

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-3000	5,087549E+22	5,087361E+22	1,983398E+22	1,983490E+22	1,017491E+23	3,966888E+22	1,414180E+23
-2999	5,087205E+22	5,087433E+22	1,983564E+22	1,983479E+22	1,017464E+23	3,967043E+22	1,414168E+23
-2998	5,087319E+22	5,087366E+22	1,983580E+22	1,983653E+22	1,017469E+23	3,967233E+22	1,414192E+23
-2997	5,087325E+22	5,087205E+22	1,983599E+22	1,983597E+22	1,017453E+23	3,967196E+22	1,414173E+23
-2996	5,087062E+22	5,087199E+22	1,983766E+22	1,983668E+22	1,017426E+23	3,967434E+22	1,414169E+23
-2995	5,087259E+22	5,087102E+22	1,983698E+22	1,983805E+22	1,017436E+23	3,967503E+22	1,414186E+23
-2994	5,087085E+22	5,087092E+22	1,983748E+22	1,983723E+22	1,017418E+23	3,967472E+22	1,414165E+23
-2993	5,087010E+22	5,087129E+22	1,983812E+22	1,983822E+22	1,017414E+23	3,967634E+22	1,414177E+23
-2992	5,087245E+22	5,087049E+22	1,983696E+22	1,983810E+22	1,017429E+23	3,967506E+22	1,414180E+23
-2991	5,087003E+22	5,087129E+22	1,983793E+22	1,983677E+22	1,017413E+23	3,967470E+22	1,414160E+23
-2990	5,087141E+22	5,087184E+22	1,983758E+22	1,983760E+22	1,017433E+23	3,967517E+22	1,414184E+23
-2989	5,087265E+22	5,087139E+22	1,983642E+22	1,983653E+22	1,017440E+23	3,967295E+22	1,414170E+23
-2988	5,087014E+22	5,087243E+22	1,983705E+22	1,983609E+22	1,017426E+23	3,967314E+22	1,414157E+23
-2987	5,087269E+22	5,087243E+22	1,983579E+22	1,983683E+22	1,017451E+23	3,967262E+22	1,414177E+23
-2986	5,087261E+22	5,087242E+22	1,983536E+22	1,983519E+22	1,017450E+23	3,967056E+22	1,414156E+23
-2985	5,087212E+22	5,087310E+22	1,983584E+22	1,983534E+22	1,017452E+23	3,967118E+22	1,414164E+23
-2984	5,087501E+22	5,087264E+22	1,983458E+22	1,983559E+22	1,017476E+23	3,967017E+22	1,414178E+23
-2983	5,087266E+22	5,087319E+22	1,983537E+22	1,983463E+22	1,017459E+23	3,966999E+22	1,414158E+23
-2982	5,087257E+22	5,087381E+22	1,983582E+22	1,983597E+22	1,017464E+23	3,967179E+22	1,414182E+23
-2981	5,087386E+22	5,087270E+22	1,983525E+22	1,983604E+22	1,017466E+23	3,967129E+22	1,414179E+23
-2980	5,087073E+22	5,087247E+22	1,983688E+22	1,983597E+22	1,017432E+23	3,967285E+22	1,414160E+23
-2979	5,087211E+22	5,087179E+22	1,983706E+22	1,983756E+22	1,017439E+23	3,967462E+22	1,414185E+23
-2978	5,087196E+22	5,087068E+22	1,983719E+22	1,983720E+22	1,017426E+23	3,967439E+22	1,414170E+23
-2977	5,086956E+22	5,087078E+22	1,983852E+22	1,983791E+22	1,017403E+23	3,967643E+22	1,414168E+23
-2976	5,087152E+22	5,087015E+22	1,983778E+22	1,983920E+22	1,017417E+23	3,967698E+22	1,414187E+23
-2975	5,086953E+22	5,086981E+22	1,983852E+22	1,983832E+22	1,017393E+23	3,967684E+22	1,414162E+23
-2974	5,086894E+22	5,087054E+22	1,983918E+22	1,983895E+22	1,017395E+23	3,967813E+22	1,414176E+23
-2973	5,087152E+22	5,086967E+22	1,983816E+22	1,983883E+22	1,017412E+23	3,967699E+22	1,414182E+23
-2972	5,086901E+22	5,086986E+22	1,983890E+22	1,983771E+22	1,017389E+23	3,967662E+22	1,414155E+23
-2971	5,087010E+22	5,087066E+22	1,983840E+22	1,983854E+22	1,017408E+23	3,967695E+22	1,414177E+23
-2970	5,087125E+22	5,087049E+22	1,983718E+22	1,983760E+22	1,017417E+23	3,967478E+22	1,414165E+23
-2969	5,086937E+22	5,087120E+22	1,983758E+22	1,983689E+22	1,017406E+23	3,967447E+22	1,414150E+23
-2968	5,087230E+22	5,087137E+22	1,983640E+22	1,983740E+22	1,017437E+23	3,967379E+22	1,414175E+23
-2967	5,087202E+22	5,087120E+22	1,983624E+22	1,983586E+22	1,017432E+23	3,967210E+22	1,414153E+23
-2966	5,087115E+22	5,087256E+22	1,983674E+22	1,983602E+22	1,017437E+23	3,967276E+22	1,414165E+23
-2965	5,087375E+22	5,087226E+22	1,983564E+22	1,983658E+22	1,017460E+23	3,967222E+22	1,414182E+23
-2964	5,087121E+22	5,087196E+22	1,983640E+22	1,983589E+22	1,017432E+23	3,967229E+22	1,414155E+23
-2963	5,087109E+22	5,087245E+22	1,983699E+22	1,983708E+22	1,017435E+23	3,967407E+22	1,414176E+23
-2962	5,087249E+22	5,087134E+22	1,983653E+22	1,983718E+22	1,017438E+23	3,967371E+22	1,414175E+23
-2961	5,086991E+22	5,087074E+22	1,983796E+22	1,983707E+22	1,017407E+23	3,967503E+22	1,414157E+23
-2960	5,087118E+22	5,087043E+22	1,983807E+22	1,983871E+22	1,017416E+23	3,967678E+22	1,414184E+23
-2959	5,087041E+22	5,086933E+22	1,983827E+22	1,983858E+22	1,017397E+23	3,967685E+22	1,414166E+23
-2958	5,086799E+22	5,086998E+22	1,983951E+22	1,983909E+22	1,017380E+23	3,967860E+22	1,414166E+23
-2957	5,087029E+22	5,086928E+22	1,983895E+22	1,984022E+22	1,017396E+23	3,967917E+22	1,414187E+23
-2956	5,086860E+22	5,086827E+22	1,983962E+22	1,983925E+22	1,017369E+23	3,967886E+22	1,414157E+23
-2955	5,086811E+22	5,086921E+22	1,984027E+22	1,983965E+22	1,017373E+23	3,967992E+22	1,414172E+23
-2954	5,087031E+22	5,086880E+22	1,983915E+22	1,983969E+22	1,017391E+23	3,967884E+22	1,414180E+23
-2953	5,086802E+22	5,086890E+22	1,983954E+22	1,983866E+22	1,017369E+23	3,967820E+22	1,414151E+23
-2952	5,086910E+22	5,086978E+22	1,983897E+22	1,983937E+22	1,017389E+23	3,967834E+22	1,414172E+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							
-2951	5,087004E+22	5,086934E+22	1,983797E+22	1,983846E+22	1,017394E+23	3,967642E+22	1,414158E+23
-2950	5,086855E+22	5,087041E+22	1,983837E+22	1,983748E+22	1,017390E+23	3,967584E+22	1,414148E+23
-2949	5,087171E+22	5,087053E+22	1,983739E+22	1,983807E+22	1,017422E+23	3,967546E+22	1,414177E+23
-2948	5,087113E+22	5,086995E+22	1,983712E+22	1,983685E+22	1,017411E+23	3,967397E+22	1,414151E+23
-2947	5,086987E+22	5,087155E+22	1,983765E+22	1,983703E+22	1,017414E+23	3,967468E+22	1,414161E+23
-2946	5,087218E+22	5,087141E+22	1,983666E+22	1,983773E+22	1,017436E+23	3,967439E+22	1,414180E+23
-2945	5,087018E+22	5,087060E+22	1,983732E+22	1,983696E+22	1,017408E+23	3,967428E+22	1,414151E+23
-2944	5,087021E+22	5,087104E+22	1,983802E+22	1,983797E+22	1,017413E+23	3,967600E+22	1,414173E+23
-2943	5,087130E+22	5,086978E+22	1,983777E+22	1,983831E+22	1,017411E+23	3,967608E+22	1,414172E+23
-2942	5,086857E+22	5,086974E+22	1,983906E+22	1,983817E+22	1,017383E+23	3,967724E+22	1,414156E+23
-2941	5,086983E+22	5,086954E+22	1,983925E+22	1,984000E+22	1,017394E+23	3,967925E+22	1,414186E+23
-2940	5,086905E+22	5,086787E+22	1,983937E+22	1,983994E+22	1,017369E+23	3,967931E+22	1,414162E+23
-2939	5,086675E+22	5,086865E+22	1,984068E+22	1,984008E+22	1,017354E+23	3,968077E+22	1,414162E+23
-2938	5,086922E+22	5,086818E+22	1,984021E+22	1,984112E+22	1,017374E+23	3,968133E+22	1,414187E+23
-2937	5,086792E+22	5,086688E+22	1,984060E+22	1,984009E+22	1,017348E+23	3,968069E+22	1,414155E+23
-2936	5,086705E+22	5,086821E+22	1,984111E+22	1,984049E+22	1,017353E+23	3,968160E+22	1,414169E+23
-2935	5,086868E+22	5,086776E+22	1,984000E+22	1,984080E+22	1,017364E+23	3,968080E+22	1,414172E+23
-2934	5,086652E+22	5,086811E+22	1,984025E+22	1,983954E+22	1,017346E+23	3,967979E+22	1,414144E+23
-2933	5,086815E+22	5,086886E+22	1,983984E+22	1,984016E+22	1,017370E+23	3,967999E+22	1,414170E+23
-2932	5,086941E+22	5,086783E+22	1,983878E+22	1,983922E+22	1,017372E+23	3,967800E+22	1,414152E+23
-2931	5,086799E+22	5,086928E+22	1,983919E+22	1,983811E+22	1,017373E+23	3,967730E+22	1,414146E+23
-2930	5,087077E+22	5,086994E+22	1,983825E+22	1,983892E+22	1,017407E+23	3,967716E+22	1,414179E+23
-2929	5,087026E+22	5,086915E+22	1,983778E+22	1,983785E+22	1,017394E+23	3,967563E+22	1,414150E+23
-2928	5,086878E+22	5,087076E+22	1,983845E+22	1,983794E+22	1,017395E+23	3,967639E+22	1,414159E+23
-2927	5,087072E+22	5,087023E+22	1,983780E+22	1,983877E+22	1,017409E+23	3,967656E+22	1,414175E+23
-2926	5,086899E+22	5,086948E+22	1,983851E+22	1,983785E+22	1,017385E+23	3,967637E+22	1,414148E+23
-2925	5,086920E+22	5,086974E+22	1,983936E+22	1,983907E+22	1,017389E+23	3,967842E+22	1,414174E+23
-2924	5,086993E+22	5,086809E+22	1,983893E+22	1,983974E+22	1,017380E+23	3,967867E+22	1,414167E+23
-2923	5,086713E+22	5,086836E+22	1,984013E+22	1,983951E+22	1,017355E+23	3,967964E+22	1,414151E+23
-2922	5,086834E+22	5,086840E+22	1,984038E+22	1,984124E+22	1,017367E+23	3,968162E+22	1,414184E+23
-2921	5,086820E+22	5,086647E+22	1,984036E+22	1,984097E+22	1,017347E+23	3,968133E+22	1,414160E+23
-2920	5,086603E+22	5,086741E+22	1,984173E+22	1,984081E+22	1,017334E+23	3,968253E+22	1,414160E+23
-2919	5,086790E+22	5,086701E+22	1,984140E+22	1,984204E+22	1,017349E+23	3,968344E+22	1,414183E+23
-2918	5,086641E+22	5,086625E+22	1,984158E+22	1,984101E+22	1,017327E+23	3,968259E+22	1,414152E+23
-2917	5,086559E+22	5,086743E+22	1,984207E+22	1,984157E+22	1,017330E+23	3,968364E+22	1,414167E+23
-2916	5,086726E+22	5,086635E+22	1,984081E+22	1,984193E+22	1,017336E+23	3,968275E+22	1,414164E+23
-2915	5,086559E+22	5,086677E+22	1,984104E+22	1,984031E+22	1,017324E+23	3,968136E+22	1,414137E+23
-2914	5,086755E+22	5,086777E+22	1,984072E+22	1,984084E+22	1,017353E+23	3,968156E+22	1,414169E+23
-2913	5,086918E+22	5,086669E+22	1,983944E+22	1,983994E+22	1,017359E+23	3,967939E+22	1,414153E+23
-2912	5,086728E+22	5,086859E+22	1,983983E+22	1,983883E+22	1,017359E+23	3,967866E+22	1,414145E+23
-2911	5,086929E+22	5,086926E+22	1,983911E+22	1,983991E+22	1,017386E+23	3,967902E+22	1,414176E+23
-2910	5,086881E+22	5,086854E+22	1,983870E+22	1,983871E+22	1,017373E+23	3,967741E+22	1,414147E+23
-2909	5,086765E+22	5,086974E+22	1,983964E+22	1,983886E+22	1,017374E+23	3,967850E+22	1,414159E+23
-2908	5,086960E+22	5,086849E+22	1,983899E+22	1,983983E+22	1,017381E+23	3,967883E+22	1,414169E+23
-2907	5,086787E+22	5,086792E+22	1,983967E+22	1,983891E+22	1,017358E+23	3,967859E+22	1,414144E+23
-2906	5,086789E+22	5,086862E+22	1,984050E+22	1,984034E+22	1,017365E+23	3,968084E+22	1,414174E+23
-2905	5,086886E+22	5,086674E+22	1,983982E+22	1,984107E+22	1,017356E+23	3,968089E+22	1,414165E+23
-2904	5,086597E+22	5,086725E+22	1,984109E+22	1,984059E+22	1,017332E+23	3,968168E+22	1,414149E+23
-2903	5,086695E+22	5,086724E+22	1,984162E+22	1,984231E+22	1,017342E+23	3,968393E+22	1,414181E+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	5,086701E+22	5,086550E+22	1,984161E+22	1,984181E+22	1,017325E+23	3,968342E+22	1,414159E+23
-2901	5,086485E+22	5,086639E+22	1,984304E+22	1,984184E+22	1,017312E+23	3,968488E+22	1,414161E+23
-2900	5,086620E+22	5,086556E+22	1,984247E+22	1,984332E+22	1,017318E+23	3,968579E+22	1,414176E+23
-2899	5,086480E+22	5,086492E+22	1,984247E+22	1,984217E+22	1,017297E+23	3,968464E+22	1,414144E+23
-2898	5,086433E+22	5,086622E+22	1,984293E+22	1,984258E+22	1,017305E+23	3,968551E+22	1,414161E+23
-2897	5,086681E+22	5,086490E+22	1,984145E+22	1,984272E+22	1,017317E+23	3,968416E+22	1,414159E+23
-2896	5,086541E+22	5,086571E+22	1,984167E+22	1,984079E+22	1,017311E+23	3,968246E+22	1,414136E+23
-2895	5,086679E+22	5,086705E+22	1,984151E+22	1,984150E+22	1,017338E+23	3,968302E+22	1,414169E+23
-2894	5,086811E+22	5,086653E+22	1,984019E+22	1,984062E+22	1,017346E+23	3,968081E+22	1,414155E+23
-2893	5,086612E+22	5,086820E+22	1,984077E+22	1,983974E+22	1,017343E+23	3,968051E+22	1,414148E+23
-2892	5,086770E+22	5,086810E+22	1,984013E+22	1,984095E+22	1,017358E+23	3,968108E+22	1,414169E+23
-2891	5,086760E+22	5,086718E+22	1,983981E+22	1,983964E+22	1,017348E+23	3,967946E+22	1,414142E+23
-2890	5,086663E+22	5,086822E+22	1,984084E+22	1,983985E+22	1,017349E+23	3,968069E+22	1,414156E+23
-2889	5,086880E+22	5,086682E+22	1,983993E+22	1,984104E+22	1,017356E+23	3,968097E+22	1,414166E+23
-2888	5,086683E+22	5,086665E+22	1,984049E+22	1,984009E+22	1,017335E+23	3,968058E+22	1,414141E+23
-2887	5,086627E+22	5,086749E+22	1,984149E+22	1,984167E+22	1,017338E+23	3,968316E+22	1,414169E+23
-2886	5,086745E+22	5,086591E+22	1,984090E+22	1,984211E+22	1,017334E+23	3,968301E+22	1,414164E+23
-2885	5,086495E+22	5,086618E+22	1,984242E+22	1,984158E+22	1,017311E+23	3,968400E+22	1,414151E+23
-2884	5,086562E+22	5,086569E+22	1,984297E+22	1,984337E+22	1,017313E+23	3,968634E+22	1,414176E+23
-2883	5,086564E+22	5,086419E+22	1,984285E+22	1,984289E+22	1,017298E+23	3,968573E+22	1,414156E+23
-2882	5,086331E+22	5,086526E+22	1,984416E+22	1,984306E+22	1,017286E+23	3,968723E+22	1,414158E+23
-2881	5,086499E+22	5,086415E+22	1,984325E+22	1,984455E+22	1,017291E+23	3,968780E+22	1,414169E+23
-2880	5,086387E+22	5,086367E+22	1,984317E+22	1,984304E+22	1,017275E+23	3,968621E+22	1,414137E+23
-2879	5,086344E+22	5,086509E+22	1,984381E+22	1,984336E+22	1,017285E+23	3,968717E+22	1,414157E+23
-2878	5,086624E+22	5,086418E+22	1,984231E+22	1,984323E+22	1,017304E+23	3,968554E+22	1,414160E+23
-2877	5,086479E+22	5,086518E+22	1,984260E+22	1,984153E+22	1,017300E+23	3,968413E+22	1,414141E+23
-2876	5,086538E+22	5,086623E+22	1,984236E+22	1,984248E+22	1,017316E+23	3,968484E+22	1,414164E+23
-2875	5,086659E+22	5,086567E+22	1,984103E+22	1,984155E+22	1,017323E+23	3,968259E+22	1,414148E+23
-2874	5,086481E+22	5,086711E+22	1,984176E+22	1,984070E+22	1,017319E+23	3,968246E+22	1,414144E+23
-2873	5,086692E+22	5,086647E+22	1,984098E+22	1,984186E+22	1,017334E+23	3,968283E+22	1,414162E+23
-2872	5,086693E+22	5,086571E+22	1,984066E+22	1,984045E+22	1,017326E+23	3,968111E+22	1,414137E+23
-2871	5,086552E+22	5,086707E+22	1,984179E+22	1,984096E+22	1,017326E+23	3,968274E+22	1,414153E+23
-2870	5,086755E+22	5,086610E+22	1,984082E+22	1,984211E+22	1,017337E+23	3,968294E+22	1,414166E+23
-2869	5,086568E+22	5,086589E+22	1,984155E+22	1,984131E+22	1,017316E+23	3,968286E+22	1,414144E+23
-2868	5,086474E+22	5,086618E+22	1,984269E+22	1,984285E+22	1,017309E+23	3,968554E+22	1,414165E+23
-2867	5,086619E+22	5,086457E+22	1,984225E+22	1,984311E+22	1,017308E+23	3,968536E+22	1,414161E+23
-2866	5,086380E+22	5,086477E+22	1,984390E+22	1,984268E+22	1,017286E+23	3,968658E+22	1,414151E+23
-2865	5,086439E+22	5,086410E+22	1,984410E+22	1,984462E+22	1,017285E+23	3,968872E+22	1,414172E+23
-2864	5,086423E+22	5,086287E+22	1,984376E+22	1,984410E+22	1,017271E+23	3,968785E+22	1,414150E+23
-2863	5,086168E+22	5,086398E+22	1,984507E+22	1,984430E+22	1,017257E+23	3,968937E+22	1,414150E+23
-2862	5,086387E+22	5,086315E+22	1,984411E+22	1,984538E+22	1,017270E+23	3,968949E+22	1,414165E+23
-2861	5,086338E+22	5,086270E+22	1,984412E+22	1,984377E+22	1,017261E+23	3,968789E+22	1,414140E+23
-2860	5,086256E+22	5,086393E+22	1,984473E+22	1,984409E+22	1,017265E+23	3,968882E+22	1,414153E+23
-2859	5,086526E+22	5,086350E+22	1,984319E+22	1,984399E+22	1,017288E+23	3,968718E+22	1,414159E+23
-2858	5,086358E+22	5,086454E+22	1,984348E+22	1,984245E+22	1,017281E+23	3,968593E+22	1,414140E+23
-2857	5,086417E+22	5,086516E+22	1,984304E+22	1,984345E+22	1,017293E+23	3,968649E+22	1,414158E+23
-2856	5,086561E+22	5,086451E+22	1,984175E+22	1,984233E+22	1,017301E+23	3,968408E+22	1,414142E+23
-2855	5,086377E+22	5,086576E+22	1,984270E+22	1,984156E+22	1,017295E+23	3,968426E+22	1,414138E+23
-2854	5,086612E+22	5,086538E+22	1,984193E+22	1,984263E+22	1,017315E+23	3,968456E+22	1,414161E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2853	5,086613E+22	5,086474E+22	1,984163E+22	1,984154E+22	1,017309E+23	3,968317E+22	1,414140E+23
-2852	5,086398E+22	5,086586E+22	1,984273E+22	1,984223E+22	1,017298E+23	3,968496E+22	1,414148E+23
-2851	5,086611E+22	5,086501E+22	1,984189E+22	1,984326E+22	1,017311E+23	3,968515E+22	1,414163E+23
-2850	5,086448E+22	5,086466E+22	1,984285E+22	1,984241E+22	1,017291E+23	3,968525E+22	1,414144E+23
-2849	5,086380E+22	5,086458E+22	1,984390E+22	1,984388E+22	1,017284E+23	3,968778E+22	1,414162E+23
-2848	5,086520E+22	5,086315E+22	1,984345E+22	1,984409E+22	1,017283E+23	3,968753E+22	1,414159E+23
-2847	5,086226E+22	5,086358E+22	1,984512E+22	1,984396E+22	1,017258E+23	3,968908E+22	1,414149E+23
-2846	5,086279E+22	5,086318E+22	1,984514E+22	1,984580E+22	1,017260E+23	3,969094E+22	1,414169E+23
-2845	5,086292E+22	5,086187E+22	1,984480E+22	1,984534E+22	1,017248E+23	3,969014E+22	1,414149E+23
-2844	5,086030E+22	5,086256E+22	1,984608E+22	1,984538E+22	1,017229E+23	3,969146E+22	1,414143E+23
-2843	5,086298E+22	5,086186E+22	1,984514E+22	1,984615E+22	1,017248E+23	3,969129E+22	1,414161E+23
-2842	5,086270E+22	5,086163E+22	1,984519E+22	1,984458E+22	1,017243E+23	3,968977E+22	1,414141E+23
-2841	5,086172E+22	5,086283E+22	1,984545E+22	1,984499E+22	1,017246E+23	3,969044E+22	1,414150E+23
-2840	5,086409E+22	5,086264E+22	1,984381E+22	1,984480E+22	1,017267E+23	3,968861E+22	1,414153E+23
-2839	5,086219E+22	5,086364E+22	1,984423E+22	1,984338E+22	1,017258E+23	3,968761E+22	1,414134E+23
-2838	5,086311E+22	5,086424E+22	1,984384E+22	1,984406E+22	1,017273E+23	3,968790E+22	1,414152E+23
-2837	5,086504E+22	5,086346E+22	1,984267E+22	1,984307E+22	1,017285E+23	3,968574E+22	1,414142E+23
-2836	5,086279E+22	5,086441E+22	1,984361E+22	1,984246E+22	1,017272E+23	3,968607E+22	1,414133E+23
-2835	5,086503E+22	5,086440E+22	1,984286E+22	1,984362E+22	1,017294E+23	3,968648E+22	1,414159E+23
-2834	5,086498E+22	5,086386E+22	1,984267E+22	1,984272E+22	1,017288E+23	3,968539E+22	1,414142E+23
-2833	5,086282E+22	5,086461E+22	1,984365E+22	1,984340E+22	1,017274E+23	3,968705E+22	1,414145E+23
-2832	5,086505E+22	5,086376E+22	1,984298E+22	1,984421E+22	1,017288E+23	3,968719E+22	1,414160E+23
-2831	5,086330E+22	5,086332E+22	1,984418E+22	1,984349E+22	1,017266E+23	3,968768E+22	1,414143E+23
-2830	5,086255E+22	5,086344E+22	1,984522E+22	1,984491E+22	1,017260E+23	3,969013E+22	1,414161E+23
-2829	5,086385E+22	5,086209E+22	1,984468E+22	1,984546E+22	1,017259E+23	3,969013E+22	1,414161E+23
-2828	5,086025E+22	5,086206E+22	1,984621E+22	1,984542E+22	1,017223E+23	3,969163E+22	1,414139E+23
-2827	5,086118E+22	5,086176E+22	1,984622E+22	1,984700E+22	1,017229E+23	3,969323E+22	1,414162E+23
-2826	5,086193E+22	5,086038E+22	1,984593E+22	1,984635E+22	1,017223E+23	3,969228E+22	1,414146E+23
-2825	5,085967E+22	5,086098E+22	1,984695E+22	1,984622E+22	1,017207E+23	3,969317E+22	1,414138E+23
-2824	5,086240E+22	5,086077E+22	1,984597E+22	1,984683E+22	1,017232E+23	3,969280E+22	1,414160E+23
-2823	5,086157E+22	5,086097E+22	1,984601E+22	1,984547E+22	1,017225E+23	3,969148E+22	1,414140E+23
-2822	5,086048E+22	5,086239E+22	1,984619E+22	1,984572E+22	1,017229E+23	3,969191E+22	1,414148E+23
-2821	5,086302E+22	5,086202E+22	1,984463E+22	1,984563E+22	1,017250E+23	3,969026E+22	1,414153E+23
-2820	5,086086E+22	5,086236E+22	1,984514E+22	1,984421E+22	1,017232E+23	3,968935E+22	1,414126E+23
-2819	5,086219E+22	5,086295E+22	1,984486E+22	1,984478E+22	1,017251E+23	3,968964E+22	1,414148E+23
-2818	5,086426E+22	5,086226E+22	1,984375E+22	1,984403E+22	1,017265E+23	3,968778E+22	1,414143E+23
-2817	5,086183E+22	5,086315E+22	1,984434E+22	1,984361E+22	1,017250E+23	3,968796E+22	1,414129E+23
-2816	5,086391E+22	5,086332E+22	1,984361E+22	1,984467E+22	1,017272E+23	3,968828E+22	1,414155E+23
-2815	5,086369E+22	5,086286E+22	1,984364E+22	1,984385E+22	1,017266E+23	3,968749E+22	1,414140E+23
-2814	5,086181E+22	5,086360E+22	1,984478E+22	1,984420E+22	1,017254E+23	3,968899E+22	1,414144E+23
-2813	5,086417E+22	5,086272E+22	1,984427E+22	1,984518E+22	1,017269E+23	3,968946E+22	1,414163E+23
-2812	5,086176E+22	5,086194E+22	1,984551E+22	1,984474E+22	1,017237E+23	3,969024E+22	1,414139E+23
-2811	5,086082E+22	5,086220E+22	1,984647E+22	1,984618E+22	1,017230E+23	3,969265E+22	1,414157E+23
-2810	5,086221E+22	5,086078E+22	1,984591E+22	1,984688E+22	1,017230E+23	3,969280E+22	1,414158E+23
-2809	5,085896E+22	5,086035E+22	1,984714E+22	1,984671E+22	1,017193E+23	3,969385E+22	1,414132E+23
-2808	5,086028E+22	5,086014E+22	1,984719E+22	1,984790E+22	1,017204E+23	3,969509E+22	1,414155E+23
-2807	5,086115E+22	5,085914E+22	1,984700E+22	1,984725E+22	1,017203E+23	3,969425E+22	1,414145E+23
-2806	5,085891E+22	5,086016E+22	1,984791E+22	1,984692E+22	1,017191E+23	3,969484E+22	1,414139E+23
-2805	5,086136E+22	5,086028E+22	1,984684E+22	1,984775E+22	1,017216E+23	3,969460E+22	1,414162E+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							
-2804	5,085985E+22	5,086006E+22	1,984685E+22	1,984648E+22	1,017199E+23	3,969334E+22	1,414132E+23
-2803	5,085899E+22	5,086139E+22	1,984711E+22	1,984651E+22	1,017204E+23	3,969362E+22	1,414140E+23
-2802	5,086203E+22	5,086082E+22	1,984566E+22	1,984643E+22	1,017229E+23	3,969209E+22	1,414149E+23
-2801	5,086020E+22	5,086079E+22	1,984591E+22	1,984504E+22	1,017210E+23	3,969095E+22	1,414119E+23
-2800	5,086157E+22	5,086171E+22	1,984560E+22	1,984559E+22	1,017233E+23	3,969119E+22	1,414145E+23
-2799	5,086323E+22	5,086147E+22	1,984452E+22	1,984510E+22	1,017247E+23	3,968963E+22	1,414143E+23
-2798	5,086079E+22	5,086255E+22	1,984512E+22	1,984453E+22	1,017233E+23	3,968965E+22	1,414130E+23
-2797	5,086297E+22	5,086268E+22	1,984457E+22	1,984564E+22	1,017257E+23	3,969021E+22	1,414159E+23
-2796	5,086229E+22	5,086159E+22	1,984484E+22	1,984484E+22	1,017239E+23	3,968968E+22	1,414136E+23
-2795	5,086055E+22	5,086230E+22	1,984619E+22	1,984516E+22	1,017228E+23	3,969136E+22	1,414142E+23
-2794	5,086281E+22	5,086134E+22	1,984572E+22	1,984645E+22	1,017242E+23	3,969217E+22	1,414163E+23
-2793	5,086010E+22	5,086024E+22	1,984658E+22	1,984622E+22	1,017203E+23	3,969280E+22	1,414131E+23
-2792	5,085931E+22	5,086052E+22	1,984747E+22	1,984749E+22	1,017198E+23	3,969496E+22	1,414148E+23
-2791	5,086085E+22	5,085928E+22	1,984699E+22	1,984812E+22	1,017201E+23	3,969510E+22	1,414152E+23
-2790	5,085819E+22	5,085907E+22	1,984816E+22	1,984752E+22	1,017173E+23	3,969568E+22	1,414129E+23
-2789	5,085974E+22	5,085921E+22	1,984825E+22	1,984872E+22	1,017190E+23	3,969696E+22	1,414159E+23
-2788	5,085983E+22	5,085823E+22	1,984807E+22	1,984821E+22	1,017181E+23	3,969628E+22	1,414143E+23
-2787	5,085741E+22	5,085955E+22	1,984896E+22	1,984785E+22	1,017170E+23	3,969681E+22	1,414138E+23
-2786	5,085984E+22	5,085951E+22	1,984792E+22	1,984879E+22	1,017194E+23	3,969671E+22	1,414161E+23
-2785	5,085854E+22	5,085871E+22	1,984766E+22	1,984748E+22	1,017172E+23	3,969514E+22	1,414124E+23
-2784	5,085815E+22	5,085985E+22	1,984793E+22	1,984723E+22	1,017180E+23	3,969516E+22	1,414132E+23
-2783	5,086130E+22	5,085957E+22	1,984653E+22	1,984730E+22	1,017209E+23	3,969383E+22	1,414147E+23
-2782	5,085962E+22	5,085989E+22	1,984660E+22	1,984583E+22	1,017195E+23	3,969243E+22	1,414119E+23
-2781	5,086074E+22	5,086115E+22	1,984625E+22	1,984656E+22	1,017219E+23	3,969282E+22	1,414147E+23
-2780	5,086180E+22	5,086060E+22	1,984535E+22	1,984614E+22	1,017224E+23	3,969149E+22	1,414139E+23
-2779	5,085955E+22	5,086159E+22	1,984617E+22	1,984532E+22	1,017211E+23	3,969149E+22	1,414126E+23
-2778	5,086189E+22	5,086153E+22	1,984590E+22	1,984649E+22	1,017234E+23	3,969239E+22	1,414158E+23
-2777	5,086121E+22	5,086002E+22	1,984599E+22	1,984591E+22	1,017212E+23	3,969191E+22	1,414131E+23
-2776	5,085927E+22	5,086076E+22	1,984733E+22	1,984631E+22	1,017200E+23	3,969364E+22	1,414137E+23
-2775	5,086117E+22	5,086014E+22	1,984684E+22	1,984788E+22	1,017213E+23	3,969473E+22	1,414160E+23
-2774	5,085877E+22	5,085898E+22	1,984757E+22	1,984745E+22	1,017177E+23	3,969502E+22	1,414128E+23
-2773	5,085827E+22	5,085935E+22	1,984850E+22	1,984863E+22	1,017176E+23	3,969713E+22	1,414148E+23
-2772	5,085959E+22	5,085785E+22	1,984821E+22	1,984917E+22	1,017174E+23	3,969738E+22	1,414148E+23
-2771	5,085715E+22	5,085795E+22	1,984946E+22	1,984843E+22	1,017151E+23	3,969789E+22	1,414130E+23
-2770	5,085850E+22	5,085834E+22	1,984954E+22	1,984983E+22	1,017168E+23	3,969936E+22	1,414162E+23
-2769	5,085823E+22	5,085707E+22	1,984897E+22	1,984945E+22	1,017153E+23	3,969842E+22	1,414137E+23
-2768	5,085598E+22	5,085821E+22	1,984981E+22	1,984887E+22	1,017142E+23	3,969868E+22	1,414129E+23
-2767	5,085857E+22	5,085826E+22	1,984881E+22	1,984970E+22	1,017168E+23	3,969851E+22	1,414153E+23
-2766	5,085793E+22	5,085745E+22	1,984843E+22	1,984811E+22	1,017154E+23	3,969654E+22	1,414119E+23
-2765	5,085783E+22	5,085893E+22	1,984863E+22	1,984795E+22	1,017168E+23	3,969658E+22	1,414133E+23
-2764	5,086022E+22	5,085867E+22	1,984730E+22	1,984816E+22	1,017189E+23	3,969545E+22	1,414143E+23
-2763	5,085849E+22	5,085935E+22	1,984741E+22	1,984666E+22	1,017178E+23	3,969407E+22	1,414119E+23
-2762	5,085962E+22	5,086049E+22	1,984724E+22	1,984747E+22	1,017201E+23	3,969471E+22	1,414148E+23
-2761	5,086057E+22	5,085937E+22	1,984627E+22	1,984707E+22	1,017199E+23	3,969334E+22	1,414133E+23
-2760	5,085862E+22	5,086008E+22	1,984731E+22	1,984615E+22	1,017187E+23	3,969346E+22	1,414122E+23
-2759	5,086069E+22	5,086021E+22	1,984716E+22	1,984757E+22	1,017209E+23	3,969473E+22	1,414156E+23
-2758	5,085999E+22	5,085880E+22	1,984706E+22	1,984712E+22	1,017188E+23	3,969418E+22	1,414130E+23
-2757	5,085791E+22	5,085965E+22	1,984827E+22	1,984770E+22	1,017176E+23	3,969597E+22	1,414135E+23
-2756	5,085934E+22	5,085868E+22	1,984794E+22	1,984926E+22	1,017180E+23	3,969720E+22	1,414152E+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							
-2755	5,085748E+22	5,085764E+22	1,984878E+22	1,984851E+22	1,017151E+23	3,969729E+22	1,414124E+23
-2754	5,085734E+22	5,085808E+22	1,984986E+22	1,984965E+22	1,017154E+23	3,969951E+22	1,414149E+23
-2753	5,085853E+22	5,085647E+22	1,984936E+22	1,985029E+22	1,017150E+23	3,969965E+22	1,414146E+23
-2752	5,085597E+22	5,085674E+22	1,985056E+22	1,984949E+22	1,017127E+23	3,970005E+22	1,414128E+23
-2751	5,085691E+22	5,085750E+22	1,985059E+22	1,985100E+22	1,017144E+23	3,970159E+22	1,414160E+23
-2750	5,085701E+22	5,085608E+22	1,984982E+22	1,985042E+22	1,017131E+23	3,970025E+22	1,414133E+23
-2749	5,085504E+22	5,085711E+22	1,985060E+22	1,984969E+22	1,017122E+23	3,970029E+22	1,414124E+23
-2748	5,085747E+22	5,085690E+22	1,984975E+22	1,985049E+22	1,017144E+23	3,970024E+22	1,414146E+23
-2747	5,085717E+22	5,085636E+22	1,984935E+22	1,984880E+22	1,017135E+23	3,969815E+22	1,414117E+23
-2746	5,085689E+22	5,085816E+22	1,984952E+22	1,984887E+22	1,017151E+23	3,969839E+22	1,414134E+23
-2745	5,085898E+22	5,085769E+22	1,984795E+22	1,984920E+22	1,017167E+23	3,969715E+22	1,414138E+23
-2744	5,085745E+22	5,085817E+22	1,984818E+22	1,984750E+22	1,017156E+23	3,969568E+22	1,414113E+23
-2743	5,085852E+22	5,085950E+22	1,984822E+22	1,984827E+22	1,017180E+23	3,969649E+22	1,414145E+23
-2742	5,085987E+22	5,085822E+22	1,984724E+22	1,984780E+22	1,017181E+23	3,969505E+22	1,414131E+23
-2741	5,085781E+22	5,085903E+22	1,984830E+22	1,984714E+22	1,017168E+23	3,969544E+22	1,414123E+23
-2740	5,085898E+22	5,085906E+22	1,984828E+22	1,984884E+22	1,017180E+23	3,969712E+22	1,414152E+23
-2739	5,085836E+22	5,085775E+22	1,984820E+22	1,984841E+22	1,017161E+23	3,969660E+22	1,414127E+23
-2738	5,085652E+22	5,085845E+22	1,984950E+22	1,984903E+22	1,017150E+23	3,969852E+22	1,414135E+23
-2737	5,085805E+22	5,085700E+22	1,984907E+22	1,985049E+22	1,017151E+23	3,969955E+22	1,414146E+23
-2736	5,085668E+22	5,085591E+22	1,985004E+22	1,984954E+22	1,017126E+23	3,969958E+22	1,414122E+23
-2735	5,085625E+22	5,085688E+22	1,985116E+22	1,985077E+22	1,017131E+23	3,970193E+22	1,414151E+23
-2734	5,085731E+22	5,085548E+22	1,985042E+22	1,985143E+22	1,017128E+23	3,970184E+22	1,414146E+23
-2733	5,085465E+22	5,085586E+22	1,985147E+22	1,985068E+22	1,017105E+23	3,970215E+22	1,414127E+23
-2732	5,085507E+22	5,085620E+22	1,985162E+22	1,985203E+22	1,017113E+23	3,970365E+22	1,414149E+23
-2731	5,085575E+22	5,085484E+22	1,985088E+22	1,985117E+22	1,017106E+23	3,970205E+22	1,414126E+23
-2730	5,085430E+22	5,085588E+22	1,985163E+22	1,985047E+22	1,017102E+23	3,970211E+22	1,414123E+23
-2729	5,085652E+22	5,085557E+22	1,985054E+22	1,985138E+22	1,017121E+23	3,970192E+22	1,414140E+23
-2728	5,085635E+22	5,085532E+22	1,985007E+22	1,984968E+22	1,017117E+23	3,969975E+22	1,414114E+23
-2727	5,085578E+22	5,085753E+22	1,985026E+22	1,984979E+22	1,017133E+23	3,970005E+22	1,414134E+23
-2726	5,085811E+22	5,085696E+22	1,984864E+22	1,984997E+22	1,017151E+23	3,969861E+22	1,414137E+23
-2725	5,085676E+22	5,085732E+22	1,984897E+22	1,984824E+22	1,017141E+23	3,969721E+22	1,414113E+23
-2724	5,085725E+22	5,085828E+22	1,984935E+22	1,984909E+22	1,017155E+23	3,969844E+22	1,414140E+23
-2723	5,085868E+22	5,085718E+22	1,984844E+22	1,984878E+22	1,017159E+23	3,969722E+22	1,414131E+23
-2722	5,085642E+22	5,085797E+22	1,984945E+22	1,984846E+22	1,017144E+23	3,969791E+22	1,414123E+23
-2721	5,085730E+22	5,085752E+22	1,984926E+22	1,985028E+22	1,017148E+23	3,969954E+22	1,414144E+23
-2720	5,085720E+22	5,085598E+22	1,984926E+22	1,984961E+22	1,017132E+23	3,969887E+22	1,414120E+23
-2719	5,085549E+22	5,085704E+22	1,985068E+22	1,985008E+22	1,017125E+23	3,970077E+22	1,414133E+23
-2718	5,085745E+22	5,085570E+22	1,985020E+22	1,985144E+22	1,017131E+23	3,970164E+22	1,414148E+23
-2717	5,085584E+22	5,085494E+22	1,985111E+22	1,985059E+22	1,017108E+23	3,970171E+22	1,414125E+23
-2716	5,085443E+22	5,085597E+22	1,985238E+22	1,985196E+22	1,017104E+23	3,970434E+22	1,414147E+23
-2715	5,085559E+22	5,085459E+22	1,985162E+22	1,985254E+22	1,017102E+23	3,970416E+22	1,414143E+23
-2714	5,085309E+22	5,085469E+22	1,985267E+22	1,985181E+22	1,017078E+23	3,970448E+22	1,414123E+23
-2713	5,085366E+22	5,085450E+22	1,985263E+22	1,985305E+22	1,017082E+23	3,970568E+22	1,414138E+23
-2712	5,085502E+22	5,085305E+22	1,985187E+22	1,985204E+22	1,017081E+23	3,970390E+22	1,414120E+23
-2711	5,085344E+22	5,085480E+22	1,985249E+22	1,985141E+22	1,017082E+23	3,970390E+22	1,414121E+23
-2710	5,085575E+22	5,085475E+22	1,985111E+22	1,985232E+22	1,017105E+23	3,970343E+22	1,414139E+23
-2709	5,085552E+22	5,085470E+22	1,985058E+22	1,985056E+22	1,017102E+23	3,970114E+22	1,414114E+23
-2708	5,085446E+22	5,085666E+22	1,985110E+22	1,985051E+22	1,017111E+23	3,970161E+22	1,414127E+23
-2707	5,085714E+22	5,085610E+22	1,984968E+22	1,985052E+22	1,017132E+23	3,970020E+22	1,414134E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2706	5,085593E+22	5,085634E+22	1,985013E+22	1,984907E+22	1,017123E+23	3,969920E+22	1,414115E+23
-2705	5,085588E+22	5,085694E+22	1,985037E+22	1,985018E+22	1,017128E+23	3,970055E+22	1,414134E+23
-2704	5,085741E+22	5,085579E+22	1,984945E+22	1,985002E+22	1,017132E+23	3,969947E+22	1,414127E+23
-2703	5,085506E+22	5,085680E+22	1,985046E+22	1,984975E+22	1,017119E+23	3,970021E+22	1,414121E+23
-2702	5,085631E+22	5,085616E+22	1,985020E+22	1,985139E+22	1,017125E+23	3,970159E+22	1,414141E+23
-2701	5,085654E+22	5,085472E+22	1,985027E+22	1,985061E+22	1,017113E+23	3,970088E+22	1,414121E+23
-2700	5,085427E+22	5,085567E+22	1,985202E+22	1,985107E+22	1,017099E+23	3,970310E+22	1,414130E+23
-2699	5,085603E+22	5,085476E+22	1,985159E+22	1,985252E+22	1,017108E+23	3,970411E+22	1,414149E+23
-2698	5,085418E+22	5,085407E+22	1,985244E+22	1,985199E+22	1,017083E+23	3,970442E+22	1,414127E+23
-2697	5,085233E+22	5,085446E+22	1,985351E+22	1,985334E+22	1,017068E+23	3,970685E+22	1,414136E+23
-2696	5,085416E+22	5,085278E+22	1,985274E+22	1,985368E+22	1,017069E+23	3,970642E+22	1,414134E+23
-2695	5,085204E+22	5,085312E+22	1,985372E+22	1,985276E+22	1,017052E+23	3,970648E+22	1,414116E+23
-2694	5,085313E+22	5,085305E+22	1,985345E+22	1,985389E+22	1,017062E+23	3,970734E+22	1,414135E+23
-2693	5,085450E+22	5,085220E+22	1,985249E+22	1,985290E+22	1,017067E+23	3,970539E+22	1,414121E+23
-2692	5,085220E+22	5,085416E+22	1,985325E+22	1,985229E+22	1,017064E+23	3,970554E+22	1,414119E+23
-2691	5,085460E+22	5,085436E+22	1,985196E+22	1,985305E+22	1,017090E+23	3,970500E+22	1,414140E+23
-2690	5,085450E+22	5,085411E+22	1,985154E+22	1,985133E+22	1,017086E+23	3,970287E+22	1,414115E+23
-2689	5,085324E+22	5,085537E+22	1,985210E+22	1,985126E+22	1,017086E+23	3,970336E+22	1,414120E+23
-2688	5,085630E+22	5,085457E+22	1,985078E+22	1,985135E+22	1,017109E+23	3,970213E+22	1,414130E+23
-2687	5,085474E+22	5,085520E+22	1,985117E+22	1,985019E+22	1,017099E+23	3,970135E+22	1,414113E+23
-2686	5,085476E+22	5,085573E+22	1,985116E+22	1,985143E+22	1,017105E+23	3,970259E+22	1,414131E+23
-2685	5,085636E+22	5,085458E+22	1,985018E+22	1,985118E+22	1,017109E+23	3,970136E+22	1,414123E+23
-2684	5,085370E+22	5,085548E+22	1,985149E+22	1,985077E+22	1,017092E+23	3,970226E+22	1,414114E+23
-2683	5,085537E+22	5,085503E+22	1,985142E+22	1,985222E+22	1,017104E+23	3,970364E+22	1,414140E+23
-2682	5,085554E+22	5,085372E+22	1,985162E+22	1,985169E+22	1,017093E+23	3,970331E+22	1,414126E+23
-2681	5,085257E+22	5,085441E+22	1,985331E+22	1,985236E+22	1,017070E+23	3,970567E+22	1,414127E+23
-2680	5,085439E+22	5,085336E+22	1,985288E+22	1,985387E+22	1,017078E+23	3,970675E+22	1,414145E+23
-2679	5,085244E+22	5,085280E+22	1,985367E+22	1,985334E+22	1,017052E+23	3,970701E+22	1,414123E+23
-2678	5,085111E+22	5,085284E+22	1,985452E+22	1,985448E+22	1,017039E+23	3,970899E+22	1,414129E+23
-2677	5,085340E+22	5,085124E+22	1,985364E+22	1,985463E+22	1,017046E+23	3,970827E+22	1,414129E+23
-2676	5,085103E+22	5,085173E+22	1,985475E+22	1,985367E+22	1,017028E+23	3,970843E+22	1,414112E+23
-2675	5,085215E+22	5,085228E+22	1,985440E+22	1,985475E+22	1,017044E+23	3,970916E+22	1,414136E+23
-2674	5,085338E+22	5,085173E+22	1,985338E+22	1,985393E+22	1,017051E+23	3,970731E+22	1,414124E+23
-2673	5,085072E+22	5,085314E+22	1,985408E+22	1,985319E+22	1,017039E+23	3,970728E+22	1,414111E+23
-2672	5,085361E+22	5,085310E+22	1,985294E+22	1,985373E+22	1,017067E+23	3,970667E+22	1,414134E+23
-2671	5,085362E+22	5,085304E+22	1,985256E+22	1,985204E+22	1,017067E+23	3,970460E+22	1,414113E+23
-2670	5,085248E+22	5,085411E+22	1,985293E+22	1,985209E+22	1,017066E+23	3,970502E+22	1,414116E+23
-2669	5,085538E+22	5,085364E+22	1,985148E+22	1,985235E+22	1,017090E+23	3,970384E+22	1,414129E+23
-2668	5,085327E+22	5,085416E+22	1,985202E+22	1,985132E+22	1,017074E+23	3,970334E+22	1,414108E+23
-2667	5,085347E+22	5,085481E+22	1,985212E+22	1,985242E+22	1,017083E+23	3,970454E+22	1,414128E+23
-2666	5,085534E+22	5,085364E+22	1,985128E+22	1,985224E+22	1,017090E+23	3,970352E+22	1,414125E+23
