23	1,267438E+23	2,789220E+23
2928	7,609099E+22	7,609179E+22	6,337217E+22	6,337220E+22	1,521828E+23	1,267444E+23	2,789271E+23
2929	7,609126E+22	7,608959E+22	6,337087E+22	6,337166E+22	1,521808E+23	1,267425E+23	2,789234E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude $\odot$	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2930	7,608829E+22	7,609034E+22	6,337250E+22	6,337121E+22	1,521786E+23	1,267437E+23	2,789223E+23
2931	7,609047E+22	7,609205E+22	6,337108E+22	6,337143E+22	1,521825E+23	1,267425E+23	2,789250E+23
2932	7,608944E+22	7,608858E+22	6,337049E+22	6,337038E+22	1,521780E+23	1,267409E+23	2,789189E+23
2933	7,608893E+22	7,608977E+22	6,337167E+22	6,337046E+22	1,521787E+23	1,267421E+23	2,789208E+23
2934	7,609147E+22	7,608965E+22	6,336979E+22	6,337009E+22	1,521811E+23	1,267399E+23	2,789210E+23
2935	7,608902E+22	7,608813E+22	6,336947E+22	6,336953E+22	1,521772E+23	1,267390E+23	2,789162E+23
2936	7,608958E+22	7,609131E+22	6,336944E+22	6,337024E+22	1,521809E+23	1,267397E+23	2,789206E+23
2937	7,609076E+22	7,608969E+22	6,336855E+22	6,336979E+22	1,521805E+23	1,267383E+23	2,789188E+23
2938	7,608821E+22	7,608895E+22	6,337087E+22	6,336933E+22	1,521772E+23	1,267402E+23	2,789174E+23
2939	7,609055E+22	7,609144E+22	6,337074E+22	6,337029E+22	1,521820E+23	1,267410E+23	2,789230E+23
2940	7,609015E+22	7,608874E+22	6,337054E+22	6,337057E+22	1,521789E+23	1,267411E+23	2,789200E+23
2941	7,608839E+22	7,608970E+22	6,337265E+22	6,337181E+22	1,521781E+23	1,267445E+23	2,789225E+23
2942	7,609082E+22	7,609117E+22	6,337184E+22	6,337273E+22	1,521820E+23	1,267446E+23	2,789266E+23
2943	7,608899E+22	7,608859E+22	6,337227E+22	6,337267E+22	1,521776E+23	1,267449E+23	2,789225E+23
2944	7,608949E+22	7,609081E+22	6,337346E+22	6,337333E+22	1,521803E+23	1,267468E+23	2,789271E+23
2945	7,609200E+22	7,609013E+22	6,337245E+22	6,337325E+22	1,521821E+23	1,267457E+23	2,789278E+23
2946	7,608938E+22	7,608863E+22	6,337382E+22	6,337273E+22	1,521780E+23	1,267465E+23	2,789246E+23
2947	7,609064E+22	7,609216E+22	6,337332E+22	6,337328E+22	1,521828E+23	1,267466E+23	2,789294E+23
2948	7,609055E+22	7,609022E+22	6,337209E+22	6,337273E+22	1,521808E+23	1,267448E+23	2,789256E+23
2949	7,608824E+22	7,608952E+22	6,337364E+22	6,337251E+22	1,521778E+23	1,267461E+23	2,789239E+23
2950	7,609091E+22	7,609124E+22	6,337250E+22	6,337226E+22	1,521822E+23	1,267448E+23	2,789269E+23
2951	7,608962E+22	7,608799E+22	6,337156E+22	6,337135E+22	1,521776E+23	1,267429E+23	2,789205E+23
2952	7,608893E+22	7,608963E+22	6,337194E+22	6,337142E+22	1,521786E+23	1,267434E+23	2,789219E+23
2953	7,609133E+22	7,609050E+22	6,336999E+22	6,337141E+22	1,521818E+23	1,267414E+23	2,789232E+23
2954	7,608848E+22	7,608825E+22	6,337061E+22	6,337073E+22	1,521767E+23	1,267413E+23	2,789181E+23
2955	7,608933E+22	7,609143E+22	6,337104E+22	6,337084E+22	1,521808E+23	1,267419E+23	2,789226E+23
2956	7,609061E+22	7,608991E+22	6,337043E+22	6,337055E+22	1,521805E+23	1,267410E+23	2,789215E+23
2957	7,608843E+22	7,608818E+22	6,337246E+22	6,337095E+22	1,521766E+23	1,267434E+23	2,789200E+23
2958	7,609059E+22	7,609110E+22	6,337235E+22	6,337199E+22	1,521817E+23	1,267443E+23	2,789260E+23
2959	7,608957E+22	7,608876E+22	6,337184E+22	6,337259E+22	1,521783E+23	1,267444E+23	2,789227E+23
2960	7,608809E+22	7,608964E+22	6,337335E+22	6,337339E+22	1,521777E+23	1,267467E+23	2,789245E+23
2961	7,609118E+22	7,609121E+22	6,337276E+22	6,337409E+22	1,521824E+23	1,267468E+23	2,789292E+23
2962	7,608946E+22	7,608798E+22	6,337389E+22	6,337367E+22	1,521774E+23	1,267476E+23	2,789250E+23
2963	7,609003E+22	7,609083E+22	6,337479E+22	6,337392E+22	1,521809E+23	1,267487E+23	2,789296E+23