-2665	5,085248E+22	5,085393E+22	1,985270E+22	1,985177E+22	1,017064E+23	3,970448E+22	1,414109E+23
-2664	5,085435E+22	5,085351E+22	1,985279E+22	1,985330E+22	1,017079E+23	3,970609E+22	1,414139E+23
-2663	5,085403E+22	5,085264E+22	1,985294E+22	1,985303E+22	1,017067E+23	3,970597E+22	1,414126E+23
-2662	5,085100E+22	5,085306E+22	1,985439E+22	1,985379E+22	1,017041E+23	3,970818E+22	1,414122E+23
-2661	5,085296E+22	5,085196E+22	1,985386E+22	1,985512E+22	1,017049E+23	3,970898E+22	1,414139E+23
-2660	5,085094E+22	5,085118E+22	1,985484E+22	1,985442E+22	1,017021E+23	3,970926E+22	1,414114E+23
-2659	5,085016E+22	5,085149E+22	1,985569E+22	1,985531E+22	1,017017E+23	3,971100E+22	1,414127E+23
-2658	5,085256E+22	5,085029E+22	1,985474E+22	1,985562E+22	1,017028E+23	3,971037E+22	1,414132E+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	5,084969E+22	5,085069E+22	1,985570E+22	1,985474E+22	1,017004E+23	3,971044E+22	1,414108E+23
-2656	5,085102E+22	5,085131E+22	1,985535E+22	1,985574E+22	1,017023E+23	3,971109E+22	1,414134E+23
-2655	5,085209E+22	5,085103E+22	1,985432E+22	1,985484E+22	1,017031E+23	3,970916E+22	1,414123E+23
-2654	5,084986E+22	5,085201E+22	1,985489E+22	1,985397E+22	1,017019E+23	3,970886E+22	1,414107E+23
-2653	5,085291E+22	5,085188E+22	1,985372E+22	1,985436E+22	1,017048E+23	3,970808E+22	1,414129E+23
-2652	5,085244E+22	5,085186E+22	1,985352E+22	1,985290E+22	1,017043E+23	3,970641E+22	1,414107E+23
-2651	5,085129E+22	5,085326E+22	1,985380E+22	1,985307E+22	1,017045E+23	3,970686E+22	1,414114E+23
-2650	5,085406E+22	5,085286E+22	1,985232E+22	1,985356E+22	1,017069E+23	3,970588E+22	1,414128E+23
-2649	5,085183E+22	5,085277E+22	1,985289E+22	1,985242E+22	1,017046E+23	3,970531E+22	1,414099E+23
-2648	5,085264E+22	5,085324E+22	1,985319E+22	1,985331E+22	1,017059E+23	3,970649E+22	1,414124E+23
-2647	5,085448E+22	5,085245E+22	1,985249E+22	1,985316E+22	1,017069E+23	3,970565E+22	1,414126E+23
-2646	5,085161E+22	5,085265E+22	1,985381E+22	1,985287E+22	1,017043E+23	3,970668E+22	1,414109E+23
-2645	5,085306E+22	5,085250E+22	1,985385E+22	1,985448E+22	1,017056E+23	3,970833E+22	1,414139E+23
-2644	5,085218E+22	5,085154E+22	1,985419E+22	1,985439E+22	1,017037E+23	3,970858E+22	1,414123E+23
-2643	5,084937E+22	5,085187E+22	1,985566E+22	1,985497E+22	1,017012E+23	3,971063E+22	1,414119E+23
-2642	5,085163E+22	5,085070E+22	1,985515E+22	1,985631E+22	1,017023E+23	3,971146E+22	1,414138E+23
-2641	5,084965E+22	5,084934E+22	1,985609E+22	1,985552E+22	1,016990E+23	3,971162E+22	1,414106E+23
-2640	5,084921E+22	5,084991E+22	1,985689E+22	1,985642E+22	1,016991E+23	3,971331E+22	1,414124E+23
-2639	5,085129E+22	5,084943E+22	1,985580E+22	1,985683E+22	1,017007E+23	3,971263E+22	1,414134E+23
-2638	5,084851E+22	5,084963E+22	1,985645E+22	1,985586E+22	1,016981E+23	3,971231E+22	1,414104E+23
-2637	5,084998E+22	5,085033E+22	1,985605E+22	1,985653E+22	1,017003E+23	3,971258E+22	1,414129E+23
-2636	5,085096E+22	5,084991E+22	1,985524E+22	1,985550E+22	1,017009E+23	3,971074E+22	1,414116E+23
-2635	5,084899E+22	5,085101E+22	1,985582E+22	1,985454E+22	1,017000E+23	3,971037E+22	1,414104E+23
-2634	5,085191E+22	5,085118E+22	1,985461E+22	1,985524E+22	1,017031E+23	3,970985E+22	1,414130E+23
-2633	5,085100E+22	5,085070E+22	1,985433E+22	1,985396E+22	1,017017E+23	3,970830E+22	1,414100E+23
-2632	5,085019E+22	5,085205E+22	1,985464E+22	1,985413E+22	1,017022E+23	3,970877E+22	1,414110E+23
-2631	5,085296E+22	5,085188E+22	1,985327E+22	1,985456E+22	1,017048E+23	3,970783E+22	1,414127E+23
-2630	5,085116E+22	5,085139E+22	1,985376E+22	1,985333E+22	1,017026E+23	3,970710E+22	1,414096E+23
-2629	5,085204E+22	5,085199E+22	1,985417E+22	1,985409E+22	1,017040E+23	3,970827E+22	1,414123E+23
-2628	5,085319E+22	5,085138E+22	1,985374E+22	1,985425E+22	1,017046E+23	3,970799E+22	1,414126E+23
-2627	5,085006E+22	5,085180E+22	1,985505E+22	1,985411E+22	1,017019E+23	3,970917E+22	1,414110E+23
-2626	5,085125E+22	5,085159E+22	1,985509E+22	1,985590E+22	1,017028E+23	3,971098E+22	1,414138E+23
-2625	5,085027E+22	5,084980E+22	1,985547E+22	1,985575E+22	1,017001E+23	3,971122E+22	1,414113E+23
-2624	5,084823E+22	5,084992E+22	1,985696E+22	1,985613E+22	1,016981E+23	3,971309E+22	1,414112E+23
-2623	5,085052E+22	5,084919E+22	1,985643E+22	1,985743E+22	1,016997E+23	3,971386E+22	1,414136E+23
-2622	5,084879E+22	5,084793E+22	1,985704E+22	1,985673E+22	1,016967E+23	3,971378E+22	1,414105E+23
-2621	5,084821E+22	5,084891E+22	1,985767E+22	1,985745E+22	1,016971E+23	3,971513E+22	1,414122E+23
-2620	5,084980E+22	5,084863E+22	1,985676E+22	1,985786E+22	1,016984E+23	3,971462E+22	1,414131E+23
-2619	5,084733E+22	5,084890E+22	1,985740E+22	1,985663E+22	1,016962E+23	3,971403E+22	1,414103E+23
-2618	5,084890E+22	5,084951E+22	1,985705E+22	1,985724E+22	1,016984E+23	3,971429E+22	1,414127E+23
-2617	5,084975E+22	5,084845E+22	1,985627E+22	1,985630E+22	1,016982E+23	3,971257E+22	1,414108E+23
-2616	5,084803E+22	5,084960E+22	1,985678E+22	1,985548E+22	1,016976E+23	3,971226E+22	1,414099E+23
-2615	5,085059E+22	5,085027E+22	1,985548E+22	1,985635E+22	1,017009E+23	3,971183E+22	1,414127E+23
-2614	5,085002E+22	5,084943E+22	1,985495E+22	1,985508E+22	1,016995E+23	3,971003E+22	1,414095E+23
-2613	5,084948E+22	5,085083E+22	1,985529E+22	1,985490E+22	1,017003E+23	3,971019E+22	1,414105E+23
-2612	5,085211E+22	5,085080E+22	1,985428E+22	1,985530E+22	1,017029E+23	3,970958E+22	1,414125E+23
-2611	5,085042E+22	5,085054E+22	1,985486E+22	1,985409E+22	1,017010E+23	3,970895E+22	1,414099E+23
-2610	5,085080E+22	5,085143E+22	1,985536E+22	1,985517E+22	1,017022E+23	3,971053E+22	1,414128E+23
-2609	5,085130E+22	5,085022E+22	1,985499E+22	1,985561E+22	1,017015E+23	3,971060E+22	1,414121E+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	5,084840E+22	5,085032E+22	1,985636E+22	1,985553E+22	1,016987E+23	3,971189E+22	1,414106E+23
-2607	5,084961E+22	5,085018E+22	1,985644E+22	1,985724E+22	1,016998E+23	3,971368E+22	1,414135E+23
-2606	5,084924E+22	5,084778E+22	1,985659E+22	1,985699E+22	1,016970E+23	3,971358E+22	1,414106E+23
-2605	5,084746E+22	5,084817E+22	1,985799E+22	1,985716E+22	1,016956E+23	3,971515E+22	1,414108E+23
-2604	5,084931E+22	5,084796E+22	1,985755E+22	1,985862E+22	1,016973E+23	3,971617E+22	1,414134E+23
-2603	5,084749E+22	5,084714E+22	1,985802E+22	1,985785E+22	1,016946E+23	3,971587E+22	1,414105E+23
-2602	5,084681E+22	5,084832E+22	1,985865E+22	1,985850E+22	1,016951E+23	3,971714E+22	1,414123E+23
-2601	5,084829E+22	5,084731E+22	1,985784E+22	1,985873E+22	1,016956E+23	3,971657E+22	1,414122E+23
-2600	5,084640E+22	5,084744E+22	1,985850E+22	1,985737E+22	1,016938E+23	3,971587E+22	1,414097E+23
-2599	5,084780E+22	5,084842E+22	1,985812E+22	1,985804E+22	1,016962E+23	3,971616E+22	1,414124E+23
-2598	5,084878E+22	5,084718E+22	1,985699E+22	1,985733E+22	1,016960E+23	3,971432E+22	1,414103E+23
-2597	5,084712E+22	5,084855E+22	1,985734E+22	1,985642E+22	1,016957E+23	3,971376E+22	1,414094E+23
-2596	5,084943E+22	5,084938E+22	1,985625E+22	1,985732E+22	1,016988E+23	3,971357E+22	1,414124E+23
-2595	5,084925E+22	5,084866E+22	1,985576E+22	1,985584E+22	1,016979E+23	3,971159E+22	1,414095E+23
-2594	5,084877E+22	5,085010E+22	1,985626E+22	1,985562E+22	1,016989E+23	3,971188E+22	1,414108E+23
-2593	5,085093E+22	5,084954E+22	1,985548E+22	1,985622E+22	1,017005E+23	3,971170E+22	1,414122E+23
-2592	5,084918E+22	5,084936E+22	1,985610E+22	1,985530E+22	1,016985E+23	3,971140E+22	1,414099E+23
-2591	5,084890E+22	5,085043E+22	1,985662E+22	1,985655E+22	1,016993E+23	3,971317E+22	1,414125E+23
-2590	5,084974E+22	5,084854E+22	1,985604E+22	1,985708E+22	1,016983E+23	3,971312E+22	1,414114E+23
-2589	5,084732E+22	5,084839E+22	1,985737E+22	1,985662E+22	1,016957E+23	3,971400E+22	1,414097E+23
-2588	5,084846E+22	5,084845E+22	1,985767E+22	1,985830E+22	1,016969E+23	3,971597E+22	1,414129E+23
-2587	5,084840E+22	5,084654E+22	1,985773E+22	1,985801E+22	1,016949E+23	3,971573E+22	1,414107E+23
-2586	5,084632E+22	5,084746E+22	1,985906E+22	1,985830E+22	1,016938E+23	3,971736E+22	1,414111E+23
-2585	5,084762E+22	5,084692E+22	1,985873E+22	1,985984E+22	1,016945E+23	3,971858E+22	1,414131E+23
-2584	5,084609E+22	5,084605E+22	1,985922E+22	1,985897E+22	1,016921E+23	3,971819E+22	1,414103E+23
-2583	5,084529E+22	5,084731E+22	1,985990E+22	1,985942E+22	1,016926E+23	3,971932E+22	1,414119E+23
-2582	5,084731E+22	5,084568E+22	1,985885E+22	1,985966E+22	1,016930E+23	3,971851E+22	1,414115E+23
-2581	5,084561E+22	5,084587E+22	1,985937E+22	1,985818E+22	1,016915E+23	3,971755E+22	1,414090E+23
-2580	5,084653E+22	5,084736E+22	1,985899E+22	1,985908E+22	1,016939E+23	3,971807E+22	1,414120E+23
-2579	5,084768E+22	5,084642E+22	1,985765E+22	1,985833E+22	1,016941E+23	3,971598E+22	1,414101E+23
-2578	5,084616E+22	5,084795E+22	1,985799E+22	1,985732E+22	1,016941E+23	3,971532E+22	1,414094E+23
-2577	5,084840E+22	5,084817E+22	1,985716E+22	1,985808E+22	1,016966E+23	3,971524E+22	1,414118E+23
-2576	5,084860E+22	5,084749E+22	1,985680E+22	1,985654E+22	1,016961E+23	3,971334E+22	1,414094E+23
-2575	5,084772E+22	5,084931E+22	1,985745E+22	1,985647E+22	1,016970E+23	3,971392E+22	1,414110E+23
-2574	5,084971E+22	5,084831E+22	1,985645E+22	1,985739E+22	1,016980E+23	3,971384E+22	1,414119E+23
-2573	5,084782E+22	5,084805E+22	1,985706E+22	1,985648E+22	1,016959E+23	3,971354E+22	1,414094E+23
-2572	5,084727E+22	5,084913E+22	1,985778E+22	1,985781E+22	1,016964E+23	3,971559E+22	1,414120E+23
-2571	5,084855E+22	5,084714E+22	1,985716E+22	1,985817E+22	1,016957E+23	3,971533E+22	1,414110E+23
-2570	5,084641E+22	5,084709E+22	1,985852E+22	1,985768E+22	1,016935E+23	3,971620E+22	1,414097E+23
-2569	5,084720E+22	5,084680E+22	1,985899E+22	1,985948E+22	1,016940E+23	3,971847E+22	1,414125E+23
-2568	5,084709E+22	5,084535E+22	1,985899E+22	1,985933E+22	1,016924E+23	3,971831E+22	1,414107E+23
-2567	5,084458E+22	5,084661E+22	1,986034E+22	1,985960E+22	1,016912E+23	3,971994E+22	1,414111E+23
-2566	5,084615E+22	5,084547E+22	1,985982E+22	1,986108E+22	1,016916E+23	3,972090E+22	1,414125E+23
-2565	5,084503E+22	5,084448E+22	1,986026E+22	1,985985E+22	1,016895E+23	3,972011E+22	1,414096E+23
-2564	5,084410E+22	5,084595E+22	1,986103E+22	1,986028E+22	1,016900E+23	3,972131E+22	1,414114E+23
-2563	5,084635E+22	5,084465E+22	1,985974E+22	1,986054E+22	1,016910E+23	3,972028E+22	1,414113E+23
-2562	5,084457E+22	5,084520E+22	1,986008E+22	1,985917E+22	1,016898E+23	3,971925E+22	1,414090E+23
-2561	5,084516E+22	5,084627E+22	1,985983E+22	1,986012E+22	1,016914E+23	3,971995E+22	1,414114E+23
-2560	5,084674E+22	5,084550E+22	1,985852E+22	1,985924E+22	1,016922E+23	3,971776E+22	1,414100E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2559	5,084519E+22	5,084711E+22	1,985899E+22	1,985801E+22	1,016923E+23	3,971700E+22	1,414093E+23
-2558	5,084773E+22	5,084680E+22	1,985808E+22	1,985884E+22	1,016945E+23	3,971693E+22	1,414115E+23
-2557	5,084789E+22	5,084618E+22	1,985773E+22	1,985733E+22	1,016941E+23	3,971506E+22	1,414091E+23
-2556	5,084615E+22	5,084834E+22	1,985851E+22	1,985760E+22	1,016945E+23	3,971611E+22	1,414106E+23
-2555	5,084819E+22	5,084737E+22	1,985741E+22	1,985858E+22	1,016956E+23	3,971599E+22	1,414115E+23
-2554	5,084649E+22	5,084693E+22	1,985805E+22	1,985763E+22	1,016934E+23	3,971568E+22	1,414091E+23
-2553	5,084589E+22	5,084733E+22	1,985904E+22	1,985891E+22	1,016932E+23	3,971795E+22	1,414112E+23
-2552	5,084758E+22	5,084558E+22	1,985846E+22	1,985926E+22	1,016932E+23	3,971772E+22	1,414109E+23
-2551	5,084512E+22	5,084602E+22	1,985985E+22	1,985887E+22	1,016911E+23	3,971872E+22	1,414099E+23
-2550	5,084585E+22	5,084550E+22	1,986010E+22	1,986089E+22	1,016913E+23	3,972099E+22	1,414123E+23
-2549	5,084574E+22	5,084408E+22	1,986008E+22	1,986058E+22	1,016898E+23	3,972066E+22	1,414105E+23
-2548	5,084296E+22	5,084551E+22	1,986160E+22	1,986078E+22	1,016885E+23	3,972238E+22	1,414109E+23
-2547	5,084496E+22	5,084425E+22	1,986095E+22	1,986201E+22	1,016892E+23	3,972296E+22	1,414122E+23
-2546	5,084408E+22	5,084331E+22	1,986132E+22	1,986075E+22	1,016874E+23	3,972207E+22	1,414095E+23
-2545	5,084276E+22	5,084444E+22	1,986213E+22	1,986135E+22	1,016872E+23	3,972348E+22	1,414107E+23
-2544	5,084500E+22	5,084360E+22	1,986066E+22	1,986167E+22	1,016886E+23	3,972233E+22	1,414109E+23
-2543	5,084323E+22	5,084442E+22	1,986094E+22	1,986021E+22	1,016877E+23	3,972115E+22	1,414088E+23
-2542	5,084429E+22	5,084486E+22	1,986052E+22	1,986101E+22	1,016892E+23	3,972153E+22	1,414107E+23
-2541	5,084623E+22	5,084415E+22	1,985928E+22	1,985977E+22	1,016904E+23	3,971906E+22	1,414094E+23
-2540	5,084441E+22	5,084618E+22	1,985995E+22	1,985865E+22	1,016906E+23	3,971860E+22	1,414092E+23
-2539	5,084679E+22	5,084610E+22	1,985896E+22	1,985959E+22	1,016929E+23	3,971855E+22	1,414114E+23
-2538	5,084663E+22	5,084567E+22	1,985858E+22	1,985838E+22	1,016923E+23	3,971696E+22	1,414093E+23
-2537	5,084441E+22	5,084709E+22	1,985962E+22	1,985883E+22	1,016915E+23	3,971846E+22	1,414100E+23
-2536	5,084670E+22	5,084611E+22	1,985858E+22	1,985978E+22	1,016928E+23	3,971836E+22	1,414112E+23
-2535	5,084524E+22	5,084557E+22	1,985933E+22	1,985874E+22	1,016908E+23	3,971807E+22	1,414089E+23
-2534	5,084499E+22	5,084539E+22	1,986020E+22	1,986012E+22	1,016904E+23	3,972032E+22	1,414107E+23
-2533	5,084663E+22	5,084400E+22	1,985960E+22	1,986047E+22	1,016906E+23	3,972007E+22	1,414107E+23
-2532	5,084354E+22	5,084499E+22	1,986106E+22	1,986026E+22	1,016885E+23	3,972131E+22	1,414098E+23
-2531	5,084434E+22	5,084454E+22	1,986120E+22	1,986215E+22	1,016889E+23	3,972335E+22	1,414122E+23
-2530	5,084445E+22	5,084306E+22	1,986120E+22	1,986167E+22	1,016875E+23	3,972287E+22	1,414104E+23
-2529	5,084150E+22	5,084384E+22	1,986295E+22	1,986179E+22	1,016853E+23	3,972474E+22	1,414101E+23
-2528	5,084377E+22	5,084291E+22	1,986221E+22	1,986298E+22	1,016867E+23	3,972519E+22	1,414119E+23
-2527	5,084272E+22	5,084224E+22	1,986246E+22	1,986180E+22	1,016850E+23	3,972426E+22	1,414092E+23
-2526	5,084150E+22	5,084303E+22	1,986295E+22	1,986254E+22	1,016845E+23	3,972548E+22	1,414100E+23
-2525	5,084405E+22	5,084234E+22	1,986140E+22	1,986262E+22	1,016864E+23	3,972402E+22	1,414104E+23
-2524	5,084217E+22	5,084350E+22	1,986179E+22	1,986102E+22	1,016857E+23	3,972281E+22	1,414085E+23
-2523	5,084369E+22	5,084400E+22	1,986130E+22	1,986158E+22	1,016877E+23	3,972288E+22	1,414106E+23
-2522	5,084565E+22	5,084343E+22	1,986011E+22	1,986040E+22	1,016891E+23	3,972051E+22	1,414096E+23
-2521	5,084307E+22	5,084511E+22	1,986101E+22	1,985961E+22	1,016882E+23	3,972062E+22	1,414088E+23
-2520	5,084514E+22	5,084533E+22	1,985997E+22	1,986073E+22	1,016905E+23	3,972070E+22	1,414112E+23
-2519	5,084494E+22	5,084472E+22	1,985966E+22	1,985960E+22	1,016897E+23	3,971927E+22	1,414089E+23
-2518	5,084321E+22	5,084525E+22	1,986060E+22	1,986004E+22	1,016885E+23	3,972064E+22	1,414091E+23
-2517	5,084596E+22	5,084423E+22	1,985962E+22	1,986074E+22	1,016902E+23	3,972037E+22	1,414106E+23
-2516	5,084432E+22	5,084424E+22	1,986048E+22	1,985981E+22	1,016886E+23	3,972030E+22	1,414089E+23
-2515	5,084404E+22	5,084441E+22	1,986120E+22	1,986123E+22	1,016885E+23	3,972243E+22	1,414109E+23
-2514	5,084539E+22	5,084336E+22	1,986064E+22	1,986171E+22	1,016887E+23	3,972235E+22	1,414111E+23
-2513	5,084181E+22	5,084380E+22	1,986242E+22	1,986158E+22	1,016856E+23	3,972401E+22	1,414096E+23
-2512	5,084264E+22	5,084340E+22	1,986260E+22	1,986326E+22	1,016860E+23	3,972587E+22	1,414119E+23
-2511	5,084300E+22	5,084175E+22	1,986267E+22	1,986275E+22	1,016847E+23	3,972541E+22	1,414102E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2510	5,084034E+22	5,084178E+22	1,986414E+22	1,986297E+22	1,016821E+23	3,972711E+22	1,414092E+23
-2509	5,084254E+22	5,084120E+22	1,986321E+22	1,986412E+22	1,016837E+23	3,972733E+22	1,414111E+23
-2508	5,084126E+22	5,084117E+22	1,986333E+22	1,986304E+22	1,016824E+23	3,972637E+22	1,414088E+23
-2507	5,084049E+22	5,084203E+22	1,986360E+22	1,986350E+22	1,016825E+23	3,972709E+22	1,414096E+23
-2506	5,084336E+22	5,084157E+22	1,986209E+22	1,986331E+22	1,016849E+23	3,972540E+22	1,414103E+23
-2505	5,084131E+22	5,084234E+22	1,986277E+22	1,986167E+22	1,016837E+23	3,972444E+22	1,414081E+23
-2504	5,084267E+22	5,084330E+22	1,986231E+22	1,986223E+22	1,016860E+23	3,972454E+22	1,414105E+23
-2503	5,084431E+22	5,084289E+22	1,986114E+22	1,986133E+22	1,016872E+23	3,972247E+22	1,414097E+23
-2502	5,084166E+22	5,084376E+22	1,986188E+22	1,986083E+22	1,016854E+23	3,972271E+22	1,414081E+23
-2501	5,084387E+22	5,084389E+22	1,986088E+22	1,986183E+22	1,016878E+23	3,972271E+22	1,414105E+23
-2500	5,084375E+22	5,084340E+22	1,986069E+22	1,986067E+22	1,016872E+23	3,972136E+22	1,414085E+23
-2499	5,084260E+22	5,084382E+22	1,986153E+22	1,986096E+22	1,016864E+23	3,972249E+22	1,414089E+23
-2498	5,084537E+22	5,084312E+22	1,986062E+22	1,986172E+22	1,016885E+23	3,972234E+22	1,414108E+23
-2497	5,084291E+22	5,084302E+22	1,986172E+22	1,986108E+22	1,016859E+23	3,972280E+22	1,414087E+23
-2496	5,084230E+22	5,084367E+22	1,986246E+22	1,986252E+22	1,016860E+23	3,972498E+22	1,414109E+23
-2495	5,084361E+22	5,084236E+22	1,986204E+22	1,986298E+22	1,016860E+23	3,972502E+22	1,414110E+23
-2494	5,084031E+22	5,084185E+22	1,986375E+22	1,986284E+22	1,016822E+23	3,972659E+22	1,414087E+23
-2493	5,084145E+22	5,084147E+22	1,986391E+22	1,986430E+22	1,016829E+23	3,972821E+22	1,414111E+23
-2492	5,084162E+22	5,084027E+22	1,986390E+22	1,986393E+22	1,016819E+23	3,972783E+22	1,414097E+23
-2491	5,083919E+22	5,084056E+22	1,986498E+22	1,986416E+22	1,016798E+23	3,972915E+22	1,414089E+23
-2490	5,084146E+22	5,084034E+22	1,986395E+22	1,986524E+22	1,016818E+23	3,972920E+22	1,414110E+23
-2489	5,083997E+22	5,084006E+22	1,986429E+22	1,986409E+22	1,016800E+23	3,972837E+22	1,414084E+23
-2488	5,083943E+22	5,084129E+22	1,986456E+22	1,986420E+22	1,016807E+23	3,972877E+22	1,414095E+23
-2487	5,084248E+22	5,084078E+22	1,986321E+22	1,986396E+22	1,016833E+23	3,972717E+22	1,414104E+23
-2486	5,084042E+22	5,084093E+22	1,986374E+22	1,986257E+22	1,016813E+23	3,972631E+22	1,414076E+23
-2485	5,084143E+22	5,084211E+22	1,986320E+22	1,986317E+22	1,016835E+23	3,972637E+22	1,414099E+23
-2484	5,084276E+22	5,084197E+22	1,986202E+22	1,986250E+22	1,016847E+23	3,972452E+22	1,414092E+23
-2483	5,084066E+22	5,084249E+22	1,986258E+22	1,986185E+22	1,016831E+23	3,972443E+22	1,414076E+23
-2482	5,084320E+22	5,084268E+22	1,986169E+22	1,986265E+22	1,016859E+23	3,972434E+22	1,414102E+23
-2481	5,084295E+22	5,084195E+22	1,986179E+22	1,986159E+22	1,016849E+23	3,972339E+22	1,414083E+23
-2480	5,084155E+22	5,084295E+22	1,986264E+22	1,986185E+22	1,016845E+23	3,972449E+22	1,414090E+23
-2479	5,084394E+22	5,084250E+22	1,986187E+22	1,986290E+22	1,016864E+23	3,972477E+22	1,414112E+23
-2478	5,084136E+22	5,084161E+22	1,986291E+22	1,986251E+22	1,016830E+23	3,972542E+22	1,414084E+23
-2477	5,084064E+22	5,084214E+22	1,986377E+22	1,986375E+22	1,016828E+23	3,972752E+22	1,414103E+23
-2476	5,084202E+22	5,084093E+22	1,986343E+22	1,986423E+22	1,016830E+23	3,972766E+22	1,414106E+23
-2475	5,083930E+22	5,084004E+22	1,986492E+22	1,986399E+22	1,016793E+23	3,972891E+22	1,414083E+23
-2474	5,084040E+22	5,084002E+22	1,986498E+22	1,986545E+22	1,016804E+23	3,973043E+22	1,414109E+23
-2473	5,084006E+22	5,083885E+22	1,986501E+22	1,986530E+22	1,016789E+23	3,973031E+22	1,414092E+23
-2472	5,083763E+22	5,083969E+22	1,986594E+22	1,986533E+22	1,016773E+23	3,973127E+22	1,414086E+23
-2471	5,084022E+22	5,083948E+22	1,986503E+22	1,986624E+22	1,016797E+23	3,973127E+22	1,414110E+23
-2470	5,083911E+22	5,083850E+22	1,986527E+22	1,986494E+22	1,016776E+23	3,973021E+22	1,414078E+23
-2469	5,083871E+22	5,083996E+22	1,986558E+22	1,986480E+22	1,016787E+23	3,973039E+22	1,414091E+23
-2468	5,084139E+22	5,083996E+22	1,986420E+22	1,986477E+22	1,016813E+23	3,972896E+22	1,414103E+23
-2467	5,083938E+22	5,084004E+22	1,986445E+22	1,986353E+22	1,016794E+23	3,972798E+22	1,414074E+23
-2466	5,084029E+22	5,084133E+22	1,986390E+22	1,986414E+22	1,016816E+23	3,972804E+22	1,414097E+23
-2465	5,084136E+22	5,084074E+22	1,986298E+22	1,986354E+22	1,016821E+23	3,972653E+22	1,414086E+23
-2464	5,083962E+22	5,084151E+22	1,986355E+22	1,986266E+22	1,016811E+23	3,972621E+22	1,414073E+23
-2463	5,084242E+22	5,084155E+22	1,986285E+22	1,986351E+22	1,016840E+23	3,972636E+22	1,414103E+23
-2462	5,084193E+22	5,084036E+22	1,986286E+22	1,986275E+22	1,016823E+23	3,972562E+22	1,414079E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2461	5,084017E+22	5,084173E+22	1,986373E+22	1,986305E+22	1,016819E+23	3,972678E+22	1,414087E+23
-2460	5,084218E+22	5,084149E+22	1,986307E+22	1,986425E+22	1,016837E+23	3,972731E+22	1,414110E+23
-2459	5,084008E+22	5,084016E+22	1,986400E+22	1,986376E+22	1,016802E+23	3,972776E+22	1,414080E+23
-2458	5,083955E+22	5,084066E+22	1,986494E+22	1,986478E+22	1,016802E+23	3,972972E+22	1,414099E+23
-2457	5,084067E+22	5,083921E+22	1,986480E+22	1,986542E+22	1,016799E+23	3,973022E+22	1,414101E+23
-2456	5,083789E+22	5,083890E+22	1,986612E+22	1,986513E+22	1,016768E+23	3,973125E+22	1,414080E+23
-2455	5,083894E+22	5,083904E+22	1,986618E+22	1,986674E+22	1,016780E+23	3,973291E+22	1,414109E+23
-2454	5,083868E+22	5,083735E+22	1,986605E+22	1,986665E+22	1,016760E+23	3,973270E+22	1,414087E+23
-2453	5,083647E+22	5,083837E+22	1,986700E+22	1,986629E+22	1,016748E+23	3,973329E+22	1,414081E+23
-2452	5,083917E+22	5,083845E+22	1,986617E+22	1,986708E+22	1,016776E+23	3,973325E+22	1,414109E+23
-2451	5,083854E+22	5,083726E+22	1,986618E+22	1,986572E+22	1,016758E+23	3,973190E+22	1,414077E+23
-2450	5,083778E+22	5,083907E+22	1,986641E+22	1,986559E+22	1,016768E+23	3,973200E+22	1,414088E+23
-2449	5,083980E+22	5,083901E+22	1,986512E+22	1,986588E+22	1,016788E+23	3,973100E+22	1,414098E+23
-2448	5,083782E+22	5,083922E+22	1,986525E+22	1,986450E+22	1,016770E+23	3,972975E+22	1,414068E+23
-2447	5,083910E+22	5,084029E+22	1,986488E+22	1,986505E+22	1,016794E+23	3,972993E+22	1,414093E+23
-2446	5,084057E+22	5,083899E+22	1,986391E+22	1,986447E+22	1,016796E+23	3,972838E+22	1,414079E+23
-2445	5,083891E+22	5,084003E+22	1,986451E+22	1,986345E+22	1,016789E+23	3,972796E+22	1,414069E+23
-2444	5,084133E+22	5,084069E+22	1,986387E+22	1,986454E+22	1,016820E+23	3,972841E+22	1,414104E+23
-2443	5,084090E+22	5,083936E+22	1,986371E+22	1,986394E+22	1,016803E+23	3,972766E+22	1,414079E+23
-2442	5,083889E+22	5,084080E+22	1,986473E+22	1,986417E+22	1,016797E+23	3,972890E+22	1,414086E+23
-2441	5,084052E+22	5,084018E+22	1,986441E+22	1,986547E+22	1,016807E+23	3,972988E+22	1,414106E+23
-2440	5,083863E+22	5,083889E+22	1,986538E+22	1,986481E+22	1,016775E+23	3,973019E+22	1,414077E+23
-2439	5,083830E+22	5,083921E+22	1,986643E+22	1,986597E+22	1,016775E+23	3,973239E+22	1,414099E+23
-2438	5,083920E+22	5,083731E+22	1,986607E+22	1,986689E+22	1,016765E+23	3,973296E+22	1,414095E+23
-2437	5,083636E+22	5,083738E+22	1,986724E+22	1,986651E+22	1,016737E+23	3,973375E+22	1,414075E+23
-2436	5,083742E+22	5,083787E+22	1,986730E+22	1,986804E+22	1,016753E+23	3,973534E+22	1,414106E+23
-2435	5,083780E+22	5,083599E+22	1,986699E+22	1,986770E+22	1,016738E+23	3,973468E+22	1,414085E+23
-2434	5,083582E+22	5,083726E+22	1,986797E+22	1,986699E+22	1,016731E+23	3,973496E+22	1,414080E+23
-2433	5,083800E+22	5,083734E+22	1,986732E+22	1,986790E+22	1,016753E+23	3,973521E+22	1,414106E+23
-2432	5,083713E+22	5,083671E+22	1,986715E+22	1,986655E+22	1,016738E+23	3,973370E+22	1,414075E+23
-2431	5,083631E+22	5,083836E+22	1,986738E+22	1,986662E+22	1,016747E+23	3,973400E+22	1,414087E+23
-2430	5,083827E+22	5,083756E+22	1,986597E+22	1,986704E+22	1,016758E+23	3,973300E+22	1,414088E+23
-2429	5,083677E+22	5,083780E+22	1,986610E+22	1,986538E+22	1,016746E+23	3,973148E+22	1,414061E+23
-2428	5,083833E+22	5,083901E+22	1,986583E+22	1,986587E+22	1,016773E+23	3,973170E+22	1,414090E+23
-2427	5,084021E+22	5,083764E+22	1,986469E+22	1,986534E+22	1,016779E+23	3,973003E+22	1,414079E+23
-2426	5,083816E+22	5,083917E+22	1,986530E+22	1,986434E+22	1,016773E+23	3,972964E+22	1,414070E+23
-2425	5,083972E+22	5,083985E+22	1,986493E+22	1,986573E+22	1,016796E+23	3,973066E+22	1,414102E+23
-2424	5,083926E+22	5,083864E+22	1,986483E+22	1,986503E+22	1,016779E+23	3,972986E+22	1,414078E+23
-2423	5,083747E+22	5,083961E+22	1,986612E+22	1,986527E+22	1,016771E+23	3,973139E+22	1,414085E+23
-2422	5,083916E+22	5,083823E+22	1,986580E+22	1,986668E+22	1,016774E+23	3,973248E+22	1,414099E+23
-2421	5,083739E+22	5,083710E+22	1,986671E+22	1,986599E+22	1,016745E+23	3,973270E+22	1,414072E+23
-2420	5,083680E+22	5,083788E+22	1,986770E+22	1,986736E+22	1,016747E+23	3,973506E+22	1,414097E+23
-2419	5,083800E+22	5,083591E+22	1,986705E+22	1,986835E+22	1,016739E+23	3,973539E+22	1,414093E+23
-2418	5,083517E+22	5,083625E+22	1,986820E+22	1,986768E+22	1,016714E+23	3,973588E+22	1,414073E+23
-2417	5,083606E+22	5,083672E+22	1,986852E+22	1,986913E+22	1,016728E+23	3,973765E+22	1,414104E+23
-2416	5,083669E+22	5,083505E+22	1,986816E+22	1,986846E+22	1,016717E+23	3,973662E+22	1,414084E+23
-2415	5,083471E+22	5,083626E+22	1,986922E+22	1,986788E+22	1,016710E+23	3,973710E+22	1,414081E+23
-2414	5,083643E+22	5,083594E+22	1,986834E+22	1,986906E+22	1,016724E+23	3,973740E+22	1,414098E+23
-2413	5,083552E+22	5,083542E+22	1,986802E+22	1,986767E+22	1,016709E+23	3,973569E+22	1,414066E+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							
-2412	5,083491E+22	5,083716E+22	1,986825E+22	1,986769E+22	1,016721E+23	3,973594E+22	1,414080E+23
-2411	5,083767E+22	5,083603E+22	1,986664E+22	1,986791E+22	1,016737E+23	3,973454E+22	1,414082E+23
-2410	5,083648E+22	5,083658E+22	1,986679E+22	1,986596E+22	1,016731E+23	3,973275E+22	1,414058E+23
-2409	5,083754E+22	5,083807E+22	1,986676E+22	1,986665E+22	1,016756E+23	3,973341E+22	1,414090E+23
-2408	5,083905E+22	5,083729E+22	1,986560E+22	1,986616E+22	1,016763E+23	3,973175E+22	1,414081E+23
-2407	5,083681E+22	5,083866E+22	1,986643E+22	1,986543E+22	1,016755E+23	3,973186E+22	1,414073E+23
-2406	5,083798E+22	5,083852E+22	1,986616E+22	1,986696E+22	1,016765E+23	3,973312E+22	1,414096E+23
-2405	5,083778E+22	5,083714E+22	1,986616E+22	1,986618E+22	1,016749E+23	3,973234E+22	1,414073E+23
-2404	5,083618E+22	5,083797E+22	1,986755E+22	1,986648E+22	1,016742E+23	3,973403E+22	1,414082E+23
-2403	5,083815E+22	5,083638E+22	1,986695E+22	1,986805E+22	1,016745E+23	3,973500E+22	1,414095E+23
-2402	5,083622E+22	5,083569E+22	1,986770E+22	1,986734E+22	1,016719E+23	3,973505E+22	1,414070E+23
-2401	5,083510E+22	5,083659E+22	1,986882E+22	1,986881E+22	1,016717E+23	3,973763E+22	1,414093E+23
-2400	5,083649E+22	5,083499E+22	1,986817E+22	1,986947E+22	1,016715E+23	3,973764E+22	1,414091E+23
-2399	5,083413E+22	5,083514E+22	1,986950E+22	1,986866E+22	1,016693E+23	3,973816E+22	1,414074E+23
-2398	5,083478E+22	5,083511E+22	1,986980E+22	1,987009E+22	1,016699E+23	3,973989E+22	1,414098E+23
-2397	5,083543E+22	5,083379E+22	1,986934E+22	1,986941E+22	1,016692E+23	3,973874E+22	1,414080E+23
-2396	5,083320E+22	5,083522E+22	1,987029E+22	1,986900E+22	1,016684E+23	3,973929E+22	1,414077E+23
-2395	5,083518E+22	5,083465E+22	1,986908E+22	1,987022E+22	1,016698E+23	3,973930E+22	1,414091E+23
-2394	5,083455E+22	5,083424E+22	1,986869E+22	1,986855E+22	1,016688E+23	3,973724E+22	1,414060E+23
-2393	5,083393E+22	5,083596E+22	1,986912E+22	1,986852E+22	1,016699E+23	3,973764E+22	1,414075E+23
-2392	5,083703E+22	5,083521E+22	1,986752E+22	1,986850E+22	1,016722E+23	3,973602E+22	1,414083E+23
-2391	5,083584E+22	5,083585E+22	1,986779E+22	1,986677E+22	1,016717E+23	3,973456E+22	1,414062E+23
-2390	5,083611E+22	5,083706E+22	1,986773E+22	1,986774E+22	1,016732E+23	3,973546E+22	1,414086E+23
-2389	5,083748E+22	5,083633E+22	1,986661E+22	1,986728E+22	1,016738E+23	3,973389E+22	1,414077E+23
-2388	5,083527E+22	5,083747E+22	1,986764E+22	1,986662E+22	1,016727E+23	3,973426E+22	1,414070E+23
-2387	5,083693E+22	5,083681E+22	1,986724E+22	1,986811E+22	1,016737E+23	3,973536E+22	1,414091E+23
-2386	5,083689E+22	5,083548E+22	1,986724E+22	1,986719E+22	1,016724E+23	3,973444E+22	1,414068E+23
-2385	5,083487E+22	5,083653E+22	1,986874E+22	1,986777E+22	1,016714E+23	3,973652E+22	1,414079E+23
-2384	5,083670E+22	5,083539E+22	1,986802E+22	1,986928E+22	1,016721E+23	3,973731E+22	1,414094E+23
-2383	5,083484E+22	5,083469E+22	1,986890E+22	1,986868E+22	1,016695E+23	3,973757E+22	1,414071E+23
-2382	5,083349E+22	5,083513E+22	1,987006E+22	1,987009E+22	1,016686E+23	3,974016E+22	1,414088E+23
-2381	5,083518E+22	5,083358E+22	1,986952E+22	1,987050E+22	1,016688E+23	3,974002E+22	1,414088E+23
-2380	5,083296E+22	5,083376E+22	1,987095E+22	1,986970E+22	1,016667E+23	3,974065E+22	1,414074E+23
-2379	5,083364E+22	5,083357E+22	1,987090E+22	1,987123E+22	1,016672E+23	3,974213E+22	1,414093E+23
-2378	5,083406E+22	5,083258E+22	1,987021E+22	1,987053E+22	1,016666E+23	3,974074E+22	1,414074E+23
-2377	5,083155E+22	5,083402E+22	1,987118E+22	1,987021E+22	1,016656E+23	3,974139E+22	1,414070E+23
-2376	5,083393E+22	5,083367E+22	1,986990E+22	1,987106E+22	1,016676E+23	3,974096E+22	1,414086E+23
-2375	5,083395E+22	5,083321E+22	1,986962E+22	1,986930E+22	1,016672E+23	3,973892E+22	1,414061E+23
-2374	5,083311E+22	5,083464E+22	1,987004E+22	1,986928E+22	1,016678E+23	3,973933E+22	1,414071E+23
-2373	5,083609E+22	5,083438E+22	1,986846E+22	1,986931E+22	1,016705E+23	3,973777E+22	1,414082E+23
-2372	5,083461E+22	5,083519E+22	1,986878E+22	1,986782E+22	1,016698E+23	3,973660E+22	1,414064E+23
-2371	5,083483E+22	5,083597E+22	1,986857E+22	1,986887E+22	1,016708E+23	3,973744E+22	1,414082E+23
-2370	5,083634E+22	5,083515E+22	1,986753E+22	1,986827E+22	1,016715E+23	3,973580E+22	1,414073E+23
-2369	5,083402E+22	5,083595E+22	1,986881E+22	1,986768E+22	1,016700E+23	3,973649E+22	1,414065E+23
-2368	5,083582E+22	5,083550E+22	1,986842E+22	1,986906E+22	1,016713E+23	3,973748E+22	1,414088E+23
-2367	5,083587E+22	5,083424E+22	1,986844E+22	1,986845E+22	1,016701E+23	3,973689E+22	1,414070E+23
-2366	5,083314E+22	5,083500E+22	1,986986E+22	1,986922E+22	1,016681E+23	3,973908E+22	1,414072E+23
-2365	5,083507E+22	5,083411E+22	1,986921E+22	1,987063E+22	1,016692E+23	3,973984E+22	1,414090E+23
-2364	5,083349E+22	5,083333E+22	1,987025E+22	1,986991E+22	1,016668E+23	3,974016E+22	1,414070E+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	5,083250E+22	5,083346E+22	1,987128E+22	1,987117E+22	1,016660E+23	3,974245E+22	1,414084E+23
-2362	5,083425E+22	5,083217E+22	1,987070E+22	1,987143E+22	1,016664E+23	3,974213E+22	1,414085E+23
-2361	5,083144E+22	5,083258E+22	1,987215E+22	1,987090E+22	1,016640E+23	3,974305E+22	1,414071E+23
-2360	5,083198E+22	5,083276E+22	1,987191E+22	1,987232E+22	1,016647E+23	3,974423E+22	1,414090E+23
-2359	5,083270E+22	5,083162E+22	1,987120E+22	1,987171E+22	1,016643E+23	3,974291E+22	1,414072E+23
-2358	5,083014E+22	5,083256E+22	1,987213E+22	1,987128E+22	1,016627E+23	3,974340E+22	1,414061E+23
-2357	5,083307E+22	5,083236E+22	1,987088E+22	1,987185E+22	1,016654E+23	3,974273E+22	1,414082E+23
-2356	5,083332E+22	5,083208E+22	1,987067E+22	1,987013E+22	1,016654E+23	3,974080E+22	1,414062E+23
-2355	5,083239E+22	5,083353E+22	1,987081E+22	1,987023E+22	1,016659E+23	3,974104E+22	1,414070E+23
-2354	5,083496E+22	5,083352E+22	1,986917E+22	1,987021E+22	1,016685E+23	3,973937E+22	1,414079E+23
-2353	5,083311E+22	5,083424E+22	1,986969E+22	1,986891E+22	1,016673E+23	3,973860E+22	1,414060E+23
-2352	5,083354E+22	5,083495E+22	1,986956E+22	1,986966E+22	1,016685E+23	3,973921E+22	1,414077E+23
-2351	5,083545E+22	5,083388E+22	1,986868E+22	1,986917E+22	1,016693E+23	3,973785E+22	1,414072E+23
-2350	5,083280E+22	5,083430E+22	1,986996E+22	1,986878E+22	1,016671E+23	3,973874E+22	1,414058E+23
-2349	5,083451E+22	5,083419E+22	1,986959E+22	1,987024E+22	1,016687E+23	3,973982E+22	1,414085E+23
-2348	5,083444E+22	5,083310E+22	1,986967E+22	1,986984E+22	1,016675E+23	3,973951E+22	1,414070E+23
-2347	5,083182E+22	5,083356E+22	1,987092E+22	1,987060E+22	1,016654E+23	3,974152E+22	1,414069E+23
-2346	5,083388E+22	5,083275E+22	1,987039E+22	1,987173E+22	1,016666E+23	3,974212E+22	1,414087E+23
-2345	5,083221E+22	5,083194E+22	1,987165E+22	1,987108E+22	1,016642E+23	3,974273E+22	1,414069E+23
-2344	5,083120E+22	5,083229E+22	1,987263E+22	1,987215E+22	1,016635E+23	3,974478E+22	1,414083E+23
-2343	5,083288E+22	5,083111E+22	1,987196E+22	1,987272E+22	1,016640E+23	3,974468E+22	1,414087E+23
-2342	5,082947E+22	5,083109E+22	1,987324E+22	1,987232E+22	1,016606E+23	3,974556E+22	1,414061E+23
-2341	5,083032E+22	5,083139E+22	1,987296E+22	1,987352E+22	1,016617E+23	3,974648E+22	1,414082E+23
-2340	5,083164E+22	5,083022E+22	1,987229E+22	1,987273E+22	1,016619E+23	3,974502E+22	1,414069E+23
-2339	5,082959E+22	5,083098E+22	1,987293E+22	1,987210E+22	1,016606E+23	3,974503E+22	1,414056E+23
-2338	5,083263E+22	5,083127E+22	1,987167E+22	1,987250E+22	1,016639E+23	3,974416E+22	1,414081E+23
-2337	5,083231E+22	5,083136E+22	1,987149E+22	1,987100E+22	1,016637E+23	3,974248E+22	1,414062E+23
-2336	5,083109E+22	5,083308E+22	1,987160E+22	1,987097E+22	1,016642E+23	3,974257E+22	1,414067E+23
-2335	5,083378E+22	5,083289E+22	1,987010E+22	1,987113E+22	1,016667E+23	3,974123E+22	1,414079E+23
-2334	5,083159E+22	5,083285E+22	1,987075E+22	1,986990E+22	1,016644E+23	3,974065E+22	1,414051E+23
-2333	5,083236E+22	5,083351E+22	1,987076E+22	1,987057E+22	1,016659E+23	3,974133E+22	1,414072E+23
-2332	5,083444E+22	5,083241E+22	1,986996E+22	1,987033E+22	1,016668E+23	3,974029E+22	1,414071E+23
-2331	5,083167E+22	5,083273E+22	1,987090E+22	1,987013E+22	1,016644E+23	3,974103E+22	1,414054E+23
-2330	5,083322E+22	5,083287E+22	1,987051E+22	1,987152E+22	1,016661E+23	3,974203E+22	1,414081E+23
-2329	5,083295E+22	5,083187E+22	1,987079E+22	1,987119E+22	1,016648E+23	3,974198E+22	1,414068E+23
-2328	5,083060E+22	5,083243E+22	1,987216E+22	1,987157E+22	1,016630E+23	3,974373E+22	1,414068E+23
-2327	5,083290E+22	5,083157E+22	1,987178E+22	1,987277E+22	1,016645E+23	3,974456E+22	1,414090E+23
-2326	5,083063E+22	5,083045E+22	1,987306E+22	1,987233E+22	1,016611E+23	3,974539E+22	1,414065E+23
-2325	5,082945E+22	5,083107E+22	1,987395E+22	1,987344E+22	1,016605E+23	3,974738E+22	1,414079E+23
-2324	5,083115E+22	5,082984E+22	1,987323E+22	1,987414E+22	1,016610E+23	3,974737E+22	1,414084E+23
-2323	5,082817E+22	5,082943E+22	1,987417E+22	1,987362E+22	1,016576E+23	3,974778E+22	1,414054E+23
-2322	5,082944E+22	5,082979E+22	1,987386E+22	1,987439E+22	1,016592E+23	3,974825E+22	1,414075E+23
-2321	5,083088E+22	5,082895E+22	1,987329E+22	1,987358E+22	1,016598E+23	3,974687E+22	1,414067E+23
-2320	5,082893E+22	5,083014E+22	1,987382E+22	1,987272E+22	1,016591E+23	3,974654E+22	1,414056E+23
-2319	5,083164E+22	5,083074E+22	1,987253E+22	1,987337E+22	1,016624E+23	3,974590E+22	1,414083E+23
-2318	5,083059E+22	5,083048E+22	1,987237E+22	1,987205E+22	1,016611E+23	3,974442E+22	1,414055E+23
-2317	5,082951E+22	5,083206E+22	1,987260E+22	1,987188E+22	1,016616E+23	3,974448E+22	1,414061E+23
-2316	5,083257E+22	5,083161E+22	1,987126E+22	1,987206E+22	1,016642E+23	3,974333E+22	1,414075E+23
-2315	5,083077E+22	5,083111E+22	1,987169E+22	1,987089E+22	1,016619E+23	3,974259E+22	1,414045E+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	5,083154E+22	5,083202E+22	1,987170E+22	1,987155E+22	1,016636E+23	3,974324E+22	1,414068E+23
-2313	5,083319E+22	5,083136E+22	1,987094E+22	1,987161E+22	1,016645E+23	3,974255E+22	1,414071E+23
-2312	5,083040E+22	5,083188E+22	1,987184E+22	1,987125E+22	1,016623E+23	3,974309E+22	1,414054E+23
-2311	5,083207E+22	5,083202E+22	1,987164E+22	1,987270E+22	1,016641E+23	3,974434E+22	1,414084E+23
-2310	5,083143E+22	5,083047E+22	1,987214E+22	1,987237E+22	1,016619E+23	3,974451E+22	1,414064E+23
-2309	5,082925E+22	5,083103E+22	1,987371E+22	1,987264E+22	1,016603E+23	3,974635E+22	1,414066E+23
-2308	5,083148E+22	5,083018E+22	1,987338E+22	1,987410E+22	1,016617E+23	3,974747E+22	1,414091E+23
-2307	5,082896E+22	5,082874E+22	1,987422E+22	1,987385E+22	1,016577E+23	3,974807E+22	1,414058E+23
-2306	5,082784E+22	5,082943E+22	1,987498E+22	1,987478E+22	1,016573E+23	3,974976E+22	1,414070E+23
-2305	5,082970E+22	5,082830E+22	1,987427E+22	1,987539E+22	1,016580E+23	3,974966E+22	1,414077E+23
-2304	5,082729E+22	5,082810E+22	1,987510E+22	1,987438E+22	1,016554E+23	3,974948E+22	1,414049E+23
-2303	5,082896E+22	5,082881E+22	1,987483E+22	1,987514E+22	1,016578E+23	3,974996E+22	1,414077E+23
-2302	5,082969E+22	5,082798E+22	1,987427E+22	1,987445E+22	1,016577E+23	3,974873E+22	1,414064E+23
-2301	5,082752E+22	5,082957E+22	1,987481E+22	1,987360E+22	1,016571E+23	3,974841E+22	1,414055E+23
-2300	5,083014E+22	5,083002E+22	1,987360E+22	1,987438E+22	1,016602E+23	3,974799E+22	1,414081E+23
-2299	5,082924E+22	5,082914E+22	1,987322E+22	1,987311E+22	1,016584E+23	3,974633E+22	1,414047E+23
-2298	5,082854E+22	5,083051E+22	1,987352E+22	1,987272E+22	1,016590E+23	3,974624E+22	1,414053E+23
-2297	5,083164E+22	5,083018E+22	1,987228E+22	1,987306E+22	1,016618E+23	3,974534E+22	1,414072E+23
-2296	5,082999E+22	5,082996E+22	1,987257E+22	1,987183E+22	1,016600E+23	3,974440E+22	1,414044E+23
-2295	5,083056E+22	5,083117E+22	1,987256E+22	1,987272E+22	1,016617E+23	3,974528E+22	1,414070E+23
-2294	5,083153E+22	5,083024E+22	1,987197E+22	1,987291E+22	1,016618E+23	3,974488E+22	1,414066E+23
-2293	5,082897E+22	5,083077E+22	1,987310E+22	1,987232E+22	1,016597E+23	3,974542E+22	1,414052E+23
-2292	5,083081E+22	5,083072E+22	1,987317E+22	1,987376E+22	1,016615E+23	3,974694E+22	1,414085E+23
-2291	5,083028E+22	5,082877E+22	1,987349E+22	1,987358E+22	1,016591E+23	3,974707E+22	1,414061E+23
-2290	5,082790E+22	5,082939E+22	1,987500E+22	1,987385E+22	1,016573E+23	3,974885E+22	1,414061E+23
-2289	5,082963E+22	5,082887E+22	1,987462E+22	1,987557E+22	1,016585E+23	3,975018E+22	1,414087E+23
-2288	5,082744E+22	5,082745E+22	1,987527E+22	1,987511E+22	1,016549E+23	3,975038E+22	1,414053E+23
-2287	5,082664E+22	5,082816E+22	1,987602E+22	1,987595E+22	1,016548E+23	3,975197E+22	1,414068E+23
-2286	5,082838E+22	5,082684E+22	1,987543E+22	1,987645E+22	1,016552E+23	3,975188E+22	1,414071E+23
-2285	5,082634E+22	5,082694E+22	1,987630E+22	1,987523E+22	1,016533E+23	3,975153E+22	1,414048E+23
-2284	5,082787E+22	5,082792E+22	1,987603E+22	1,987613E+22	1,016558E+23	3,975216E+22	1,414080E+23
-2283	5,082829E+22	5,082691E+22	1,987510E+22	1,987561E+22	1,016552E+23	3,975071E+22	1,414059E+23
-2282	5,082613E+22	5,082835E+22	1,987563E+22	1,987458E+22	1,016545E+23	3,975021E+22	1,414047E+23
-2281	5,082877E+22	5,082885E+22	1,987452E+22	1,987534E+22	1,016576E+23	3,974986E+22	1,414075E+23
-2280	5,082849E+22	5,082785E+22	1,987405E+22	1,987380E+22	1,016563E+23	3,974785E+22	1,414042E+23
-2279	5,082805E+22	5,082940E+22	1,987437E+22	1,987354E+22	1,016575E+23	3,974791E+22	1,414054E+23
-2278	5,083045E+22	5,082908E+22	1,987322E+22	1,987410E+22	1,016595E+23	3,974733E+22	1,414068E+23
-2277	5,082870E+22	5,082921E+22	1,987356E+22	1,987289E+22	1,016579E+23	3,974645E+22	1,414044E+23
-2276	5,082927E+22	5,083034E+22	1,987374E+22	1,987389E+22	1,016596E+23	3,974763E+22	1,414072E+23
-2275	5,083020E+22	5,082883E+22	1,987307E+22	1,987408E+22	1,016590E+23	3,974715E+22	1,414062E+23
-2274	5,082787E+22	5,082914E+22	1,987442E+22	1,987334E+22	1,016570E+23	3,974776E+22	1,414048E+23
-2273	5,082948E+22	5,082922E+22	1,987461E+22	1,987496E+22	1,016587E+23	3,974957E+22	1,414083E+23
-2272	5,082886E+22	5,082738E+22	1,987472E+22	1,987486E+22	1,016562E+23	3,974957E+22	1,414058E+23
-2271	5,082635E+22	5,082816E+22	1,987609E+22	1,987534E+22	1,016545E+23	3,975143E+22	1,414059E+23
-2270	5,082761E+22	5,082729E+22	1,987578E+22	1,987705E+22	1,016549E+23	3,975283E+22	1,414077E+23
-2269	5,082600E+22	5,082600E+22	1,987649E+22	1,987625E+22	1,016520E+23	3,975273E+22	1,414047E+23
-2268	5,082570E+22	5,082678E+22	1,987734E+22	1,987696E+22	1,016525E+23	3,975430E+22	1,414068E+23
-2267	5,082744E+22	5,082538E+22	1,987650E+22	1,987748E+22	1,016528E+23	3,975398E+22	1,414068E+23
-2266	5,082533E+22	5,082579E+22	1,987730E+22	1,987619E+22	1,016511E+23	3,975348E+22	1,414046E+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							
-2265	5,082636E+22	5,082714E+22	1,987700E+22	1,987720E+22	1,016535E+23	3,975419E+22	1,414077E+23
-2264	5,082705E+22	5,082604E+22	1,987591E+22	1,987650E+22	1,016531E+23	3,975241E+22	1,414055E+23
-2263	5,082517E+22	5,082731E+22	1,987645E+22	1,987543E+22	1,016525E+23	3,975188E+22	1,414044E+23
-2262	5,082753E+22	5,082747E+22	1,987554E+22	1,987619E+22	1,016550E+23	3,975173E+22	1,414067E+23
-2261	5,082764E+22	5,082669E+22	1,987512E+22	1,987462E+22	1,016543E+23	3,974974E+22	1,414041E+23
-2260	5,082703E+22	5,082844E+22	1,987543E+22	1,987461E+22	1,016555E+23	3,975004E+22	1,414055E+23
-2259	5,082912E+22	5,082791E+22	1,987405E+22	1,987536E+22	1,016570E+23	3,974941E+22	1,414064E+23
-2258	5,082752E+22	5,082784E+22	1,987448E+22	1,987396E+22	1,016554E+23	3,974844E+22	1,414038E+23
-2257	5,082793E+22	5,082912E+22	1,987490E+22	1,987490E+22	1,016571E+23	3,974980E+22	1,414068E+23
-2256	5,082930E+22	5,082753E+22	1,987422E+22	1,987498E+22	1,016568E+23	3,974921E+22	1,414060E+23
-2255	5,082688E+22	5,082789E+22	1,987562E+22	1,987448E+22	1,016548E+23	3,975010E+22	1,414049E+23
-2254	5,082755E+22	5,082793E+22	1,987592E+22	1,987636E+22	1,016555E+23	3,975228E+22	1,414078E+23
-2253	5,082703E+22	5,082619E+22	1,987601E+22	1,987627E+22	1,016532E+23	3,975228E+22	1,414055E+23
-2252	5,082475E+22	5,082679E+22	1,987742E+22	1,987677E+22	1,016515E+23	3,975419E+22	1,414057E+23
-2251	5,082625E+22	5,082550E+22	1,987693E+22	1,987835E+22	1,016517E+23	3,975528E+22	1,414070E+23
-2250	5,082519E+22	5,082420E+22	1,987769E+22	1,987726E+22	1,016494E+23	3,975495E+22	1,414043E+23
-2249	5,082470E+22	5,082555E+22	1,987856E+22	1,987800E+22	1,016503E+23	3,975656E+22	1,414068E+23
-2248	5,082637E+22	5,082446E+22	1,987746E+22	1,987849E+22	1,016508E+23	3,975595E+22	1,414068E+23
-2247	5,082406E+22	5,082504E+22	1,987814E+22	1,987729E+22	1,016491E+23	3,975544E+22	1,414045E+23
-2246	5,082454E+22	5,082602E+22	1,987799E+22	1,987822E+22	1,016506E+23	3,975621E+22	1,414068E+23
-2245	5,082575E+22	5,082489E+22	1,987696E+22	1,987729E+22	1,016506E+23	3,975425E+22	1,414049E+23
-2244	5,082439E+22	5,082606E+22	1,987755E+22	1,987626E+22	1,016504E+23	3,975381E+22	1,414043E+23
-2243	5,082661E+22	5,082599E+22	1,987639E+22	1,987714E+22	1,016526E+23	3,975354E+22	1,414061E+23
-2242	5,082672E+22	5,082548E+22	1,987593E+22	1,987561E+22	1,016522E+23	3,975153E+22	1,414037E+23
-2241	5,082580E+22	5,082761E+22	1,987627E+22	1,987569E+22	1,016534E+23	3,975196E+22	1,414054E+23
-2240	5,082804E+22	5,082697E+22	1,987488E+22	1,987631E+22	1,016550E+23	3,975118E+22	1,414062E+23
-2239	5,082663E+22	5,082685E+22	1,987545E+22	1,987492E+22	1,016535E+23	3,975037E+22	1,414039E+23
-2238	5,082649E+22	5,082773E+22	1,987622E+22	1,987591E+22	1,016542E+23	3,975213E+22	1,414064E+23
-2237	5,082793E+22	5,082629E+22	1,987564E+22	1,987611E+22	1,016542E+23	3,975175E+22	1,414060E+23
-2236	5,082531E+22	5,082661E+22	1,987702E+22	1,987595E+22	1,016519E+23	3,975296E+22	1,414049E+23
-2235	5,082563E+22	5,082620E+22	1,987707E+22	1,987796E+22	1,016518E+23	3,975503E+22	1,414069E+23
-2234	5,082562E+22	5,082428E+22	1,987719E+22	1,987763E+22	1,016499E+23	3,975482E+22	1,414047E+23
-2233	5,082356E+22	5,082517E+22	1,987865E+22	1,987793E+22	1,016487E+23	3,975659E+22	1,414053E+23
-2232	5,082557E+22	5,082406E+22	1,987807E+22	1,987930E+22	1,016496E+23	3,975737E+22	1,414070E+23
-2231	5,082445E+22	5,082322E+22	1,987875E+22	1,987828E+22	1,016477E+23	3,975703E+22	1,414047E+23
-2230	5,082297E+22	5,082471E+22	1,987974E+22	1,987912E+22	1,016477E+23	3,975886E+22	1,414065E+23
-2229	5,082470E+22	5,082377E+22	1,987863E+22	1,987955E+22	1,016485E+23	3,975818E+22	1,414067E+23
-2228	5,082253E+22	5,082400E+22	1,987933E+22	1,987838E+22	1,016465E+23	3,975770E+22	1,414042E+23
-2227	5,082311E+22	5,082442E+22	1,987899E+22	1,987923E+22	1,016475E+23	3,975822E+22	1,414057E+23
-2226	5,082500E+22	5,082309E+22	1,987794E+22	1,987814E+22	1,016481E+23	3,975607E+22	1,414042E+23
-2225	5,082349E+22	5,082479E+22	1,987843E+22	1,987722E+22	1,016483E+23	3,975565E+22	1,414039E+23
-2224	5,082578E+22	5,082505E+22	1,987703E+22	1,987814E+22	1,016508E+23	3,975517E+22	1,414060E+23
-2223	5,082581E+22	5,082472E+22	1,987653E+22	1,987663E+22	1,016505E+23	3,975315E+22	1,414037E+23
-2222	5,082432E+22	5,082662E+22	1,987723E+22	1,987661E+22	1,016509E+23	3,975384E+22	1,414048E+23
-2221	5,082693E+22	5,082599E+22	1,987607E+22	1,987705E+22	1,016529E+23	3,975312E+22	1,414060E+23
-2220	5,082564E+22	5,082568E+22	1,987683E+22	1,987591E+22	1,016513E+23	3,975274E+22	1,414041E+23
-2219	5,082497E+22	5,082622E+22	1,987747E+22	1,987716E+22	1,016512E+23	3,975462E+22	1,414058E+23
-2218	5,082643E+22	5,082471E+22	1,987686E+22	1,987750E+22	1,016511E+23	3,975436E+22	1,414055E+23
-2217	5,082367E+22	5,082522E+22	1,987820E+22	1,987741E+22	1,016489E+23	3,975561E+22	1,414045E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2216	5,082443E+22	5,082464E+22	1,987814E+22	1,987923E+22	1,016491E+23	3,975737E+22	1,414064E+23
-2215	5,082478E+22	5,082288E+22	1,987829E+22	1,987878E+22	1,016477E+23	3,975707E+22	1,414047E+23
-2214	5,082231E+22	5,082376E+22	1,988002E+22	1,987902E+22	1,016461E+23	3,975904E+22	1,414051E+23
-2213	5,082424E+22	5,082311E+22	1,987947E+22	1,988038E+22	1,016474E+23	3,975985E+22	1,414072E+23
-2212	5,082289E+22	5,082241E+22	1,988007E+22	1,987962E+22	1,016453E+23	3,975969E+22	1,414050E+23
-2211	5,082097E+22	5,082329E+22	1,988081E+22	1,988042E+22	1,016443E+23	3,976123E+22	1,414055E+23
-2210	5,082322E+22	5,082205E+22	1,987969E+22	1,988061E+22	1,016453E+23	3,976031E+22	1,414056E+23
-2209	5,082144E+22	5,082244E+22	1,988032E+22	1,987929E+22	1,016439E+23	3,975961E+22	1,414035E+23
-2208	5,082252E+22	5,082290E+22	1,987978E+22	1,988002E+22	1,016454E+23	3,975979E+22	1,414052E+23
-2207	5,082445E+22	5,082216E+22	1,987858E+22	1,987901E+22	1,016466E+23	3,975759E+22	1,414042E+23
-2206	5,082221E+22	5,082405E+22	1,987921E+22	1,987817E+22	1,016463E+23	3,975737E+22	1,414036E+23
-2205	5,082457E+22	5,082453E+22	1,987794E+22	1,987898E+22	1,016491E+23	3,975692E+22	1,414060E+23
-2204	5,082472E+22	5,082400E+22	1,987761E+22	1,987755E+22	1,016487E+23	3,975516E+22	1,414039E+23
-2203	5,082299E+22	5,082521E+22	1,987837E+22	1,987752E+22	1,016482E+23	3,975590E+22	1,414041E+23
-2202	5,082593E+22	5,082433E+22	1,987738E+22	1,987803E+22	1,016503E+23	3,975541E+22	1,414057E+23
-2201	5,082427E+22	5,082431E+22	1,987810E+22	1,987718E+22	1,016486E+23	3,975529E+22	1,414039E+23
-2200	5,082355E+22	5,082481E+22	1,987849E+22	1,987859E+22	1,016484E+23	3,975708E+22	1,414054E+23
-2199	5,082508E+22	5,082336E+22	1,987780E+22	1,987893E+22	1,016484E+23	3,975673E+22	1,414052E+23
-2198	5,082206E+22	5,082369E+22	1,987940E+22	1,987868E+22	1,016458E+23	3,975808E+22	1,414038E+23
-2197	5,082335E+22	5,082336E+22	1,987950E+22	1,988025E+22	1,016467E+23	3,975975E+22	1,414065E+23
-2196	5,082378E+22	5,082171E+22	1,987973E+22	1,987992E+22	1,016455E+23	3,975965E+22	1,414051E+23
-2195	5,082068E+22	5,082245E+22	1,988133E+22	1,988029E+22	1,016431E+23	3,976162E+22	1,414047E+23
-2194	5,082267E+22	5,082175E+22	1,988074E+22	1,988166E+22	1,016444E+23	3,976239E+22	1,414068E+23
-2193	5,082111E+22	5,082118E+22	1,988125E+22	1,988089E+22	1,016423E+23	3,976215E+22	1,414044E+23
-2192	5,081968E+22	5,082179E+22	1,988175E+22	1,988150E+22	1,016415E+23	3,976324E+22	1,414047E+23
-2191	5,082241E+22	5,082059E+22	1,988053E+22	1,988151E+22	1,016430E+23	3,976203E+22	1,414050E+23
-2190	5,082043E+22	5,082105E+22	1,988130E+22	1,988016E+22	1,016415E+23	3,976146E+22	1,414029E+23
-2189	5,082161E+22	5,082207E+22	1,988071E+22	1,988086E+22	1,016437E+23	3,976157E+22	1,414053E+23
-2188	5,082334E+22	5,082160E+22	1,987948E+22	1,988007E+22	1,016449E+23	3,975954E+22	1,414045E+23
-2187	5,082073E+22	5,082299E+22	1,988005E+22	1,987917E+22	1,016437E+23	3,975922E+22	1,414029E+23
-2186	5,082350E+22	5,082319E+22	1,987898E+22	1,987977E+22	1,016467E+23	3,975875E+22	1,414054E+23
-2185	5,082371E+22	5,082280E+22	1,987875E+22	1,987839E+22	1,016465E+23	3,975714E+22	1,414037E+23
-2184	5,082212E+22	5,082382E+22	1,987940E+22	1,987848E+22	1,016459E+23	3,975788E+22	1,414038E+23
-2183	5,082479E+22	5,082325E+22	1,987832E+22	1,987922E+22	1,016480E+23	3,975754E+22	1,414056E+23
-2182	5,082254E+22	5,082315E+22	1,987921E+22	1,987857E+22	1,016457E+23	3,975778E+22	1,414035E+23
-2181	5,082200E+22	5,082367E+22	1,987969E+22	1,987983E+22	1,016457E+23	3,975952E+22	1,414052E+23
-2180	5,082382E+22	5,082217E+22	1,987911E+22	1,988023E+22	1,016460E+23	3,975934E+22	1,414053E+23
-2179	5,082074E+22	5,082190E+22	1,988071E+22	1,987985E+22	1,016426E+23	3,976057E+22	1,414032E+23
-2178	5,082226E+22	5,082162E+22	1,988094E+22	1,988140E+22	1,016439E+23	3,976234E+22	1,414062E+23
-2177	5,082229E+22	5,082053E+22	1,988109E+22	1,988127E+22	1,016428E+23	3,976236E+22	1,414052E+23
-2176	5,081908E+22	5,082110E+22	1,988242E+22	1,988168E+22	1,016402E+23	3,976410E+22	1,414043E+23
-2175	5,082113E+22	5,082044E+22	1,988171E+22	1,988289E+22	1,016416E+23	3,976460E+22	1,414062E+23
-2174	5,081953E+22	5,081962E+22	1,988239E+22	1,988194E+22	1,016392E+23	3,976433E+22	1,414035E+23
-2173	5,081868E+22	5,082044E+22	1,988289E+22	1,988228E+22	1,016391E+23	3,976516E+22	1,414043E+23
-2172	5,082160E+22	5,081958E+22	1,988160E+22	1,988245E+22	1,016412E+23	3,976405E+22	1,414052E+23
-2171	5,081915E+22	5,081994E+22	1,988218E+22	1,988118E+22	1,016391E+23	3,976335E+22	1,414025E+23
-2170	5,082052E+22	5,082107E+22	1,988162E+22	1,988184E+22	1,016416E+23	3,976346E+22	1,414050E+23
-2169	5,082207E+22	5,082084E+22	1,988042E+22	1,988102E+22	1,016429E+23	3,976144E+22	1,414043E+23
-2168	5,081979E+22	5,082185E+22	1,988092E+22	1,988003E+22	1,016416E+23	3,976095E+22	1,414026E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2167	5,082270E+22	5,082201E+22	1,987990E+22	1,988056E+22	1,016447E+23	3,976046E+22	1,414052E+23
-2166	5,082242E+22	5,082154E+22	1,987991E+22	1,987941E+22	1,016440E+23	3,975933E+22	1,414033E+23
-2165	5,082078E+22	5,082284E+22	1,988053E+22	1,987965E+22	1,016436E+23	3,976018E+22	1,414038E+23
-2164	5,082325E+22	5,082225E+22	1,987941E+22	1,988063E+22	1,016455E+23	3,976004E+22	1,414055E+23
-2163	5,082081E+22	5,082149E+22	1,988028E+22	1,987991E+22	1,016423E+23	3,976019E+22	1,414025E+23
-2162	5,082096E+22	5,082181E+22	1,988092E+22	1,988094E+22	1,016428E+23	3,976186E+22	1,414046E+23
-2161	5,082277E+22	5,082068E+22	1,988046E+22	1,988130E+22	1,016434E+23	3,976176E+22	1,414052E+23
-2160	5,081978E+22	5,082048E+22	1,988192E+22	1,988103E+22	1,016403E+23	3,976295E+22	1,414032E+23
-2159	5,082094E+22	5,082057E+22	1,988207E+22	1,988262E+22	1,016415E+23	3,976469E+22	1,414062E+23
-2158	5,082035E+22	5,081944E+22	1,988238E+22	1,988264E+22	1,016398E+23	3,976502E+22	1,414048E+23
-2157	5,081738E+22	5,081997E+22	1,988370E+22	1,988285E+22	1,016373E+23	3,976655E+22	1,414039E+23
-2156	5,081970E+22	5,081919E+22	1,988298E+22	1,988404E+22	1,016389E+23	3,976702E+22	1,414059E+23
-2155	5,081821E+22	5,081780E+22	1,988357E+22	1,988301E+22	1,016360E+23	3,976657E+22	1,414026E+23
-2154	5,081781E+22	5,081877E+22	1,988401E+22	1,988330E+22	1,016366E+23	3,976731E+22	1,414039E+23
-2153	5,082041E+22	5,081865E+22	1,988258E+22	1,988359E+22	1,016391E+23	3,976617E+22	1,414052E+23
-2152	5,081808E+22	5,081893E+22	1,988286E+22	1,988229E+22	1,016370E+23	3,976515E+22	1,414022E+23
-2151	5,081949E+22	5,082015E+22	1,988230E+22	1,988268E+22	1,016396E+23	3,976498E+22	1,414046E+23
-2150	5,082092E+22	5,081979E+22	1,988139E+22	1,988178E+22	1,016407E+23	3,976317E+22	1,414039E+23
-2149	5,081888E+22	5,082080E+22	1,988200E+22	1,988070E+22	1,016397E+23	3,976269E+22	1,414024E+23
-2148	5,082159E+22	5,082118E+22	1,988101E+22	1,988155E+22	1,016428E+23	3,976255E+22	1,414053E+23
-2147	5,082081E+22	5,082020E+22	1,988093E+22	1,988064E+22	1,016410E+23	3,976157E+22	1,414026E+23
-2146	5,081939E+22	5,082132E+22	1,988160E+22	1,988091E+22	1,016407E+23	3,976251E+22	1,414032E+23
-2145	5,082186E+22	5,082097E+22	1,988055E+22	1,988188E+22	1,016428E+23	3,976243E+22	1,414053E+23
-2144	5,081990E+22	5,081984E+22	1,988131E+22	1,988105E+22	1,016397E+23	3,976236E+22	1,414021E+23
-2143	5,082018E+22	5,082036E+22	1,988205E+22	1,988193E+22	1,016405E+23	3,976398E+22	1,414045E+23
-2142	5,082141E+22	5,081945E+22	1,988185E+22	1,988251E+22	1,016409E+23	3,976437E+22	1,414052E+23
-2141	5,081814E+22	5,081954E+22	1,988330E+22	1,988235E+22	1,016377E+23	3,976566E+22	1,414033E+23
-2140	5,081901E+22	5,081964E+22	1,988341E+22	1,988410E+22	1,016386E+23	3,976751E+22	1,414062E+23
-2139	5,081831E+22	5,081768E+22	1,988368E+22	1,988402E+22	1,016360E+23	3,976771E+22	1,414037E+23
-2138	5,081612E+22	5,081796E+22	1,988501E+22	1,988400E+22	1,016341E+23	3,976901E+22	1,414031E+23
-2137	5,081859E+22	5,081761E+22	1,988422E+22	1,988511E+22	1,016362E+23	3,976933E+22	1,414055E+23
-2136	5,081740E+22	5,081637E+22	1,988445E+22	1,988414E+22	1,016338E+23	3,976859E+22	1,414024E+23
-2135	5,081691E+22	5,081786E+22	1,988473E+22	1,988431E+22	1,016348E+23	3,976904E+22	1,414038E+23
-2134	5,081901E+22	5,081793E+22	1,988348E+22	1,988459E+22	1,016369E+23	3,976808E+22	1,414050E+23
-2133	5,081697E+22	5,081829E+22	1,988380E+22	1,988306E+22	1,016353E+23	3,976686E+22	1,414021E+23
-2132	5,081844E+22	5,081935E+22	1,988332E+22	1,988341E+22	1,016378E+23	3,976673E+22	1,414045E+23
-2131	5,081965E+22	5,081831E+22	1,988248E+22	1,988261E+22	1,016380E+23	3,976510E+22	1,414031E+23
-2130	5,081787E+22	5,081927E+22	1,988310E+22	1,988172E+22	1,016371E+23	3,976482E+22	1,414020E+23
-2129	5,082006E+22	5,082006E+22	1,988204E+22	1,988279E+22	1,016401E+23	3,976484E+22	1,414050E+23
-2128	5,081956E+22	5,081875E+22	1,988172E+22	1,988198E+22	1,016383E+23	3,976370E+22	1,414020E+23
-2127	5,081843E+22	5,081987E+22	1,988241E+22	1,988195E+22	1,016383E+23	3,976436E+22	1,414027E+23
-2126	5,082078E+22	5,081961E+22	1,988172E+22	1,988286E+22	1,016404E+23	3,976458E+22	1,414050E+23
-2125	5,081903E+22	5,081875E+22	1,988258E+22	1,988198E+22	1,016378E+23	3,976457E+22	1,414024E+23
-2124	5,081884E+22	5,081961E+22	1,988340E+22	1,988313E+22	1,016384E+23	3,976653E+22	1,414050E+23
-2123	5,081940E+22	5,081820E+22	1,988323E+22	1,988397E+22	1,016376E+23	3,976720E+22	1,414048E+23
-2122	5,081637E+22	5,081796E+22	1,988473E+22	1,988383E+22	1,016343E+23	3,976856E+22	1,414029E+23
-2121	5,081716E+22	5,081816E+22	1,988483E+22	1,988549E+22	1,016353E+23	3,977032E+22	1,414056E+23
-2120	5,081716E+22	5,081569E+22	1,988482E+22	1,988531E+22	1,016328E+23	3,977014E+22	1,414030E+23
-2119	5,081534E+22	5,081619E+22	1,988602E+22	1,988504E+22	1,016315E+23	3,977107E+22	1,414026E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2118	5,081747E+22	5,081639E+22	1,988532E+22	1,988627E+22	1,016339E+23	3,977158E+22	1,414054E+23
-2117	5,081623E+22	5,081560E+22	1,988538E+22	1,988518E+22	1,016318E+23	3,977056E+22	1,414024E+23
-2116	5,081558E+22	5,081732E+22	1,988564E+22	1,988530E+22	1,016329E+23	3,977094E+22	1,414038E+23
-2115	5,081756E+22	5,081667E+22	1,988449E+22	1,988543E+22	1,016342E+23	3,976991E+22	1,414041E+23
-2114	5,081602E+22	5,081679E+22	1,988491E+22	1,988377E+22	1,016328E+23	3,976868E+22	1,414015E+23
-2113	5,081728E+22	5,081823E+22	1,988446E+22	1,988421E+22	1,016355E+23	3,976867E+22	1,414042E+23
-2112	5,081860E+22	5,081697E+22	1,988331E+22	1,988371E+22	1,016356E+23	3,976702E+22	1,414026E+23
-2111	5,081678E+22	5,081811E+22	1,988381E+22	1,988281E+22	1,016349E+23	3,976662E+22	1,414015E+23
-2110	5,081868E+22	5,081898E+22	1,988299E+22	1,988396E+22	1,016377E+23	3,976695E+22	1,414046E+23
-2109	5,081853E+22	5,081774E+22	1,988271E+22	1,988296E+22	1,016363E+23	3,976567E+22	1,414019E+23
-2108	5,081751E+22	5,081892E+22	1,988355E+22	1,988291E+22	1,016364E+23	3,976645E+22	1,414029E+23
-2107	5,081949E+22	5,081811E+22	1,988308E+22	1,988395E+22	1,016376E+23	3,976703E+22	1,414046E+23
-2106	5,081772E+22	5,081736E+22	1,988402E+22	1,988332E+22	1,016351E+23	3,976734E+22	1,414024E+23
-2105	5,081685E+22	5,081851E+22	1,988483E+22	1,988462E+22	1,016354E+23	3,976945E+22	1,414048E+23
-2104	5,081766E+22	5,081649E+22	1,988442E+22	1,988556E+22	1,016342E+23	3,976998E+22	1,414041E+23
-2103	5,081510E+22	5,081605E+22	1,988585E+22	1,988507E+22	1,016312E+23	3,977093E+22	1,414021E+23
-2102	5,081588E+22	5,081636E+22	1,988613E+22	1,988661E+22	1,016322E+23	3,977274E+22	1,414050E+23
-2101	5,081628E+22	5,081438E+22	1,988599E+22	1,988632E+22	1,016307E+23	3,977232E+22	1,414030E+23
-2100	5,081427E+22	5,081540E+22	1,988705E+22	1,988613E+22	1,016297E+23	3,977317E+22	1,414028E+23
-2099	5,081584E+22	5,081532E+22	1,988638E+22	1,988741E+22	1,016312E+23	3,977380E+22	1,414050E+23
-2098	5,081494E+22	5,081455E+22	1,988647E+22	1,988622E+22	1,016295E+23	3,977269E+22	1,414022E+23
-2097	5,081412E+22	5,081636E+22	1,988679E+22	1,988616E+22	1,016305E+23	3,977295E+22	1,414034E+23
-2096	5,081658E+22	5,081516E+22	1,988544E+22	1,988631E+22	1,016317E+23	3,977175E+22	1,414035E+23
-2095	5,081526E+22	5,081527E+22	1,988579E+22	1,988460E+22	1,016305E+23	3,977038E+22	1,414009E+23
-2094	5,081594E+22	5,081710E+22	1,988542E+22	1,988531E+22	1,016330E+23	3,977072E+22	1,414038E+23
-2093	5,081734E+22	5,081611E+22	1,988411E+22	1,988484E+22	1,016334E+23	3,976895E+22	1,414024E+23
-2092	5,081560E+22	5,081729E+22	1,988459E+22	1,988391E+22	1,016329E+23	3,976850E+22	1,414014E+23
-2091	5,081744E+22	5,081752E+22	1,988403E+22	1,988495E+22	1,016350E+23	3,976898E+22	1,414039E+23
-2090	5,081777E+22	5,081628E+22	1,988392E+22	1,988387E+22	1,016340E+23	3,976779E+22	1,414018E+23
-2089	5,081632E+22	5,081787E+22	1,988493E+22	1,988393E+22	1,016342E+23	3,976885E+22	1,414030E+23
-2088	5,081814E+22	5,081680E+22	1,988427E+22	1,988530E+22	1,016349E+23	3,976957E+22	1,414045E+23
-2087	5,081619E+22	5,081599E+22	1,988519E+22	1,988469E+22	1,016322E+23	3,976987E+22	1,414021E+23
-2086	5,081500E+22	5,081714E+22	1,988619E+22	1,988606E+22	1,016321E+23	3,977224E+22	1,414044E+23
-2085	5,081625E+22	5,081498E+22	1,988569E+22	1,988676E+22	1,016312E+23	3,977245E+22	1,414037E+23
-2084	5,081399E+22	5,081460E+22	1,988709E+22	1,988620E+22	1,016286E+23	3,977329E+22	1,414019E+23
-2083	5,081458E+22	5,081457E+22	1,988746E+22	1,988780E+22	1,016291E+23	3,977526E+22	1,414044E+23
-2082	5,081500E+22	5,081304E+22	1,988723E+22	1,988760E+22	1,016280E+23	3,977484E+22	1,414029E+23
-2081	5,081257E+22	5,081458E+22	1,988824E+22	1,988739E+22	1,016271E+23	3,977562E+22	1,414028E+23
-2080	5,081444E+22	5,081396E+22	1,988735E+22	1,988859E+22	1,016284E+23	3,977594E+22	1,414043E+23
-2079	5,081393E+22	5,081310E+22	1,988741E+22	1,988704E+22	1,016270E+23	3,977445E+22	1,414015E+23
-2078	5,081299E+22	5,081507E+22	1,988787E+22	1,988695E+22	1,016281E+23	3,977482E+22	1,414029E+23
-2077	5,081560E+22	5,081416E+22	1,988636E+22	1,988712E+22	1,016298E+23	3,977348E+22	1,414032E+23
-2076	5,081416E+22	5,081459E+22	1,988656E+22	1,988561E+22	1,016287E+23	3,977218E+22	1,414009E+23
-2075	5,081446E+22	5,081590E+22	1,988632E+22	1,988644E+22	1,016304E+23	3,977276E+22	1,414031E+23
-2074	5,081625E+22	5,081497E+22	1,988509E+22	1,988590E+22	1,016312E+23	3,977099E+22	1,414022E+23
-2073	5,081449E+22	5,081629E+22	1,988570E+22	1,988480E+22	1,016308E+23	3,977051E+22	1,414013E+23
-2072	5,081666E+22	5,081599E+22	1,988509E+22	1,988592E+22	1,016327E+23	3,977101E+22	1,414037E+23
-2071	5,081699E+22	5,081487E+22	1,988504E+22	1,988488E+22	1,016319E+23	3,976992E+22	1,414018E+23
-2070	5,081468E+22	5,081677E+22	1,988622E+22	1,988523E+22	1,016315E+23	3,977144E+22	1,414029E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2069	5,081641E+22	5,081576E+22	1,988546E+22	1,988666E+22	1,016322E+23	3,977212E+22	1,414043E+23
-2068	5,081462E+22	5,081472E+22	1,988636E+22	1,988602E+22	1,016293E+23	3,977239E+22	1,414017E+23
-2067	5,081332E+22	5,081512E+22	1,988758E+22	1,988730E+22	1,016284E+23	3,977487E+22	1,414033E+23
-2066	5,081512E+22	5,081319E+22	1,988708E+22	1,988795E+22	1,016283E+23	3,977503E+22	1,414033E+23
-2065	5,081264E+22	5,081332E+22	1,988844E+22	1,988742E+22	1,016260E+23	3,977587E+22	1,414018E+23
-2064	5,081324E+22	5,081319E+22	1,988854E+22	1,988920E+22	1,016264E+23	3,977774E+22	1,414042E+23
-2063	5,081372E+22	5,081182E+22	1,988825E+22	1,988881E+22	1,016255E+23	3,977706E+22	1,414026E+23
-2062	5,081100E+22	5,081354E+22	1,988940E+22	1,988849E+22	1,016245E+23	3,977790E+22	1,414024E+23
-2061	5,081327E+22	5,081289E+22	1,988841E+22	1,988942E+22	1,016262E+23	3,977784E+22	1,414040E+23
-2060	5,081299E+22	5,081201E+22	1,988841E+22	1,988786E+22	1,016250E+23	3,977627E+22	1,414013E+23
-2059	5,081166E+22	5,081358E+22	1,988897E+22	1,988795E+22	1,016252E+23	3,977692E+22	1,414022E+23
-2058	5,081429E+22	5,081305E+22	1,988732E+22	1,988826E+22	1,016273E+23	3,977558E+22	1,414029E+23
-2057	5,081270E+22	5,081371E+22	1,988749E+22	1,988675E+22	1,016264E+23	3,977424E+22	1,414007E+23
-2056	5,081348E+22	5,081441E+22	1,988712E+22	1,988750E+22	1,016279E+23	3,977462E+22	1,414025E+23
-2055	5,081564E+22	5,081349E+22	1,988598E+22	1,988664E+22	1,016291E+23	3,977262E+22	1,414017E+23
-2054	5,081364E+22	5,081519E+22	1,988684E+22	1,988562E+22	1,016288E+23	3,977247E+22	1,414013E+23
-2053	5,081563E+22	5,081512E+22	1,988618E+22	1,988681E+22	1,016308E+23	3,977299E+22	1,414037E+23
-2052	5,081553E+22	5,081421E+22	1,988612E+22	1,988608E+22	1,016297E+23	3,977220E+22	1,414019E+23
-2051	5,081269E+22	5,081538E+22	1,988754E+22	1,988665E+22	1,016281E+23	3,977419E+22	1,414023E+23
-2050	5,081464E+22	5,081427E+22	1,988683E+22	1,988804E+22	1,016289E+23	3,977488E+22	1,414038E+23
-2049	5,081306E+22	5,081317E+22	1,988781E+22	1,988731E+22	1,016262E+23	3,977511E+22	1,414013E+23
-2048	5,081226E+22	5,081298E+22	1,988884E+22	1,988864E+22	1,016252E+23	3,977748E+22	1,414027E+23
-2047	5,081412E+22	5,081144E+22	1,988828E+22	1,988923E+22	1,016256E+23	3,977751E+22	1,414031E+23
-2046	5,081110E+22	5,081223E+22	1,988965E+22	1,988883E+22	1,016233E+23	3,977848E+22	1,414018E+23
-2045	5,081175E+22	5,081226E+22	1,988960E+22	1,989042E+22	1,016240E+23	3,978002E+22	1,414040E+23
-2044	5,081244E+22	5,081090E+22	1,988930E+22	1,988985E+22	1,016233E+23	3,977915E+22	1,414025E+23
-2043	5,080959E+22	5,081194E+22	1,989066E+22	1,988940E+22	1,016215E+23	3,978007E+22	1,414016E+23
-2042	5,081212E+22	5,081157E+22	1,988963E+22	1,989029E+22	1,016237E+23	3,977992E+22	1,414036E+23
-2041	5,081166E+22	5,081103E+22	1,988953E+22	1,988886E+22	1,016227E+23	3,977838E+22	1,414011E+23
-2040	5,081040E+22	5,081221E+22	1,988978E+22	1,988916E+22	1,016226E+23	3,977895E+22	1,414016E+23
-2039	5,081331E+22	5,081180E+22	1,988809E+22	1,988930E+22	1,016251E+23	3,977739E+22	1,414025E+23
-2038	5,081162E+22	5,081267E+22	1,988838E+22	1,988767E+22	1,016243E+23	3,977605E+22	1,414003E+23
-2037	5,081277E+22	5,081343E+22	1,988798E+22	1,988820E+22	1,016262E+23	3,977618E+22	1,414024E+23
-2036	5,081499E+22	5,081262E+22	1,988693E+22	1,988740E+22	1,016276E+23	3,977433E+22	1,414019E+23
-2035	5,081218E+22	5,081391E+22	1,988808E+22	1,988672E+22	1,016261E+23	3,977480E+22	1,414009E+23
-2034	5,081383E+22	5,081419E+22	1,988741E+22	1,988812E+22	1,016280E+23	3,977553E+22	1,414035E+23
-2033	5,081358E+22	5,081308E+22	1,988742E+22	1,988751E+22	1,016267E+23	3,977492E+22	1,414016E+23
-2032	5,081120E+22	5,081333E+22	1,988872E+22	1,988808E+22	1,016245E+23	3,977680E+22	1,414013E+23
-2031	5,081365E+22	5,081217E+22	1,988805E+22	1,988920E+22	1,016258E+23	3,977725E+22	1,414031E+23
-2030	5,081195E+22	5,081156E+22	1,988910E+22	1,988852E+22	1,016235E+23	3,977762E+22	1,414011E+23
-2029	5,081120E+22	5,081182E+22	1,988995E+22	1,988984E+22	1,016230E+23	3,977979E+22	1,414028E+23
-2028	5,081283E+22	5,081069E+22	1,988936E+22	1,989050E+22	1,016235E+23	3,977986E+22	1,414034E+23
-2027	5,080934E+22	5,081101E+22	1,989100E+22	1,989014E+22	1,016203E+23	3,978114E+22	1,414015E+23
-2026	5,081012E+22	5,081116E+22	1,989097E+22	1,989150E+22	1,016213E+23	3,978247E+22	1,414038E+23
-2025	5,081097E+22	5,080970E+22	1,989071E+22	1,989086E+22	1,016207E+23	3,978157E+22	1,414022E+23
-2024	5,080849E+22	5,081004E+22	1,989182E+22	1,989053E+22	1,016185E+23	3,978236E+22	1,414009E+23
-2023	5,081096E+22	5,080996E+22	1,989062E+22	1,989137E+22	1,016209E+23	3,978199E+22	1,414029E+23
-2022	5,081022E+22	5,080999E+22	1,989041E+22	1,989009E+22	1,016202E+23	3,978050E+22	1,414007E+23
-2021	5,080937E+22	5,081116E+22	1,989043E+22	1,989015E+22	1,016205E+23	3,978058E+22	1,414011E+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	5,081251E+22	5,081090E+22	1,988880E+22	1,989006E+22	1,016234E+23	3,977886E+22	1,414023E+23
-2019	5,081071E+22	5,081139E+22	1,988940E+22	1,988841E+22	1,016221E+23	3,977781E+22	1,413999E+23
-2018	5,081174E+22	5,081255E+22	1,988909E+22	1,988893E+22	1,016243E+23	3,977803E+22	1,414023E+23
-2017	5,081355E+22	5,081197E+22	1,988812E+22	1,988844E+22	1,016255E+23	3,977656E+22	1,414021E+23
-2016	5,081064E+22	5,081247E+22	1,988914E+22	1,988811E+22	1,016231E+23	3,977725E+22	1,414004E+23
-2015	5,081231E+22	5,081261E+22	1,988855E+22	1,988940E+22	1,016249E+23	3,977795E+22	1,414029E+23
-2014	5,081211E+22	5,081159E+22	1,988865E+22	1,988880E+22	1,016237E+23	3,977745E+22	1,414011E+23
-2013	5,081029E+22	5,081166E+22	1,988983E+22	1,988918E+22	1,016219E+23	3,977901E+22	1,414010E+23
-2012	5,081285E+22	5,081081E+22	1,988920E+22	1,989034E+22	1,016237E+23	3,977954E+22	1,414032E+23
-2011	5,081050E+22	5,081012E+22	1,989044E+22	1,988989E+22	1,016206E+23	3,978033E+22	1,414010E+23
-2010	5,080944E+22	5,081093E+22	1,989128E+22	1,989121E+22	1,016204E+23	3,978249E+22	1,414029E+23
-2009	5,081101E+22	5,080974E+22	1,989079E+22	1,989184E+22	1,016207E+23	3,978263E+22	1,414034E+23
-2008	5,080785E+22	5,080915E+22	1,989232E+22	1,989141E+22	1,016170E+23	3,978373E+22	1,414007E+23
-2007	5,080896E+22	5,080933E+22	1,989226E+22	1,989249E+22	1,016183E+23	3,978474E+22	1,414030E+23
-2006	5,080967E+22	5,080825E+22	1,989189E+22	1,989194E+22	1,016179E+23	3,978383E+22	1,414018E+23
-2005	5,080733E+22	5,080883E+22	1,989264E+22	1,989162E+22	1,016162E+23	3,978426E+22	1,414004E+23
-2004	5,080987E+22	5,080910E+22	1,989130E+22	1,989245E+22	1,016190E+23	3,978376E+22	1,414027E+23
-2003	5,080888E+22	5,080878E+22	1,989131E+22	1,989114E+22	1,016177E+23	3,978245E+22	1,414001E+23
-2002	5,080830E+22	5,081033E+22	1,989138E+22	1,989091E+22	1,016186E+23	3,978229E+22	1,414009E+23
-2001	5,081161E+22	5,081004E+22	1,988992E+22	1,989077E+22	1,016217E+23	3,978069E+22	1,414023E+23
-2000	5,080983E+22	5,080988E+22	1,989044E+22	1,988938E+22	1,016197E+23	3,977983E+22	1,413995E+23
-1999	5,081049E+22	5,081128E+22	1,989014E+22	1,988998E+22	1,016218E+23	3,978012E+22	1,414019E+23
-1998	5,081183E+22	5,081094E+22	1,988919E+22	1,988976E+22	1,016228E+23	3,977895E+22	1,414017E+23
-1997	5,080935E+22	5,081106E+22	1,989008E+22	1,988933E+22	1,016204E+23	3,977941E+22	1,413998E+23
-1996	5,081131E+22	5,081116E+22	1,988956E+22	1,989045E+22	1,016225E+23	3,978002E+22	1,414025E+23
-1995	5,081099E+22	5,080982E+22	1,988996E+22	1,988993E+22	1,016208E+23	3,977989E+22	1,414007E+23