2964	7,609182E+22	7,609090E+22	6,337376E+22	6,337416E+22	1,521827E+23	1,267479E+23	2,789306E+23
2965	7,608903E+22	7,608879E+22	6,337488E+22	6,337433E+22	1,521778E+23	1,267492E+23	2,789270E+23
2966	7,609016E+22	7,609214E+22	6,337475E+22	6,337446E+22	1,521823E+23	1,267492E+23	2,789315E+23
2967	7,608992E+22	7,608982E+22	6,337372E+22	6,337390E+22	1,521797E+23	1,267476E+23	2,789274E+23
2968	7,608825E+22	7,608881E+22	6,337441E+22	6,337339E+22	1,521771E+23	1,267478E+23	2,789249E+23
2969	7,609127E+22	7,609094E+22	6,337301E+22	6,337352E+22	1,521822E+23	1,267465E+23	2,789287E+23
2970	7,608959E+22	7,608765E+22	6,337246E+22	6,337268E+22	1,521772E+23	1,267451E+23	2,789224E+23
2971	7,608879E+22	7,609012E+22	6,337247E+22	6,337233E+22	1,521789E+23	1,267448E+23	2,789237E+23
2972	7,609096E+22	7,609130E+22	6,337105E+22	6,337217E+22	1,521823E+23	1,267432E+23	2,789255E+23
2973	7,608869E+22	7,608778E+22	6,337201E+22	6,337175E+22	1,521765E+23	1,267438E+23	2,789202E+23
2974	7,608964E+22	7,609086E+22	6,337292E+22	6,337157E+22	1,521805E+23	1,267445E+23	2,789250E+23
2975	7,609039E+22	7,608962E+22	6,337215E+22	6,337186E+22	1,521800E+23	1,267440E+23	2,789240E+23
2976	7,608808E+22	7,608802E+22	6,337326E+22	6,337254E+22	1,521761E+23	1,267458E+23	2,789219E+23
2977	7,609025E+22	7,609153E+22	6,337305E+22	6,337395E+22	1,521818E+23	1,267470E+23	2,789288E+23
2978	7,608922E+22	7,608851E+22	6,337328E+22	6,337426E+22	1,521777E+23	1,267475E+23	2,789253E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude ☉	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2979	7,608830E+22	7,608953E+22	6,337475E+22	6,337430E+22	1,521778E+23	1,267491E+23	2,789269E+23
2980	7,609159E+22	7,609147E+22	6,337439E+22	6,337490E+22	1,521831E+23	1,267493E+23	2,789324E+23
2981	7,609006E+22	7,608755E+22	6,337527E+22	6,337508E+22	1,521776E+23	1,267503E+23	2,789280E+23
2982	7,609010E+22	7,609100E+22	6,337631E+22	6,337515E+22	1,521811E+23	1,267515E+23	2,789326E+23
2983	7,609105E+22	7,609143E+22	6,337502E+22	6,337565E+22	1,521825E+23	1,267507E+23	2,789332E+23
2984	7,608833E+22	7,608866E+22	6,337564E+22	6,337559E+22	1,521770E+23	1,267512E+23	2,789282E+23
2985	7,609007E+22	7,609186E+22	6,337570E+22	6,337560E+22	1,521819E+23	1,267513E+23	2,789332E+23
2986	7,609004E+22	7,608881E+22	6,337502E+22	6,337492E+22	1,521788E+23	1,267499E+23	2,789288E+23
2987	7,608856E+22	7,608854E+22	6,337510E+22	6,337409E+22	1,521771E+23	1,267492E+23	2,789263E+23
2988	7,609123E+22	7,609154E+22	6,337369E+22	6,337435E+22	1,521828E+23	1,267480E+23	2,789308E+23
2989	7,608951E+22	7,608779E+22	6,337314E+22	6,337393E+22	1,521773E+23	1,267471E+23	2,789244E+23
2990	7,608867E+22	7,609028E+22	6,337389E+22	6,337297E+22	1,521789E+23	1,267469E+23	2,789258E+23
2991	7,609058E+22	7,609126E+22	6,337285E+22	6,337299E+22	1,521818E+23	1,267458E+23	2,789277E+23
2992	7,608862E+22	7,608731E+22	6,337327E+22	6,337281E+22	1,521759E+23	1,267461E+23	2,789220E+23
2993	7,608966E+22	7,609070E+22	6,337405E+22	6,337322E+22	1,521804E+23	1,267473E+23	2,789276E+23
2994	7,608997E+22	7,608927E+22	6,337356E+22	6,337386E+22	1,521792E+23	1,267474E+23	2,789267E+23
2995	7,608779E+22	7,608831E+22	6,337407E+22	6,337411E+22	1,521761E+23	1,267482E+23	2,789243E+23
2996	7,609021E+22	7,609183E+22	6,337431E+22	6,337521E+22	1,521820E+23	1,267495E+23	2,789316E+23
2997	7,608989E+22	7,608794E+22	6,337471E+22	6,337551E+22	1,521778E+23	1,267502E+23	2,789281E+23
2998	7,608916E+22	7,608920E+22	6,337635E+22	6,337498E+22	1,521784E+23	1,267513E+23	2,789297E+23
2999	7,609156E+22	7,609169E+22	6,337595E+22	6,337601E+22	1,521832E+23	1,267520E+23	2,789352E+23