-1994	5,080910E+22	5,081050E+22	1,989113E+22	1,989029E+22	1,016196E+23	3,978142E+22	1,414010E+23
-1993	5,081129E+22	5,081000E+22	1,989060E+22	1,989168E+22	1,016213E+23	3,978228E+22	1,414036E+23
-1992	5,080890E+22	5,080867E+22	1,989174E+22	1,989146E+22	1,016176E+23	3,978320E+22	1,414008E+23
-1991	5,080779E+22	5,080940E+22	1,989264E+22	1,989250E+22	1,016172E+23	3,978514E+22	1,414023E+23
-1990	5,080937E+22	5,080834E+22	1,989220E+22	1,989309E+22	1,016177E+23	3,978529E+22	1,414030E+23
-1989	5,080681E+22	5,080739E+22	1,989348E+22	1,989249E+22	1,016142E+23	3,978597E+22	1,414002E+23
-1988	5,080786E+22	5,080788E+22	1,989329E+22	1,989354E+22	1,016157E+23	3,978683E+22	1,414026E+23
-1987	5,080810E+22	5,080686E+22	1,989295E+22	1,989323E+22	1,016150E+23	3,978619E+22	1,414011E+23
-1986	5,080581E+22	5,080793E+22	1,989353E+22	1,989275E+22	1,016137E+23	3,978628E+22	1,414000E+23
-1985	5,080860E+22	5,080824E+22	1,989230E+22	1,989344E+22	1,016168E+23	3,978574E+22	1,414026E+23
-1984	5,080809E+22	5,080721E+22	1,989222E+22	1,989200E+22	1,016153E+23	3,978423E+22	1,413995E+23
-1983	5,080764E+22	5,080895E+22	1,989237E+22	1,989152E+22	1,016166E+23	3,978389E+22	1,414005E+23
-1982	5,081055E+22	5,080919E+22	1,989096E+22	1,989161E+22	1,016197E+23	3,978257E+22	1,414023E+23
-1981	5,080872E+22	5,080895E+22	1,989127E+22	1,989042E+22	1,016177E+23	3,978169E+22	1,413994E+23
-1980	5,080914E+22	5,081043E+22	1,989101E+22	1,989109E+22	1,016196E+23	3,978209E+22	1,414017E+23
-1979	5,081022E+22	5,080956E+22	1,989035E+22	1,989101E+22	1,016198E+23	3,978136E+22	1,414011E+23
-1978	5,080803E+22	5,080982E+22	1,989126E+22	1,989039E+22	1,016179E+23	3,978165E+22	1,413995E+23
-1977	5,081027E+22	5,080982E+22	1,989093E+22	1,989157E+22	1,016201E+23	3,978250E+22	1,414026E+23
-1976	5,080987E+22	5,080798E+22	1,989122E+22	1,989131E+22	1,016179E+23	3,978253E+22	1,414004E+23
-1975	5,080768E+22	5,080910E+22	1,989239E+22	1,989167E+22	1,016168E+23	3,978406E+22	1,414008E+23
-1974	5,080947E+22	5,080886E+22	1,989190E+22	1,989316E+22	1,016183E+23	3,978507E+22	1,414034E+23
-1973	5,080745E+22	5,080715E+22	1,989292E+22	1,989278E+22	1,016146E+23	3,978570E+22	1,414003E+23
-1972	5,080656E+22	5,080792E+22	1,989385E+22	1,989355E+22	1,016145E+23	3,978740E+22	1,414019E+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							
-1971	5,080793E+22	5,080656E+22	1,989359E+22	1,989423E+22	1,016145E+23	3,978782E+22	1,414023E+23
-1970	5,080536E+22	5,080620E+22	1,989468E+22	1,989359E+22	1,016116E+23	3,978827E+22	1,413998E+23
-1969	5,080636E+22	5,080690E+22	1,989445E+22	1,989477E+22	1,016133E+23	3,978922E+22	1,414025E+23
-1968	5,080674E+22	5,080535E+22	1,989393E+22	1,989454E+22	1,016121E+23	3,978846E+22	1,414006E+23
-1967	5,080473E+22	5,080662E+22	1,989449E+22	1,989369E+22	1,016113E+23	3,978818E+22	1,413995E+23
-1966	5,080760E+22	5,080721E+22	1,989335E+22	1,989425E+22	1,016148E+23	3,978760E+22	1,414024E+23
-1965	5,080755E+22	5,080600E+22	1,989310E+22	1,989275E+22	1,016135E+23	3,978585E+22	1,413994E+23
-1964	5,080677E+22	5,080806E+22	1,989324E+22	1,989231E+22	1,016148E+23	3,978555E+22	1,414004E+23
-1963	5,080889E+22	5,080822E+22	1,989201E+22	1,989278E+22	1,016171E+23	3,978479E+22	1,414019E+23
-1962	5,080702E+22	5,080812E+22	1,989227E+22	1,989157E+22	1,016151E+23	3,978384E+22	1,413990E+23
-1961	5,080767E+22	5,080928E+22	1,989219E+22	1,989223E+22	1,016169E+23	3,978442E+22	1,414014E+23
-1960	5,080919E+22	5,080762E+22	1,989149E+22	1,989220E+22	1,016168E+23	3,978369E+22	1,414005E+23
-1959	5,080719E+22	5,080805E+22	1,989241E+22	1,989139E+22	1,016152E+23	3,978380E+22	1,413990E+23
-1958	5,080903E+22	5,080866E+22	1,989214E+22	1,989279E+22	1,016177E+23	3,978493E+22	1,414026E+23
-1957	5,080872E+22	5,080680E+22	1,989223E+22	1,989265E+22	1,016155E+23	3,978488E+22	1,414004E+23
-1956	5,080623E+22	5,080803E+22	1,989352E+22	1,989291E+22	1,016143E+23	3,978643E+22	1,414007E+23
-1955	5,080765E+22	5,080748E+22	1,989336E+22	1,989448E+22	1,016151E+23	3,978784E+22	1,414030E+23
-1954	5,080588E+22	5,080584E+22	1,989436E+22	1,989389E+22	1,016117E+23	3,978825E+22	1,414000E+23
-1953	5,080517E+22	5,080644E+22	1,989537E+22	1,989474E+22	1,016116E+23	3,979011E+22	1,414017E+23
-1952	5,080646E+22	5,080462E+22	1,989486E+22	1,989567E+22	1,016111E+23	3,979053E+22	1,414016E+23
-1951	5,080386E+22	5,080465E+22	1,989575E+22	1,989493E+22	1,016085E+23	3,979068E+22	1,413992E+23
-1950	5,080486E+22	5,080573E+22	1,989549E+22	1,989604E+22	1,016106E+23	3,979153E+22	1,414021E+23
-1949	5,080589E+22	5,080399E+22	1,989475E+22	1,989552E+22	1,016099E+23	3,979027E+22	1,414002E+23
-1948	5,080413E+22	5,080553E+22	1,989535E+22	1,989433E+22	1,016097E+23	3,978968E+22	1,413993E+23
-1947	5,080655E+22	5,080613E+22	1,989445E+22	1,989502E+22	1,016127E+23	3,978947E+22	1,414021E+23
-1946	5,080620E+22	5,080548E+22	1,989410E+22	1,989359E+22	1,016117E+23	3,978769E+22	1,413994E+23
-1945	5,080524E+22	5,080743E+22	1,989432E+22	1,989342E+22	1,016127E+23	3,978774E+22	1,414004E+23
-1944	5,080725E+22	5,080672E+22	1,989301E+22	1,989407E+22	1,016140E+23	3,978709E+22	1,414011E+23
-1943	5,080579E+22	5,080654E+22	1,989330E+22	1,989265E+22	1,016123E+23	3,978595E+22	1,413983E+23
-1942	5,080668E+22	5,080774E+22	1,989331E+22	1,989325E+22	1,016144E+23	3,978656E+22	1,414010E+23
-1941	5,080859E+22	5,080595E+22	1,989245E+22	1,989325E+22	1,016145E+23	3,978570E+22	1,414002E+23
-1940	5,080629E+22	5,080693E+22	1,989337E+22	1,989248E+22	1,016132E+23	3,978585E+22	1,413991E+23
-1939	5,080729E+22	5,080759E+22	1,989338E+22	1,989415E+22	1,016149E+23	3,978753E+22	1,414024E+23
-1938	5,080689E+22	5,080594E+22	1,989353E+22	1,989392E+22	1,016128E+23	3,978745E+22	1,414003E+23
-1937	5,080462E+22	5,080676E+22	1,989506E+22	1,989415E+22	1,016114E+23	3,978921E+22	1,414006E+23
-1936	5,080613E+22	5,080542E+22	1,989486E+22	1,989577E+22	1,016116E+23	3,979064E+22	1,414022E+23
-1935	5,080456E+22	5,080395E+22	1,989578E+22	1,989511E+22	1,016085E+23	3,979089E+22	1,413994E+23
-1934	5,080358E+22	5,080502E+22	1,989667E+22	1,989612E+22	1,016086E+23	3,979279E+22	1,414014E+23
-1933	5,080517E+22	5,080321E+22	1,989581E+22	1,989709E+22	1,016084E+23	3,979290E+22	1,414013E+23
-1932	5,080271E+22	5,080352E+22	1,989663E+22	1,989605E+22	1,016062E+23	3,979268E+22	1,413989E+23
-1931	5,080354E+22	5,080458E+22	1,989662E+22	1,989708E+22	1,016081E+23	3,979370E+22	1,414018E+23
-1930	5,080487E+22	5,080318E+22	1,989585E+22	1,989626E+22	1,016080E+23	3,979210E+22	1,414002E+23
-1929	5,080313E+22	5,080464E+22	1,989657E+22	1,989516E+22	1,016078E+23	3,979173E+22	1,413995E+23
-1928	5,080511E+22	5,080483E+22	1,989551E+22	1,989614E+22	1,016099E+23	3,979165E+22	1,414016E+23
-1927	5,080465E+22	5,080422E+22	1,989504E+22	1,989473E+22	1,016089E+23	3,978976E+22	1,413986E+23
-1926	5,080366E+22	5,080617E+22	1,989530E+22	1,989459E+22	1,016098E+23	3,978988E+22	1,413997E+23
-1925	5,080644E+22	5,080506E+22	1,989380E+22	1,989509E+22	1,016115E+23	3,978889E+22	1,414004E+23
-1924	5,080527E+22	5,080507E+22	1,989411E+22	1,989341E+22	1,016103E+23	3,978752E+22	1,413979E+23
-1923	5,080572E+22	5,080650E+22	1,989441E+22	1,989422E+22	1,016122E+23	3,978862E+22	1,414008E+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	5,080730E+22	5,080535E+22	1,989353E+22	1,989427E+22	1,016126E+23	3,978780E+22	1,414004E+23
-1921	5,080476E+22	5,080625E+22	1,989468E+22	1,989375E+22	1,016110E+23	3,978843E+22	1,413995E+23
-1920	5,080543E+22	5,080613E+22	1,989478E+22	1,989557E+22	1,016116E+23	3,979034E+22	1,414019E+23
-1919	5,080526E+22	5,080431E+22	1,989500E+22	1,989521E+22	1,016096E+23	3,979021E+22	1,413998E+23
-1918	5,080312E+22	5,080502E+22	1,989660E+22	1,989547E+22	1,016081E+23	3,979207E+22	1,414002E+23
-1917	5,080498E+22	5,080344E+22	1,989610E+22	1,989717E+22	1,016084E+23	3,979328E+22	1,414017E+23
-1916	5,080327E+22	5,080244E+22	1,989683E+22	1,989648E+22	1,016057E+23	3,979331E+22	1,413990E+23
-1915	5,080184E+22	5,080367E+22	1,989780E+22	1,989761E+22	1,016055E+23	3,979542E+22	1,414009E+23
-1914	5,080364E+22	5,080228E+22	1,989690E+22	1,989825E+22	1,016059E+23	3,979514E+22	1,414011E+23
-1913	5,080170E+22	5,080250E+22	1,989786E+22	1,989703E+22	1,016042E+23	3,979488E+22	1,413991E+23
-1912	5,080244E+22	5,080300E+22	1,989781E+22	1,989796E+22	1,016054E+23	3,979577E+22	1,414012E+23
-1911	5,080377E+22	5,080197E+22	1,989697E+22	1,989709E+22	1,016057E+23	3,979406E+22	1,413998E+23
-1910	5,080170E+22	5,080365E+22	1,989762E+22	1,989620E+22	1,016053E+23	3,979382E+22	1,413992E+23
-1909	5,080375E+22	5,080355E+22	1,989627E+22	1,989728E+22	1,016073E+23	3,979355E+22	1,414008E+23
-1908	5,080353E+22	5,080304E+22	1,989577E+22	1,989569E+22	1,016066E+23	3,979146E+22	1,413980E+23
-1907	5,080251E+22	5,080481E+22	1,989627E+22	1,989556E+22	1,016073E+23	3,979183E+22	1,413992E+23
-1906	5,080558E+22	5,080404E+22	1,989481E+22	1,989587E+22	1,016096E+23	3,979068E+22	1,414003E+23
-1905	5,080450E+22	5,080411E+22	1,989526E+22	1,989439E+22	1,016086E+23	3,978966E+22	1,413983E+23
-1904	5,080422E+22	5,080525E+22	1,989555E+22	1,989549E+22	1,016095E+23	3,979104E+22	1,414005E+23
-1903	5,080561E+22	5,080424E+22	1,989473E+22	1,989560E+22	1,016099E+23	3,979033E+22	1,414002E+23
-1902	5,080302E+22	5,080492E+22	1,989608E+22	1,989512E+22	1,016079E+23	3,979120E+22	1,413991E+23
-1901	5,080413E+22	5,080429E+22	1,989604E+22	1,989686E+22	1,016084E+23	3,979290E+22	1,414013E+23
-1900	5,080419E+22	5,080254E+22	1,989624E+22	1,989635E+22	1,016067E+23	3,979258E+22	1,413993E+23
-1899	5,080164E+22	5,080340E+22	1,989796E+22	1,989685E+22	1,016050E+23	3,979481E+22	1,413998E+23
-1898	5,080339E+22	5,080240E+22	1,989730E+22	1,989850E+22	1,016058E+23	3,979580E+22	1,414016E+23
-1897	5,080182E+22	5,080140E+22	1,989807E+22	1,989787E+22	1,016032E+23	3,979594E+22	1,413992E+23
-1896	5,080030E+22	5,080218E+22	1,989903E+22	1,989891E+22	1,016025E+23	3,979795E+22	1,414004E+23
-1895	5,080246E+22	5,080088E+22	1,989815E+22	1,989922E+22	1,016033E+23	3,979737E+22	1,414007E+23
-1894	5,080058E+22	5,080116E+22	1,989918E+22	1,989795E+22	1,016017E+23	3,979713E+22	1,413989E+23
-1893	5,080143E+22	5,080156E+22	1,989881E+22	1,989896E+22	1,016030E+23	3,979777E+22	1,414008E+23
-1892	5,080247E+22	5,080085E+22	1,989778E+22	1,989811E+22	1,016033E+23	3,979589E+22	1,413992E+23
-1891	5,080001E+22	5,080250E+22	1,989852E+22	1,989741E+22	1,016025E+23	3,979593E+22	1,413984E+23
-1890	5,080238E+22	5,080257E+22	1,989714E+22	1,989818E+22	1,016049E+23	3,979532E+22	1,414003E+23
-1889	5,080276E+22	5,080189E+22	1,989677E+22	1,989655E+22	1,016047E+23	3,979332E+22	1,413980E+23
-1888	5,080163E+22	5,080328E+22	1,989729E+22	1,989646E+22	1,016049E+23	3,979375E+22	1,413987E+23
-1887	5,080459E+22	5,080295E+22	1,989587E+22	1,989681E+22	1,016075E+23	3,979268E+22	1,414002E+23
-1886	5,080314E+22	5,080326E+22	1,989640E+22	1,989560E+22	1,016064E+23	3,979201E+22	1,413984E+23
-1885	5,080282E+22	5,080401E+22	1,989657E+22	1,989678E+22	1,016068E+23	3,979335E+22	1,414002E+23
-1884	5,080427E+22	5,080295E+22	1,989585E+22	1,989677E+22	1,016072E+23	3,979262E+22	1,413998E+23
-1883	5,080154E+22	5,080331E+22	1,989747E+22	1,989641E+22	1,016048E+23	3,979388E+22	1,413987E+23
-1882	5,080276E+22	5,080286E+22	1,989743E+22	1,989798E+22	1,016056E+23	3,979541E+22	1,414010E+23
-1881	5,080299E+22	5,080115E+22	1,989765E+22	1,989775E+22	1,016041E+23	3,979539E+22	1,413995E+23
-1880	5,079985E+22	5,080167E+22	1,989921E+22	1,989841E+22	1,016015E+23	3,979762E+22	1,413991E+23
-1879	5,080168E+22	5,080096E+22	1,989855E+22	1,989992E+22	1,016026E+23	3,979847E+22	1,414011E+23
-1878	5,080043E+22	5,079996E+22	1,989939E+22	1,989913E+22	1,016004E+23	3,979852E+22	1,413989E+23
-1877	5,079930E+22	5,080047E+22	1,990017E+22	1,989993E+22	1,015998E+23	3,980010E+22	1,413999E+23
-1876	5,080159E+22	5,079955E+22	1,989924E+22	1,990004E+22	1,016011E+23	3,979928E+22	1,414004E+23
-1875	5,079916E+22	5,080005E+22	1,990032E+22	1,989903E+22	1,015992E+23	3,979935E+22	1,413986E+23
-1874	5,079975E+22	5,080089E+22	1,989979E+22	1,989997E+22	1,016006E+23	3,979975E+22	1,414004E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1873	5,080107E+22	5,079999E+22	1,989876E+22	1,989926E+22	1,016011E+23	3,979802E+22	1,413991E+23
-1872	5,079856E+22	5,080099E+22	1,989947E+22	1,989852E+22	1,015995E+23	3,979799E+22	1,413975E+23
-1871	5,080146E+22	5,080117E+22	1,989815E+22	1,989905E+22	1,016026E+23	3,979720E+22	1,413998E+23
-1870	5,080206E+22	5,080058E+22	1,989786E+22	1,989745E+22	1,016026E+23	3,979532E+22	1,413980E+23
-1869	5,080087E+22	5,080198E+22	1,989814E+22	1,989750E+22	1,016029E+23	3,979564E+22	1,413985E+23
-1868	5,080344E+22	5,080202E+22	1,989671E+22	1,989787E+22	1,016055E+23	3,979458E+22	1,414000E+23
-1867	5,080149E+22	5,080223E+22	1,989751E+22	1,989690E+22	1,016037E+23	3,979442E+22	1,413981E+23
-1866	5,080130E+22	5,080296E+22	1,989778E+22	1,989781E+22	1,016043E+23	3,979559E+22	1,413999E+23
-1865	5,080314E+22	5,080154E+22	1,989723E+22	1,989788E+22	1,016047E+23	3,979511E+22	1,413998E+23
-1864	5,080014E+22	5,080140E+22	1,989886E+22	1,989768E+22	1,016015E+23	3,979654E+22	1,413981E+23
-1863	5,080130E+22	5,080128E+22	1,989877E+22	1,989930E+22	1,016026E+23	3,979806E+22	1,414006E+23
-1862	5,080132E+22	5,079978E+22	1,989898E+22	1,989925E+22	1,016011E+23	3,979823E+22	1,413993E+23
-1861	5,079842E+22	5,080009E+22	1,990030E+22	1,989988E+22	1,015985E+23	3,980017E+22	1,413987E+23
-1860	5,080045E+22	5,079953E+22	1,989969E+22	1,990107E+22	1,016000E+23	3,980076E+22	1,414007E+23
-1859	5,079914E+22	5,079858E+22	1,990074E+22	1,990028E+22	1,015977E+23	3,980101E+22	1,413987E+23
-1858	5,079808E+22	5,079938E+22	1,990144E+22	1,990082E+22	1,015975E+23	3,980226E+22	1,413997E+23
-1857	5,080029E+22	5,079857E+22	1,990045E+22	1,990120E+22	1,015989E+23	3,980165E+22	1,414005E+23
-1856	5,079728E+22	5,079866E+22	1,990137E+22	1,990037E+22	1,015959E+23	3,980174E+22	1,413977E+23
-1855	5,079807E+22	5,079955E+22	1,990079E+22	1,990113E+22	1,015976E+23	3,980192E+22	1,413995E+23
-1854	5,079989E+22	5,079857E+22	1,989982E+22	1,990030E+22	1,015985E+23	3,980012E+22	1,413986E+23
-1853	5,079801E+22	5,079930E+22	1,990026E+22	1,989937E+22	1,015973E+23	3,979963E+22	1,413969E+23
-1852	5,080100E+22	5,079993E+22	1,989896E+22	1,989976E+22	1,016009E+23	3,979872E+22	1,413997E+23
-1851	5,080105E+22	5,079977E+22	1,989879E+22	1,989845E+22	1,016008E+23	3,979725E+22	1,413981E+23
-1850	5,079948E+22	5,080149E+22	1,989909E+22	1,989840E+22	1,016010E+23	3,979749E+22	1,413985E+23
-1849	5,080212E+22	5,080133E+22	1,989786E+22	1,989898E+22	1,016035E+23	3,979684E+22	1,414003E+23
-1848	5,079984E+22	5,080069E+22	1,989880E+22	1,989810E+22	1,016005E+23	3,979689E+22	1,413974E+23
-1847	5,079984E+22	5,080133E+22	1,989921E+22	1,989892E+22	1,016012E+23	3,979812E+22	1,413993E+23
-1846	5,080185E+22	5,079985E+22	1,989871E+22	1,989920E+22	1,016017E+23	3,979791E+22	1,413996E+23
-1845	5,079880E+22	5,079953E+22	1,989998E+22	1,989918E+22	1,015983E+23	3,979916E+22	1,413975E+23
-1844	5,079982E+22	5,079979E+22	1,989982E+22	1,990075E+22	1,015996E+23	3,980057E+22	1,414002E+23
-1843	5,079969E+22	5,079839E+22	1,990019E+22	1,990074E+22	1,015981E+23	3,980094E+22	1,413990E+23
-1842	5,079709E+22	5,079891E+22	1,990156E+22	1,990092E+22	1,015960E+23	3,980248E+22	1,413985E+23
-1841	5,079947E+22	5,079835E+22	1,990108E+22	1,990210E+22	1,015978E+23	3,980318E+22	1,414010E+23
-1840	5,079764E+22	5,079709E+22	1,990211E+22	1,990143E+22	1,015947E+23	3,980354E+22	1,413983E+23
-1839	5,079639E+22	5,079823E+22	1,990272E+22	1,990199E+22	1,015946E+23	3,980470E+22	1,413993E+23
-1838	5,079856E+22	5,079739E+22	1,990166E+22	1,990250E+22	1,015959E+23	3,980416E+22	1,414001E+23
-1837	5,079595E+22	5,079704E+22	1,990223E+22	1,990161E+22	1,015930E+23	3,980385E+22	1,413968E+23
-1836	5,079719E+22	5,079803E+22	1,990164E+22	1,990201E+22	1,015952E+23	3,980365E+22	1,413989E+23
-1835	5,079911E+22	5,079729E+22	1,990080E+22	1,990120E+22	1,015964E+23	3,980199E+22	1,413984E+23
-1834	5,079737E+22	5,079846E+22	1,990117E+22	1,990006E+22	1,015958E+23	3,980123E+22	1,413971E+23
-1833	5,080008E+22	5,079933E+22	1,989990E+22	1,990069E+22	1,015994E+23	3,980059E+22	1,414000E+23
-1832	5,079932E+22	5,079880E+22	1,989980E+22	1,989963E+22	1,015981E+23	3,979942E+22	1,413975E+23
-1831	5,079783E+22	5,080036E+22	1,990024E+22	1,989946E+22	1,015982E+23	3,979971E+22	1,413979E+23
-1830	5,080064E+22	5,079987E+22	1,989922E+22	1,990007E+22	1,016005E+23	3,979929E+22	1,413998E+23
-1829	5,079877E+22	5,079875E+22	1,989994E+22	1,989927E+22	1,015975E+23	3,979921E+22	1,413967E+23
-1828	5,079879E+22	5,079959E+22	1,990034E+22	1,990007E+22	1,015984E+23	3,980041E+22	1,413988E+23
-1827	5,080034E+22	5,079853E+22	1,989989E+22	1,990069E+22	1,015989E+23	3,980057E+22	1,413994E+23
-1826	5,079731E+22	5,079849E+22	1,990106E+22	1,990049E+22	1,015958E+23	3,980155E+22	1,413973E+23
-1825	5,079852E+22	5,079873E+22	1,990107E+22	1,990207E+22	1,015973E+23	3,980315E+22	1,414004E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1824	5,079811E+22	5,079688E+22	1,990161E+22	1,990202E+22	1,015950E+23	3,980363E+22	1,413986E+23
-1823	5,079573E+22	5,079744E+22	1,990311E+22	1,990200E+22	1,015932E+23	3,980510E+22	1,413983E+23
-1822	5,079804E+22	5,079694E+22	1,990267E+22	1,990333E+22	1,015950E+23	3,980600E+22	1,414010E+23
-1821	5,079606E+22	5,079545E+22	1,990325E+22	1,990286E+22	1,015915E+23	3,980611E+22	1,413976E+23
-1820	5,079476E+22	5,079672E+22	1,990372E+22	1,990328E+22	1,015915E+23	3,980700E+22	1,413985E+23
-1819	5,079704E+22	5,079598E+22	1,990267E+22	1,990377E+22	1,015930E+23	3,980644E+22	1,413995E+23
-1818	5,079503E+22	5,079577E+22	1,990313E+22	1,990238E+22	1,015908E+23	3,980551E+22	1,413963E+23
-1817	5,079675E+22	5,079700E+22	1,990259E+22	1,990276E+22	1,015938E+23	3,980535E+22	1,413991E+23
-1816	5,079805E+22	5,079620E+22	1,990178E+22	1,990206E+22	1,015943E+23	3,980383E+22	1,413981E+23
-1815	5,079598E+22	5,079780E+22	1,990218E+22	1,990096E+22	1,015938E+23	3,980314E+22	1,413969E+23
-1814	5,079851E+22	5,079859E+22	1,990105E+22	1,990177E+22	1,015971E+23	3,980282E+22	1,413999E+23
-1813	5,079787E+22	5,079738E+22	1,990077E+22	1,990081E+22	1,015952E+23	3,980157E+22	1,413968E+23
-1812	5,079664E+22	5,079875E+22	1,990133E+22	1,990048E+22	1,015954E+23	3,980181E+22	1,413972E+23
-1811	5,079946E+22	5,079828E+22	1,990044E+22	1,990125E+22	1,015977E+23	3,980169E+22	1,413994E+23
-1810	5,079774E+22	5,079737E+22	1,990103E+22	1,990039E+22	1,015951E+23	3,980142E+22	1,413965E+23
-1809	5,079763E+22	5,079848E+22	1,990142E+22	1,990145E+22	1,015961E+23	3,980287E+22	1,413990E+23
-1808	5,079851E+22	5,079716E+22	1,990108E+22	1,990218E+22	1,015957E+23	3,980326E+22	1,413989E+23
-1807	5,079573E+22	5,079720E+22	1,990244E+22	1,990174E+22	1,015929E+23	3,980417E+22	1,413971E+23
-1806	5,079717E+22	5,079729E+22	1,990267E+22	1,990323E+22	1,015945E+23	3,980590E+22	1,414004E+23
-1805	5,079693E+22	5,079511E+22	1,990299E+22	1,990325E+22	1,015920E+23	3,980625E+22	1,413983E+23
-1804	5,079440E+22	5,079587E+22	1,990443E+22	1,990319E+22	1,015903E+23	3,980762E+22	1,413979E+23
-1803	5,079617E+22	5,079572E+22	1,990393E+22	1,990477E+22	1,015919E+23	3,980870E+22	1,414006E+23
-1802	5,079448E+22	5,079430E+22	1,990429E+22	1,990410E+22	1,015888E+23	3,980839E+22	1,413972E+23
-1801	5,079357E+22	5,079547E+22	1,990472E+22	1,990442E+22	1,015890E+23	3,980914E+22	1,413982E+23
-1800	5,079571E+22	5,079448E+22	1,990376E+22	1,990480E+22	1,015902E+23	3,980855E+22	1,413988E+23
-1799	5,079418E+22	5,079455E+22	1,990422E+22	1,990318E+22	1,015887E+23	3,980740E+22	1,413961E+23
-1798	5,079573E+22	5,079600E+22	1,990374E+22	1,990368E+22	1,015917E+23	3,980742E+22	1,413992E+23
-1797	5,079674E+22	5,079512E+22	1,990259E+22	1,990320E+22	1,015919E+23	3,980579E+22	1,413977E+23
-1796	5,079458E+22	5,079661E+22	1,990305E+22	1,990200E+22	1,015912E+23	3,980505E+22	1,413962E+23
-1795	5,079697E+22	5,079738E+22	1,990209E+22	1,990286E+22	1,015944E+23	3,980494E+22	1,413993E+23
-1794	5,079690E+22	5,079603E+22	1,990177E+22	1,990165E+22	1,015929E+23	3,980342E+22	1,413963E+23
-1793	5,079592E+22	5,079740E+22	1,990240E+22	1,990146E+22	1,015933E+23	3,980386E+22	1,413972E+23
-1792	5,079805E+22	5,079689E+22	1,990160E+22	1,990249E+22	1,015949E+23	3,980409E+22	1,413990E+23
-1791	5,079624E+22	5,079631E+22	1,990221E+22	1,990165E+22	1,015926E+23	3,980386E+22	1,413964E+23
-1790	5,079609E+22	5,079737E+22	1,990279E+22	1,990281E+22	1,015935E+23	3,980559E+22	1,413991E+23
-1789	5,079706E+22	5,079559E+22	1,990234E+22	1,990355E+22	1,015927E+23	3,980589E+22	1,413985E+23
-1788	5,079450E+22	5,079552E+22	1,990387E+22	1,990291E+22	1,015900E+23	3,980678E+22	1,413968E+23
-1787	5,079575E+22	5,079580E+22	1,990422E+22	1,990453E+22	1,015916E+23	3,980875E+22	1,414003E+23
-1786	5,079549E+22	5,079373E+22	1,990431E+22	1,990453E+22	1,015892E+23	3,980884E+22	1,413981E+23
-1785	5,079281E+22	5,079466E+22	1,990559E+22	1,990467E+22	1,015875E+23	3,981026E+22	1,413977E+23
-1784	5,079411E+22	5,079413E+22	1,990509E+22	1,990623E+22	1,015882E+23	3,981131E+22	1,413996E+23
-1783	5,079295E+22	5,079279E+22	1,990544E+22	1,990520E+22	1,015857E+23	3,981065E+22	1,413964E+23
-1782	5,079261E+22	5,079404E+22	1,990595E+22	1,990537E+22	1,015866E+23	3,981132E+22	1,413980E+23
-1781	5,079491E+22	5,079296E+22	1,990472E+22	1,990574E+22	1,015879E+23	3,981046E+22	1,413983E+23
-1780	5,079329E+22	5,079343E+22	1,990514E+22	1,990406E+22	1,015867E+23	3,980920E+22	1,413959E+23
-1779	5,079431E+22	5,079529E+22	1,990467E+22	1,990472E+22	1,015896E+23	3,980939E+22	1,413990E+23
-1778	5,079546E+22	5,079432E+22	1,990342E+22	1,990410E+22	1,015898E+23	3,980753E+22	1,413973E+23
-1777	5,079355E+22	5,079559E+22	1,990397E+22	1,990295E+22	1,015891E+23	3,980692E+22	1,413961E+23
-1776	5,079555E+22	5,079592E+22	1,990323E+22	1,990384E+22	1,015915E+23	3,980707E+22	1,413985E+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	5,079584E+22	5,079468E+22	1,990300E+22	1,990263E+22	1,015905E+23	3,980562E+22	1,413961E+23
-1774	5,079475E+22	5,079615E+22	1,990366E+22	1,990270E+22	1,015909E+23	3,980636E+22	1,413972E+23
-1773	5,079656E+22	5,079545E+22	1,990261E+22	1,990397E+22	1,015920E+23	3,980658E+22	1,413986E+23
-1772	5,079489E+22	5,079482E+22	1,990332E+22	1,990298E+22	1,015897E+23	3,980630E+22	1,413960E+23
-1771	5,079460E+22	5,079600E+22	1,990411E+22	1,990406E+22	1,015906E+23	3,980817E+22	1,413988E+23
-1770	5,079602E+22	5,079420E+22	1,990365E+22	1,990461E+22	1,015902E+23	3,980826E+22	1,413985E+23
-1769	5,079347E+22	5,079414E+22	1,990522E+22	1,990411E+22	1,015876E+23	3,980933E+22	1,413969E+23
-1768	5,079370E+22	5,079440E+22	1,990564E+22	1,990595E+22	1,015881E+23	3,981159E+22	1,413997E+23
-1767	5,079354E+22	5,079250E+22	1,990565E+22	1,990595E+22	1,015860E+23	3,981159E+22	1,413976E+23
-1766	5,079108E+22	5,079318E+22	1,990694E+22	1,990608E+22	1,015843E+23	3,981302E+22	1,413973E+23
-1765	5,079269E+22	5,079230E+22	1,990618E+22	1,990752E+22	1,015850E+23	3,981371E+22	1,413987E+23
-1764	5,079217E+22	5,079102E+22	1,990654E+22	1,990617E+22	1,015832E+23	3,981271E+22	1,413959E+23
-1763	5,079172E+22	5,079278E+22	1,990706E+22	1,990633E+22	1,015845E+23	3,981339E+22	1,413979E+23
-1762	5,079399E+22	5,079210E+22	1,990561E+22	1,990664E+22	1,015861E+23	3,981225E+22	1,413983E+23
-1761	5,079212E+22	5,079275E+22	1,990595E+22	1,990511E+22	1,015849E+23	3,981106E+22	1,413959E+23
-1760	5,079246E+22	5,079425E+22	1,990568E+22	1,990576E+22	1,015867E+23	3,981144E+22	1,413982E+23
-1759	5,079407E+22	5,079317E+22	1,990454E+22	1,990495E+22	1,015872E+23	3,980949E+22	1,413967E+23
-1758	5,079257E+22	5,079420E+22	1,990521E+22	1,990388E+22	1,015868E+23	3,980909E+22	1,413959E+23
-1757	5,079451E+22	5,079428E+22	1,990426E+22	1,990495E+22	1,015888E+23	3,980921E+22	1,413980E+23
-1756	5,079476E+22	5,079329E+22	1,990399E+22	1,990382E+22	1,015880E+23	3,980781E+22	1,413959E+23
-1755	5,079333E+22	5,079515E+22	1,990469E+22	1,990404E+22	1,015885E+23	3,980873E+22	1,413972E+23
-1754	5,079533E+22	5,079433E+22	1,990362E+22	1,990514E+22	1,015897E+23	3,980876E+22	1,413984E+23
-1753	5,079384E+22	5,079365E+22	1,990448E+22	1,990415E+22	1,015875E+23	3,980863E+22	1,413961E+23
-1752	5,079304E+22	5,079447E+22	1,990558E+22	1,990521E+22	1,015875E+23	3,981079E+22	1,413983E+23
-1751	5,079451E+22	5,079279E+22	1,990521E+22	1,990581E+22	1,015873E+23	3,981101E+22	1,413983E+23
-1750	5,079177E+22	5,079275E+22	1,990675E+22	1,990562E+22	1,015845E+23	3,981237E+22	1,413969E+23
-1749	5,079167E+22	5,079261E+22	1,990686E+22	1,990759E+22	1,015843E+23	3,981445E+22	1,413987E+23
-1748	5,079197E+22	5,079057E+22	1,990684E+22	1,990736E+22	1,015825E+23	3,981420E+22	1,413968E+23
-1747	5,078981E+22	5,079151E+22	1,990812E+22	1,990728E+22	1,015813E+23	3,981540E+22	1,413967E+23
-1746	5,079202E+22	5,079082E+22	1,990723E+22	1,990841E+22	1,015828E+23	3,981564E+22	1,413985E+23
-1745	5,079157E+22	5,079004E+22	1,990751E+22	1,990709E+22	1,015816E+23	3,981459E+22	1,413962E+23
-1744	5,079014E+22	5,079197E+22	1,990813E+22	1,990733E+22	1,015821E+23	3,981546E+22	1,413976E+23
-1743	5,079237E+22	5,079151E+22	1,990670E+22	1,990761E+22	1,015839E+23	3,981431E+22	1,413982E+23
-1742	5,079062E+22	5,079180E+22	1,990713E+22	1,990617E+22	1,015824E+23	3,981330E+22	1,413957E+23
-1741	5,079097E+22	5,079270E+22	1,990671E+22	1,990682E+22	1,015837E+23	3,981354E+22	1,413972E+23
-1740	5,079321E+22	5,079141E+22	1,990562E+22	1,990592E+22	1,015846E+23	3,981154E+22	1,413962E+23
-1739	5,079159E+22	5,079276E+22	1,990624E+22	1,990498E+22	1,015844E+23	3,981122E+22	1,413956E+23
-1738	5,079358E+22	5,079312E+22	1,990508E+22	1,990610E+22	1,015867E+23	3,981118E+22	1,413979E+23
-1737	5,079373E+22	5,079230E+22	1,990477E+22	1,990505E+22	1,015860E+23	3,980981E+22	1,413958E+23
-1736	5,079162E+22	5,079391E+22	1,990581E+22	1,990519E+22	1,015855E+23	3,981100E+22	1,413965E+23
-1735	5,079400E+22	5,079317E+22	1,990499E+22	1,990609E+22	1,015872E+23	3,981108E+22	1,413982E+23
-1734	5,079266E+22	5,079225E+22	1,990605E+22	1,990527E+22	1,015849E+23	3,981132E+22	1,413962E+23
-1733	5,079139E+22	5,079279E+22	1,990700E+22	1,990657E+22	1,015842E+23	3,981357E+22	1,413978E+23
-1732	5,079286E+22	5,079112E+22	1,990658E+22	1,990728E+22	1,015840E+23	3,981386E+22	1,413978E+23
-1731	5,078993E+22	5,079124E+22	1,990805E+22	1,990718E+22	1,015812E+23	3,981523E+22	1,413964E+23
-1730	5,079030E+22	5,079099E+22	1,990798E+22	1,990892E+22	1,015813E+23	3,981690E+22	1,413982E+23
-1729	5,079102E+22	5,078911E+22	1,990793E+22	1,990854E+22	1,015801E+23	3,981647E+22	1,413966E+23
-1728	5,078856E+22	5,079008E+22	1,990941E+22	1,990834E+22	1,015786E+23	3,981775E+22	1,413964E+23
-1727	5,079086E+22	5,078985E+22	1,990854E+22	1,990938E+22	1,015807E+23	3,981792E+22	1,413986E+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							
-1726	5,079014E+22	5,078927E+22	1,990876E+22	1,990831E+22	1,015794E+23	3,981706E+22	1,413965E+23
-1725	5,078827E+22	5,079074E+22	1,990914E+22	1,990859E+22	1,015790E+23	3,981772E+22	1,413967E+23
-1724	5,079091E+22	5,078997E+22	1,990774E+22	1,990866E+22	1,015809E+23	3,981640E+22	1,413973E+23
-1723	5,078949E+22	5,079032E+22	1,990817E+22	1,990714E+22	1,015798E+23	3,981531E+22	1,413951E+23
-1722	5,079034E+22	5,079112E+22	1,990758E+22	1,990764E+22	1,015815E+23	3,981522E+22	1,413967E+23
-1721	5,079255E+22	5,079031E+22	1,990638E+22	1,990688E+22	1,015829E+23	3,981326E+22	1,413961E+23
-1720	5,079021E+22	5,079182E+22	1,990712E+22	1,990607E+22	1,015820E+23	3,981319E+22	1,413952E+23
-1719	5,079219E+22	5,079237E+22	1,990611E+22	1,990711E+22	1,015846E+23	3,981322E+22	1,413978E+23
-1718	5,079245E+22	5,079139E+22	1,990601E+22	1,990617E+22	1,015838E+23	3,981218E+22	1,413960E+23
-1717	5,079017E+22	5,079236E+22	1,990711E+22	1,990630E+22	1,015825E+23	3,981341E+22	1,413959E+23
-1716	5,079284E+22	5,079139E+22	1,990647E+22	1,990722E+22	1,015842E+23	3,981369E+22	1,413979E+23
-1715	5,079117E+22	5,079073E+22	1,990751E+22	1,990669E+22	1,015819E+23	3,981420E+22	1,413961E+23
-1714	5,078977E+22	5,079125E+22	1,990820E+22	1,990810E+22	1,015810E+23	3,981630E+22	1,413973E+23
-1713	5,079128E+22	5,078967E+22	1,990765E+22	1,990884E+22	1,015810E+23	3,981650E+22	1,413975E+23
-1712	5,078813E+22	5,078955E+22	1,990930E+22	1,990856E+22	1,015777E+23	3,981786E+22	1,413955E+23
-1711	5,078910E+22	5,078955E+22	1,990935E+22	1,990998E+22	1,015786E+23	3,981933E+22	1,413980E+23
-1710	5,079007E+22	5,078787E+22	1,990935E+22	1,990965E+22	1,015779E+23	3,981900E+22	1,413969E+23
-1709	5,078708E+22	5,078878E+22	1,991064E+22	1,990954E+22	1,015759E+23	3,982019E+22	1,413961E+23
-1708	5,078940E+22	5,078867E+22	1,990974E+22	1,991059E+22	1,015781E+23	3,982033E+22	1,413984E+23
-1707	5,078845E+22	5,078817E+22	1,990987E+22	1,990951E+22	1,015766E+23	3,981938E+22	1,413960E+23
-1706	5,078699E+22	5,078936E+22	1,991005E+22	1,990960E+22	1,015764E+23	3,981965E+22	1,413960E+23
-1705	5,079007E+22	5,078857E+22	1,990857E+22	1,990954E+22	1,015786E+23	3,981811E+22	1,413967E+23
-1704	5,078837E+22	5,078882E+22	1,990917E+22	1,990802E+22	1,015772E+23	3,981719E+22	1,413944E+23
-1703	5,078936E+22	5,079014E+22	1,990859E+22	1,990854E+22	1,015795E+23	3,981713E+22	1,413966E+23
-1702	5,079135E+22	5,078955E+22	1,990739E+22	1,990805E+22	1,015809E+23	3,981544E+22	1,413963E+23
-1701	5,078860E+22	5,079062E+22	1,990808E+22	1,990726E+22	1,015792E+23	3,981534E+22	1,413946E+23
-1700	5,079097E+22	5,079090E+22	1,990730E+22	1,990812E+22	1,015819E+23	3,981541E+22	1,413973E+23
-1699	5,079126E+22	5,079000E+22	1,990733E+22	1,990720E+22	1,015813E+23	3,981454E+22	1,413958E+23
-1698	5,078915E+22	5,079081E+22	1,990835E+22	1,990740E+22	1,015800E+23	3,981575E+22	1,413957E+23
-1697	5,079151E+22	5,079014E+22	1,990763E+22	1,990854E+22	1,015817E+23	3,981617E+22	1,413978E+23
-1696	5,078916E+22	5,078941E+22	1,990881E+22	1,990822E+22	1,015786E+23	3,981703E+22	1,413956E+23
-1695	5,078799E+22	5,078994E+22	1,990955E+22	1,990951E+22	1,015779E+23	3,981905E+22	1,413970E+23
-1694	5,078981E+22	5,078829E+22	1,990908E+22	1,991028E+22	1,015781E+23	3,981936E+22	1,413975E+23
-1693	5,078674E+22	5,078771E+22	1,991065E+22	1,990985E+22	1,015745E+23	3,982050E+22	1,413950E+23
-1692	5,078809E+22	5,078777E+22	1,991078E+22	1,991114E+22	1,015759E+23	3,982192E+22	1,413978E+23
-1691	5,078874E+22	5,078670E+22	1,991069E+22	1,991094E+22	1,015754E+23	3,982163E+22	1,413971E+23
-1690	5,078564E+22	5,078755E+22	1,991166E+22	1,991080E+22	1,015732E+23	3,982246E+22	1,413957E+23
-1689	5,078787E+22	5,078750E+22	1,991064E+22	1,991172E+22	1,015754E+23	3,982236E+22	1,413977E+23
-1688	5,078683E+22	5,078674E+22	1,991094E+22	1,991051E+22	1,015736E+23	3,982145E+22	1,413950E+23
-1687	5,078592E+22	5,078800E+22	1,991115E+22	1,991034E+22	1,015739E+23	3,982149E+22	1,413954E+23
-1686	5,078920E+22	5,078748E+22	1,990965E+22	1,991047E+22	1,015767E+23	3,982012E+22	1,413968E+23
-1685	5,078712E+22	5,078760E+22	1,991006E+22	1,990908E+22	1,015747E+23	3,981914E+22	1,413939E+23
-1684	5,078821E+22	5,078901E+22	1,990954E+22	1,990962E+22	1,015772E+23	3,981916E+22	1,413964E+23
-1683	5,079002E+22	5,078865E+22	1,990841E+22	1,990915E+22	1,015787E+23	3,981756E+22	1,413962E+23
-1682	5,078754E+22	5,078936E+22	1,990906E+22	1,990827E+22	1,015769E+23	3,981733E+22	1,413942E+23
-1681	5,079001E+22	5,078963E+22	1,990838E+22	1,990907E+22	1,015796E+23	3,981745E+22	1,413971E+23
-1680	5,078984E+22	5,078857E+22	1,990868E+22	1,990838E+22	1,015784E+23	3,981706E+22	1,413955E+23
-1679	5,078759E+22	5,078961E+22	1,990972E+22	1,990872E+22	1,015772E+23	3,981844E+22	1,413956E+23
-1678	5,078973E+22	5,078898E+22	1,990896E+22	1,991016E+22	1,015787E+23	3,981911E+22	1,413978E+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	5,078719E+22	5,078759E+22	1,991006E+22	1,990980E+22	1,015748E+23	3,981986E+22	1,413946E+23
-1676	5,078676E+22	5,078793E+22	1,991093E+22	1,991082E+22	1,015747E+23	3,982175E+22	1,413964E+23
-1675	5,078870E+22	5,078660E+22	1,991051E+22	1,991146E+22	1,015753E+23	3,982197E+22	1,413973E+23
-1674	5,078582E+22	5,078617E+22	1,991188E+22	1,991102E+22	1,015720E+23	3,982290E+22	1,413949E+23
-1673	5,078686E+22	5,078671E+22	1,991189E+22	1,991230E+22	1,015736E+23	3,982419E+22	1,413978E+23
-1672	5,078678E+22	5,078567E+22	1,991191E+22	1,991221E+22	1,015724E+23	3,982412E+22	1,413966E+23
-1671	5,078391E+22	5,078653E+22	1,991289E+22	1,991189E+22	1,015704E+23	3,982478E+22	1,413952E+23
-1670	5,078638E+22	5,078634E+22	1,991186E+22	1,991281E+22	1,015727E+23	3,982467E+22	1,413974E+23
-1669	5,078546E+22	5,078500E+22	1,991205E+22	1,991155E+22	1,015705E+23	3,982360E+22	1,413941E+23
-1668	5,078510E+22	5,078630E+22	1,991226E+22	1,991134E+22	1,015714E+23	3,982360E+22	1,413950E+23
-1667	5,078804E+22	5,078643E+22	1,991064E+22	1,991161E+22	1,015745E+23	3,982226E+22	1,413967E+23
-1666	5,078605E+22	5,078653E+22	1,991076E+22	1,991025E+22	1,015726E+23	3,982101E+22	1,413936E+23
-1665	5,078713E+22	5,078801E+22	1,991027E+22	1,991057E+22	1,015751E+23	3,982084E+22	1,413960E+23
-1664	5,078872E+22	5,078751E+22	1,990949E+22	1,991005E+22	1,015762E+23	3,981954E+22	1,413958E+23
-1663	5,078652E+22	5,078822E+22	1,991032E+22	1,990909E+22	1,015747E+23	3,981940E+22	1,413941E+23
-1662	5,078874E+22	5,078864E+22	1,990973E+22	1,991021E+22	1,015774E+23	3,981994E+22	1,413973E+23
-1661	5,078804E+22	5,078714E+22	1,990994E+22	1,990982E+22	1,015752E+23	3,981976E+22	1,413949E+23
-1660	5,078599E+22	5,078792E+22	1,991102E+22	1,991020E+22	1,015739E+23	3,982122E+22	1,413951E+23
-1659	5,078810E+22	5,078748E+22	1,991029E+22	1,991162E+22	1,015756E+23	3,982191E+22	1,413975E+23
-1658	5,078612E+22	5,078573E+22	1,991121E+22	1,991110E+22	1,015718E+23	3,982230E+22	1,413942E+23
-1657	5,078583E+22	5,078630E+22	1,991212E+22	1,991192E+22	1,015721E+23	3,982403E+22	1,413962E+23
-1656	5,078731E+22	5,078527E+22	1,991193E+22	1,991270E+22	1,015726E+23	3,982463E+22	1,413972E+23
-1655	5,078422E+22	5,078520E+22	1,991327E+22	1,991228E+22	1,015694E+23	3,982555E+22	1,413950E+23
-1654	5,078492E+22	5,078586E+22	1,991321E+22	1,991372E+22	1,015708E+23	3,982693E+22	1,413977E+23
-1653	5,078474E+22	5,078403E+22	1,991314E+22	1,991355E+22	1,015688E+23	3,982669E+22	1,413955E+23
-1652	5,078263E+22	5,078457E+22	1,991414E+22	1,991298E+22	1,015672E+23	3,982712E+22	1,413943E+23
-1651	5,078528E+22	5,078477E+22	1,991304E+22	1,991381E+22	1,015700E+23	3,982685E+22	1,413969E+23
-1650	5,078471E+22	5,078351E+22	1,991288E+22	1,991259E+22	1,015682E+23	3,982547E+22	1,413937E+23
-1649	5,078422E+22	5,078535E+22	1,991294E+22	1,991233E+22	1,015696E+23	3,982527E+22	1,413948E+23
-1648	5,078666E+22	5,078564E+22	1,991153E+22	1,991265E+22	1,015723E+23	3,982418E+22	1,413965E+23
-1647	5,078489E+22	5,078582E+22	1,991176E+22	1,991111E+22	1,015707E+23	3,982286E+22	1,413936E+23
-1646	5,078601E+22	5,078722E+22	1,991142E+22	1,991144E+22	1,015732E+23	3,982286E+22	1,413961E+23
-1645	5,078737E+22	5,078599E+22	1,991074E+22	1,991104E+22	1,015734E+23	3,982179E+22	1,413951E+23
-1644	5,078543E+22	5,078656E+22	1,991167E+22	1,991028E+22	1,015720E+23	3,982195E+22	1,413939E+23
-1643	5,078705E+22	5,078732E+22	1,991102E+22	1,991162E+22	1,015744E+23	3,982264E+22	1,413970E+23
-1642	5,078649E+22	5,078549E+22	1,991096E+22	1,991136E+22	1,015720E+23	3,982232E+22	1,413943E+23
-1641	5,078474E+22	5,078624E+22	1,991202E+22	1,991148E+22	1,015710E+23	3,982349E+22	1,413945E+23
-1640	5,078673E+22	5,078581E+22	1,991160E+22	1,991280E+22	1,015725E+23	3,982440E+22	1,413970E+23
-1639	5,078510E+22	5,078443E+22	1,991260E+22	1,991215E+22	1,015695E+23	3,982475E+22	1,413943E+23
-1638	5,078448E+22	5,078540E+22	1,991355E+22	1,991317E+22	1,015699E+23	3,982672E+22	1,413966E+23
-1637	5,078529E+22	5,078402E+22	1,991333E+22	1,991416E+22	1,015693E+23	3,982749E+22	1,413968E+23
-1636	5,078244E+22	5,078369E+22	1,991470E+22	1,991374E+22	1,015661E+23	3,982844E+22	1,413946E+23
-1635	5,078302E+22	5,078442E+22	1,991460E+22	1,991504E+22	1,015674E+23	3,982964E+22	1,413971E+23
-1634	5,078354E+22	5,078214E+22	1,991422E+22	1,991476E+22	1,015657E+23	3,982898E+22	1,413947E+23
-1633	5,078187E+22	5,078282E+22	1,991507E+22	1,991394E+22	1,015647E+23	3,982901E+22	1,413937E+23
-1632	5,078422E+22	5,078348E+22	1,991407E+22	1,991488E+22	1,015677E+23	3,982895E+22	1,413966E+23
-1631	5,078364E+22	5,078277E+22	1,991377E+22	1,991360E+22	1,015664E+23	3,982737E+22	1,413938E+23
-1630	5,078293E+22	5,078484E+22	1,991383E+22	1,991338E+22	1,015678E+23	3,982721E+22	1,413950E+23
-1629	5,078521E+22	5,078447E+22	1,991255E+22	1,991359E+22	1,015697E+23	3,982615E+22	1,413958E+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							
-1628	5,078395E+22	5,078429E+22	1,991295E+22	1,991193E+22	1,015682E+23	3,982488E+22	1,413931E+23
-1627	5,078478E+22	5,078598E+22	1,991271E+22	1,991234E+22	1,015708E+23	3,982505E+22	1,413958E+23
-1626	5,078623E+22	5,078450E+22	1,991175E+22	1,991224E+22	1,015707E+23	3,982399E+22	1,413947E+23
-1625	5,078408E+22	5,078519E+22	1,991257E+22	1,991154E+22	1,015693E+23	3,982411E+22	1,413934E+23
-1624	5,078534E+22	5,078602E+22	1,991215E+22	1,991301E+22	1,015714E+23	3,982516E+22	1,413965E+23
-1623	5,078516E+22	5,078422E+22	1,991214E+22	1,991257E+22	1,015694E+23	3,982470E+22	1,413941E+23
-1622	5,078357E+22	5,078506E+22	1,991331E+22	1,991266E+22	1,015686E+23	3,982597E+22	1,413946E+23
-1621	5,078535E+22	5,078414E+22	1,991307E+22	1,991405E+22	1,015695E+23	3,982712E+22	1,413966E+23
-1620	5,078379E+22	5,078285E+22	1,991415E+22	1,991355E+22	1,015666E+23	3,982770E+22	1,413943E+23
-1619	5,078249E+22	5,078425E+22	1,991505E+22	1,991468E+22	1,015667E+23	3,982972E+22	1,413965E+23
-1618	5,078349E+22	5,078234E+22	1,991453E+22	1,991572E+22	1,015658E+23	3,983025E+22	1,413961E+23
-1617	5,078104E+22	5,078183E+22	1,991581E+22	1,991497E+22	1,015629E+23	3,983078E+22	1,413937E+23
-1616	5,078166E+22	5,078264E+22	1,991586E+22	1,991613E+22	1,015643E+23	3,983199E+22	1,413963E+23
-1615	5,078263E+22	5,078081E+22	1,991536E+22	1,991570E+22	1,015634E+23	3,983106E+22	1,413945E+23
-1614	5,078088E+22	5,078205E+22	1,991606E+22	1,991500E+22	1,015629E+23	3,983106E+22	1,413940E+23
-1613	5,078268E+22	5,078246E+22	1,991508E+22	1,991600E+22	1,015651E+23	3,983108E+22	1,413962E+23
-1612	5,078245E+22	5,078174E+22	1,991484E+22	1,991464E+22	1,015642E+23	3,982948E+22	1,413937E+23
-1611	5,078153E+22	5,078387E+22	1,991498E+22	1,991424E+22	1,015654E+23	3,982922E+22	1,413946E+23
-1610	5,078415E+22	5,078298E+22	1,991355E+22	1,991450E+22	1,015671E+23	3,982805E+22	1,413952E+23
-1609	5,078310E+22	5,078275E+22	1,991393E+22	1,991283E+22	1,015659E+23	3,982676E+22	1,413926E+23
-1608	5,078329E+22	5,078468E+22	1,991384E+22	1,991354E+22	1,015680E+23	3,982737E+22	1,413954E+23
-1607	5,078473E+22	5,078349E+22	1,991276E+22	1,991354E+22	1,015682E+23	3,982630E+22	1,413945E+23
-1606	5,078264E+22	5,078415E+22	1,991356E+22	1,991287E+22	1,015668E+23	3,982643E+22	1,413932E+23
-1605	5,078384E+22	5,078430E+22	1,991336E+22	1,991424E+22	1,015681E+23	3,982760E+22	1,413957E+23
-1604	5,078425E+22	5,078248E+22	1,991352E+22	1,991368E+22	1,015667E+23	3,982720E+22	1,413939E+23
-1603	5,078230E+22	5,078376E+22	1,991482E+22	1,991380E+22	1,015661E+23	3,982862E+22	1,413947E+23
-1602	5,078396E+22	5,078272E+22	1,991437E+22	1,991547E+22	1,015667E+23	3,982985E+22	1,413965E+23
-1601	5,078220E+22	5,078147E+22	1,991539E+22	1,991497E+22	1,015637E+23	3,983036E+22	1,413940E+23
-1600	5,078049E+22	5,078287E+22	1,991646E+22	1,991613E+22	1,015634E+23	3,983259E+22	1,413960E+23
-1599	5,078195E+22	5,078092E+22	1,991584E+22	1,991695E+22	1,015629E+23	3,983279E+22	1,413957E+23
-1598	5,077984E+22	5,078042E+22	1,991705E+22	1,991612E+22	1,015603E+23	3,983317E+22	1,413934E+23
-1597	5,078040E+22	5,078088E+22	1,991716E+22	1,991730E+22	1,015613E+23	3,983446E+22	1,413957E+23
-1596	5,078154E+22	5,077941E+22	1,991655E+22	1,991690E+22	1,015610E+23	3,983345E+22	1,413944E+23
-1595	5,077929E+22	5,078122E+22	1,991715E+22	1,991618E+22	1,015605E+23	3,983334E+22	1,413938E+23
-1594	5,078138E+22	5,078117E+22	1,991594E+22	1,991713E+22	1,015625E+23	3,983307E+22	1,413956E+23
-1593	5,078143E+22	5,078032E+22	1,991570E+22	1,991545E+22	1,015617E+23	3,983115E+22	1,413929E+23
-1592	5,078036E+22	5,078259E+22	1,991607E+22	1,991504E+22	1,015630E+23	3,983111E+22	1,413941E+23
-1591	5,078312E+22	5,078192E+22	1,991457E+22	1,991534E+22	1,015650E+23	3,982990E+22	1,413949E+23
-1590	5,078186E+22	5,078196E+22	1,991488E+22	1,991396E+22	1,015638E+23	3,982884E+22	1,413927E+23
-1589	5,078160E+22	5,078335E+22	1,991492E+22	1,991484E+22	1,015649E+23	3,982976E+22	1,413947E+23
-1588	5,078341E+22	5,078208E+22	1,991393E+22	1,991482E+22	1,015655E+23	3,982875E+22	1,413942E+23
-1587	5,078130E+22	5,078288E+22	1,991484E+22	1,991401E+22	1,015642E+23	3,982884E+22	1,413930E+23
-1586	5,078290E+22	5,078252E+22	1,991457E+22	1,991540E+22	1,015654E+23	3,982997E+22	1,413954E+23
-1585	5,078335E+22	5,078087E+22	1,991479E+22	1,991484E+22	1,015642E+23	3,982963E+22	1,413939E+23
-1584	5,078061E+22	5,078254E+22	1,991628E+22	1,991522E+22	1,015632E+23	3,983150E+22	1,413947E+23
-1583	5,078206E+22	5,078166E+22	1,991573E+22	1,991694E+22	1,015637E+23	3,983267E+22	1,413964E+23
-1582	5,078043E+22	5,078026E+22	1,991671E+22	1,991645E+22	1,015607E+23	3,983316E+22	1,413938E+23
-1581	5,077865E+22	5,078084E+22	1,991792E+22	1,991746E+22	1,015595E+23	3,983538E+22	1,413949E+23
-1580	5,078075E+22	5,077902E+22	1,991728E+22	1,991815E+22	1,015598E+23	3,983543E+22	1,413952E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1579	5,077856E+22	5,077902E+22	1,991836E+22	1,991727E+22	1,015576E+23	3,983563E+22	1,413932E+23
-1578	5,077913E+22	5,077943E+22	1,991815E+22	1,991860E+22	1,015586E+23	3,983675E+22	1,413953E+23
-1577	5,078033E+22	5,077828E+22	1,991744E+22	1,991803E+22	1,015586E+23	3,983548E+22	1,413941E+23
-1576	5,077780E+22	5,078023E+22	1,991821E+22	1,991722E+22	1,015580E+23	3,983543E+22	1,413935E+23
-1575	5,078022E+22	5,078022E+22	1,991695E+22	1,991791E+22	1,015604E+23	3,983486E+22	1,413953E+23
-1574	5,078051E+22	5,077932E+22	1,991671E+22	1,991626E+22	1,015598E+23	3,983296E+22	1,413928E+23
-1573	5,077902E+22	5,078108E+22	1,991723E+22	1,991605E+22	1,015601E+23	3,983329E+22	1,413934E+23
-1572	5,078178E+22	5,078071E+22	1,991567E+22	1,991655E+22	1,015625E+23	3,983221E+22	1,413947E+23
-1571	5,078023E+22	5,078093E+22	1,991594E+22	1,991524E+22	1,015612E+23	3,983118E+22	1,413923E+23
-1570	5,078038E+22	5,078167E+22	1,991585E+22	1,991612E+22	1,015621E+23	3,983197E+22	1,413940E+23
-1569	5,078260E+22	5,078038E+22	1,991496E+22	1,991580E+22	1,015630E+23	3,983075E+22	1,413937E+23
-1568	5,078027E+22	5,078152E+22	1,991613E+22	1,991503E+22	1,015618E+23	3,983116E+22	1,413929E+23
-1567	5,078177E+22	5,078152E+22	1,991585E+22	1,991648E+22	1,015633E+23	3,983233E+22	1,413956E+23
-1566	5,078179E+22	5,078013E+22	1,991607E+22	1,991621E+22	1,015619E+23	3,983228E+22	1,413942E+23
-1565	5,077848E+22	5,078111E+22	1,991778E+22	1,991678E+22	1,015596E+23	3,983457E+22	1,413942E+23
-1564	5,078018E+22	5,078004E+22	1,991725E+22	1,991841E+22	1,015602E+23	3,983566E+22	1,413959E+23
-1563	5,077865E+22	5,077859E+22	1,991823E+22	1,991779E+22	1,015572E+23	3,983603E+22	1,413933E+23
-1562	5,077749E+22	5,077861E+22	1,991919E+22	1,991882E+22	1,015561E+23	3,983801E+22	1,413941E+23
-1561	5,077976E+22	5,077714E+22	1,991844E+22	1,991938E+22	1,015569E+23	3,983782E+22	1,413947E+23
-1560	5,077710E+22	5,077788E+22	1,991949E+22	1,991861E+22	1,015550E+23	3,983810E+22	1,413931E+23
-1559	5,077773E+22	5,077856E+22	1,991911E+22	1,991974E+22	1,015563E+23	3,983885E+22	1,413951E+23
-1558	5,077908E+22	5,077747E+22	1,991839E+22	1,991902E+22	1,015565E+23	3,983741E+22	1,413940E+23
-1557	5,077644E+22	5,077875E+22	1,991940E+22	1,991808E+22	1,015552E+23	3,983748E+22	1,413927E+23
-1556	5,077911E+22	5,077889E+22	1,991817E+22	1,991871E+22	1,015580E+23	3,983688E+22	1,413949E+23
-1555	5,077916E+22	5,077832E+22	1,991788E+22	1,991724E+22	1,015575E+23	3,983512E+22	1,413926E+23
-1554	5,077770E+22	5,077962E+22	1,991813E+22	1,991732E+22	1,015573E+23	3,983545E+22	1,413928E+23
-1553	5,078058E+22	5,077934E+22	1,991655E+22	1,991773E+22	1,015599E+23	3,983427E+22	1,413942E+23
-1552	5,077896E+22	5,077974E+22	1,991696E+22	1,991639E+22	1,015587E+23	3,983334E+22	1,413920E+23
-1551	5,077946E+22	5,078053E+22	1,991688E+22	1,991705E+22	1,015600E+23	3,983393E+22	1,413939E+23
-1550	5,078180E+22	5,077938E+22	1,991610E+22	1,991681E+22	1,015612E+23	3,983291E+22	1,413941E+23
-1549	5,077878E+22	5,078006E+22	1,991758E+22	1,991629E+22	1,015588E+23	3,983388E+22	1,413927E+23
-1548	5,077991E+22	5,078040E+22	1,991732E+22	1,991793E+22	1,015603E+23	3,983525E+22	1,413956E+23
-1547	5,077968E+22	5,077889E+22	1,991754E+22	1,991777E+22	1,015586E+23	3,983531E+22	1,413939E+23
-1546	5,077672E+22	5,077892E+22	1,991909E+22	1,991834E+22	1,015556E+23	3,983743E+22	1,413931E+23
-1545	5,077894E+22	5,077785E+22	1,991855E+22	1,991967E+22	1,015568E+23	3,983822E+22	1,413950E+23
-1544	5,077744E+22	5,077680E+22	1,991956E+22	1,991904E+22	1,015542E+23	3,983860E+22	1,413928E+23
-1543	5,077640E+22	5,077734E+22	1,992031E+22	1,992000E+22	1,015537E+23	3,984031E+22	1,413941E+23
-1542	5,077851E+22	5,077640E+22	1,991947E+22	1,992063E+22	1,015549E+23	3,984009E+22	1,413950E+23
-1541	5,077541E+22	5,077672E+22	1,992073E+22	1,991984E+22	1,015521E+23	3,984057E+22	1,413927E+23
-1540	5,077623E+22	5,077754E+22	1,992038E+22	1,992074E+22	1,015538E+23	3,984112E+22	1,413949E+23
-1539	5,077766E+22	5,077638E+22	1,991969E+22	1,991991E+22	1,015540E+23	3,983961E+22	1,413936E+23
-1538	5,077538E+22	5,077693E+22	1,992051E+22	1,991912E+22	1,015523E+23	3,983963E+22	1,413919E+23
-1537	5,077801E+22	5,077732E+22	1,991917E+22	1,991976E+22	1,015553E+23	3,983893E+22	1,413943E+23
-1536	5,077766E+22	5,077723E+22	1,991883E+22	1,991853E+22	1,015549E+23	3,983736E+22	1,413922E+23
-1535	5,077651E+22	5,077855E+22	1,991889E+22	1,991848E+22	1,015551E+23	3,983737E+22	1,413924E+23
-1534	5,077963E+22	5,077831E+22	1,991738E+22	1,991871E+22	1,015579E+23	3,983609E+22	1,413940E+23
-1533	5,077793E+22	5,077826E+22	1,991813E+22	1,991732E+22	1,015562E+23	3,983545E+22	1,413916E+23
-1532	5,077844E+22	5,077936E+22	1,991817E+22	1,991794E+22	1,015578E+23	3,983610E+22	1,413939E+23
-1531	5,078023E+22	5,077851E+22	1,991749E+22	1,991797E+22	1,015587E+23	3,983546E+22	1,413942E+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	5,077708E+22	5,077851E+22	1,991884E+22	1,991783E+22	1,015556E+23	3,983668E+22	1,413923E+23
-1529	5,077814E+22	5,077868E+22	1,991864E+22	1,991937E+22	1,015568E+23	3,983801E+22	1,413948E+23
-1528	5,077791E+22	5,077724E+22	1,991894E+22	1,991923E+22	1,015552E+23	3,983817E+22	1,413933E+23
-1527	5,077557E+22	5,077710E+22	1,992034E+22	1,991957E+22	1,015527E+23	3,983991E+22	1,413926E+23
-1526	5,077798E+22	5,077631E+22	1,991978E+22	1,992089E+22	1,015543E+23	3,984067E+22	1,413950E+23
-1525	5,077600E+22	5,077524E+22	1,992094E+22	1,992043E+22	1,015512E+23	3,984137E+22	1,413926E+23
-1524	5,077472E+22	5,077637E+22	1,992161E+22	1,992134E+22	1,015511E+23	3,984296E+22	1,413941E+23
-1523	5,077669E+22	5,077553E+22	1,992082E+22	1,992191E+22	1,015522E+23	3,984273E+22	1,413949E+23
-1522	5,077398E+22	5,077497E+22	1,992194E+22	1,992105E+22	1,015489E+23	3,984298E+22	1,413919E+23
-1521	5,077509E+22	5,077581E+22	1,992158E+22	1,992163E+22	1,015509E+23	3,984321E+22	1,413941E+23
-1520	5,077642E+22	5,077504E+22	1,992084E+22	1,992093E+22	1,015515E+23	3,984177E+22	1,413932E+23
-1519	5,077424E+22	5,077578E+22	1,992135E+22	1,992019E+22	1,015500E+23	3,984154E+22	1,413916E+23
-1518	5,077686E+22	5,077653E+22	1,991992E+22	1,992090E+22	1,015534E+23	3,984082E+22	1,413942E+23
-1517	5,077628E+22	5,077594E+22	1,991980E+22	1,991967E+22	1,015522E+23	3,983947E+22	1,413917E+23
-1516	5,077536E+22	5,07754E+22	1,991993E+22	1,991937E+22	1,015529E+23	3,983930E+22	1,413922E+23
-1515	5,077862E+22	5,077728E+22	1,991859E+22	1,991956E+22	1,015559E+23	3,983815E+22	1,413941E+23
-1514	5,077698E+22	5,077654E+22	1,991930E+22	1,991842E+22	1,015535E+23	3,983772E+22	1,413912E+23
-1513	5,077711E+22	5,077795E+22	1,991939E+22	1,991911E+22	1,015551E+23	3,983850E+22	1,413936E+23
-1512	5,077836E+22	5,077736E+22	1,991875E+22	1,991946E+22	1,015557E+23	3,983821E+22	1,413939E+23
-1511	5,077548E+22	5,077700E+22	1,991999E+22	1,991926E+22	1,015525E+23	3,983925E+22	1,413917E+23
-1510	5,077681E+22	5,077711E+22	1,991984E+22	1,992063E+22	1,015539E+23	3,984047E+22	1,413944E+23
-1509	5,077655E+22	5,077524E+22	1,992040E+22	1,992050E+22	1,015518E+23	3,984090E+22	1,413927E+23
-1508	5,077430E+22	5,077568E+22	1,992174E+22	1,992078E+22	1,015500E+23	3,984253E+22	1,413925E+23
-1507	5,077640E+22	5,077532E+22	1,992122E+22	1,992225E+22	1,015517E+23	3,984346E+22	1,413952E+23
-1506	5,077440E+22	5,077375E+22	1,992221E+22	1,992198E+22	1,015481E+23	3,984418E+22	1,413923E+23
-1505	5,077315E+22	5,077493E+22	1,992290E+22	1,992260E+22	1,015481E+23	3,984551E+22	1,413936E+23
-1504	5,077508E+22	5,077425E+22	1,992215E+22	1,992311E+22	1,015493E+23	3,984525E+22	1,413946E+23
-1503	5,077296E+22	5,077343E+22	1,992304E+22	1,992207E+22	1,015464E+23	3,984511E+22	1,413915E+23
-1502	5,077406E+22	5,077447E+22	1,992259E+22	1,992261E+22	1,015485E+23	3,984519E+22	1,413937E+23
-1501	5,077493E+22	5,077366E+22	1,992192E+22	1,992216E+22	1,015486E+23	3,984408E+22	1,413927E+23
-1500	5,077278E+22	5,077480E+22	1,992225E+22	1,992132E+22	1,015476E+23	3,984357E+22	1,413912E+23
-1499	5,077546E+22	5,077554E+22	1,992093E+22	1,992194E+22	1,015510E+23	3,984287E+22	1,413939E+23
-1498	5,077537E+22	5,077426E+22	1,992073E+22	1,992066E+22	1,015496E+23	3,984139E+22	1,413910E+23
-1497	5,077464E+22	5,077598E+22	1,992099E+22	1,992010E+22	1,015506E+23	3,984109E+22	1,413917E+23
-1496	5,077749E+22	5,077626E+22	1,991977E+22	1,992052E+22	1,015538E+23	3,984029E+22	1,413940E+23
-1495	5,077576E+22	5,077551E+22	1,992032E+22	1,991959E+22	1,015513E+23	3,983992E+22	1,413912E+23
-1494	5,077552E+22	5,077701E+22	1,992048E+22	1,992040E+22	1,015525E+23	3,984087E+22	1,413934E+23
-1493	5,077648E+22	5,077584E+22	1,992014E+22	1,992090E+22	1,015523E+23	3,984104E+22	1,413934E+23
-1492	5,077389E+22	5,077551E+22	1,992138E+22	1,992052E+22	1,015494E+23	3,984190E+22	1,413913E+23
-1491	5,077548E+22	5,077554E+22	1,992136E+22	1,992191E+22	1,015510E+23	3,984327E+22	1,413943E+23
-1490	5,077535E+22	5,077317E+22	1,992178E+22	1,992200E+22	1,015485E+23	3,984378E+22	1,413923E+23
-1489	5,077287E+22	5,077411E+22	1,992307E+22	1,992224E+22	1,015470E+23	3,984531E+22	1,413923E+23
-1488	5,077459E+22	5,077420E+22	1,992255E+22	1,992380E+22	1,015488E+23	3,984635E+22	1,413951E+23
-1487	5,077295E+22	5,077234E+22	1,992337E+22	1,992331E+22	1,015453E+23	3,984668E+22	1,413920E+23
-1486	5,077195E+22	5,077358E+22	1,992407E+22	1,992362E+22	1,015455E+23	3,984769E+22	1,413932E+23
-1485	5,077373E+22	5,077253E+22	1,992349E+22	1,992412E+22	1,015463E+23	3,984761E+22	1,413939E+23
-1484	5,077157E+22	5,077223E+22	1,992422E+22	1,992304E+22	1,015438E+23	3,984726E+22	1,413911E+23
-1483	5,077255E+22	5,077354E+22	1,992370E+22	1,992374E+22	1,015461E+23	3,984745E+22	1,413935E+23
-1482	5,077352E+22	5,077213E+22	1,992284E+22	1,992344E+22	1,015456E+23	3,984628E+22	1,413919E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1481	5,077167E+22	5,077344E+22	1,992317E+22	1,992230E+22	1,015451E+23	3,984547E+22	1,413906E+23
-1480	5,077443E+22	5,077443E+22	1,992195E+22	1,992284E+22	1,015489E+23	3,984478E+22	1,413936E+23
-1479	5,077478E+22	5,077298E+22	1,992165E+22	1,992148E+22	1,015478E+23	3,984313E+22	1,413909E+23
-1478	5,077378E+22	5,077501E+22	1,992198E+22	1,992098E+22	1,015488E+23	3,984296E+22	1,413917E+23
-1477	5,077577E+22	5,077517E+22	1,992101E+22	1,992179E+22	1,015509E+23	3,984280E+22	1,413937E+23
-1476	5,077387E+22	5,077456E+22	1,992154E+22	1,992094E+22	1,015484E+23	3,984248E+22	1,413909E+23
-1475	5,077375E+22	5,077568E+22	1,992186E+22	1,992175E+22	1,015494E+23	3,984361E+22	1,413930E+23
-1474	5,077512E+22	5,077365E+22	1,992146E+22	1,992231E+22	1,015488E+23	3,984377E+22	1,413925E+23
-1473	5,077288E+22	5,077348E+22	1,992270E+22	1,992172E+22	1,015464E+23	3,984442E+22	1,413908E+23
-1472	5,077414E+22	5,077413E+22	1,992273E+22	1,992329E+22	1,015483E+23	3,984601E+22	1,413943E+23
-1471	5,077411E+22	5,077191E+22	1,992292E+22	1,992347E+22	1,015460E+23	3,984639E+22	1,413924E+23
-1470	5,077140E+22	5,077302E+22	1,992425E+22	1,992356E+22	1,015444E+23	3,984781E+22	1,413922E+23
-1469	5,077275E+22	5,077281E+22	1,992404E+22	1,992512E+22	1,015456E+23	3,984916E+22	1,413947E+23
-1468	5,077139E+22	5,077106E+22	1,992479E+22	1,992437E+22	1,015424E+23	3,984916E+22	1,413916E+23
-1467	5,077048E+22	5,077213E+22	1,992555E+22	1,992469E+22	1,015426E+23	3,985024E+22	1,413928E+23
-1466	5,077229E+22	5,077064E+22	1,992471E+22	1,992545E+22	1,015429E+23	3,985016E+22	1,413931E+23
-1465	5,077013E+22	5,077068E+22	1,992524E+22	1,992430E+22	1,015408E+23	3,984954E+22	1,413904E+23
-1464	5,077101E+22	5,077237E+22	1,992469E+22	1,992502E+22	1,015434E+23	3,984970E+22	1,413931E+23
-1463	5,077263E+22	5,077079E+22	1,992361E+22	1,992446E+22	1,015434E+23	3,984808E+22	1,413915E+23
-1462	5,077104E+22	5,077232E+22	1,992399E+22	1,992300E+22	1,015434E+23	3,984699E+22	1,413903E+23
-1461	5,077341E+22	5,077327E+22	1,992309E+22	1,992363E+22	1,015467E+23	3,984672E+22	1,413934E+23
-1460	5,077347E+22	5,077233E+22	1,992275E+22	1,992237E+22	1,015458E+23	3,984512E+22	1,413909E+23
-1459	5,077210E+22	5,077432E+22	1,992322E+22	1,992218E+22	1,015464E+23	3,984540E+22	1,413918E+23
-1458	5,077397E+22	5,077359E+22	1,992220E+22	1,992325E+22	1,015476E+23	3,984545E+22	1,413930E+23
-1457	5,077239E+22	5,077283E+22	1,992278E+22	1,992225E+22	1,015452E+23	3,984503E+22	1,413903E+23
-1456	5,077246E+22	5,077398E+22	1,992320E+22	1,992304E+22	1,015464E+23	3,984623E+22	1,413927E+23
-1455	5,077432E+22	5,077177E+22	1,992262E+22	1,992357E+22	1,015461E+23	3,984619E+22	1,413923E+23
-1454	5,077190E+22	5,077214E+22	1,992383E+22	1,992297E+22	1,015440E+23	3,984681E+22	1,413909E+23
-1453	5,077240E+22	5,077287E+22	1,992409E+22	1,992477E+22	1,015453E+23	3,984885E+22	1,413941E+23
-1452	5,077217E+22	5,077095E+22	1,992429E+22	1,992483E+22	1,015431E+23	3,984912E+22	1,413922E+23
-1451	5,076966E+22	5,077178E+22	1,992581E+22	1,992484E+22	1,015414E+23	3,985064E+22	1,413921E+23
-1450	5,077116E+22	5,077073E+22	1,992552E+22	1,992638E+22	1,015419E+23	3,985190E+22	1,413938E+23
-1449	5,077006E+22	5,076917E+22	1,992617E+22	1,992552E+22	1,015392E+23	3,985169E+22	1,413909E+23
-1448	5,076892E+22	5,077071E+22	1,992679E+22	1,992599E+22	1,015396E+23	3,985278E+22	1,413924E+23
-1447	5,077098E+22	5,076927E+22	1,992558E+22	1,992679E+22	1,015402E+23	3,985238E+22	1,413926E+23
-1446	5,076901E+22	5,076961E+22	1,992601E+22	1,992540E+22	1,015386E+23	3,985142E+22	1,413900E+23
-1445	5,076974E+22	5,077119E+22	1,992573E+22	1,992603E+22	1,015409E+23	3,985176E+22	1,413927E+23
-1444	5,077163E+22	5,076996E+22	1,992466E+22	1,992519E+22	1,015416E+23	3,984985E+22	1,413914E+23
-1443	5,077010E+22	5,077139E+22	1,992522E+22	1,992381E+22	1,015415E+23	3,984903E+22	1,413905E+23
-1442	5,077202E+22	5,077189E+22	1,992424E+22	1,992478E+22	1,015439E+23	3,984902E+22	1,413929E+23
-1441	5,077190E+22	5,077108E+22	1,992385E+22	1,992364E+22	1,015430E+23	3,984749E+22	1,413905E+23
-1440	5,077033E+22	5,077300E+22	1,992439E+22	1,992356E+22	1,015433E+23	3,984795E+22	1,413913E+23
-1439	5,077286E+22	5,077184E+22	1,992321E+22	1,992452E+22	1,015447E+23	3,984773E+22	1,413924E+23
-1438	5,077163E+22	5,077111E+22	1,992380E+22	1,992324E+22	1,015427E+23	3,984704E+22	1,413898E+23
-1437	5,077131E+22	5,077239E+22	1,992451E+22	1,992419E+22	1,015437E+23	3,984870E+22	1,413924E+23
-1436	5,077290E+22	5,077088E+22	1,992389E+22	1,992476E+22	1,015438E+23	3,984865E+22	1,413924E+23
-1435	5,077018E+22	5,077127E+22	1,992528E+22	1,992438E+22	1,015415E+23	3,984966E+22	1,413911E+23
-1434	5,077041E+22	5,077132E+22	1,992557E+22	1,992630E+22	1,015417E+23	3,985187E+22	1,413936E+23
-1433	5,077046E+22	5,076929E+22	1,992582E+22	1,992618E+22	1,015398E+23	3,985200E+22	1,413918E+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	5,076804E+22	5,077005E+22	1,992738E+22	1,992617E+22	1,015381E+23	3,985354E+22	1,413916E+23
-1431	5,076996E+22	5,076878E+22	1,992676E+22	1,992772E+22	1,015387E+23	3,985449E+22	1,413932E+23
-1430	5,076880E+22	5,076766E+22	1,992720E+22	1,992681E+22	1,015365E+23	3,985402E+22	1,413905E+23
-1429	5,076722E+22	5,076937E+22	1,992789E+22	1,992742E+22	1,015366E+23	3,985531E+22	1,413919E+23
-1428	5,076948E+22	5,076834E+22	1,992658E+22	1,992790E+22	1,015378E+23	3,985448E+22	1,413923E+23
-1427	5,076798E+22	5,076859E+22	1,992714E+22	1,992632E+22	1,015366E+23	3,985347E+22	1,413900E+23
-1426	5,076877E+22	5,076963E+22	1,992685E+22	1,992688E+22	1,015384E+23	3,985372E+22	1,413921E+23
-1425	5,077066E+22	5,076875E+22	1,992578E+22	1,992601E+22	1,015394E+23	3,985179E+22	1,413912E+23
-1424	5,076871E+22	5,077047E+22	1,992635E+22	1,992491E+22	1,015392E+23	3,985125E+22	1,413904E+23
-1423	5,077059E+22	5,077065E+22	1,992514E+22	1,992600E+22	1,015412E+23	3,985114E+22	1,413924E+23
-1422	5,077060E+22	5,076985E+22	1,992475E+22	1,992477E+22	1,015405E+23	3,984952E+22	1,413900E+23
-1421	5,076897E+22	5,077144E+22	1,992555E+22	1,992472E+22	1,015404E+23	3,985027E+22	1,413907E+23
-1420	5,077169E+22	5,077053E+22	1,992440E+22	1,992549E+22	1,015422E+23	3,984989E+22	1,413921E+23
-1419	5,077064E+22	5,076987E+22	1,992513E+22	1,992440E+22	1,015405E+23	3,984953E+22	1,413900E+23
-1418	5,076974E+22	5,077083E+22	1,992582E+22	1,992564E+22	1,015406E+23	3,985146E+22	1,413920E+23
-1417	5,077112E+22	5,076960E+22	1,992524E+22	1,992626E+22	1,015407E+23	3,985151E+22	1,413922E+23
-1416	5,076830E+22	5,076986E+22	1,992679E+22	1,992591E+22	1,015382E+23	3,985270E+22	1,413909E+23
-1415	5,076894E+22	5,076943E+22	1,992692E+22	1,992766E+22	1,015384E+23	3,985459E+22	1,413930E+23
-1414	5,076931E+22	5,076749E+22	1,992711E+22	1,992734E+22	1,015368E+23	3,985445E+22	1,413912E+23
-1413	5,076652E+22	5,076831E+22	1,992877E+22	1,992750E+22	1,015348E+23	3,985627E+22	1,413911E+23
-1412	5,076830E+22	5,076771E+22	1,992796E+22	1,992899E+22	1,015360E+23	3,985696E+22	1,413930E+23
-1411	5,076732E+22	5,076663E+22	1,992839E+22	1,992815E+22	1,015339E+23	3,985654E+22	1,413905E+23
-1410	5,076571E+22	5,076785E+22	1,992903E+22	1,992870E+22	1,015336E+23	3,985773E+22	1,413913E+23
-1409	5,076839E+22	5,076702E+22	1,992775E+22	1,992887E+22	1,015354E+23	3,985662E+22	1,413920E+23
-1408	5,076697E+22	5,076733E+22	1,992838E+22	1,992722E+22	1,015343E+23	3,985560E+22	1,413899E+23
-1407	5,076790E+22	5,076827E+22	1,992784E+22	1,992782E+22	1,015362E+23	3,985566E+22	1,413918E+23
-1406	5,076948E+22	5,076769E+22	1,992663E+22	1,992700E+22	1,015372E+23	3,985363E+22	1,413908E+23
-1405	5,076693E+22	5,076930E+22	1,992737E+22	1,992619E+22	1,015362E+23	3,985355E+22	1,413898E+23
-1404	5,076896E+22	5,076963E+22	1,992614E+22	1,992707E+22	1,015386E+23	3,985321E+22	1,413918E+23
-1403	5,076951E+22	5,076850E+22	1,992591E+22	1,992582E+22	1,015380E+23	3,985172E+22	1,413897E+23
-1402	5,076788E+22	5,076960E+22	1,992673E+22	1,992583E+22	1,015375E+23	3,985256E+22	1,413900E+23
-1401	5,077062E+22	5,076911E+22	1,992563E+22	1,992663E+22	1,015397E+23	3,985226E+22	1,413920E+23
-1400	5,076914E+22	5,076879E+22	1,992643E+22	1,992579E+22	1,015379E+23	3,985222E+22	1,413901E+23
-1399	5,076822E+22	5,076948E+22	1,992698E+22	1,992710E+22	1,015377E+23	3,985408E+22	1,413918E+23
-1398	5,076963E+22	5,076823E+22	1,992649E+22	1,992757E+22	1,015379E+23	3,985406E+22	1,413919E+23
-1397	5,076665E+22	5,076820E+22	1,992832E+22	1,992730E+22	1,015348E+23	3,985562E+22	1,413905E+23
-1396	5,076742E+22	5,076794E+22	1,992841E+22	1,992883E+22	1,015354E+23	3,985723E+22	1,413926E+23
-1395	5,076797E+22	5,076600E+22	1,992859E+22	1,992873E+22	1,015340E+23	3,985732E+22	1,413913E+23
-1394	5,076475E+22	5,076654E+22	1,993005E+22	1,992908E+22	1,015313E+23	3,985912E+22	1,413904E+23
-1393	5,076662E+22	5,076626E+22	1,992918E+22	1,993043E+22	1,015329E+23	3,985961E+22	1,413925E+23
-1392	5,076593E+22	5,076528E+22	1,992963E+22	1,992942E+22	1,015312E+23	3,985906E+22	1,413903E+23
-1391	5,076485E+22	5,076619E+22	1,993005E+22	1,992965E+22	1,015310E+23	3,985970E+22	1,413907E+23
-1390	5,076765E+22	5,076574E+22	1,992874E+22	1,992959E+22	1,015334E+23	3,985832E+22	1,413917E+23
-1389	5,076572E+22	5,076625E+22	1,992947E+22	1,992819E+22	1,015320E+23	3,985766E+22	1,413896E+23
-1388	5,076619E+22	5,076763E+22	1,992881E+22	1,992877E+22	1,015338E+23	3,985758E+22	1,413914E+23
-1387	5,076793E+22	5,076687E+22	1,992767E+22	1,992818E+22	1,015348E+23	3,985585E+22	1,413907E+23
-1386	5,076535E+22	5,076767E+22	1,992842E+22	1,992741E+22	1,015330E+23	3,985583E+22	1,413888E+23
-1385	5,076785E+22	5,076805E+22	1,992728E+22	1,992811E+22	1,015359E+23	3,985539E+22	1,413913E+23
-1384	5,076863E+22	5,076696E+22	1,992713E+22	1,992691E+22	1,015356E+23	3,985404E+22	1,413896E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1383	5,076703E+22	5,076801E+22	1,992774E+22	1,992703E+22	1,015350E+23	3,985477E+22	1,413898E+23
-1382	5,076939E+22	5,076800E+22	1,992664E+22	1,992787E+22	1,015374E+23	3,985451E+22	1,413919E+23
-1381	5,076736E+22	5,076759E+22	1,992772E+22	1,992727E+22	1,015350E+23	3,985498E+22	1,413899E+23
-1380	5,076644E+22	5,076834E+22	1,992837E+22	1,992829E+22	1,015348E+23	3,985666E+22	1,413914E+23
-1379	5,076828E+22	5,076675E+22	1,992804E+22	1,992881E+22	1,015350E+23	3,985685E+22	1,413919E+23
-1378	5,076510E+22	5,076612E+22	1,992987E+22	1,992867E+22	1,015312E+23	3,985853E+22	1,413898E+23
-1377	5,076585E+22	5,076627E+22	1,992988E+22	1,993023E+22	1,015321E+23	3,986011E+22	1,413922E+23
-1376	5,076620E+22	5,076457E+22	1,992998E+22	1,993028E+22	1,015308E+23	3,986026E+22	1,413910E+23
-1375	5,076330E+22	5,076494E+22	1,993113E+22	1,993056E+22	1,015282E+23	3,986168E+22	1,413899E+23
-1374	5,076546E+22	5,076484E+22	1,993023E+22	1,993154E+22	1,015303E+23	3,986178E+22	1,413921E+23
-1373	5,076468E+22	5,076392E+22	1,993086E+22	1,993049E+22	1,015286E+23	3,986135E+22	1,413899E+23
-1372	5,076370E+22	5,076520E+22	1,993121E+22	1,993043E+22	1,015289E+23	3,986164E+22	1,413905E+23
-1371	5,076646E+22	5,076483E+22	1,992989E+22	1,993061E+22	1,015313E+23	3,986050E+22	1,413918E+23
-1370	5,076391E+22	5,076493E+22	1,993052E+22	1,992949E+22	1,015288E+23	3,986001E+22	1,413888E+23
-1369	5,076449E+22	5,076634E+22	1,992985E+22	1,992997E+22	1,015308E+23	3,985983E+22	1,413907E+23
-1368	5,076658E+22	5,076541E+22	1,992879E+22	1,992932E+22	1,015320E+23	3,985811E+22	1,413901E+23
-1367	5,076467E+22	5,076584E+22	1,992929E+22	1,992840E+22	1,015305E+23	3,985769E+22	1,413882E+23
-1366	5,076730E+22	5,076658E+22	1,992819E+22	1,992894E+22	1,015339E+23	3,985713E+22	1,413910E+23
-1365	5,076752E+22	5,076592E+22	1,992821E+22	1,992805E+22	1,015334E+23	3,985627E+22	1,413897E+23
-1364	5,076551E+22	5,076738E+22	1,992884E+22	1,992811E+22	1,015329E+23	3,985695E+22	1,413898E+23
-1363	5,076786E+22	5,076718E+22	1,992798E+22	1,992916E+22	1,015350E+23	3,985714E+22	1,413922E+23
-1362	5,076554E+22	5,076597E+22	1,992920E+22	1,992868E+22	1,015315E+23	3,985788E+22	1,413894E+23
-1361	5,076481E+22	5,076662E+22	1,992998E+22	1,992958E+22	1,015314E+23	3,985956E+22	1,413910E+23
-1360	5,076682E+22	5,076495E+22	1,992969E+22	1,993026E+22	1,015318E+23	3,985995E+22	1,413917E+23
-1359	5,076372E+22	5,076407E+22	1,993110E+22	1,993024E+22	1,015278E+23	3,986134E+22	1,413891E+23
-1358	5,076429E+22	5,076465E+22	1,993099E+22	1,993172E+22	1,015289E+23	3,986272E+22	1,413917E+23
-1357	5,076451E+22	5,076313E+22	1,993118E+22	1,993181E+22	1,015276E+23	3,986299E+22	1,413906E+23
-1356	5,076189E+22	5,076372E+22	1,993230E+22	1,993159E+22	1,015256E+23	3,986389E+22	1,413895E+23
-1355	5,076450E+22	5,076368E+22	1,993152E+22	1,993250E+22	1,015282E+23	3,986402E+22	1,413922E+23
-1354	5,076335E+22	5,076244E+22	1,993213E+22	1,993152E+22	1,015258E+23	3,986365E+22	1,413894E+23
-1353	5,076215E+22	5,076411E+22	1,993242E+22	1,993147E+22	1,015263E+23	3,986389E+22	1,413902E+23
-1352	5,076475E+22	5,076377E+22	1,993107E+22	1,993183E+22	1,015285E+23	3,986290E+22	1,413914E+23
-1351	5,076254E+22	5,076335E+22	1,993139E+22	1,993072E+22	1,015259E+23	3,986211E+22	1,413880E+23
-1350	5,076349E+22	5,076482E+22	1,993074E+22	1,993092E+22	1,015283E+23	3,986166E+22	1,413900E+23
-1349	5,076567E+22	5,076399E+22	1,992983E+22	1,993032E+22	1,015297E+23	3,986014E+22	1,413898E+23
-1348	5,076388E+22	5,076481E+22	1,993029E+22	1,992920E+22	1,015287E+23	3,985949E+22	1,413882E+23
-1347	5,076633E+22	5,076581E+22	1,992928E+22	1,993003E+22	1,015321E+23	3,985931E+22	1,413915E+23
-1346	5,076572E+22	5,076481E+22	1,992940E+22	1,992944E+22	1,015305E+23	3,985884E+22	1,413894E+23
-1345	5,076371E+22	5,076620E+22	1,993022E+22	1,992942E+22	1,015299E+23	3,985964E+22	1,413896E+23
-1344	5,076617E+22	5,076562E+22	1,992955E+22	1,993046E+22	1,015318E+23	3,986001E+22	1,413918E+23
-1343	5,076428E+22	5,076387E+22	1,993056E+22	1,993003E+22	1,015282E+23	3,986058E+22	1,413887E+23
-1342	5,076361E+22	5,076468E+22	1,993128E+22	1,993085E+22	1,015283E+23	3,986212E+22	1,413904E+23
-1341	5,076509E+22	5,076339E+22	1,993100E+22	1,993183E+22	1,015285E+23	3,986284E+22	1,413913E+23
-1340	5,076203E+22	5,076293E+22	1,993225E+22	1,993162E+22	1,015250E+23	3,986388E+22	1,413888E+23
-1339	5,076290E+22	5,076348E+22	1,993225E+22	1,993310E+22	1,015264E+23	3,986535E+22	1,413917E+23
-1338	5,076294E+22	5,076158E+22	1,993256E+22	1,993310E+22	1,015245E+23	3,986565E+22	1,413902E+23
-1337	5,076064E+22	5,076232E+22	1,993375E+22	1,993260E+22	1,015230E+23	3,986635E+22	1,413893E+23
-1336	5,076318E+22	5,076234E+22	1,993302E+22	1,993358E+22	1,015255E+23	3,986660E+22	1,413921E+23
-1335	5,076193E+22	5,076093E+22	1,993320E+22	1,993281E+22	1,015229E+23	3,986601E+22	1,413889E+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	5,076057E+22	5,076274E+22	1,993335E+22	1,993267E+22	1,015233E+23	3,986602E+22	1,413893E+23
-1333	5,076312E+22	5,076244E+22	1,993205E+22	1,993309E+22	1,015256E+23	3,986515E+22	1,413907E+23
-1332	5,076151E+22	5,076207E+22	1,993227E+22	1,993155E+22	1,015236E+23	3,986382E+22	1,413874E+23
-1331	5,076296E+22	5,076364E+22	1,993174E+22	1,993175E+22	1,015266E+23	3,986349E+22	1,413901E+23
-1330	5,076462E+22	5,076275E+22	1,993090E+22	1,993131E+22	1,015274E+23	3,986221E+22	1,413896E+23
-1329	5,076251E+22	5,076401E+22	1,993142E+22	1,993025E+22	1,015265E+23	3,986167E+22	1,413882E+23
-1328	5,076467E+22	5,076498E+22	1,993060E+22	1,993128E+22	1,015296E+23	3,986187E+22	1,413915E+23
-1327	5,076420E+22	5,076327E+22	1,993055E+22	1,993079E+22	1,015275E+23	3,986134E+22	1,413888E+23
-1326	5,076229E+22	5,076445E+22	1,993150E+22	1,993061E+22	1,015267E+23	3,986210E+22	1,413888E+23
-1325	5,076472E+22	5,076387E+22	1,993096E+22	1,993181E+22	1,015286E+23	3,986277E+22	1,413914E+23
-1324	5,076298E+22	5,076225E+22	1,993184E+22	1,993128E+22	1,015252E+23	3,986312E+22	1,413883E+23
-1323	5,076225E+22	5,076332E+22	1,993254E+22	1,993236E+22	1,015256E+23	3,986490E+22	1,413905E+23
-1322	5,076314E+22	5,076183E+22	1,993231E+22	1,993347E+22	1,015250E+23	3,986578E+22	1,413907E+23
-1321	5,076036E+22	5,076150E+22	1,993366E+22	1,993298E+22	1,015219E+23	3,986664E+22	1,413885E+23
-1320	5,076152E+22	5,076200E+22	1,993383E+22	1,993428E+22	1,015235E+23	3,986812E+22	1,413916E+23
-1319	5,076183E+22	5,075979E+22	1,993388E+22	1,993425E+22	1,015216E+23	3,986812E+22	1,413897E+23
-1318	5,075942E+22	5,076083E+22	1,993501E+22	1,993367E+22	1,015202E+23	3,986868E+22	1,413889E+23
-1317	5,076138E+22	5,076121E+22	1,993421E+22	1,993490E+22	1,015226E+23	3,986911E+22	1,413917E+23
-1316	5,076027E+22	5,075991E+22	1,993418E+22	1,993397E+22	1,015202E+23	3,986815E+22	1,413883E+23
-1315	5,075934E+22	5,076159E+22	1,993434E+22	1,993382E+22	1,015209E+23	3,986817E+22	1,413891E+23
-1314	5,076175E+22	5,076095E+22	1,993314E+22	1,993418E+22	1,015227E+23	3,986732E+22	1,413900E+23
-1313	5,076068E+22	5,076081E+22	1,993339E+22	1,993242E+22	1,015215E+23	3,986581E+22	1,413873E+23
-1312	5,076202E+22	5,076249E+22	1,993294E+22	1,993273E+22	1,015245E+23	3,986566E+22	1,413902E+23
-1311	5,076337E+22	5,076153E+22	1,993182E+22	1,993253E+22	1,015249E+23	3,986435E+22	1,413892E+23
-1310	5,076109E+22	5,076277E+22	1,993240E+22	1,993142E+22	1,015239E+23	3,986382E+22	1,413877E+23
-1309	5,076292E+22	5,076365E+22	1,993180E+22	1,993252E+22	1,015266E+23	3,986432E+22	1,413909E+23
-1308	5,076292E+22	5,076183E+22	1,993174E+22	1,993181E+22	1,015248E+23	3,986355E+22	1,413883E+23
-1307	5,076134E+22	5,076289E+22	1,993278E+22	1,993176E+22	1,015242E+23	3,986454E+22	1,413888E+23
-1306	5,076308E+22	5,076222E+22	1,993233E+22	1,993322E+22	1,015253E+23	3,986555E+22	1,413909E+23
-1305	5,076131E+22	5,076097E+22	1,993318E+22	1,993271E+22	1,015223E+23	3,986589E+22	1,413882E+23
-1304	5,076052E+22	5,076200E+22	1,993401E+22	1,993386E+22	1,015225E+23	3,986787E+22	1,413904E+23
-1303	5,076163E+22	5,076013E+22	1,993361E+22	1,993495E+22	1,015218E+23	3,986856E+22	1,413903E+23
-1302	5,075913E+22	5,075980E+22	1,993506E+22	1,993418E+22	1,015189E+23	3,986923E+22	1,413882E+23
-1301	5,076010E+22	5,076051E+22	1,993533E+22	1,993553E+22	1,015206E+23	3,987086E+22	1,413915E+23
-1300	5,076046E+22	5,075852E+22	1,993514E+22	1,993541E+22	1,015190E+23	3,987056E+22	1,413895E+23
-1299	5,075788E+22	5,075971E+22	1,993614E+22	1,993506E+22	1,015176E+23	3,987120E+22	1,413888E+23
-1298	5,075931E+22	5,075979E+22	1,993535E+22	1,993634E+22	1,015191E+23	3,987168E+22	1,413908E+23
-1297	5,075875E+22	5,075847E+22	1,993530E+22	1,993508E+22	1,015172E+23	3,987038E+22	1,413876E+23
-1296	5,075836E+22	5,076011E+22	1,993554E+22	1,993477E+22	1,015185E+23	3,987032E+22	1,413888E+23
-1295	5,076107E+22	5,075929E+22	1,993406E+22	1,993511E+22	1,015204E+23	3,986917E+22	1,413895E+23
-1294	5,075983E+22	5,075956E+22	1,993430E+22	1,993330E+22	1,015194E+23	3,986760E+22	1,413870E+23
-1293	5,076057E+22	5,076172E+22	1,993391E+22	1,993382E+22	1,015223E+23	3,986773E+22	1,413900E+23
-1292	5,076195E+22	5,076069E+22	1,993275E+22	1,993354E+22	1,015226E+23	3,986629E+22	1,413889E+23
-1291	5,075986E+22	5,076168E+22	1,993352E+22	1,993254E+22	1,015215E+23	3,986606E+22	1,413876E+23
-1290	5,076128E+22	5,076207E+22	1,993315E+22	1,993369E+22	1,015233E+23	3,986685E+22	1,413902E+23
-1289	5,076162E+22	5,076026E+22	1,993318E+22	1,993298E+22	1,015219E+23	3,986616E+22	1,413880E+23
-1288	5,075996E+22	5,076135E+22	1,993427E+22	1,993317E+22	1,015213E+23	3,986744E+22	1,413888E+23
-1287	5,076143E+22	5,076051E+22	1,993352E+22	1,993487E+22	1,015219E+23	3,986839E+22	1,413903E+23
-1286	5,075976E+22	5,075930E+22	1,993441E+22	1,993422E+22	1,015191E+23	3,986863E+22	1,413877E+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	5,075891E+22	5,076048E+22	1,993540E+22	1,993527E+22	1,015194E+23	3,987067E+22	1,413901E+23
-1284	5,076045E+22	5,075868E+22	1,993497E+22	1,993606E+22	1,015191E+23	3,987103E+22	1,413902E+23
-1283	5,075811E+22	5,075845E+22	1,993645E+22	1,993538E+22	1,015166E+23	3,987183E+22	1,413884E+23
-1282	5,075813E+22	5,075916E+22	1,993677E+22	1,993688E+22	1,015173E+23	3,987365E+22	1,413909E+23
-1281	5,075856E+22	5,075742E+22	1,993647E+22	1,993677E+22	1,015160E+23	3,987324E+22	1,413892E+23
-1280	5,075617E+22	5,075829E+22	1,993745E+22	1,993639E+22	1,015145E+23	3,987384E+22	1,413883E+23
-1279	5,075790E+22	5,075797E+22	1,993638E+22	1,993757E+22	1,015159E+23	3,987395E+22	1,413898E+23
-1278	5,075799E+22	5,075674E+22	1,993630E+22	1,993600E+22	1,015147E+23	3,987230E+22	1,413870E+23
-1277	5,075751E+22	5,075876E+22	1,993657E+22	1,993570E+22	1,015163E+23	3,987227E+22	1,413885E+23
-1276	5,076019E+22	5,075841E+22	1,993492E+22	1,993598E+22	1,015186E+23	3,987090E+22	1,413895E+23
-1275	5,075872E+22	5,075887E+22	1,993515E+22	1,993439E+22	1,015176E+23	3,986953E+22	1,413871E+23
-1274	5,075865E+22	5,076067E+22	1,993501E+22	1,993497E+22	1,015193E+23	3,986999E+22	1,413893E+23
-1273	5,076044E+22	5,075949E+22	1,993401E+22	1,993454E+22	1,015199E+23	3,986855E+22	1,413885E+23
-1272	5,075868E+22	5,076010E+22	1,993494E+22	1,993362E+22	1,015188E+23	3,986856E+22	1,413873E+23
-1271	5,076005E+22	5,076019E+22	1,993437E+22	1,993497E+22	1,015202E+23	3,986934E+22	1,413896E+23
-1270	5,076035E+22	5,075862E+22	1,993436E+22	1,993434E+22	1,015190E+23	3,986869E+22	1,413877E+23
-1269	5,075829E+22	5,076008E+22	1,993547E+22	1,993472E+22	1,015184E+23	3,987018E+22	1,413885E+23
-1268	5,076000E+22	5,075923E+22	1,993468E+22	1,993624E+22	1,015192E+23	3,987092E+22	1,413901E+23
-1267	5,075858E+22	5,075801E+22	1,993570E+22	1,993556E+22	1,015166E+23	3,987126E+22	1,413879E+23
-1266	5,075729E+22	5,075894E+22	1,993697E+22	1,993655E+22	1,015162E+23	3,987351E+22	1,413897E+23
-1265	5,075900E+22	5,075723E+22	1,993659E+22	1,993727E+22	1,015162E+23	3,987385E+22	1,413901E+23
-1264	5,075643E+22	5,075704E+22	1,993804E+22	1,993683E+22	1,015135E+23	3,987487E+22	1,413883E+23
-1263	5,075613E+22	5,075741E+22	1,993797E+22	1,993846E+22	1,015135E+23	3,987642E+22	1,413900E+23
-1262	5,075689E+22	5,075553E+22	1,993761E+22	1,993813E+22	1,015124E+23	3,987574E+22	1,413882E+23
-1261	5,075483E+22	5,075663E+22	1,993855E+22	1,993756E+22	1,015115E+23	3,987611E+22	1,413876E+23
-1260	5,075722E+22	5,075646E+22	1,993733E+22	1,993839E+22	1,015137E+23	3,987572E+22	1,413894E+23
-1259	5,075746E+22	5,075571E+22	1,993720E+22	1,993686E+22	1,015132E+23	3,987406E+22	1,413872E+23
-1258	5,075605E+22	5,075795E+22	1,993760E+22	1,993667E+22	1,015140E+23	3,987427E+22	1,413883E+23
-1257	5,075860E+22	5,075783E+22	1,993602E+22	1,993695E+22	1,015164E+23	3,987297E+22	1,413894E+23
-1256	5,075717E+22	5,075794E+22	1,993640E+22	1,993552E+22	1,015151E+23	3,987192E+22	1,413870E+23
-1255	5,075706E+22	5,075906E+22	1,993616E+22	1,993614E+22	1,015161E+23	3,987230E+22	1,413884E+23
-1254	5,075935E+22	5,075765E+22	1,993523E+22	1,993565E+22	1,015170E+23	3,987088E+22	1,413879E+23
-1253	5,075752E+22	5,075844E+22	1,993616E+22	1,993490E+22	1,015160E+23	3,987106E+22	1,413870E+23
-1252	5,075890E+22	5,075878E+22	1,993541E+22	1,993630E+22	1,015177E+23	3,987171E+22	1,413894E+23
-1251	5,075913E+22	5,075747E+22	1,993535E+22	1,993582E+22	1,015166E+23	3,987117E+22	1,413878E+23
-1250	5,075644E+22	5,075869E+22	1,993676E+22	1,993611E+22	1,015151E+23	3,987287E+22	1,413880E+23
-1249	5,075856E+22	5,075793E+22	1,993619E+22	1,993739E+22	1,015165E+23	3,987358E+22	1,413901E+23
-1248	5,075737E+22	5,075647E+22	1,993738E+22	1,993676E+22	1,015138E+23	3,987414E+22	1,413880E+23
-1247	5,075562E+22	5,075715E+22	1,993846E+22	1,993790E+22	1,015128E+23	3,987636E+22	1,413891E+23
-1246	5,075729E+22	5,075559E+22	1,993798E+22	1,993871E+22	1,015129E+23	3,987669E+22	1,413896E+23
-1245	5,075447E+22	5,075551E+22	1,993932E+22	1,993837E+22	1,015100E+23	3,987769E+22	1,413877E+23
-1244	5,075463E+22	5,075582E+22	1,993905E+22	1,993975E+22	1,015104E+23	3,987881E+22	1,413893E+23
-1243	5,075592E+22	5,075410E+22	1,993862E+22	1,993928E+22	1,015100E+23	3,987789E+22	1,413879E+23
-1242	5,075362E+22	5,075519E+22	1,993972E+22	1,993857E+22	1,015088E+23	3,987829E+22	1,413871E+23
-1241	5,075622E+22	5,075549E+22	1,993853E+22	1,993929E+22	1,015117E+23	3,987781E+22	1,413895E+23
-1240	5,075619E+22	5,075492E+22	1,993838E+22	1,993798E+22	1,015111E+23	3,987636E+22	1,413875E+23
-1239	5,075429E+22	5,075678E+22	1,993858E+22	1,993791E+22	1,015111E+23	3,987648E+22	1,413876E+23
-1238	5,075713E+22	5,075636E+22	1,993708E+22	1,993804E+22	1,015135E+23	3,987512E+22	1,413886E+23
-1237	5,075587E+22	5,075639E+22	1,993754E+22	1,993660E+22	1,015123E+23	3,987414E+22	1,413864E+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	5,075624E+22	5,075742E+22	1,993718E+22	1,993710E+22	1,015137E+23	3,987428E+22	1,413879E+23
-1235	5,075853E+22	5,075637E+22	1,993620E+22	1,993680E+22	1,015149E+23	3,987300E+22	1,413879E+23
-1234	5,075596E+22	5,075729E+22	1,993726E+22	1,993622E+22	1,015133E+23	3,987348E+22	1,413867E+23
-1233	5,075737E+22	5,075777E+22	1,993664E+22	1,993753E+22	1,015151E+23	3,987417E+22	1,413893E+23
-1232	5,075766E+22	5,075630E+22	1,993679E+22	1,993714E+22	1,015140E+23	3,987393E+22	1,413879E+23
-1231	5,075488E+22	5,075696E+22	1,993818E+22	1,993740E+22	1,015118E+23	3,987558E+22	1,413874E+23
-1230	5,075724E+22	5,075603E+22	1,993778E+22	1,993862E+22	1,015133E+23	3,987640E+22	1,413897E+23
-1229	5,075576E+22	5,075486E+22	1,993896E+22	1,993824E+22	1,015106E+23	3,987719E+22	1,413878E+23
-1228	5,075389E+22	5,075558E+22	1,993973E+22	1,993944E+22	1,015095E+23	3,987917E+22	1,413886E+23
-1227	5,075556E+22	5,075415E+22	1,993910E+22	1,994030E+22	1,015097E+23	3,987940E+22	1,413891E+23
-1226	5,075258E+22	5,075382E+22	1,994057E+22	1,993978E+22	1,015064E+23	3,988035E+22	1,413867E+23
-1225	5,075339E+22	5,075432E+22	1,994036E+22	1,994078E+22	1,015077E+23	3,988115E+22	1,413889E+23
-1224	5,075504E+22	5,075281E+22	1,993995E+22	1,994030E+22	1,015079E+23	3,988026E+22	1,413881E+23
-1223	5,075235E+22	5,075387E+22	1,994082E+22	1,993965E+22	1,015062E+23	3,988047E+22	1,413867E+23
-1222	5,075488E+22	5,075439E+22	1,993962E+22	1,994038E+22	1,015093E+23	3,988000E+22	1,413893E+23
-1221	5,075458E+22	5,075395E+22	1,993945E+22	1,993915E+22	1,015085E+23	3,987860E+22	1,413871E+23
-1220	5,075297E+22	5,075550E+22	1,993952E+22	1,993893E+22	1,015085E+23	3,987845E+22	1,413869E+23
-1219	5,075617E+22	5,075506E+22	1,993802E+22	1,993902E+22	1,015112E+23	3,987704E+22	1,413883E+23
-1218	5,075466E+22	5,075483E+22	1,993868E+22	1,993762E+22	1,015095E+23	3,987630E+22	1,413858E+23
-1217	5,075515E+22	5,075623E+22	1,993837E+22	1,993815E+22	1,015114E+23	3,987652E+22	1,413879E+23
-1216	5,075722E+22	5,075534E+22	1,993738E+22	1,993814E+22	1,015126E+23	3,987552E+22	1,413881E+23
-1215	5,075417E+22	5,075584E+22	1,993835E+22	1,993762E+22	1,015100E+23	3,987597E+22	1,413860E+23
-1214	5,075596E+22	5,075614E+22	1,993795E+22	1,993877E+22	1,015121E+23	3,987671E+22	1,413888E+23
-1213	5,075630E+22	5,075471E+22	1,993825E+22	1,993836E+22	1,015110E+23	3,987661E+22	1,413876E+23
-1212	5,075372E+22	5,075528E+22	1,993957E+22	1,993861E+22	1,015090E+23	3,987818E+22	1,413872E+23
-1211	5,075583E+22	5,075468E+22	1,993908E+22	1,994001E+22	1,015105E+23	3,987909E+22	1,413896E+23
-1210	5,075359E+22	5,075346E+22	1,994036E+22	1,993983E+22	1,015071E+23	3,988019E+22	1,413872E+23
-1209	5,075196E+22	5,075422E+22	1,994115E+22	1,994089E+22	1,015062E+23	3,988204E+22	1,413882E+23
-1208	5,075397E+22	5,075267E+22	1,994054E+22	1,994174E+22	1,015066E+23	3,988228E+22	1,413889E+23
-1207	5,075118E+22	5,075194E+22	1,994183E+22	1,994105E+22	1,015031E+23	3,988289E+22	1,413860E+23
-1206	5,075251E+22	5,075252E+22	1,994168E+22	1,994187E+22	1,015050E+23	3,988355E+22	1,413886E+23
-1205	5,075384E+22	5,075163E+22	1,994118E+22	1,994149E+22	1,015055E+23	3,988267E+22	1,413881E+23
-1204	5,075106E+22	5,075280E+22	1,994176E+22	1,994083E+22	1,015039E+23	3,988259E+22	1,413865E+23
-1203	5,075342E+22	5,075340E+22	1,994050E+22	1,994149E+22	1,015068E+23	3,988199E+22	1,413888E+23
-1202	5,075294E+22	5,075266E+22	1,994055E+22	1,994019E+22	1,015056E+23	3,988073E+22	1,413863E+23
-1201	5,075186E+22	5,075412E+22	1,994070E+22	1,993972E+22	1,015060E+23	3,988042E+22	1,413864E+23
-1200	5,075516E+22	5,075381E+22	1,993923E+22	1,994001E+22	1,015090E+23	3,987925E+22	1,413882E+23
-1199	5,075331E+22	5,075342E+22	1,993968E+22	1,993881E+22	1,015067E+23	3,987849E+22	1,413852E+23
-1198	5,075382E+22	5,075485E+22	1,993945E+22	1,993939E+22	1,015087E+23	3,987885E+22	1,413875E+23
-1197	5,075567E+22	5,075422E+22	1,993856E+22	1,993946E+22	1,015099E+23	3,987801E+22	1,413879E+23
-1196	5,075295E+22	5,075442E+22	1,993948E+22	1,993883E+22	1,015074E+23	3,987831E+22	1,413857E+23
-1195	5,075483E+22	5,075475E+22	1,993920E+22	1,993990E+22	1,015096E+23	3,987911E+22	1,413887E+23
-1194	5,075475E+22	5,075317E+22	1,993977E+22	1,993968E+22	1,015079E+23	3,987945E+22	1,413874E+23
-1193	5,075204E+22	5,075393E+22	1,994112E+22	1,994000E+22	1,015060E+23	3,988112E+22	1,413871E+23
-1192	5,075387E+22	5,075342E+22	1,994057E+22	1,994169E+22	1,015073E+23	3,988226E+22	1,413896E+23
-1191	5,075149E+22	5,075155E+22	1,994168E+22	1,994149E+22	1,015030E+23	3,988316E+22	1,413862E+23
-1190	5,075056E+22	5,075211E+22	1,994255E+22	1,994226E+22	1,015027E+23	3,988481E+22	1,413875E+23
-1189	5,075283E+22	5,075093E+22	1,994193E+22	1,994295E+22	1,015038E+23	3,988488E+22	1,413886E+23
-1188	5,075035E+22	5,075040E+22	1,994298E+22	1,994215E+22	1,015007E+23	3,988513E+22	1,413859E+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	5,075145E+22	5,075158E+22	1,994270E+22	1,994296E+22	1,015030E+23	3,988566E+22	1,413887E+23
-1186	5,075205E+22	5,075074E+22	1,994232E+22	1,994265E+22	1,015028E+23	3,988497E+22	1,413878E+23
-1185	5,074940E+22	5,075191E+22	1,994294E+22	1,994184E+22	1,015013E+23	3,988478E+22	1,413861E+23
-1184	5,075195E+22	5,075232E+22	1,994170E+22	1,994252E+22	1,015043E+23	3,988422E+22	1,413885E+23
-1183	5,075149E+22	5,075090E+22	1,994165E+22	1,994123E+22	1,015024E+23	3,988288E+22	1,413853E+23
-1182	5,075095E+22	5,075232E+22	1,994185E+22	1,994078E+22	1,015033E+23	3,988263E+22	1,413859E+23
-1181	5,075393E+22	5,075254E+22	1,994030E+22	1,994126E+22	1,015065E+23	3,988156E+22	1,413880E+23
-1180	5,075212E+22	5,075217E+22	1,994049E+22	1,994011E+22	1,015043E+23	3,988061E+22	1,413849E+23
-1179	5,075263E+22	5,075372E+22	1,994031E+22	1,994055E+22	1,015063E+23	3,988087E+22	1,413872E+23
-1178	5,075420E+22	5,075290E+22	1,993979E+22	1,994056E+22	1,015071E+23	3,988035E+22	1,413875E+23
-1177	5,075179E+22	5,075312E+22	1,994093E+22	1,993982E+22	1,015049E+23	3,988075E+22	1,413857E+23
-1176	5,075341E+22	5,075355E+22	1,994076E+22	1,994115E+22	1,015070E+23	3,988191E+22	1,413889E+23
-1175	5,075278E+22	5,075158E+22	1,994121E+22	1,994123E+22	1,015044E+23	3,988244E+22	1,413868E+23
-1174	5,075025E+22	5,075211E+22	1,994258E+22	1,994161E+22	1,015024E+23	3,988419E+22	1,413866E+23
-1173	5,075200E+22	5,075175E+22	1,994202E+22	1,994328E+22	1,015038E+23	3,988531E+22	1,413891E+23
-1172	5,075027E+22	5,074965E+22	1,994290E+22	1,994289E+22	1,014999E+23	3,988579E+22	1,413857E+23
-1171	5,074963E+22	5,075044E+22	1,994374E+22	1,994342E+22	1,015001E+23	3,988716E+22	1,413872E+23
-1170	5,075154E+22	5,074958E+22	1,994333E+22	1,994415E+22	1,015011E+23	3,988748E+22	1,413886E+23
-1169	5,074894E+22	5,074946E+22	1,994429E+22	1,994330E+22	1,014984E+23	3,988760E+22	1,413860E+23
-1168	5,074959E+22	5,075080E+22	1,994396E+22	1,994425E+22	1,015004E+23	3,988821E+22	1,413886E+23
-1167	5,075004E+22	5,074927E+22	1,994345E+22	1,994392E+22	1,014993E+23	3,988737E+22	1,413867E+23
-1166	5,074810E+22	5,075000E+22	1,994414E+22	1,994289E+22	1,014981E+23	3,988703E+22	1,413851E+23
-1165	5,075077E+22	5,075073E+22	1,994288E+22	1,994351E+22	1,015015E+23	3,988638E+22	1,413879E+23
-1164	5,075072E+22	5,074934E+22	1,994251E+22	1,994228E+22	1,015001E+23	3,988479E+22	1,413849E+23
-1163	5,075002E+22	5,075126E+22	1,994258E+22	1,994185E+22	1,015013E+23	3,988443E+22	1,413857E+23
-1162	5,075247E+22	5,075163E+22	1,994127E+22	1,994242E+22	1,015041E+23	3,988370E+22	1,413878E+23
-1161	5,075085E+22	5,075131E+22	1,994160E+22	1,994111E+22	1,015022E+23	3,988271E+22	1,413849E+23
-1160	5,075136E+22	5,075279E+22	1,994162E+22	1,994159E+22	1,015041E+23	3,988321E+22	1,413874E+23
-1159	5,075274E+22	5,075126E+22	1,994119E+22	1,994172E+22	1,015040E+23	3,988291E+22	1,413869E+23
-1158	5,075054E+22	5,075128E+22	1,994249E+22	1,994115E+22	1,015018E+23	3,988365E+22	1,413855E+23
-1157	5,075154E+22	5,075212E+22	1,994226E+22	1,994274E+22	1,015037E+23	3,988500E+22	1,413887E+23
-1156	5,075101E+22	5,074984E+22	1,994241E+22	1,994295E+22	1,015008E+23	3,988536E+22	1,413862E+23
-1155	5,074880E+22	5,075034E+22	1,994373E+22	1,994310E+22	1,014991E+23	3,988682E+22	1,413860E+23
-1154	5,075053E+22	5,074992E+22	1,994341E+22	1,994459E+22	1,015005E+23	3,988800E+22	1,413885E+23
-1153	5,074920E+22	5,074819E+22	1,994432E+22	1,994397E+22	1,014974E+23	3,988828E+22	1,413857E+23
-1152	5,074838E+22	5,074946E+22	1,994513E+22	1,994461E+22	1,014978E+23	3,988974E+22	1,413876E+23
-1151	5,074960E+22	5,074834E+22	1,994463E+22	1,994551E+22	1,014979E+23	3,989014E+22	1,413881E+23
-1150	5,074721E+22	5,074807E+22	1,994563E+22	1,994465E+22	1,014953E+23	3,989028E+22	1,413856E+23
-1149	5,074771E+22	5,074946E+22	1,994526E+22	1,994548E+22	1,014972E+23	3,989074E+22	1,413879E+23
-1148	5,074882E+22	5,074750E+22	1,994446E+22	1,994505E+22	1,014963E+23	3,988952E+22	1,413858E+23
-1147	5,074735E+22	5,074830E+22	1,994504E+22	1,994383E+22	1,014956E+23	3,988886E+22	1,413845E+23
-1146	5,074970E+22	5,074935E+22	1,994391E+22	1,994456E+22	1,014991E+23	3,988847E+22	1,413875E+23
-1145	5,074964E+22	5,074851E+22	1,994344E+22	1,994333E+22	1,014982E+23	3,988676E+22	1,413849E+23
-1144	5,074869E+22	5,075062E+22	1,994354E+22	1,994298E+22	1,014993E+23	3,988652E+22	1,413858E+23
-1143	5,075089E+22	5,075034E+22	1,994238E+22	1,994352E+22	1,015012E+23	3,988591E+22	1,413871E+23
-1142	5,074981E+22	5,074967E+22	1,994295E+22	1,994212E+22	1,014995E+23	3,988507E+22	1,413846E+23
-1141	5,074999E+22	5,075139E+22	1,994310E+22	1,994266E+22	1,015014E+23	3,988576E+22	1,413871E+23
-1140	5,075147E+22	5,074970E+22	1,994243E+22	1,994309E+22	1,015012E+23	3,988552E+22	1,413867E+23
-1139	5,074901E+22	5,074979E+22	1,994364E+22	1,994261E+22	1,014988E+23	3,988624E+22	1,413850E+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							
-1138	5,074957E+22	5,075064E+22	1,994361E+22	1,994431E+22	1,015002E+23	3,988792E+22	1,413881E+23
-1137	5,074946E+22	5,074836E+22	1,994375E+22	1,994432E+22	1,014978E+23	3,988806E+22	1,413859E+23
-1136	5,074743E+22	5,074892E+22	1,994511E+22	1,994440E+22	1,014964E+23	3,988952E+22	1,413859E+23
-1135	5,074908E+22	5,074813E+22	1,994489E+22	1,994591E+22	1,014972E+23	3,989080E+22	1,413880E+23
-1134	5,074798E+22	5,074652E+22	1,994585E+22	1,994534E+22	1,014945E+23	3,989118E+22	1,413857E+23
-1133	5,074648E+22	5,074833E+22	1,994658E+22	1,994604E+22	1,014948E+23	3,989262E+22	1,413874E+23
-1132	5,074787E+22	5,074683E+22	1,994575E+22	1,994696E+22	1,014947E+23	3,989272E+22	1,413874E+23
-1131	5,074580E+22	5,074638E+22	1,994667E+22	1,994581E+22	1,014922E+23	3,989248E+22	1,413847E+23
-1130	5,074633E+22	5,074780E+22	1,994645E+22	1,994650E+22	1,014941E+23	3,989295E+22	1,413871E+23
-1129	5,074790E+22	5,074617E+22	1,994555E+22	1,994591E+22	1,014941E+23	3,989146E+22	1,413855E+23
-1128	5,074637E+22	5,074746E+22	1,994600E+22	1,994484E+22	1,014938E+23	3,989085E+22	1,413847E+23
-1127	5,074821E+22	5,074826E+22	1,994488E+22	1,994571E+22	1,014965E+23	3,989059E+22	1,413871E+23
-1126	5,074843E+22	5,074738E+22	1,994453E+22	1,994445E+22	1,014958E+23	3,988898E+22	1,413848E+23
-1125	5,074725E+22	5,074962E+22	1,994475E+22	1,994400E+22	1,014969E+23	3,988875E+22	1,413856E+23
-1124	5,074978E+22	5,074883E+22	1,994350E+22	1,994457E+22	1,014986E+23	3,988807E+22	1,413867E+23
-1123	5,074889E+22	5,074810E+22	1,994411E+22	1,994320E+22	1,014970E+23	3,988731E+22	1,413843E+23
-1122	5,074840E+22	5,074994E+22	1,994445E+22	1,994399E+22	1,014983E+23	3,988844E+22	1,413868E+23
-1121	5,074971E+22	5,074850E+22	1,994367E+22	1,994454E+22	1,014982E+23	3,988821E+22	1,413864E+23
-1120	5,074730E+22	5,074854E+22	1,994482E+22	1,994415E+22	1,014958E+23	3,988897E+22	1,413848E+23
-1119	5,074779E+22	5,074864E+22	1,994496E+22	1,994575E+22	1,014964E+23	3,989071E+22	1,413871E+23
-1118	5,074837E+22	5,074638E+22	1,994524E+22	1,994559E+22	1,014947E+23	3,989084E+22	1,413856E+23
-1117	5,074611E+22	5,074743E+22	1,994667E+22	1,994563E+22	1,014935E+23	3,989230E+22	1,413858E+23
-1116	5,074771E+22	5,074664E+22	1,994622E+22	1,994732E+22	1,014943E+23	3,989354E+22	1,413879E+23
-1115	5,074642E+22	5,074522E+22	1,994707E+22	1,994671E+22	1,014916E+23	3,989379E+22	1,413854E+23
-1114	5,074446E+22	5,074702E+22	1,994795E+22	1,994741E+22	1,014915E+23	3,989536E+22	1,413868E+23
-1113	5,074627E+22	5,074552E+22	1,994702E+22	1,994810E+22	1,014918E+23	3,989512E+22	1,413869E+23
-1112	5,074458E+22	5,074502E+22	1,994785E+22	1,994689E+22	1,014896E+23	3,989473E+22	1,413843E+23
-1111	5,074503E+22	5,074603E+22	1,994768E+22	1,994760E+22	1,014911E+23	3,989529E+22	1,413863E+23
-1110	5,074689E+22	5,074476E+22	1,994671E+22	1,994710E+22	1,014916E+23	3,989381E+22	1,413855E+23
-1109	5,074484E+22	5,074661E+22	1,994707E+22	1,994605E+22	1,014914E+23	3,989312E+22	1,413846E+23
-1108	5,074695E+22	5,074703E+22	1,994575E+22	1,994692E+22	1,014940E+23	3,989268E+22	1,413867E+23
-1107	5,074744E+22	5,074595E+22	1,994545E+22	1,994536E+22	1,014934E+23	3,989081E+22	1,413842E+23
-1106	5,074602E+22	5,074826E+22	1,994597E+22	1,994490E+22	1,014943E+23	3,989087E+22	1,413852E+23
-1105	5,074867E+22	5,074767E+22	1,994469E+22	1,994549E+22	1,014963E+23	3,989018E+22	1,413865E+23
-1104	5,074743E+22	5,074713E+22	1,994527E+22	1,994446E+22	1,014946E+23	3,988973E+22	1,413843E+23
-1103	5,074642E+22	5,074844E+22	1,994572E+22	1,994549E+22	1,014949E+23	3,989121E+22	1,413861E+23
-1102	5,074813E+22	5,074682E+22	1,994504E+22	1,994603E+22	1,014950E+23	3,989107E+22	1,413860E+23
-1101	5,074571E+22	5,074701E+22	1,994625E+22	1,994549E+22	1,014927E+23	3,989174E+22	1,413845E+23
-1100	5,074672E+22	5,074670E+22	1,994626E+22	1,994708E+22	1,014934E+23	3,989334E+22	1,413868E+23
-1099	5,074742E+22	5,074463E+22	1,994659E+22	1,994684E+22	1,014921E+23	3,989342E+22	1,413855E+23
-1098	5,074446E+22	5,074615E+22	1,994817E+22	1,994706E+22	1,014906E+23	3,989524E+22	1,413858E+23
-1097	5,074581E+22	5,074561E+22	1,994759E+22	1,994874E+22	1,014914E+23	3,989633E+22	1,413878E+23
-1096	5,074456E+22	5,074408E+22	1,994838E+22	1,994816E+22	1,014886E+23	3,989654E+22	1,413852E+23
-1095	5,074258E+22	5,074508E+22	1,994936E+22	1,994870E+22	1,014877E+23	3,989806E+22	1,413857E+23
-1094	5,074506E+22	5,074363E+22	1,994840E+22	1,994925E+22	1,014887E+23	3,989765E+22	1,413863E+23
-1093	5,074336E+22	5,074364E+22	1,994910E+22	1,994799E+22	1,014870E+23	3,989709E+22	1,413841E+23
-1092	5,074391E+22	5,074459E+22	1,994861E+22	1,994885E+22	1,014885E+23	3,989746E+22	1,413860E+23
-1091	5,074577E+22	5,074367E+22	1,994755E+22	1,994821E+22	1,014894E+23	3,989576E+22	1,413852E+23
-1090	5,074343E+22	5,074561E+22	1,994808E+22	1,994709E+22	1,014890E+23	3,989517E+22	1,413842E+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	5,074572E+22	5,074606E+22	1,994679E+22	1,994772E+22	1,014918E+23	3,989451E+22	1,413863E+23
-1088	5,074643E+22	5,074495E+22	1,994653E+22	1,994626E+22	1,014914E+23	3,989278E+22	1,413842E+23
-1087	5,074458E+22	5,074662E+22	1,994727E+22	1,994600E+22	1,014912E+23	3,989328E+22	1,413845E+23
-1086	5,074718E+22	5,074628E+22	1,994600E+22	1,994684E+22	1,014935E+23	3,989284E+22	1,413863E+23
-1085	5,074558E+22	5,074590E+22	1,994653E+22	1,994594E+22	1,014915E+23	3,989247E+22	1,413839E+23
-1084	5,074493E+22	5,074654E+22	1,994685E+22	1,994699E+22	1,014915E+23	3,989384E+22	1,413853E+23
-1083	5,074707E+22	5,074491E+22	1,994623E+22	1,994725E+22	1,014920E+23	3,989348E+22	1,413855E+23
-1082	5,074451E+22	5,074538E+22	1,994768E+22	1,994668E+22	1,014899E+23	3,989436E+22	1,413842E+23
-1081	5,074550E+22	5,074552E+22	1,994767E+22	1,994825E+22	1,014910E+23	3,989592E+22	1,413869E+23
-1080	5,074582E+22	5,074380E+22	1,994796E+22	1,994827E+22	1,014896E+23	3,989622E+22	1,413858E+23
-1079	5,074223E+22	5,074472E+22	1,994972E+22	1,994865E+22	1,014869E+23	3,989837E+22	1,413853E+23
-1078	5,074387E+22	5,074405E+22	1,994915E+22	1,995023E+22	1,014879E+23	3,989938E+22	1,413873E+23
-1077	5,074272E+22	5,074249E+22	1,994990E+22	1,994950E+22	1,014852E+23	3,989940E+22	1,413846E+23
-1076	5,074143E+22	5,074294E+22	1,995059E+22	1,995003E+22	1,014844E+23	3,990062E+22	1,413850E+23
-1075	5,074419E+22	5,074176E+22	1,994949E+22	1,995040E+22	1,014860E+23	3,989989E+22	1,413858E+23
-1074	5,074201E+22	5,074247E+22	1,995014E+22	1,994924E+22	1,014845E+23	3,989938E+22	1,413839E+23
-1073	5,074262E+22	5,074377E+22	1,994947E+22	1,994992E+22	1,014864E+23	3,989939E+22	1,413858E+23
-1072	5,074453E+22	5,074288E+22	1,994844E+22	1,994917E+22	1,014874E+23	3,989761E+22	1,413850E+23
-1071	5,074206E+22	5,074416E+22	1,994926E+22	1,994797E+22	1,014862E+23	3,989723E+22	1,413835E+23
-1070	5,074463E+22	5,074469E+22	1,994808E+22	1,994855E+22	1,014893E+23	3,989663E+22	1,413859E+23
-1069	5,074501E+22	5,074386E+22	1,994782E+22	1,994731E+22	1,014889E+23	3,989513E+22	1,413840E+23
-1068	5,074314E+22	5,074507E+22	1,994832E+22	1,994740E+22	1,014882E+23	3,989573E+22	1,413839E+23
-1067	5,074575E+22	5,074474E+22	1,994704E+22	1,994820E+22	1,014905E+23	3,989524E+22	1,413857E+23
-1066	5,074406E+22	5,074448E+22	1,994772E+22	1,994729E+22	1,014885E+23	3,989501E+22	1,413835E+23
-1065	5,074379E+22	5,074514E+22	1,994804E+22	1,994812E+22	1,014889E+23	3,989616E+22	1,413851E+23
-1064	5,074608E+22	5,074369E+22	1,994753E+22	1,994844E+22	1,014898E+23	3,989597E+22	1,413857E+23
-1063	5,074297E+22	5,074378E+22	1,994926E+22	1,994809E+22	1,014868E+23	3,989734E+22	1,413841E+23
-1062	5,074362E+22	5,074428E+22	1,994928E+22	1,994980E+22	1,014879E+23	3,989908E+22	1,413870E+23
-1061	5,074363E+22	5,074260E+22	1,994954E+22	1,994991E+22	1,014862E+23	3,989945E+22	1,413857E+23
-1060	5,074041E+22	5,074256E+22	1,995109E+22	1,995025E+22	1,014830E+23	3,990134E+22	1,413843E+23
-1059	5,074254E+22	5,074186E+22	1,995047E+22	1,995148E+22	1,014844E+23	3,990195E+22	1,413864E+23
-1058	5,074151E+22	5,074064E+22	1,995119E+22	1,995069E+22	1,014821E+23	3,990188E+22	1,413840E+23
-1057	5,074033E+22	5,074159E+22	1,995165E+22	1,995112E+22	1,014819E+23	3,990277E+22	1,413847E+23
-1056	5,074297E+22	5,074104E+22	1,995043E+22	1,995157E+22	1,014840E+23	3,990200E+22	1,413860E+23
-1055	5,074040E+22	5,074132E+22	1,995127E+22	1,995040E+22	1,014817E+23	3,990166E+22	1,413834E+23
-1054	5,074121E+22	5,074276E+22	1,995068E+22	1,995087E+22	1,014840E+23	3,990155E+22	1,413855E+23
-1053	5,074314E+22	5,074187E+22	1,994970E+22	1,995005E+22	1,014850E+23	3,989975E+22	1,413848E+23
-1052	5,074100E+22	5,074238E+22	1,995040E+22	1,994903E+22	1,014834E+23	3,989943E+22	1,413828E+23
-1051	5,074348E+22	5,074311E+22	1,994918E+22	1,994966E+22	1,014866E+23	3,989884E+22	1,413854E+23
-1050	5,074337E+22	5,074265E+22	1,994891E+22	1,994871E+22	1,014860E+23	3,989762E+22	1,413836E+23
-1049	5,074169E+22	5,074384E+22	1,994927E+22	1,994873E+22	1,014855E+23	3,989800E+22	1,413835E+23
-1048	5,074455E+22	5,074350E+22	1,994805E+22	1,994943E+22	1,014881E+23	3,989747E+22	1,413855E+23
-1047	5,074281E+22	5,074273E+22	1,994905E+22	1,994846E+22	1,014855E+23	3,989751E+22	1,413830E+23
-1046	5,074269E+22	5,074375E+22	1,994951E+22	1,994923E+22	1,014864E+23	3,989873E+22	1,413852E+23
-1045	5,074445E+22	5,074267E+22	1,994909E+22	1,994976E+22	1,014871E+23	3,989885E+22	1,413860E+23
-1044	5,074122E+22	5,074220E+22	1,995068E+22	1,994974E+22	1,014834E+23	3,990042E+22	1,413838E+23
-1043	5,074178E+22	5,074255E+22	1,995070E+22	1,995130E+22	1,014843E+23	3,990201E+22	1,413863E+23
-1042	5,074169E+22	5,074088E+22	1,995101E+22	1,995141E+22	1,014826E+23	3,990242E+22	1,413850E+23
-1041	5,073910E+22	5,074073E+22	1,995236E+22	1,995149E+22	1,014798E+23	3,990385E+22	1,413837E+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							
-1040	5,074148E+22	5,074026E+22	1,995167E+22	1,995268E+22	1,014817E+23	3,990435E+22	1,413861E+23
-1039	5,074011E+22	5,073903E+22	1,995250E+22	1,995201E+22	1,014791E+23	3,990450E+22	1,413836E+23
-1038	5,073882E+22	5,074059E+22	1,995286E+22	1,995238E+22	1,014794E+23	3,990524E+22	1,413847E+23
-1037	5,074124E+22	5,074023E+22	1,995166E+22	1,995277E+22	1,014815E+23	3,990443E+22	1,413859E+23
-1036	5,073910E+22	5,073970E+22	1,995236E+22	1,995154E+22	1,014788E+23	3,990389E+22	1,413827E+23
-1035	5,074014E+22	5,074111E+22	1,995180E+22	1,995169E+22	1,014812E+23	3,990350E+22	1,413847E+23
-1034	5,074194E+22	5,074055E+22	1,995085E+22	1,995102E+22	1,014825E+23	3,990187E+22	1,413844E+23
-1033	5,073984E+22	5,074119E+22	1,995132E+22	1,995010E+22	1,014810E+23	3,990142E+22	1,413824E+23
-1032	5,074212E+22	5,074223E+22	1,995005E+22	1,995090E+22	1,014843E+23	3,990095E+22	1,413853E+23
-1031	5,074178E+22	5,074125E+22	1,995003E+22	1,995004E+22	1,014830E+23	3,990007E+22	1,413831E+23
-1030	5,074038E+22	5,074259E+22	1,995047E+22	1,994987E+22	1,014830E+23	3,990034E+22	1,413833E+23
-1029	5,074338E+22	5,074229E+22	1,994944E+22	1,995052E+22	1,014857E+23	3,989995E+22	1,413856E+23
-1028	5,074183E+22	5,074080E+22	1,995039E+22	1,994974E+22	1,014826E+23	3,990013E+22	1,413828E+23
-1027	5,074132E+22	5,074217E+22	1,995091E+22	1,995053E+22	1,014835E+23	3,990144E+22	1,413849E+23
-1026	5,074251E+22	5,074141E+22	1,995051E+22	1,995135E+22	1,014839E+23	3,990186E+22	1,413858E+23
-1025	5,073937E+22	5,074060E+22	1,995198E+22	1,995127E+22	1,014800E+23	3,990325E+22	1,413832E+23
-1024	5,074016E+22	5,074093E+22	1,995202E+22	1,995267E+22	1,014811E+23	3,990469E+22	1,413858E+23
-1023	5,074014E+22	5,073877E+22	1,995253E+22	1,995274E+22	1,014789E+23	3,990527E+22	1,413842E+23
-1022	5,073779E+22	5,073914E+22	1,995379E+22	1,995271E+22	1,014769E+23	3,990650E+22	1,413834E+23
-1021	5,073994E+22	5,073919E+22	1,995306E+22	1,995399E+22	1,014791E+23	3,990706E+22	1,413862E+23
-1020	5,073859E+22	5,073756E+22	1,995365E+22	1,995348E+22	1,014762E+23	3,990713E+22	1,413833E+23
-1019	5,073737E+22	5,073925E+22	1,995402E+22	1,995355E+22	1,014766E+23	3,990757E+22	1,413842E+23
-1018	5,073973E+22	5,073905E+22	1,995286E+22	1,995386E+22	1,014788E+23	3,990672E+22	1,413855E+23
-1017	5,073808E+22	5,073830E+22	1,995340E+22	1,995246E+22	1,014764E+23	3,990586E+22	1,413822E+23
-1016	5,073914E+22	5,073988E+22	1,995280E+22	1,995264E+22	1,014790E+23	3,990544E+22	1,413845E+23
-1015	5,074042E+22	5,073917E+22	1,995200E+22	1,995226E+22	1,014796E+23	3,990426E+22	1,413838E+23
-1014	5,073833E+22	5,074017E+22	1,995234E+22	1,995136E+22	1,014785E+23	3,990370E+22	1,413822E+23
-1013	5,074060E+22	5,074113E+22	1,995119E+22	1,995211E+22	1,014817E+23	3,990330E+22	1,413850E+23
-1012	5,074075E+22	5,073941E+22	1,995110E+22	1,995123E+22	1,014802E+23	3,990234E+22	1,413825E+23
-1011	5,073959E+22	5,074082E+22	1,995166E+22	1,995077E+22	1,014804E+23	3,990243E+22	1,413828E+23
-1010	5,074212E+22	5,074102E+22	1,995077E+22	1,995163E+22	1,014831E+23	3,990239E+22	1,413855E+23
-1009	5,074046E+22	5,073966E+22	1,995159E+22	1,995105E+22	1,014801E+23	3,990264E+22	1,413828E+23
-1008	5,073954E+22	5,074112E+22	1,995216E+22	1,995195E+22	1,014807E+23	3,990412E+22	1,413848E+23
-1007	5,074039E+22	5,073979E+22	1,995206E+22	1,995292E+22	1,014802E+23	3,990498E+22	1,413852E+23
-1006	5,073762E+22	5,073897E+22	1,995351E+22	1,995265E+22	1,014766E+23	3,990616E+22	1,413827E+23
-1005	5,073861E+22	5,073923E+22	1,995362E+22	1,995402E+22	1,014778E+23	3,990764E+22	1,413855E+23
-1004	5,073890E+22	5,073660E+22	1,995393E+22	1,995426E+22	1,014755E+23	3,990819E+22	1,413837E+23
-1003	5,073643E+22	5,073748E+22	1,995506E+22	1,995413E+22	1,014739E+23	3,990920E+22	1,413831E+23
-1002	5,073820E+22	5,073807E+22	1,995430E+22	1,995549E+22	1,014763E+23	3,990979E+22	1,413861E+23
-1001	5,073723E+22	5,073625E+22	1,995469E+22	1,995472E+22	1,014735E+23	3,990942E+22	1,413829E+23
-1000	5,073620E+22	5,073801E+22	1,995508E+22	1,995448E+22	1,014742E+23	3,990956E+22	1,413838E+23
-999	5,073844E+22	5,073749E+22	1,995415E+22	1,995480E+22	1,014759E+23	3,990895E+22	1,413849E+23
-998	5,073679E+22	5,073715E+22	1,995459E+22	1,995340E+22	1,014739E+23	3,990800E+22	1,413819E+23
-997	5,073760E+22	5,073900E+22	1,995399E+22	1,995379E+22	1,014766E+23	3,990778E+22	1,413844E+23
-996	5,073899E+22	5,073759E+22	1,995298E+22	1,995361E+22	1,014766E+23	3,990659E+22	1,413832E+23
-995	5,073711E+22	5,073865E+22	1,995334E+22	1,995246E+22	1,014758E+23	3,990580E+22	1,413816E+23
-994	5,073944E+22	5,073984E+22	1,995229E+22	1,995316E+22	1,014793E+23	3,990545E+22	1,413847E+23
-993	5,073998E+22	5,073793E+22	1,995213E+22	1,995221E+22	1,014779E+23	3,990434E+22	1,413823E+23
-992	5,073859E+22	5,073970E+22	1,995280E+22	1,995182E+22	1,014783E+23	3,990463E+22	1,413829E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-991	5,074030E+22	5,073978E+22	1,995220E+22	1,995305E+22	1,014801E+23	3,990524E+22	1,413853E+23
-990	5,073840E+22	5,073858E+22	1,995302E+22	1,995257E+22	1,014770E+23	3,990559E+22	1,413826E+23
-989	5,073750E+22	5,073970E+22	1,995374E+22	1,995348E+22	1,014772E+23	3,990722E+22	1,413844E+23
-988	5,073880E+22	5,073743E+22	1,995352E+22	1,995447E+22	1,014762E+23	3,990799E+22	1,413842E+23
-987	5,073646E+22	5,073675E+22	1,995493E+22	1,995395E+22	1,014732E+23	3,990888E+22	1,413821E+23
-986	5,073723E+22	5,073761E+22	1,995502E+22	1,995543E+22	1,014748E+23	3,991045E+22	1,413853E+23
-985	5,073760E+22	5,073527E+22	1,995506E+22	1,995571E+22	1,014729E+23	3,991077E+22	1,413836E+23
-984	5,073500E+22	5,073649E+22	1,995618E+22	1,995543E+22	1,014715E+23	3,991161E+22	1,413831E+23
-983	5,073644E+22	5,073679E+22	1,995571E+22	1,995675E+22	1,014732E+23	3,991246E+22	1,413857E+23
-982	5,073577E+22	5,073515E+22	1,995605E+22	1,995573E+22	1,014709E+23	3,991178E+22	1,413827E+23
-981	5,073484E+22	5,073670E+22	1,995649E+22	1,995545E+22	1,014715E+23	3,991194E+22	1,413835E+23
-980	5,073710E+22	5,073567E+22	1,995534E+22	1,995603E+22	1,014728E+23	3,991137E+22	1,413841E+23
-979	5,073544E+22	5,073562E+22	1,995559E+22	1,995463E+22	1,014711E+23	3,991021E+22	1,413813E+23
-978	5,073597E+22	5,073776E+22	1,995497E+22	1,995509E+22	1,014737E+23	3,991006E+22	1,413838E+23
-977	5,073793E+22	5,073618E+22	1,995378E+22	1,995474E+22	1,014741E+23	3,990852E+22	1,413826E+23
-976	5,073636E+22	5,073738E+22	1,995421E+22	1,995330E+22	1,014737E+23	3,990750E+22	1,413812E+23
-975	5,073835E+22	5,073848E+22	1,995354E+22	1,995409E+22	1,014768E+23	3,990763E+22	1,413845E+23
-974	5,073866E+22	5,073711E+22	1,995339E+22	1,995324E+22	1,014758E+23	3,990663E+22	1,413824E+23
-973	5,073678E+22	5,073888E+22	1,995424E+22	1,995315E+22	1,014757E+23	3,990739E+22	1,413830E+23
-972	5,073833E+22	5,073811E+22	1,995359E+22	1,995466E+22	1,014764E+23	3,990825E+22	1,413847E+23
-971	5,073670E+22	5,073668E+22	1,995445E+22	1,995404E+22	1,014734E+23	3,990850E+22	1,413819E+23
-970	5,073592E+22	5,073781E+22	1,995523E+22	1,995493E+22	1,014737E+23	3,991016E+22	1,413839E+23
-969	5,073778E+22	5,073537E+22	1,995480E+22	1,995586E+22	1,014732E+23	3,991067E+22	1,413838E+23
-968	5,073538E+22	5,073522E+22	1,995613E+22	1,995530E+22	1,014706E+23	3,991143E+22	1,413820E+23
-967	5,073551E+22	5,073629E+22	1,995643E+22	1,995697E+22	1,014718E+23	3,991340E+22	1,413852E+23
-966	5,073574E+22	5,073435E+22	1,995643E+22	1,995709E+22	1,014701E+23	3,991352E+22	1,413836E+23
-965	5,073329E+22	5,073536E+22	1,995770E+22	1,995667E+22	1,014687E+23	3,991437E+22	1,413830E+23
-964	5,073496E+22	5,073480E+22	1,995712E+22	1,995791E+22	1,014698E+23	3,991503E+22	1,413848E+23
-963	5,073449E+22	5,073332E+22	1,995736E+22	1,995675E+22	1,014678E+23	3,991411E+22	1,413819E+23
-962	5,073330E+22	5,073534E+22	1,995768E+22	1,995666E+22	1,014686E+23	3,991433E+22	1,413830E+23
-961	5,073572E+22	5,073433E+22	1,995617E+22	1,995731E+22	1,014701E+23	3,991349E+22	1,413835E+23
-960	5,073423E+22	5,073455E+22	1,995634E+22	1,995575E+22	1,014688E+23	3,991209E+22	1,413809E+23
-959	5,073467E+22	5,073647E+22	1,995603E+22	1,995617E+22	1,014711E+23	3,991220E+22	1,413833E+23
-958	5,073688E+22	5,073524E+22	1,995488E+22	1,995557E+22	1,014721E+23	3,991046E+22	1,413826E+23
-957	5,073538E+22	5,073636E+22	1,995552E+22	1,995422E+22	1,014717E+23	3,990973E+22	1,413815E+23
-956	5,073696E+22	5,073696E+22	1,995483E+22	1,995533E+22	1,014739E+23	3,991016E+22	1,413841E+23
-955	5,073701E+22	5,073577E+22	1,995467E+22	1,995464E+22	1,014728E+23	3,990931E+22	1,413821E+23
-954	5,073482E+22	5,073744E+22	1,995560E+22	1,995470E+22	1,014723E+23	3,991030E+22	1,413826E+23
-953	5,073686E+22	5,073621E+22	1,995480E+22	1,995611E+22	1,014731E+23	3,991091E+22	1,413840E+23
-952	5,073565E+22	5,073483E+22	1,995565E+22	1,995526E+22	1,014705E+23	3,991091E+22	1,413814E+23
-951	5,073460E+22	5,073597E+22	1,995671E+22	1,995626E+22	1,014706E+23	3,991297E+22	1,413835E+23
-950	5,073630E+22	5,073432E+22	1,995621E+22	1,995720E+22	1,014706E+23	3,991341E+22	1,413840E+23
-949	5,073367E+22	5,073426E+22	1,995763E+22	1,995676E+22	1,014679E+23	3,991439E+22	1,413823E+23
-948	5,073357E+22	5,073471E+22	1,995791E+22	1,995850E+22	1,014683E+23	3,991641E+22	1,413847E+23
-947	5,073411E+22	5,073273E+22	1,995789E+22	1,995838E+22	1,014668E+23	3,991627E+22	1,413831E+23
-946	5,073165E+22	5,073369E+22	1,995917E+22	1,995790E+22	1,014653E+23	3,991707E+22	1,413824E+23
-945	5,073374E+22	5,073297E+22	1,995828E+22	1,995912E+22	1,014667E+23	3,991740E+22	1,413841E+23
-944	5,073327E+22	5,073188E+22	1,995832E+22	1,995794E+22	1,014652E+23	3,991626E+22	1,413814E+23
-943	5,073163E+22	5,073401E+22	1,995873E+22	1,995803E+22	1,014656E+23	3,991676E+22	1,413824E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-942	5,073423E+22	5,073340E+22	1,995713E+22	1,995844E+22	1,014676E+23	3,991558E+22	1,413832E+23
-941	5,073316E+22	5,073346E+22	1,995744E+22	1,995670E+22	1,014666E+23	3,991414E+22	1,413808E+23
-940	5,073373E+22	5,073482E+22	1,995715E+22	1,995708E+22	1,014685E+23	3,991423E+22	1,413828E+23
-939	5,073596E+22	5,073389E+22	1,995606E+22	1,995644E+22	1,014698E+23	3,991249E+22	1,413823E+23
-938	5,073391E+22	5,073534E+22	1,995678E+22	1,995540E+22	1,014693E+23	3,991218E+22	1,413814E+23
-937	5,073537E+22	5,073570E+22	1,995591E+22	1,995669E+22	1,014711E+23	3,991260E+22	1,413837E+23
-936	5,073547E+22	5,073445E+22	1,995578E+22	1,995597E+22	1,014699E+23	3,991175E+22	1,413817E+23
-935	5,073319E+22	5,073574E+22	1,995700E+22	1,995611E+22	1,014689E+23	3,991311E+22	1,413820E+23
-934	5,073546E+22	5,073471E+22	1,995620E+22	1,995732E+22	1,014702E+23	3,991352E+22	1,413837E+23
-933	5,073447E+22	5,073335E+22	1,995717E+22	1,995659E+22	1,014678E+23	3,991376E+22	1,413816E+23
-932	5,073303E+22	5,073417E+22	1,995814E+22	1,995783E+22	1,014672E+23	3,991597E+22	1,413832E+23
-931	5,073446E+22	5,073287E+22	1,995764E+22	1,995878E+22	1,014673E+23	3,991641E+22	1,413838E+23
-930	5,073171E+22	5,073285E+22	1,995914E+22	1,995833E+22	1,014646E+23	3,991747E+22	1,413820E+23
-929	5,073205E+22	5,073284E+22	1,995923E+22	1,995984E+22	1,014649E+23	3,991906E+22	1,413840E+23
-928	5,073293E+22	5,073101E+22	1,995913E+22	1,995946E+22	1,014639E+23	3,991859E+22	1,413825E+23
-927	5,073020E+22	5,073199E+22	1,996052E+22	1,995913E+22	1,014622E+23	3,991965E+22	1,413818E+23
-926	5,073209E+22	5,073196E+22	1,995943E+22	1,996028E+22	1,014640E+23	3,991972E+22	1,413838E+23
-925	5,073178E+22	5,073094E+22	1,995945E+22	1,995921E+22	1,014627E+23	3,991865E+22	1,413814E+23
-924	5,073017E+22	5,073246E+22	1,995980E+22	1,995927E+22	1,014626E+23	3,991906E+22	1,413817E+23
-923	5,073318E+22	5,073204E+22	1,995825E+22	1,995940E+22	1,014652E+23	3,991764E+22	1,413829E+23
-922	5,073220E+22	5,073218E+22	1,995863E+22	1,995761E+22	1,014644E+23	3,991624E+22	1,413806E+23
-921	5,073287E+22	5,073342E+22	1,995817E+22	1,995805E+22	1,014663E+23	3,991621E+22	1,413825E+23
-920	5,073479E+22	5,073287E+22	1,995702E+22	1,995753E+22	1,014677E+23	3,991454E+22	1,413822E+23
-919	5,073205E+22	5,073414E+22	1,995799E+22	1,995683E+22	1,014662E+23	3,991482E+22	1,413810E+23
-918	5,073353E+22	5,073462E+22	1,995714E+22	1,995797E+22	1,014681E+23	3,991511E+22	1,413833E+23
-917	5,073413E+22	5,073291E+22	1,995715E+22	1,995723E+22	1,014670E+23	3,991438E+22	1,413814E+23
-916	5,073188E+22	5,073357E+22	1,995838E+22	1,995741E+22	1,014654E+23	3,991580E+22	1,413812E+23
-915	5,073426E+22	5,073297E+22	1,995759E+22	1,995862E+22	1,014672E+23	3,991621E+22	1,413834E+23
-914	5,073282E+22	5,073200E+22	1,995858E+22	1,995811E+22	1,014648E+23	3,991669E+22	1,413815E+23
-913	5,073138E+22	5,073272E+22	1,995938E+22	1,995939E+22	1,014641E+23	3,991877E+22	1,413829E+23
-912	5,073291E+22	5,073149E+22	1,995893E+22	1,996014E+22	1,014644E+23	3,991907E+22	1,413835E+23
-911	5,072999E+22	5,073120E+22	1,996070E+22	1,995972E+22	1,014612E+23	3,992042E+22	1,413816E+23
-910	5,073048E+22	5,073142E+22	1,996071E+22	1,996095E+22	1,014619E+23	3,992166E+22	1,413836E+23
-909	5,073157E+22	5,072954E+22	1,996059E+22	1,996074E+22	1,014611E+23	3,992133E+22	1,413824E+23
-908	5,072850E+22	5,073021E+22	1,996176E+22	1,996061E+22	1,014587E+23	3,992236E+22	1,413811E+23
-907	5,073047E+22	5,073051E+22	1,996057E+22	1,996165E+22	1,014610E+23	3,992222E+22	1,413832E+23
-906	5,073035E+22	5,072959E+22	1,996059E+22	1,996044E+22	1,014599E+23	3,992104E+22	1,413810E+23
-905	5,072934E+22	5,073085E+22	1,996073E+22	1,996023E+22	1,014602E+23	3,992096E+22	1,413812E+23
-904	5,073250E+22	5,073079E+22	1,995920E+22	1,996013E+22	1,014633E+23	3,991933E+22	1,413826E+23
-903	5,073103E+22	5,073111E+22	1,995978E+22	1,995863E+22	1,014621E+23	3,991842E+22	1,413806E+23
-902	5,073119E+22	5,073278E+22	1,995926E+22	1,995906E+22	1,014640E+23	3,991832E+22	1,413823E+23
-901	5,073311E+22	5,073203E+22	1,995823E+22	1,995881E+22	1,014651E+23	3,991704E+22	1,413822E+23
-900	5,073033E+22	5,073236E+22	1,995922E+22	1,995822E+22	1,014627E+23	3,991744E+22	1,413801E+23
-899	5,073213E+22	5,073279E+22	1,995847E+22	1,995919E+22	1,014649E+23	3,991766E+22	1,413826E+23
-898	5,073294E+22	5,073115E+22	1,995855E+22	1,995852E+22	1,014641E+23	3,991707E+22	1,413812E+23
-897	5,073087E+22	5,073171E+22	1,995954E+22	1,995879E+22	1,014626E+23	3,991833E+22	1,413809E+23
-896	5,073294E+22	5,073166E+22	1,995874E+22	1,996002E+22	1,014646E+23	3,991876E+22	1,413834E+23
-895	5,073098E+22	5,073070E+22	1,995998E+22	1,995972E+22	1,014617E+23	3,991970E+22	1,413814E+23
-894	5,072949E+22	5,073155E+22	1,996085E+22	1,996067E+22	1,014610E+23	3,992152E+22	1,413826E+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							
-893	5,073145E+22	5,073002E+22	1,996053E+22	1,996140E+22	1,014615E+23	3,992194E+22	1,413834E+23
-892	5,072841E+22	5,072908E+22	1,996226E+22	1,996106E+22	1,014575E+23	3,992332E+22	1,413808E+23
-891	5,072888E+22	5,072972E+22	1,996217E+22	1,996228E+22	1,014586E+23	3,992445E+22	1,413831E+23
-890	5,072979E+22	5,072815E+22	1,996192E+22	1,996223E+22	1,014579E+23	3,992415E+22	1,413821E+23
-889	5,072705E+22	5,072864E+22	1,996274E+22	1,996203E+22	1,014557E+23	3,992477E+22	1,413805E+23
-888	5,072939E+22	5,072919E+22	1,996152E+22	1,996274E+22	1,014586E+23	3,992426E+22	1,413828E+23
-887	5,072923E+22	5,072830E+22	1,996173E+22	1,996147E+22	1,014575E+23	3,992321E+22	1,413807E+23
-886	5,072831E+22	5,072995E+22	1,996185E+22	1,996097E+22	1,014583E+23	3,992282E+22	1,413811E+23
-885	5,073144E+22	5,072990E+22	1,996036E+22	1,996110E+22	1,014613E+23	3,992146E+22	1,413828E+23
-884	5,072925E+22	5,072975E+22	1,996091E+22	1,995994E+22	1,014590E+23	3,992085E+22	1,413799E+23
-883	5,072937E+22	5,073148E+22	1,996042E+22	1,996036E+22	1,014608E+23	3,992078E+22	1,413816E+23
-882	5,073149E+22	5,073043E+22	1,995949E+22	1,996011E+22	1,014619E+23	3,991960E+22	1,413815E+23
-881	5,072938E+22	5,073031E+22	1,996026E+22	1,995940E+22	1,014597E+23	3,991966E+22	1,413794E+23
-880	5,073140E+22	5,073105E+22	1,995954E+22	1,996022E+22	1,014625E+23	3,991976E+22	1,413822E+23
-879	5,073167E+22	5,072982E+22	1,995981E+22	1,995985E+22	1,014615E+23	3,991966E+22	1,413812E+23
-878	5,072921E+22	5,073092E+22	1,996080E+22	1,996004E+22	1,014601E+23	3,992085E+22	1,413810E+23
-877	5,073125E+22	5,073072E+22	1,996022E+22	1,996145E+22	1,014620E+23	3,992167E+22	1,413836E+23
-876	5,072904E+22	5,072900E+22	1,996160E+22	1,996124E+22	1,014580E+23	3,992284E+22	1,413809E+23
-875	5,072776E+22	5,072977E+22	1,996253E+22	1,996201E+22	1,014575E+23	3,992454E+22	1,413821E+23
-874	5,072982E+22	5,072818E+22	1,996223E+22	1,996285E+22	1,014580E+23	3,992507E+22	1,413831E+23
-873	5,072700E+22	5,072704E+22	1,996353E+22	1,996262E+22	1,014540E+23	3,992615E+22	1,413802E+23
-872	5,072733E+22	5,072814E+22	1,996327E+22	1,996376E+22	1,014555E+23	3,992703E+22	1,413825E+23
-871	5,072812E+22	5,072678E+22	1,996308E+22	1,996376E+22	1,014549E+23	3,992684E+22	1,413817E+23
-870	5,072573E+22	5,072748E+22	1,996381E+22	1,996303E+22	1,014532E+23	3,992684E+22	1,413800E+23
-869	5,072852E+22	5,072805E+22	1,996271E+22	1,996361E+22	1,014566E+23	3,992633E+22	1,413829E+23
-868	5,072809E+22	5,072683E+22	1,996291E+22	1,996240E+22	1,014549E+23	3,992532E+22	1,413802E+23
-867	5,072686E+22	5,072885E+22	1,996303E+22	1,996193E+22	1,014557E+23	3,992496E+22	1,413807E+23
-866	5,072965E+22	5,072893E+22	1,996156E+22	1,996230E+22	1,014586E+23	3,992387E+22	1,413824E+23
-865	5,072778E+22	5,072818E+22	1,996186E+22	1,996125E+22	1,014560E+23	3,992311E+22	1,413791E+23
-864	5,072818E+22	5,072988E+22	1,996142E+22	1,996145E+22	1,014581E+23	3,992287E+22	1,413809E+23
-863	5,073036E+22	5,072884E+22	1,996067E+22	1,996130E+22	1,014592E+23	3,992196E+22	1,413812E+23
-862	5,072840E+22	5,072905E+22	1,996139E+22	1,996038E+22	1,014574E+23	3,992177E+22	1,413792E+23
-861	5,073033E+22	5,073003E+22	1,996080E+22	1,996148E+22	1,014604E+23	3,992228E+22	1,413826E+23
-860	5,072982E+22	5,072848E+22	1,996115E+22	1,996140E+22	1,014583E+23	3,992255E+22	1,413809E+23
-859	5,072727E+22	5,072960E+22	1,996233E+22	1,996152E+22	1,014569E+23	3,992385E+22	1,413807E+23
-858	5,072938E+22	5,072910E+22	1,996192E+22	1,996290E+22	1,014585E+23	3,992482E+22	1,413833E+23
-857	5,072763E+22	5,072682E+22	1,996307E+22	1,996268E+22	1,014545E+23	3,992575E+22	1,413802E+23
-856	5,072647E+22	5,072781E+22	1,996393E+22	1,996334E+22	1,014543E+23	3,992727E+22	1,413816E+23
-855	5,072806E+22	5,072656E+22	1,996360E+22	1,996443E+22	1,014546E+23	3,992804E+22	1,413827E+23
-854	5,072526E+22	5,072589E+22	1,996469E+22	1,996400E+22	1,014511E+23	3,992869E+22	1,413798E+23
-853	5,072597E+22	5,072694E+22	1,996448E+22	1,996509E+22	1,014529E+23	3,992956E+22	1,413825E+23
-852	5,072659E+22	5,072519E+22	1,996435E+22	1,996497E+22	1,014518E+23	3,992933E+22	1,413811E+23
-851	5,072457E+22	5,072613E+22	1,996513E+22	1,996395E+22	1,014507E+23	3,992908E+22	1,413798E+23
-850	5,072730E+22	5,072675E+22	1,996410E+22	1,996458E+22	1,014540E+23	3,992867E+22	1,413827E+23
-849	5,072679E+22	5,072539E+22	1,996393E+22	1,996360E+22	1,014522E+23	3,992753E+22	1,413797E+23
-848	5,072534E+22	5,072759E+22	1,996397E+22	1,996311E+22	1,014529E+23	3,992708E+22	1,413800E+23
-847	5,072790E+22	5,072762E+22	1,996263E+22	1,996363E+22	1,014555E+23	3,992626E+22	1,413818E+23
-846	5,072654E+22	5,072686E+22	1,996286E+22	1,996222E+22	1,014534E+23	3,992507E+22	1,413785E+23
-845	5,072744E+22	5,072848E+22	1,996256E+22	1,996243E+22	1,014559E+23	3,992499E+22	1,413809E+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							
-844	5,072918E+22	5,072731E+22	1,996190E+22	1,996246E+22	1,014565E+23	3,992436E+22	1,413809E+23
-843	5,072697E+22	5,072799E+22	1,996268E+22	1,996160E+22	1,014550E+23	3,992428E+22	1,413792E+23
-842	5,072850E+22	5,072902E+22	1,996227E+22	1,996290E+22	1,014575E+23	3,992517E+22	1,413827E+23
-841	5,072817E+22	5,072689E+22	1,996247E+22	1,996295E+22	1,014551E+23	3,992542E+22	1,413805E+23
-840	5,072572E+22	5,072782E+22	1,996378E+22	1,996287E+22	1,014535E+23	3,992665E+22	1,413802E+23
-839	5,072777E+22	5,072732E+22	1,996351E+22	1,996437E+22	1,014551E+23	3,992788E+22	1,413830E+23
-838	5,072622E+22	5,072512E+22	1,996448E+22	1,996399E+22	1,014513E+23	3,992847E+22	1,413798E+23
-837	5,072499E+22	5,072632E+22	1,996528E+22	1,996487E+22	1,014513E+23	3,993015E+22	1,413815E+23
-836	5,072607E+22	5,072492E+22	1,996491E+22	1,996608E+22	1,014510E+23	3,993099E+22	1,413820E+23
-835	5,072357E+22	5,072440E+22	1,996601E+22	1,996534E+22	1,014480E+23	3,993135E+22	1,413793E+23
-834	5,072459E+22	5,072547E+22	1,996593E+22	1,996622E+22	1,014501E+23	3,993216E+22	1,413822E+23
-833	5,072563E+22	5,072345E+22	1,996553E+22	1,996601E+22	1,014491E+23	3,993155E+22	1,413806E+23
-832	5,072351E+22	5,072474E+22	1,996627E+22	1,996488E+22	1,014482E+23	3,993116E+22	1,413794E+23
-831	5,072561E+22	5,072575E+22	1,996524E+22	1,996578E+22	1,014514E+23	3,993102E+22	1,413824E+23
-830	5,072510E+22	5,072449E+22	1,996490E+22	1,996470E+22	1,014496E+23	3,992960E+22	1,413792E+23
-829	5,072401E+22	5,072645E+22	1,996500E+22	1,996429E+22	1,014505E+23	3,992929E+22	1,413798E+23
-828	5,072643E+22	5,072602E+22	1,996377E+22	1,996480E+22	1,014524E+23	3,992857E+22	1,413810E+23
-827	5,072554E+22	5,072541E+22	1,996405E+22	1,996322E+22	1,014510E+23	3,992727E+22	1,413782E+23
-826	5,072641E+22	5,072714E+22	1,996388E+22	1,996356E+22	1,014535E+23	3,992744E+22	1,413810E+23
-825	5,072790E+22	5,072590E+22	1,996297E+22	1,996386E+22	1,014538E+23	3,992684E+22	1,413806E+23
-824	5,072548E+22	5,072670E+22	1,996384E+22	1,996300E+22	1,014522E+23	3,992684E+22	1,413790E+23
-823	5,072664E+22	5,072759E+22	1,996367E+22	1,996435E+22	1,014542E+23	3,992802E+22	1,413822E+23
-822	5,072667E+22	5,072535E+22	1,996386E+22	1,996414E+22	1,014520E+23	3,992800E+22	1,413800E+23
-821	5,072459E+22	5,072610E+22	1,996524E+22	1,996414E+22	1,014507E+23	3,992938E+22	1,413801E+23
-820	5,072593E+22	5,072543E+22	1,996503E+22	1,996585E+22	1,014514E+23	3,993088E+22	1,413822E+23
-819	5,072438E+22	5,072368E+22	1,996592E+22	1,996550E+22	1,014481E+23	3,993142E+22	1,413795E+23
-818	5,072314E+22	5,072487E+22	1,996678E+22	1,996642E+22	1,014480E+23	3,993320E+22	1,413812E+23
-817	5,072453E+22	5,072316E+22	1,996618E+22	1,996758E+22	1,014477E+23	3,993376E+22	1,413815E+23
-816	5,072241E+22	5,072276E+22	1,996731E+22	1,996649E+22	1,014452E+23	3,993380E+22	1,413790E+23
-815	5,072327E+22	5,072404E+22	1,996731E+22	1,996736E+22	1,014473E+23	3,993467E+22	1,413820E+23
-814	5,072437E+22	5,072233E+22	1,996670E+22	1,996703E+22	1,014467E+23	3,993373E+22	1,413804E+23
-813	5,072210E+22	5,072373E+22	1,996736E+22	1,996614E+22	1,014458E+23	3,993349E+22	1,413793E+23
-812	5,072352E+22	5,072443E+22	1,996635E+22	1,996717E+22	1,014480E+23	3,993352E+22	1,413815E+23
-811	5,072353E+22	5,072310E+22	1,996603E+22	1,996586E+22	1,014466E+23	3,993188E+22	1,413785E+23
-810	5,072291E+22	5,072488E+22	1,996624E+22	1,996533E+22	1,014478E+23	3,993157E+22	1,413794E+23
-809	5,072571E+22	5,072423E+22	1,996477E+22	1,996586E+22	1,014499E+23	3,993063E+22	1,413806E+23
-808	5,072473E+22	5,072402E+22	1,996506E+22	1,996422E+22	1,014488E+23	3,992928E+22	1,413780E+23
-807	5,072493E+22	5,072624E+22	1,996501E+22	1,996481E+22	1,014512E+23	3,992982E+22	1,413810E+23
-806	5,072638E+22	5,072498E+22	1,996407E+22	1,996502E+22	1,014514E+23	3,992908E+22	1,413804E+23
-805	5,072404E+22	5,072547E+22	1,996516E+22	1,996428E+22	1,014495E+23	3,992944E+22	1,413789E+23
-804	5,072476E+22	5,072591E+22	1,996521E+22	1,996569E+22	1,014507E+23	3,993090E+22	1,413816E+23
-803	5,072514E+22	5,072360E+22	1,996546E+22	1,996544E+22	1,014487E+23	3,993091E+22	1,413796E+23
-802	5,072301E+22	5,072433E+22	1,996689E+22	1,996565E+22	1,014473E+23	3,993254E+22	1,413799E+23
-801	5,072419E+22	5,072354E+22	1,996631E+22	1,996760E+22	1,014477E+23	3,993391E+22	1,413816E+23
-800	5,072274E+22	5,072194E+22	1,996718E+22	1,996708E+22	1,014447E+23	3,993426E+22	1,413789E+23
-799	5,072149E+22	5,072331E+22	1,996815E+22	1,996789E+22	1,014448E+23	3,993604E+22	1,413808E+23
-798	5,072336E+22	5,072171E+22	1,996747E+22	1,996864E+22	1,014451E+23	3,993611E+22	1,413812E+23
-797	5,072148E+22	5,072145E+22	1,996861E+22	1,996758E+22	1,014429E+23	3,993619E+22	1,413791E+23
-796	5,072147E+22	5,072275E+22	1,996866E+22	1,996856E+22	1,014442E+23	3,993722E+22	1,413814E+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							
-795	5,072252E+22	5,072133E+22	1,996795E+22	1,996826E+22	1,014439E+23	3,993621E+22	1,413801E+23
-794	5,072037E+22	5,072244E+22	1,996863E+22	1,996743E+22	1,014428E+23	3,993607E+22	1,413789E+23
-793	5,072210E+22	5,072267E+22	1,996738E+22	1,996842E+22	1,014448E+23	3,993580E+22	1,413806E+23
-792	5,072272E+22	5,072140E+22	1,996705E+22	1,996685E+22	1,014441E+23	3,993390E+22	1,413780E+23
-791	5,072207E+22	5,072340E+22	1,996731E+22	1,996633E+22	1,014455E+23	3,993364E+22	1,413791E+23
-790	5,072480E+22	5,072319E+22	1,996572E+22	1,996680E+22	1,014480E+23	3,993253E+22	1,413805E+23
-789	5,072360E+22	5,072321E+22	1,996602E+22	1,996543E+22	1,014468E+23	3,993145E+22	1,413783E+23
-788	5,072287E+22	5,072506E+22	1,996625E+22	1,996612E+22	1,014479E+23	3,993237E+22	1,413803E+23
-787	5,072464E+22	5,072369E+22	1,996550E+22	1,996621E+22	1,014483E+23	3,993171E+22	1,413800E+23
-786	5,072260E+22	5,072372E+22	1,996680E+22	1,996554E+22	1,014463E+23	3,993233E+22	1,413787E+23
-785	5,072331E+22	5,072381E+22	1,996664E+22	1,996712E+22	1,014471E+23	3,993376E+22	1,413809E+23
-784	5,072370E+22	5,072177E+22	1,996682E+22	1,996694E+22	1,014455E+23	3,993376E+22	1,413792E+23
-783	5,072115E+22	5,072284E+22	1,996821E+22	1,996733E+22	1,014440E+23	3,993554E+22	1,413795E+23
-782	5,072260E+22	5,072214E+22	1,996755E+22	1,996906E+22	1,014447E+23	3,993660E+22	1,413813E+23
-781	5,072152E+22	5,072056E+22	1,996848E+22	1,996846E+22	1,014421E+23	3,993694E+22	1,413790E+23
-780	5,071986E+22	5,072175E+22	1,996967E+22	1,996914E+22	1,014416E+23	3,993881E+22	1,413804E+23
-779	5,072200E+22	5,072036E+22	1,996902E+22	1,996976E+22	1,014424E+23	3,993878E+22	1,413811E+23
-778	5,071991E+22	5,072013E+22	1,997015E+22	1,996891E+22	1,014400E+23	3,993905E+22	1,413791E+23
-777	5,071960E+22	5,072119E+22	1,996981E+22	1,997006E+22	1,014408E+23	3,993987E+22	1,413807E+23
-776	5,072092E+22	5,071963E+22	1,996903E+22	1,996957E+22	1,014405E+23	3,993860E+22	1,413791E+23
-775	5,071901E+22	5,072082E+22	1,996970E+22	1,996861E+22	1,014398E+23	3,993831E+22	1,413781E+23
-774	5,072141E+22	5,072112E+22	1,996829E+22	1,996923E+22	1,014425E+23	3,993752E+22	1,413801E+23
-773	5,072218E+22	5,072022E+22	1,996795E+22	1,996772E+22	1,014424E+23	3,993567E+22	1,413781E+23
-772	5,072061E+22	5,072248E+22	1,996837E+22	1,996736E+22	1,014431E+23	3,993573E+22	1,413788E+23
-771	5,072318E+22	5,072251E+22	1,996688E+22	1,996787E+22	1,014457E+23	3,993475E+22	1,413804E+23
-770	5,072193E+22	5,072218E+22	1,996742E+22	1,996668E+22	1,014441E+23	3,993410E+22	1,413782E+23
-769	5,072117E+22	5,072336E+22	1,996756E+22	1,996745E+22	1,014445E+23	3,993500E+22	1,413795E+23
-768	5,072333E+22	5,072176E+22	1,996690E+22	1,996748E+22	1,014451E+23	3,993439E+22	1,413795E+23
-767	5,072123E+22	5,072186E+22	1,996821E+22	1,996699E+22	1,014431E+23	3,993520E+22	1,413783E+23
-766	5,072195E+22	5,072216E+22	1,996785E+22	1,996858E+22	1,014441E+23	3,993643E+22	1,413805E+23
-765	5,072227E+22	5,072041E+22	1,996797E+22	1,996858E+22	1,014427E+23	3,993655E+22	1,413792E+23
-764	5,071918E+22	5,072129E+22	1,996958E+22	1,996889E+22	1,014405E+23	3,993847E+22	1,413789E+23
-763	5,072106E+22	5,072072E+22	1,996910E+22	1,997031E+22	1,014418E+23	3,993941E+22	1,413812E+23
-762	5,072028E+22	5,071901E+22	1,997018E+22	1,996969E+22	1,014393E+23	3,993987E+22	1,413792E+23
-761	5,071833E+22	5,071999E+22	1,997114E+22	1,997043E+22	1,014383E+23	3,994157E+22	1,413799E+23
-760	5,072040E+22	5,071885E+22	1,997039E+22	1,997111E+22	1,014393E+23	3,994150E+22	1,413807E+23
-759	5,071800E+22	5,071871E+22	1,997139E+22	1,997036E+22	1,014367E+23	3,994175E+22	1,413785E+23
-758	5,071800E+22	5,071969E+22	1,997085E+22	1,997127E+22	1,014377E+23	3,994212E+22	1,413798E+23
-757	5,071989E+22	5,071825E+22	1,996999E+22	1,997068E+22	1,014381E+23	3,994067E+22	1,413788E+23
-756	5,071777E+22	5,071932E+22	1,997079E+22	1,996960E+22	1,014371E+23	3,994039E+22	1,413775E+23
-755	5,072043E+22	5,072005E+22	1,996945E+22	1,997012E+22	1,014405E+23	3,993958E+22	1,413801E+23
-754	5,072099E+22	5,071933E+22	1,996915E+22	1,996885E+22	1,014403E+23	3,993800E+22	1,413783E+23
-753	5,071890E+22	5,072127E+22	1,996941E+22	1,996867E+22	1,014402E+23	3,993807E+22	1,413782E+23
-752	5,072163E+22	5,072106E+22	1,996806E+22	1,996908E+22	1,014427E+23	3,993715E+22	1,413798E+23
-751	5,072045E+22	5,072054E+22	1,996872E+22	1,996793E+22	1,014410E+23	3,993665E+22	1,413776E+23
-750	5,072010E+22	5,072159E+22	1,996878E+22	1,996855E+22	1,014417E+23	3,993733E+22	1,413790E+23
-749	5,072232E+22	5,072024E+22	1,996807E+22	1,996878E+22	1,014426E+23	3,993685E+22	1,413794E+23
-748	5,071943E+22	5,072045E+22	1,996950E+22	1,996848E+22	1,014399E+23	3,993798E+22	1,413779E+23
-747	5,072022E+22	5,072098E+22	1,996924E+22	1,997001E+22	1,014412E+23	3,993925E+22	1,413804E+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	5,072064E+22	5,071908E+22	1,996955E+22	1,997007E+22	1,014397E+23	3,993963E+22	1,413794E+23
-745	5,071760E+22	5,071953E+22	1,997108E+22	1,997032E+22	1,014371E+23	3,994141E+22	1,413785E+23
-744	5,071979E+22	5,071883E+22	1,997071E+22	1,997158E+22	1,014386E+23	3,994228E+22	1,413809E+23
-743	5,071872E+22	5,071739E+22	1,997176E+22	1,997111E+22	1,014361E+23	3,994287E+22	1,413790E+23
-742	5,071667E+22	5,071849E+22	1,997238E+22	1,997184E+22	1,014352E+23	3,994422E+22	1,413794E+23
-741	5,071863E+22	5,071749E+22	1,997146E+22	1,997259E+22	1,014361E+23	3,994405E+22	1,413802E+23
-740	5,071603E+22	5,071711E+22	1,997256E+22	1,997172E+22	1,014331E+23	3,994428E+22	1,413774E+23
-739	5,071673E+22	5,071817E+22	1,997207E+22	1,997226E+22	1,014349E+23	3,994433E+22	1,413792E+23
-738	5,071902E+22	5,071689E+22	1,997125E+22	1,997166E+22	1,014359E+23	3,994291E+22	1,413788E+23
-737	5,071668E+22	5,071793E+22	1,997182E+22	1,997064E+22	1,014346E+23	3,994246E+22	1,413771E+23
-736	5,071920E+22	5,071894E+22	1,997051E+22	1,997119E+22	1,014381E+23	3,994170E+22	1,413798E+23
-735	5,071938E+22	5,071837E+22	1,997024E+22	1,997007E+22	1,014378E+23	3,994031E+22	1,413781E+23
-734	5,071749E+22	5,071997E+22	1,997045E+22	1,996976E+22	1,014375E+23	3,994020E+22	1,413777E+23
-733	5,072047E+22	5,071971E+22	1,996916E+22	1,997019E+22	1,014402E+23	3,993935E+22	1,413795E+23
-732	5,071901E+22	5,071887E+22	1,997005E+22	1,996913E+22	1,014379E+23	3,993918E+22	1,413771E+23
-731	5,071878E+22	5,072015E+22	1,997019E+22	1,996978E+22	1,014389E+23	3,993997E+22	1,413789E+23
-730	5,072081E+22	5,071899E+22	1,996950E+22	1,997033E+22	1,014398E+23	3,993983E+22	1,413796E+23
-729	5,071754E+22	5,071880E+22	1,997076E+22	1,997012E+22	1,014363E+23	3,994088E+22	1,413772E+23
-728	5,071868E+22	5,071920E+22	1,997070E+22	1,997147E+22	1,014379E+23	3,994216E+22	1,413801E+23
-727	5,071920E+22	5,071735E+22	1,997110E+22	1,997144E+22	1,014365E+23	3,994254E+22	1,413791E+23
-726	5,071634E+22	5,071774E+22	1,997253E+22	1,997154E+22	1,014341E+23	3,994408E+22	1,413782E+23
-725	5,071835E+22	5,071747E+22	1,997205E+22	1,997293E+22	1,014358E+23	3,994498E+22	1,413808E+23
-724	5,071651E+22	5,071601E+22	1,997316E+22	1,997264E+22	1,014325E+23	3,994580E+22	1,413783E+23
-723	5,071465E+22	5,071719E+22	1,997376E+22	1,997324E+22	1,014318E+23	3,994700E+22	1,413788E+23
-722	5,071699E+22	5,071605E+22	1,997284E+22	1,997397E+22	1,014330E+23	3,994681E+22	1,413799E+23
-721	5,071466E+22	5,071525E+22	1,997371E+22	1,997294E+22	1,014299E+23	3,994666E+22	1,413766E+23
-720	5,071596E+22	5,071641E+22	1,997328E+22	1,997328E+22	1,014324E+23	3,994655E+22	1,413789E+23
-719	5,071797E+22	5,071567E+22	1,997239E+22	1,997275E+22	1,014336E+23	3,994514E+22	1,413788E+23
-718	5,071549E+22	5,071691E+22	1,997271E+22	1,997175E+22	1,014324E+23	3,994446E+22	1,413769E+23
-717	5,071779E+22	5,071804E+22	1,997140E+22	1,997231E+22	1,014358E+23	3,994371E+22	1,413795E+23
-716	5,071762E+22	5,071711E+22	1,997141E+22	1,997120E+22	1,014347E+23	3,994261E+22	1,413773E+23
-715	5,071621E+22	5,071858E+22	1,997177E+22	1,997071E+22	1,014348E+23	3,994247E+22	1,413773E+23
-714	5,071928E+22	5,071831E+22	1,997058E+22	1,997133E+22	1,014376E+23	3,994191E+22	1,413795E+23
-713	5,071755E+22	5,071725E+22	1,997126E+22	1,997052E+22	1,014348E+23	3,994178E+22	1,413766E+23
-712	5,071734E+22	5,071853E+22	1,997146E+22	1,997123E+22	1,014359E+23	3,994268E+22	1,413786E+23
-711	5,071905E+22	5,071761E+22	1,997083E+22	1,997187E+22	1,014367E+23	3,994270E+22	1,413794E+23
-710	5,071616E+22	5,071721E+22	1,997201E+22	1,997149E+22	1,014334E+23	3,994350E+22	1,413769E+23
-709	5,071740E+22	5,071768E+22	1,997204E+22	1,997273E+22	1,014351E+23	3,994477E+22	1,413798E+23
-708	5,071753E+22	5,071574E+22	1,997270E+22	1,997281E+22	1,014333E+23	3,994551E+22	1,413788E+23
-707	5,071465E+22	5,071633E+22	1,997415E+22	1,997293E+22	1,014310E+23	3,994708E+22	1,413781E+23
-706	5,071633E+22	5,071619E+22	1,997360E+22	1,997456E+22	1,014325E+23	3,994816E+22	1,413807E+23
-705	5,071438E+22	5,071415E+22	1,997446E+22	1,997429E+22	1,014285E+23	3,994875E+22	1,413773E+23
-704	5,071320E+22	5,071508E+22	1,997510E+22	1,997459E+22	1,014283E+23	3,994969E+22	1,413780E+23
-703	5,071584E+22	5,071428E+22	1,997414E+22	1,997513E+22	1,014301E+23	3,994927E+22	1,413794E+23
-702	5,071395E+22	5,071368E+22	1,997474E+22	1,997392E+22	1,014276E+23	3,994866E+22	1,413763E+23
-701	5,071503E+22	5,071547E+22	1,997420E+22	1,997427E+22	1,014305E+23	3,994847E+22	1,413790E+23
-700	5,071626E+22	5,071489E+22	1,997347E+22	1,997388E+22	1,014312E+23	3,994734E+22	1,413785E+23
-699	5,071384E+22	5,071611E+22	1,997391E+22	1,997278E+22	1,014299E+23	3,994669E+22	1,413766E+23
-698	5,071624E+22	5,071704E+22	1,997271E+22	1,997342E+22	1,014333E+23	3,994613E+22	1,413794E+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	5,071612E+22	5,071534E+22	1,997263E+22	1,997237E+22	1,014315E+23	3,994500E+22	1,413765E+23
-696	5,071518E+22	5,071665E+22	1,997309E+22	1,997190E+22	1,014318E+23	3,994499E+22	1,413768E+23
-695	5,071794E+22	5,071678E+22	1,997182E+22	1,997273E+22	1,014347E+23	3,994455E+22	1,413793E+23
-694	5,071615E+22	5,071575E+22	1,997223E+22	1,997199E+22	1,014319E+23	3,994422E+22	1,413761E+23
-693	5,071593E+22	5,071723E+22	1,997247E+22	1,997262E+22	1,014332E+23	3,994508E+22	1,413782E+23
-692	5,071738E+22	5,071610E+22	1,997221E+22	1,997318E+22	1,014335E+23	3,994539E+22	1,413789E+23
-691	5,071485E+22	5,071575E+22	1,997361E+22	1,997261E+22	1,014306E+23	3,994621E+22	1,413768E+23
-690	5,071593E+22	5,071635E+22	1,997374E+22	1,997403E+22	1,014323E+23	3,994777E+22	1,413801E+23
-689	5,071553E+22	5,071409E+22	1,997423E+22	1,997438E+22	1,014296E+23	3,994861E+22	1,413782E+23
-688	5,071277E+22	5,071453E+22	1,997567E+22	1,997455E+22	1,014273E+23	3,995022E+22	1,413775E+23
-687	5,071433E+22	5,071449E+22	1,997505E+22	1,997615E+22	1,014288E+23	3,995120E+22	1,413800E+23
-686	5,071305E+22	5,071226E+22	1,997563E+22	1,997566E+22	1,014253E+23	3,995130E+22	1,413766E+23
-685	5,071230E+22	5,071344E+22	1,997619E+22	1,997570E+22	1,014257E+23	3,995190E+22	1,413776E+23
-684	5,071464E+22	5,071292E+22	1,997541E+22	1,997625E+22	1,014276E+23	3,995166E+22	1,413792E+23
-683	5,071273E+22	5,071282E+22	1,997596E+22	1,997498E+22	1,014256E+23	3,995094E+22	1,413765E+23
-682	5,071336E+22	5,071481E+22	1,997540E+22	1,997548E+22	1,014282E+23	3,995088E+22	1,413790E+23
-681	5,071436E+22	5,071359E+22	1,997458E+22	1,997513E+22	1,014279E+23	3,994972E+22	1,413777E+23
-680	5,071256E+22	5,071426E+22	1,997514E+22	1,997386E+22	1,014268E+23	3,994901E+22	1,413758E+23
-679	5,071492E+22	5,071535E+22	1,997397E+22	1,997447E+22	1,014303E+23	3,994844E+22	1,413787E+23
-678	5,071522E+22	5,071365E+22	1,997360E+22	1,997350E+22	1,014289E+23	3,994710E+22	1,413760E+23
-677	5,071411E+22	5,071534E+22	1,997396E+22	1,997311E+22	1,014294E+23	3,994707E+22	1,413765E+23
-676	5,071626E+22	5,071565E+22	1,997294E+22	1,997409E+22	1,014319E+23	3,994703E+22	1,413789E+23
-675	5,071470E+22	5,071467E+22	1,997350E+22	1,997319E+22	1,014294E+23	3,994669E+22	1,413761E+23
-674	5,071449E+22	5,071610E+22	1,997395E+22	1,997384E+22	1,014306E+23	3,994779E+22	1,413784E+23
-673	5,071581E+22	5,071436E+22	1,997376E+22	1,997450E+22	1,014302E+23	3,994825E+22	1,413784E+23
-672	5,071351E+22	5,071378E+22	1,997532E+22	1,997403E+22	1,014273E+23	3,994936E+22	1,413766E+23
-671	5,071395E+22	5,071480E+22	1,997538E+22	1,997567E+22	1,014287E+23	3,995104E+22	1,413798E+23
-670	5,071363E+22	5,071230E+22	1,997551E+22	1,997613E+22	1,014259E+23	3,995164E+22	1,413776E+23
-669	5,071111E+22	5,071272E+22	1,997685E+22	1,997610E+22	1,014238E+23	3,995295E+22	1,413768E+23
-668	5,071272E+22	5,071265E+22	1,997643E+22	1,997752E+22	1,014254E+23	3,995395E+22	1,413793E+23
-667	5,071199E+22	5,071078E+22	1,997700E+22	1,997672E+22	1,014228E+23	3,995372E+22	1,413765E+23
-666	5,071121E+22	5,071246E+22	1,997753E+22	1,997683E+22	1,014237E+23	3,995436E+22	1,413780E+23
-665	5,071296E+22	5,071175E+22	1,997662E+22	1,997749E+22	1,014247E+23	3,995411E+22	1,413788E+23
-664	5,071115E+22	5,071155E+22	1,997721E+22	1,997623E+22	1,014227E+23	3,995344E+22	1,413761E+23
-663	5,071155E+22	5,071357E+22	1,997664E+22	1,997664E+22	1,014251E+23	3,995327E+22	1,413784E+23
-662	5,071307E+22	5,071189E+22	1,997558E+22	1,997623E+22	1,014250E+23	3,995180E+22	1,413768E+23
-661	5,071169E+22	5,071258E+22	1,997608E+22	1,997485E+22	1,014243E+23	3,995093E+22	1,413752E+23
-660	5,071374E+22	5,071384E+22	1,997509E+22	1,997559E+22	1,014276E+23	3,995069E+22	1,413783E+23
-659	5,071402E+22	5,071263E+22	1,997467E+22	1,997466E+22	1,014267E+23	3,994933E+22	1,413760E+23
-658	5,071266E+22	5,071452E+22	1,997505E+22	1,997443E+22	1,014272E+23	3,994948E+22	1,413767E+23
-657	5,071453E+22	5,071418E+22	1,997418E+22	1,997541E+22	1,014287E+23	3,994958E+22	1,413783E+23
-656	5,071353E+22	5,071289E+22	1,997499E+22	1,997440E+22	1,014264E+23	3,994939E+22	1,413758E+23
-655	5,071301E+22	5,071450E+22	1,997558E+22	1,997504E+22	1,014275E+23	3,995062E+22	1,413781E+23
-654	5,071440E+22	5,071265E+22	1,997516E+22	1,997594E+22	1,014271E+23	3,995110E+22	1,413782E+23
-653	5,071185E+22	5,071224E+22	1,997661E+22	1,997559E+22	1,014241E+23	3,995221E+22	1,413763E+23
-652	5,071174E+22	5,071325E+22	1,997684E+22	1,997735E+22	1,014250E+23	3,995419E+22	1,413792E+23
-651	5,071190E+22	5,071079E+22	1,997694E+22	1,997760E+22	1,014227E+23	3,995454E+22	1,413772E+23
-650	5,070970E+22	5,071123E+22	1,997827E+22	1,997746E+22	1,014209E+23	3,995573E+22	1,413767E+23
-649	5,071134E+22	5,071082E+22	1,997786E+22	1,997882E+22	1,014222E+23	3,995669E+22	1,413788E+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	5,071097E+22	5,070907E+22	1,997844E+22	1,997798E+22	1,014200E+23	3,995642E+22	1,413765E+23
-647	5,070947E+22	5,071133E+22	1,997887E+22	1,997811E+22	1,014208E+23	3,995698E+22	1,413778E+23
-646	5,071132E+22	5,071042E+22	1,997762E+22	1,997882E+22	1,014217E+23	3,995644E+22	1,413782E+23
-645	5,070975E+22	5,071002E+22	1,997817E+22	1,997733E+22	1,014198E+23	3,995549E+22	1,413753E+23
-644	5,071007E+22	5,071198E+22	1,997782E+22	1,997764E+22	1,014221E+23	3,995545E+22	1,413775E+23
-643	5,071209E+22	5,071053E+22	1,997670E+22	1,997709E+22	1,014226E+23	3,995379E+22	1,413764E+23
-642	5,071066E+22	5,071159E+22	1,997714E+22	1,997591E+22	1,014222E+23	3,995305E+22	1,413753E+23
-641	5,071219E+22	5,071261E+22	1,997616E+22	1,997686E+22	1,014248E+23	3,995302E+22	1,413778E+23
-640	5,071269E+22	5,071131E+22	1,997587E+22	1,997595E+22	1,014240E+23	3,995182E+22	1,413758E+23
-639	5,071105E+22	5,071335E+22	1,997640E+22	1,997563E+22	1,014244E+23	3,995203E+22	1,413764E+23
-638	5,071329E+22	5,071256E+22	1,997543E+22	1,997663E+22	1,014259E+23	3,995206E+22	1,413779E+23
-637	5,071242E+22	5,071121E+22	1,997633E+22	1,997564E+22	1,014236E+23	3,995197E+22	1,413756E+23
-636	5,071128E+22	5,071295E+22	1,997713E+22	1,997653E+22	1,014242E+23	3,995366E+22	1,413779E+23
-635	5,071250E+22	5,071136E+22	1,997661E+22	1,997752E+22	1,014239E+23	3,995413E+22	1,413780E+23
-634	5,070995E+22	5,071090E+22	1,997800E+22	1,997730E+22	1,014209E+23	3,995530E+22	1,413762E+23
-633	5,070983E+22	5,071114E+22	1,997828E+22	1,997891E+22	1,014210E+23	3,995720E+22	1,413782E+23
-632	5,071070E+22	5,070865E+22	1,997848E+22	1,997894E+22	1,014194E+23	3,995742E+22	1,413768E+23
-631	5,070843E+22	5,070963E+22	1,997977E+22	1,997866E+22	1,014181E+23	3,995843E+22	1,413765E+23
-630	5,071009E+22	5,070929E+22	1,997908E+22	1,998012E+22	1,014194E+23	3,995920E+22	1,413786E+23
-629	5,070951E+22	5,070792E+22	1,997954E+22	1,997924E+22	1,014174E+23	3,995877E+22	1,413762E+23
-628	5,070753E+22	5,071018E+22	1,998012E+22	1,997936E+22	1,014177E+23	3,995949E+22	1,413772E+23
-627	5,070971E+22	5,070927E+22	1,997882E+22	1,997986E+22	1,014190E+23	3,995868E+22	1,413777E+23
-626	5,070851E+22	5,070878E+22	1,997932E+22	1,997837E+22	1,014173E+23	3,995768E+22	1,413750E+23
-625	5,070875E+22	5,071021E+22	1,997902E+22	1,997873E+22	1,014190E+23	3,995775E+22	1,413767E+23
-624	5,071108E+22	5,070900E+22	1,997790E+22	1,997829E+22	1,014201E+23	3,995619E+22	1,413763E+23
-623	5,070914E+22	5,071056E+22	1,997823E+22	1,997719E+22	1,014197E+23	3,995543E+22	1,413751E+23
-622	5,071083E+22	5,071126E+22	1,997709E+22	1,997820E+22	1,014221E+23	3,995529E+22	1,413774E+23
-621	5,071159E+22	5,070984E+22	1,997689E+22	1,997706E+22	1,014214E+23	3,995395E+22	1,413754E+23
-620	5,070969E+22	5,071186E+22	1,997778E+22	1,997672E+22	1,014215E+23	3,995450E+22	1,413760E+23
-619	5,071207E+22	5,071130E+22	1,997685E+22	1,997771E+22	1,014234E+23	3,995456E+22	1,413779E+23
-618	5,071089E+22	5,071008E+22	1,997773E+22	1,997705E+22	1,014210E+23	3,995478E+22	1,413758E+23
-617	5,070910E+22	5,071132E+22	1,997862E+22	1,997818E+22	1,014204E+23	3,995679E+22	1,413772E+23
-616	5,071072E+22	5,070950E+22	1,997813E+22	1,997916E+22	1,014202E+23	3,995729E+22	1,413775E+23
-615	5,070812E+22	5,070912E+22	1,997952E+22	1,997876E+22	1,014172E+23	3,995828E+22	1,413755E+23
-614	5,070861E+22	5,070907E+22	1,997962E+22	1,998032E+22	1,014177E+23	3,995994E+22	1,413776E+23
-613	5,070975E+22	5,070683E+22	1,997980E+22	1,998019E+22	1,014166E+23	3,995998E+22	1,413766E+23
-612	5,070686E+22	5,070832E+22	1,998122E+22	1,998002E+22	1,014152E+23	3,996124E+22	1,413764E+23
-611	5,070831E+22	5,070838E+22	1,998039E+22	1,998143E+22	1,014167E+23	3,996182E+22	1,413785E+23
-610	5,070767E+22	5,070694E+22	1,998077E+22	1,998059E+22	1,014146E+23	3,996136E+22	1,413760E+23
-609	5,070564E+22	5,070841E+22	1,998145E+22	1,998060E+22	1,014140E+23	3,996205E+22	1,413761E+23
-608	5,070850E+22	5,070741E+22	1,998016E+22	1,998093E+22	1,014159E+23	3,996109E+22	1,413770E+23
-607	5,070728E+22	5,070733E+22	1,998055E+22	1,997942E+22	1,014146E+23	3,995997E+22	1,413746E+23
-606	5,070769E+22	5,070871E+22	1,997994E+22	1,997997E+22	1,014164E+23	3,995991E+22	1,413763E+23
-605	5,070993E+22	5,070785E+22	1,997875E+22	1,997948E+22	1,014178E+23	3,995823E+22	1,413760E+23
-604	5,070766E+22	5,070953E+22	1,997931E+22	1,997837E+22	1,014172E+23	3,995768E+22	1,413749E+23
-603	5,070955E+22	5,071025E+22	1,997825E+22	1,997915E+22	1,014198E+23	3,995740E+22	1,413772E+23
-602	5,071049E+22	5,070879E+22	1,997815E+22	1,997812E+22	1,014193E+23	3,995628E+22	1,413756E+23
-601	5,070819E+22	5,071009E+22	1,997927E+22	1,997796E+22	1,014183E+23	3,995722E+22	1,413755E+23
-600	5,071043E+22	5,070970E+22	1,997838E+22	1,997917E+22	1,014201E+23	3,995756E+22	1,413777E+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	5,070881E+22	5,070870E+22	1,997918E+22	1,997869E+22	1,014175E+23	3,995787E+22	1,413754E+23
-598	5,070734E+22	5,070924E+22	1,997988E+22	1,997986E+22	1,014166E+23	3,995974E+22	1,413763E+23
-597	5,070939E+22	5,070743E+22	1,997943E+22	1,998056E+22	1,014168E+23	3,995999E+22	1,413768E+23
-596	5,070682E+22	5,070731E+22	1,998099E+22	1,998006E+22	1,014141E+23	3,996105E+22	1,413752E+23
-595	5,070740E+22	5,070776E+22	1,998105E+22	1,998150E+22	1,014152E+23	3,996255E+22	1,413777E+23
-594	5,070823E+22	5,070600E+22	1,998115E+22	1,998157E+22	1,014142E+23	3,996272E+22	1,413770E+23
-593	5,070470E+22	5,070698E+22	1,998269E+22	1,998151E+22	1,014117E+23	3,996420E+22	1,413759E+23
-592	5,070641E+22	5,070692E+22	1,998189E+22	1,998281E+22	1,014133E+23	3,996469E+22	1,413780E+23
-591	5,070585E+22	5,070545E+22	1,998220E+22	1,998183E+22	1,014113E+23	3,996403E+22	1,413753E+23
-590	5,070446E+22	5,070634E+22	1,998259E+22	1,998184E+22	1,014108E+23	3,996443E+22	1,413752E+23
-589	5,070765E+22	5,070562E+22	1,998118E+22	1,998205E+22	1,014133E+23	3,996324E+22	1,413765E+23
-588	5,070602E+22	5,070611E+22	1,998156E+22	1,998066E+22	1,014121E+23	3,996222E+22	1,413744E+23
-587	5,070645E+22	5,070789E+22	1,998083E+22	1,998110E+22	1,014143E+23	3,996193E+22	1,413763E+23
-586	5,070871E+22	5,070703E+22	1,997970E+22	1,998056E+22	1,014157E+23	3,996025E+22	1,413760E+23
-585	5,070622E+22	5,070802E+22	1,998058E+22	1,997938E+22	1,014142E+23	3,995996E+22	1,413742E+23
-584	5,070840E+22	5,070873E+22	1,997968E+22	1,998009E+22	1,014171E+23	3,995977E+22	1,413769E+23
-583	5,070892E+22	5,070749E+22	1,997962E+22	1,997928E+22	1,014164E+23	3,995891E+22	1,413753E+23
-582	5,070655E+22	5,070841E+22	1,998052E+22	1,997950E+22	1,014150E+23	3,996002E+22	1,413750E+23
-581	5,070871E+22	5,070803E+22	1,997961E+22	1,998072E+22	1,014167E+23	3,996034E+22	1,413771E+23
-580	5,070698E+22	5,070705E+22	1,998055E+22	1,998025E+22	1,014140E+23	3,996081E+22	1,413748E+23
-579	5,070597E+22	5,070765E+22	1,998122E+22	1,998118E+22	1,014136E+23	3,996239E+22	1,413760E+23
-578	5,070824E+22	5,070603E+22	1,998083E+22	1,998189E+22	1,014143E+23	3,996272E+22	1,413770E+23
-577	5,070528E+22	5,070560E+22	1,998261E+22	1,998150E+22	1,014109E+23	3,996411E+22	1,413750E+23
-576	5,070565E+22	5,070642E+22	1,998266E+22	1,998300E+22	1,014121E+23	3,996567E+22	1,413777E+23
-575	5,070604E+22	5,070486E+22	1,998270E+22	1,998314E+22	1,014109E+23	3,996583E+22	1,413767E+23
-574	5,070289E+22	5,070500E+22	1,998399E+22	1,998306E+22	1,014079E+23	3,996705E+22	1,413749E+23
-573	5,070503E+22	5,070487E+22	1,998313E+22	1,998400E+22	1,014099E+23	3,996714E+22	1,413770E+23
-572	5,070465E+22	5,070369E+22	1,998343E+22	1,998297E+22	1,014083E+23	3,996640E+22	1,413747E+23
-571	5,070347E+22	5,070500E+22	1,998362E+22	1,998285E+22	1,014085E+23	3,996647E+22	1,413749E+23
-570	5,070652E+22	5,070490E+22	1,998210E+22	1,998319E+22	1,014114E+23	3,996529E+22	1,413767E+23
-569	5,070449E+22	5,070496E+22	1,998263E+22	1,998182E+22	1,014095E+23	3,996445E+22	1,413739E+23
-568	5,070503E+22	5,070678E+22	1,998204E+22	1,998208E+22	1,014118E+23	3,996412E+22	1,413759E+23
-567	5,070725E+22	5,070600E+22	1,998100E+22	1,998150E+22	1,014133E+23	3,996249E+22	1,413757E+23
-566	5,070510E+22	5,070618E+22	1,998180E+22	1,998053E+22	1,014113E+23	3,996232E+22	1,413736E+23
-565	5,070714E+22	5,070706E+22	1,998094E+22	1,998130E+22	1,014142E+23	3,996224E+22	1,413764E+23
-564	5,070715E+22	5,070614E+22	1,998090E+22	1,998083E+22	1,014133E+23	3,996172E+22	1,413750E+23
-563	5,070484E+22	5,070701E+22	1,998167E+22	1,998102E+22	1,014118E+23	3,996269E+22	1,413745E+23
-562	5,070724E+22	5,070660E+22	1,998080E+22	1,998219E+22	1,014138E+23	3,996300E+22	1,413768E+23
-561	5,070551E+22	5,070504E+22	1,998202E+22	1,998161E+22	1,014105E+23	3,996363E+22	1,413742E+23
-560	5,070479E+22	5,070597E+22	1,998280E+22	1,998241E+22	1,014108E+23	3,996521E+22	1,413760E+23
-559	5,070664E+22	5,070482E+22	1,998246E+22	1,998325E+22	1,014115E+23	3,996571E+22	1,413772E+23
-558	5,070353E+22	5,070399E+22	1,998406E+22	1,998316E+22	1,014075E+23	3,996722E+22	1,413747E+23
-557	5,070378E+22	5,070483E+22	1,998410E+22	1,998450E+22	1,014086E+23	3,996860E+22	1,413772E+23
-556	5,070408E+22	5,070325E+22	1,998416E+22	1,998461E+22	1,014073E+23	3,996877E+22	1,413761E+23
-555	5,070154E+22	5,070329E+22	1,998525E+22	1,998426E+22	1,014048E+23	3,996952E+22	1,413743E+23
-554	5,070400E+22	5,070332E+22	1,998429E+22	1,998513E+22	1,014073E+23	3,996941E+22	1,413767E+23
-553	5,070331E+22	5,070204E+22	1,998468E+22	1,998419E+22	1,014053E+23	3,996887E+22	1,413742E+23
-552	5,070211E+22	5,070395E+22	1,998475E+22	1,998405E+22	1,014061E+23	3,996880E+22	1,413749E+23
-551	5,070481E+22	5,070406E+22	1,998325E+22	1,998437E+22	1,014089E+23	3,996761E+22	1,413765E+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							
-550	5,070317E+22	5,070338E+22	1,998367E+22	1,998299E+22	1,014066E+23	3,996667E+22	1,413732E+23
-549	5,070397E+22	5,070515E+22	1,998318E+22	1,998296E+22	1,014091E+23	3,996613E+22	1,413752E+23
-548	5,070600E+22	5,070461E+22	1,998224E+22	1,998253E+22	1,014106E+23	3,996477E+22	1,413754E+23
-547	5,070386E+22	5,070491E+22	1,998290E+22	1,998169E+22	1,014088E+23	3,996459E+22	1,413734E+23
-546	5,070557E+22	5,070606E+22	1,998201E+22	1,998269E+22	1,014116E+23	3,996469E+22	1,413763E+23
-545	5,070529E+22	5,070457E+22	1,998221E+22	1,998235E+22	1,014099E+23	3,996456E+22	1,413744E+23
-544	5,070333E+22	5,070545E+22	1,998306E+22	1,998236E+22	1,014088E+23	3,996542E+22	1,413742E+23
-543	5,070581E+22	5,070512E+22	1,998234E+22	1,998347E+22	1,014109E+23	3,996581E+22	1,413767E+23
-542	5,070443E+22	5,070298E+22	1,998347E+22	1,998305E+22	1,014074E+23	3,996652E+22	1,413739E+23
-541	5,070343E+22	5,070429E+22	1,998430E+22	1,998382E+22	1,014077E+23	3,996812E+22	1,413758E+23
-540	5,070470E+22	5,070359E+22	1,998397E+22	1,998491E+22	1,014083E+23	3,996888E+22	1,413772E+23
-539	5,070166E+22	5,070249E+22	1,998542E+22	1,998471E+22	1,014041E+23	3,997013E+22	1,413743E+23
-538	5,070204E+22	5,070330E+22	1,998543E+22	1,998588E+22	1,014053E+23	3,997131E+22	1,413767E+23
-537	5,070248E+22	5,070116E+22	1,998564E+22	1,998589E+22	1,014036E+23	3,997152E+22	1,413752E+23
-536	5,070025E+22	5,070156E+22	1,998662E+22	1,998539E+22	1,014018E+23	3,997201E+22	1,413738E+23
-535	5,070252E+22	5,070221E+22	1,998558E+22	1,998633E+22	1,014047E+23	3,997192E+22	1,413766E+23
-534	5,070191E+22	5,070060E+22	1,998570E+22	1,998557E+22	1,014025E+23	3,997127E+22	1,413738E+23
-533	5,070075E+22	5,070266E+22	1,998579E+22	1,998517E+22	1,014034E+23	3,997096E+22	1,413744E+23
-532	5,070338E+22	5,070294E+22	1,998438E+22	1,998543E+22	1,014063E+23	3,996981E+22	1,413761E+23
-531	5,070215E+22	5,070205E+22	1,998472E+22	1,998391E+22	1,014042E+23	3,996863E+22	1,413728E+23
-530	5,070293E+22	5,070394E+22	1,998426E+22	1,998394E+22	1,014069E+23	3,996820E+22	1,413751E+23
-529	5,070444E+22	5,070312E+22	1,998352E+22	1,998382E+22	1,014076E+23	3,996734E+22	1,413749E+23
-528	5,070222E+22	5,070370E+22	1,998411E+22	1,998308E+22	1,014059E+23	3,996720E+22	1,413731E+23
-527	5,070380E+22	5,070478E+22	1,998332E+22	1,998410E+22	1,014086E+23	3,996742E+22	1,413760E+23
-526	5,070399E+22	5,070250E+22	1,998345E+22	1,998380E+22	1,014065E+23	3,996724E+22	1,413737E+23
-525	5,070236E+22	5,070351E+22	1,998440E+22	1,998352E+22	1,014059E+23	3,996792E+22	1,413738E+23
-524	5,070450E+22	5,070363E+22	1,998383E+22	1,998476E+22	1,014081E+23	3,996860E+22	1,413767E+23
-523	5,070302E+22	5,070174E+22	1,998484E+22	1,998447E+22	1,014048E+23	3,996931E+22	1,413741E+23
-522	5,070160E+22	5,070322E+22	1,998567E+22	1,998531E+22	1,014048E+23	3,997098E+22	1,413758E+23
-521	5,070242E+22	5,070193E+22	1,998560E+22	1,998651E+22	1,014044E+23	3,997210E+22	1,413765E+23
-520	5,069978E+22	5,070084E+22	1,998699E+22	1,998612E+22	1,014006E+23	3,997310E+22	1,413737E+23
-519	5,070034E+22	5,070157E+22	1,998701E+22	1,998719E+22	1,014019E+23	3,997420E+22	1,413761E+23
-518	5,070123E+22	5,069897E+22	1,998697E+22	1,998735E+22	1,014002E+23	3,997432E+22	1,413745E+23
-517	5,069904E+22	5,069989E+22	1,998780E+22	1,998672E+22	1,013989E+23	3,997451E+22	1,413734E+23
-516	5,070092E+22	5,070111E+22	1,998670E+22	1,998774E+22	1,014020E+23	3,997444E+22	1,413765E+23
-515	5,070063E+22	5,069943E+22	1,998663E+22	1,998675E+22	1,014001E+23	3,997338E+22	1,413734E+23
-514	5,069964E+22	5,070153E+22	1,998677E+22	1,998606E+22	1,014012E+23	3,997283E+22	1,413740E+23
-513	5,070211E+22	5,070144E+22	1,998565E+22	1,998632E+22	1,014036E+23	3,997197E+22	1,413755E+23
-512	5,070093E+22	5,070085E+22	1,998597E+22	1,998485E+22	1,014018E+23	3,997082E+22	1,413726E+23
-511	5,070127E+22	5,070299E+22	1,998555E+22	1,998513E+22	1,014043E+23	3,997068E+22	1,413749E+23
-510	5,070282E+22	5,070152E+22	1,998463E+22	1,998533E+22	1,014043E+23	3,996997E+22	1,413743E+23
-509	5,070080E+22	5,070204E+22	1,998526E+22	1,998441E+22	1,014028E+23	3,996967E+22	1,413725E+23
-508	5,070246E+22	5,070329E+22	1,998460E+22	1,998540E+22	1,014058E+23	3,997000E+22	1,413758E+23
-507	5,070309E+22	5,070085E+22	1,998463E+22	1,998497E+22	1,014039E+23	3,996961E+22	1,413735E+23
-506	5,070127E+22	5,070219E+22	1,998570E+22	1,998473E+22	1,014035E+23	3,997043E+22	1,413739E+23
-505	5,070267E+22	5,070224E+22	1,998540E+22	1,998628E+22	1,014049E+23	3,997168E+22	1,413766E+23
-504	5,070087E+22	5,070053E+22	1,998639E+22	1,998607E+22	1,014014E+23	3,997247E+22	1,413739E+23
-503	5,069934E+22	5,070178E+22	1,998733E+22	1,998691E+22	1,014011E+23	3,997424E+22	1,413754E+23
-502	5,070067E+22	5,069954E+22	1,998710E+22	1,998790E+22	1,014002E+23	3,997499E+22	1,413752E+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							
-501	5,069852E+22	5,069853E+22	1,998841E+22	1,998742E+22	1,013971E+23	3,997584E+22	1,413729E+23
-500	5,069900E+22	5,069984E+22	1,998838E+22	1,998856E+22	1,013988E+23	3,997693E+22	1,413758E+23
-499	5,069999E+22	5,069763E+22	1,998802E+22	1,998870E+22	1,013976E+23	3,997672E+22	1,413743E+23
-498	5,069769E+22	5,069899E+22	1,998878E+22	1,998794E+22	1,013967E+23	3,997672E+22	1,413734E+23
-497	5,069926E+22	5,069988E+22	1,998798E+22	1,998890E+22	1,013991E+23	3,997688E+22	1,413760E+23
-496	5,069923E+22	5,069839E+22	1,998791E+22	1,998768E+22	1,013976E+23	3,997558E+22	1,413732E+23
-495	5,069829E+22	5,070035E+22	1,998815E+22	1,998698E+22	1,013986E+23	3,997513E+22	1,413738E+23
-494	5,070079E+22	5,069966E+22	1,998688E+22	1,998754E+22	1,014005E+23	3,997442E+22	1,413749E+23
-493	5,069957E+22	5,069934E+22	1,998709E+22	1,998616E+22	1,013989E+23	3,997324E+22	1,413722E+23
-492	5,069955E+22	5,070167E+22	1,998667E+22	1,998660E+22	1,014012E+23	3,997327E+22	1,413745E+23
-491	5,070155E+22	5,069999E+22	1,998560E+22	1,998667E+22	1,014015E+23	3,997227E+22	1,413738E+23
-490	5,069988E+22	5,070056E+22	1,998626E+22	1,998546E+22	1,014004E+23	3,997172E+22	1,413722E+23
-489	5,070121E+22	5,070163E+22	1,998599E+22	1,998650E+22	1,014028E+23	3,997250E+22	1,413753E+23
-488	5,070169E+22	5,069978E+22	1,998607E+22	1,998615E+22	1,014015E+23	3,997222E+22	1,413737E+23
-487	5,069934E+22	5,070122E+22	1,998729E+22	1,998616E+22	1,014006E+23	3,997346E+22	1,413740E+23
-486	5,070054E+22	5,070051E+22	1,998694E+22	1,998800E+22	1,014011E+23	3,997494E+22	1,413760E+23
-485	5,069901E+22	5,069859E+22	1,998795E+22	1,998765E+22	1,013976E+23	3,997560E+22	1,413732E+23
-484	5,069756E+22	5,069982E+22	1,998890E+22	1,998843E+22	1,013974E+23	3,997734E+22	1,413747E+23
-483	5,069951E+22	5,069746E+22	1,998841E+22	1,998951E+22	1,013970E+23	3,997793E+22	1,413749E+23
-482	5,069745E+22	5,069692E+22	1,998959E+22	1,998873E+22	1,013944E+23	3,997832E+22	1,413727E+23
-481	5,069738E+22	5,069846E+22	1,998972E+22	1,999002E+22	1,013958E+23	3,997974E+22	1,413756E+23
-480	5,069827E+22	5,069676E+22	1,998928E+22	1,999000E+22	1,013950E+23	3,997928E+22	1,413743E+23
-479	5,069602E+22	5,069798E+22	1,999017E+22	1,998910E+22	1,013940E+23	3,997927E+22	1,413733E+23
-478	5,069787E+22	5,069808E+22	1,998929E+22	1,999001E+22	1,013960E+23	3,997930E+22	1,413753E+23
-477	5,069809E+22	5,069667E+22	1,998917E+22	1,998864E+22	1,013948E+23	3,997781E+22	1,413726E+23
-476	5,069686E+22	5,069902E+22	1,998936E+22	1,998816E+22	1,013959E+23	3,997752E+22	1,413734E+23
-475	5,069941E+22	5,069835E+22	1,998777E+22	1,998883E+22	1,013978E+23	3,997660E+22	1,413744E+23
-474	5,069821E+22	5,069818E+22	1,998791E+22	1,998738E+22	1,013964E+23	3,997529E+22	1,413717E+23
-473	5,069809E+22	5,070022E+22	1,998782E+22	1,998782E+22	1,013983E+23	3,997564E+22	1,413739E+23
-472	5,070033E+22	5,069879E+22	1,998681E+22	1,998768E+22	1,013991E+23	3,997450E+22	1,413736E+23
-471	5,069872E+22	5,069935E+22	1,998770E+22	1,998654E+22	1,013981E+23	3,997424E+22	1,413723E+23
-470	5,069980E+22	5,069991E+22	1,998743E+22	1,998789E+22	1,013997E+23	3,997532E+22	1,413750E+23
-469	5,069999E+22	5,069830E+22	1,998752E+22	1,998768E+22	1,013983E+23	3,997520E+22	1,413735E+23
-468	5,069723E+22	5,069971E+22	1,998882E+22	1,998786E+22	1,013969E+23	3,997669E+22	1,413736E+23
-467	5,069880E+22	5,069855E+22	1,998830E+22	1,998957E+22	1,013974E+23	3,997787E+22	1,413752E+23
-466	5,069772E+22	5,069664E+22	1,998927E+22	1,998898E+22	1,013944E+23	3,997825E+22	1,413726E+23
-465	5,069613E+22	5,069778E+22	1,999045E+22	1,998981E+22	1,013939E+23	3,998026E+22	1,413742E+23
-464	5,069798E+22	5,069622E+22	1,998985E+22	1,999085E+22	1,013942E+23	3,998070E+22	1,413749E+23
-463	5,069575E+22	5,069598E+22	1,999103E+22	1,999017E+22	1,013917E+23	3,998121E+22	1,413729E+23
-462	5,069554E+22	5,069695E+22	1,999110E+22	1,999151E+22	1,013925E+23	3,998261E+22	1,413751E+23
-461	5,069676E+22	5,069530E+22	1,999065E+22	1,999124E+22	1,013921E+23	3,998189E+22	1,413739E+23
-460	5,069452E+22	5,069645E+22	1,999155E+22	1,999024E+22	1,013910E+23	3,998179E+22	1,413728E+23
-459	5,069671E+22	5,069640E+22	1,999041E+22	1,999110E+22	1,013931E+23	3,998151E+22	1,413746E+23
-458	5,069697E+22	5,069530E+22	1,999011E+22	1,998975E+22	1,013923E+23	3,997986E+22	1,413721E+23
-457	5,069516E+22	5,069762E+22	1,999044E+22	1,998952E+22	1,013928E+23	3,997996E+22	1,413727E+23
-456	5,069779E+22	5,069736E+22	1,998878E+22	1,999005E+22	1,013951E+23	3,997883E+22	1,413740E+23
-455	5,069697E+22	5,069697E+22	1,998907E+22	1,998847E+22	1,013939E+23	3,997754E+22	1,413715E+23
-454	5,069705E+22	5,069836E+22	1,998903E+22	1,998888E+22	1,013954E+23	3,997791E+22	1,413733E+23
-453	5,069939E+22	5,069725E+22	1,998812E+22	1,998869E+22	1,013966E+23	3,997680E+22	1,413734E+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							
-452	5,069720E+22	5,069815E+22	1,998912E+22	1,998785E+22	1,013954E+23	3,997697E+22	1,413723E+23
-451	5,069807E+22	5,069860E+22	1,998869E+22	1,998937E+22	1,013967E+23	3,997807E+22	1,413747E+23
-450	5,069823E+22	5,069691E+22	1,998880E+22	1,998916E+22	1,013951E+23	3,997796E+22	1,413731E+23
-449	5,069533E+22	5,069785E+22	1,999040E+22	1,998942E+22	1,013932E+23	3,997982E+22	1,413730E+23
-448	5,069717E+22	5,069691E+22	1,998983E+22	1,999092E+22	1,013941E+23	3,998075E+22	1,413748E+23
-447	5,069635E+22	5,069499E+22	1,999087E+22	1,999040E+22	1,013913E+23	3,998127E+22	1,413726E+23
-446	5,069459E+22	5,069586E+22	1,999192E+22	1,999144E+22	1,013904E+23	3,998337E+22	1,413738E+23
-445	5,069629E+22	5,069474E+22	1,999126E+22	1,999244E+22	1,013910E+23	3,998370E+22	1,413747E+23
-444	5,069389E+22	5,069465E+22	1,999247E+22	1,999172E+22	1,013885E+23	3,998419E+22	1,413727E+23
-443	5,069413E+22	5,069521E+22	1,999231E+22	1,999275E+22	1,013893E+23	3,998506E+22	1,413744E+23
-442	5,069562E+22	5,069368E+22	1,999178E+22	1,999219E+22	1,013893E+23	3,998397E+22	1,413733E+23
-441	5,069315E+22	5,069482E+22	1,999282E+22	1,999133E+22	1,013880E+23	3,998415E+22	1,413721E+23
-440	5,069509E+22	5,069539E+22	1,999152E+22	1,999217E+22	1,013905E+23	3,998369E+22	1,413742E+23
-439	5,069538E+22	5,069439E+22	1,999123E+22	1,999100E+22	1,013898E+23	3,998223E+22	1,413720E+23
-438	5,069366E+22	5,069601E+22	1,999152E+22	1,999082E+22	1,013897E+23	3,998234E+22	1,413720E+23
-437	5,069667E+22	5,069585E+22	1,998994E+22	1,999111E+22	1,013925E+23	3,998105E+22	1,413736E+23
-436	5,069594E+22	5,069557E+22	1,999032E+22	1,998951E+22	1,013915E+23	3,997983E+22	1,413713E+23
-435	5,069614E+22	5,069682E+22	1,999015E+22	1,998995E+22	1,013930E+23	3,998011E+22	1,413731E+23
-434	5,069816E+22	5,069612E+22	1,998924E+22	1,998990E+22	1,013943E+23	3,997913E+22	1,413734E+23
-433	5,069524E+22	5,069685E+22	1,999052E+22	1,998944E+22	1,013921E+23	3,997996E+22	1,413720E+23
-432	5,069593E+22	5,069741E+22	1,999014E+22	1,999085E+22	1,013933E+23	3,998098E+22	1,413743E+23
-431	5,069656E+22	5,069528E+22	1,999038E+22	1,999064E+22	1,013918E+23	3,998101E+22	1,413729E+23
-430	5,069383E+22	5,069547E+22	1,999195E+22	1,999091E+22	1,013893E+23	3,998287E+22	1,413722E+23
-429	5,069591E+22	5,069496E+22	1,999136E+22	1,999235E+22	1,013909E+23	3,998372E+22	1,413746E+23
-428	5,069475E+22	5,069348E+22	1,999235E+22	1,999197E+22	1,013882E+23	3,998432E+22	1,413725E+23
-427	5,069295E+22	5,069438E+22	1,999316E+22	1,999300E+22	1,013873E+23	3,998616E+22	1,413735E+23
-426	5,069477E+22	5,069344E+22	1,999248E+22	1,999376E+22	1,013882E+23	3,998624E+22	1,413744E+23
-425	5,069219E+22	5,069305E+22	1,999394E+22	1,999301E+22	1,013852E+23	3,998694E+22	1,413722E+23
-424	5,069255E+22	5,069393E+22	1,999370E+22	1,999375E+22	1,013865E+23	3,998744E+22	1,413739E+23
-423	5,069431E+22	5,069233E+22	1,999315E+22	1,999333E+22	1,013866E+23	3,998648E+22	1,413731E+23
-422	5,069155E+22	5,069307E+22	1,999402E+22	1,999271E+22	1,013846E+23	3,998673E+22	1,413714E+23
-421	5,069353E+22	5,069399E+22	1,999262E+22	1,999351E+22	1,013875E+23	3,998612E+22	1,413736E+23
-420	5,069390E+22	5,069303E+22	1,999234E+22	1,999227E+22	1,013869E+23	3,998461E+22	1,413715E+23
-419	5,069277E+22	5,069436E+22	1,999244E+22	1,999186E+22	1,013871E+23	3,998430E+22	1,413714E+23
-418	5,069599E+22	5,069448E+22	1,999091E+22	1,999192E+22	1,013905E+23	3,998283E+22	1,413733E+23
-417	5,069476E+22	5,069434E+22	1,999157E+22	1,999060E+22	1,013891E+23	3,998217E+22	1,413713E+23
-416	5,069441E+22	5,069612E+22	1,999140E+22	1,999108E+22	1,013905E+23	3,998248E+22	1,413730E+23
-415	5,069630E+22	5,069523E+22	1,999063E+22	1,999134E+22	1,013915E+23	3,998198E+22	1,413735E+23
-414	5,069332E+22	5,069498E+22	1,999199E+22	1,999105E+22	1,013883E+23	3,998304E+22	1,413713E+23
-413	5,069433E+22	5,069542E+22	1,999167E+22	1,999228E+22	1,013897E+23	3,998395E+22	1,413737E+23
-412	5,069513E+22	5,069332E+22	1,999195E+22	1,999211E+22	1,013885E+23	3,998406E+22	1,413725E+23
-411	5,069274E+22	5,069337E+22	1,999323E+22	1,999240E+22	1,013861E+23	3,998563E+22	1,413717E+23
-410	5,069452E+22	5,069343E+22	1,999258E+22	1,999382E+22	1,013880E+23	3,998640E+22	1,413744E+23
-409	5,069287E+22	5,069213E+22	1,999376E+22	1,999361E+22	1,013850E+23	3,998738E+22	1,413724E+23
-408	5,069103E+22	5,069323E+22	1,999459E+22	1,999428E+22	1,013843E+23	3,998886E+22	1,413731E+23
-407	5,069325E+22	5,069206E+22	1,999404E+22	1,999496E+22	1,013853E+23	3,998899E+22	1,413743E+23
-406	5,069068E+22	5,069102E+22	1,999544E+22	1,999425E+22	1,013817E+23	3,998968E+22	1,413714E+23
-405	5,069103E+22	5,069227E+22	1,999511E+22	1,999495E+22	1,013833E+23	3,999006E+22	1,413734E+23
-404	5,069255E+22	5,069102E+22	1,999442E+22	1,999472E+22	1,013836E+23	3,998914E+22	1,413727E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-403	5,069011E+22	5,069153E+22	1,999492E+22	1,999408E+22	1,013816E+23	3,998901E+22	1,413706E+23
-402	5,069242E+22	5,069266E+22	1,999351E+22	1,999460E+22	1,013851E+23	3,998811E+22	1,413732E+23
-401	5,069278E+22	5,069169E+22	1,999344E+22	1,999334E+22	1,013845E+23	3,998678E+22	1,413712E+23
-400	5,069170E+22	5,069339E+22	1,999357E+22	1,999266E+22	1,013851E+23	3,998622E+22	1,413713E+23
-399	5,069492E+22	5,069358E+22	1,999218E+22	1,999297E+22	1,013885E+23	3,998515E+22	1,413736E+23
-398	5,069303E+22	5,069292E+22	1,999286E+22	1,999203E+22	1,013859E+23	3,998490E+22	1,413708E+23
-397	5,069252E+22	5,069477E+22	1,999277E+22	1,999255E+22	1,013873E+23	3,998533E+22	1,413726E+23
-396	5,069448E+22	5,069353E+22	1,999209E+22	1,999283E+22	1,013880E+23	3,998491E+22	1,413729E+23
-395	5,069209E+22	5,069272E+22	1,999322E+22	1,999242E+22	1,013848E+23	3,998563E+22	1,413704E+23
-394	5,069339E+22	5,069346E+22	1,999290E+22	1,999347E+22	1,013868E+23	3,998637E+22	1,413732E+23
-393	5,069371E+22	5,069169E+22	1,999334E+22	1,999357E+22	1,013854E+23	3,998691E+22	1,413723E+23
-392	5,069095E+22	5,069243E+22	1,999457E+22	1,999377E+22	1,013834E+23	3,998834E+22	1,413717E+23
-391	5,069276E+22	5,069244E+22	1,999410E+22	1,999532E+22	1,013852E+23	3,998942E+22	1,413746E+23
-390	5,069091E+22	5,069040E+22	1,999538E+22	1,999515E+22	1,013813E+23	3,999053E+22	1,413718E+23
-389	5,068934E+22	5,069152E+22	1,999624E+22	1,999557E+22	1,013809E+23	3,999181E+22	1,413727E+23
-388	5,069163E+22	5,069028E+22	1,999566E+22	1,999628E+22	1,013819E+23	3,999194E+22	1,413739E+23
-387	5,068933E+22	5,068905E+22	1,999664E+22	1,999568E+22	1,013784E+23	3,999232E+22	1,413707E+23
-386	5,068957E+22	5,069075E+22	1,999611E+22	1,999632E+22	1,013803E+23	3,999243E+22	1,413728E+23
-385	5,069086E+22	5,068968E+22	1,999550E+22	1,999620E+22	1,013805E+23	3,999170E+22	1,413722E+23
-384	5,068878E+22	5,069044E+22	1,999591E+22	1,999510E+22	1,013792E+23	3,999101E+22	1,413702E+23
-383	5,069157E+22	5,069151E+22	1,999466E+22	1,999549E+22	1,013831E+23	3,999015E+22	1,413732E+23
-382	5,069177E+22	5,069018E+22	1,999465E+22	1,999431E+22	1,013820E+23	3,998896E+22	1,413709E+23
-381	5,069042E+22	5,069223E+22	1,999483E+22	1,999365E+22	1,013827E+23	3,998848E+22	1,413711E+23
-380	5,069309E+22	5,069257E+22	1,999351E+22	1,999424E+22	1,013857E+23	3,998775E+22	1,413734E+23
-379	5,069142E+22	5,069131E+22	1,999397E+22	1,999347E+22	1,013827E+23	3,998744E+22	1,413702E+23
-378	5,069103E+22	5,069302E+22	1,999395E+22	1,999382E+22	1,013841E+23	3,998777E+22	1,413718E+23
-377	5,069301E+22	5,069174E+22	1,999346E+22	1,999422E+22	1,013848E+23	3,998767E+22	1,413724E+23
-376	5,069085E+22	5,069119E+22	1,999452E+22	1,999359E+22	1,013820E+23	3,998810E+22	1,413701E+23
-375	5,069216E+22	5,069215E+22	1,999433E+22	1,999489E+22	1,013843E+23	3,998921E+22	1,413735E+23
-374	5,069183E+22	5,069018E+22	1,999481E+22	1,999526E+22	1,013820E+23	3,999007E+22	1,413721E+23
-373	5,068896E+22	5,069103E+22	1,999617E+22	1,999535E+22	1,013800E+23	3,999152E+22	1,413715E+23
-372	5,069080E+22	5,069084E+22	1,999584E+22	1,999682E+22	1,013816E+23	3,999266E+22	1,413743E+23
-371	5,068948E+22	5,068824E+22	1,999684E+22	1,999656E+22	1,013777E+23	3,999340E+22	1,413711E+23
-370	5,068802E+22	5,068959E+22	1,999760E+22	1,999681E+22	1,013776E+23	3,999441E+22	1,413720E+23
-369	5,068991E+22	5,068871E+22	1,999699E+22	1,999777E+22	1,013786E+23	3,999476E+22	1,413734E+23
-368	5,068757E+22	5,068797E+22	1,999773E+22	1,999698E+22	1,013755E+23	3,999471E+22	1,413702E+23
-367	5,068821E+22	5,068965E+22	1,999726E+22	1,999762E+22	1,013779E+23	3,999488E+22	1,413727E+23
-366	5,068944E+22	5,068812E+22	1,999670E+22	1,999739E+22	1,013776E+23	3,999410E+22	1,413717E+23
-365	5,068774E+22	5,068912E+22	1,999716E+22	1,999601E+22	1,013769E+23	3,999318E+22	1,413700E+23
-364	5,069048E+22	5,069022E+22	1,999599E+22	1,999642E+22	1,013807E+23	3,999241E+22	1,413731E+23
-363	5,069055E+22	5,068871E+22	1,999568E+22	1,999548E+22	1,013793E+23	3,999116E+22	1,413704E+23
-362	5,068888E+22	5,069101E+22	1,999584E+22	1,999488E+22	1,013799E+23	3,999072E+22	1,413706E+23
-361	5,069115E+22	5,069122E+22	1,999470E+22	1,999569E+22	1,013824E+23	3,999039E+22	1,413728E+23
-360	5,068986E+22	5,068990E+22	1,999513E+22	1,999463E+22	1,013798E+23	3,998976E+22	1,413695E+23
-359	5,069004E+22	5,069141E+22	1,999527E+22	1,999500E+22	1,013814E+23	3,999027E+22	1,413717E+23
-358	5,069167E+22	5,068989E+22	1,999486E+22	1,999557E+22	1,013816E+23	3,999043E+22	1,413720E+23
-357	5,068935E+22	5,068987E+22	1,999595E+22	1,999498E+22	1,013792E+23	3,999093E+22	1,413701E+23
-356	5,069023E+22	5,069095E+22	1,999590E+22	1,999645E+22	1,013812E+23	3,999234E+22	1,413735E+23
-355	5,069008E+22	5,068850E+22	1,999622E+22	1,999690E+22	1,013786E+23	3,999312E+22	1,413717E+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	5,068736E+22	5,068925E+22	1,999766E+22	1,999675E+22	1,013766E+23	3,999441E+22	1,413710E+23
-353	5,068905E+22	5,068904E+22	1,999746E+22	1,999829E+22	1,013781E+23	3,999575E+22	1,413738E+23
-352	5,068798E+22	5,068662E+22	1,999827E+22	1,999785E+22	1,013746E+23	3,999613E+22	1,413707E+23
-351	5,068657E+22	5,068811E+22	1,999896E+22	1,999829E+22	1,013747E+23	3,999726E+22	1,413719E+23
-350	5,068799E+22	5,068712E+22	1,999828E+22	1,999939E+22	1,013751E+23	3,999766E+22	1,413728E+23
-349	5,068600E+22	5,068650E+22	1,999896E+22	1,999829E+22	1,013725E+23	3,999725E+22	1,413698E+23
-348	5,068688E+22	5,068818E+22	1,999861E+22	1,999870E+22	1,013751E+23	3,999731E+22	1,413724E+23
-347	5,068860E+22	5,068642E+22	1,999776E+22	1,999836E+22	1,013750E+23	3,999613E+22	1,413711E+23
-346	5,068679E+22	5,068773E+22	1,999823E+22	1,999686E+22	1,013745E+23	3,999509E+22	1,413696E+23
-345	5,068881E+22	5,068926E+22	1,999715E+22	1,999759E+22	1,013781E+23	3,999474E+22	1,413728E+23
-344	5,068877E+22	5,068788E+22	1,999672E+22	1,999663E+22	1,013767E+23	3,999334E+22	1,413700E+23
-343	5,068736E+22	5,068983E+22	1,999701E+22	1,999618E+22	1,013772E+23	3,999319E+22	1,413704E+23
-342	5,068949E+22	5,068949E+22	1,999600E+22	1,999703E+22	1,013790E+23	3,999304E+22	1,413720E+23
-341	5,068866E+22	5,068821E+22	1,999648E+22	1,999582E+22	1,013769E+23	3,999231E+22	1,413692E+23
-340	5,068883E+22	5,068978E+22	1,999676E+22	1,999630E+22	1,013786E+23	3,999306E+22	1,413717E+23
-339	5,069034E+22	5,068821E+22	1,999609E+22	1,999713E+22	1,013785E+23	3,999321E+22	1,413718E+23
-338	5,068775E+22	5,068844E+22	1,999724E+22	1,999651E+22	1,013762E+23	3,999375E+22	1,413699E+23
-337	5,068824E+22	5,068949E+22	1,999741E+22	1,999805E+22	1,013777E+23	3,999546E+22	1,413732E+23
-336	5,068842E+22	5,068696E+22	1,999771E+22	1,999820E+22	1,013754E+23	3,999591E+22	1,413713E+23
-335	5,068612E+22	5,068754E+22	1,999924E+22	1,999808E+22	1,013737E+23	3,999732E+22	1,413710E+23
-334	5,068724E+22	5,068711E+22	1,999905E+22	1,999976E+22	1,013743E+23	3,999881E+22	1,413732E+23
-333	5,068615E+22	5,068516E+22	1,999973E+22	1,999933E+22	1,013713E+23	3,999906E+22	1,413704E+23
-332	5,068472E+22	5,068665E+22	2,000040E+22	1,999979E+22	1,013714E+23	4,000019E+22	1,413716E+23
-331	5,068647E+22	5,068532E+22	1,999943E+22	2,000081E+22	1,013718E+23	4,000024E+22	1,413720E+23
-330	5,068491E+22	5,068494E+22	2,000009E+22	1,999935E+22	1,013698E+23	3,999945E+22	1,413693E+23
-329	5,068568E+22	5,068679E+22	1,999984E+22	1,999974E+22	1,013725E+23	3,999957E+22	1,413720E+23
-328	5,068744E+22	5,068538E+22	1,999885E+22	1,999926E+22	1,013728E+23	3,999811E+22	1,413709E+23
-327	5,068551E+22	5,068680E+22	1,999931E+22	1,999806E+22	1,013723E+23	3,999737E+22	1,413697E+23
-326	5,068672E+22	5,068799E+22	1,999832E+22	1,999899E+22	1,013747E+23	3,999731E+22	1,413720E+23
-325	5,068708E+22	5,068648E+22	1,999794E+22	1,999789E+22	1,013736E+23	3,999583E+22	1,413694E+23
-324	5,068606E+22	5,068808E+22	1,999838E+22	1,999735E+22	1,013741E+23	3,999573E+22	1,413699E+23
-323	5,068859E+22	5,068744E+22	1,999715E+22	1,999825E+22	1,013760E+23	3,999540E+22	1,413714E+23
-322	5,068776E+22	5,068658E+22	1,999762E+22	1,999699E+22	1,013743E+23	3,999461E+22	1,413689E+23
-321	5,068722E+22	5,068864E+22	1,999803E+22	1,999774E+22	1,013759E+23	3,999577E+22	1,413716E+23
-320	5,068864E+22	5,068723E+22	1,999735E+22	1,999848E+22	1,013759E+23	3,999584E+22	1,413717E+23
-319	5,068619E+22	5,068715E+22	1,999874E+22	1,999797E+22	1,013733E+23	3,999671E+22	1,413701E+23
-318	5,068626E+22	5,068775E+22	1,999913E+22	1,999952E+22	1,013740E+23	3,999865E+22	1,413727E+23
-317	5,068682E+22	5,068513E+22	1,999943E+22	1,999957E+22	1,013719E+23	3,999900E+22	1,413709E+23
-316	5,068442E+22	5,068563E+22	2,000096E+22	1,999960E+22	1,013701E+23	4,000057E+22	1,413706E+23
-315	5,068546E+22	5,068516E+22	2,000034E+22	2,000149E+22	1,013706E+23	4,000183E+22	1,413725E+23
-314	5,068446E+22	5,068340E+22	2,000093E+22	2,000089E+22	1,013679E+23	4,000182E+22	1,413697E+23
-313	5,068303E+22	5,068509E+22	2,000167E+22	2,000124E+22	1,013681E+23	4,000291E+22	1,413710E+23
-312	5,068534E+22	5,068394E+22	2,000059E+22	2,000180E+22	1,013693E+23	4,000239E+22	1,413717E+23
-311	5,068411E+22	5,068368E+22	2,000129E+22	2,000032E+22	1,013678E+23	4,000161E+22	1,413694E+23
-310	5,068409E+22	5,068557E+22	2,000110E+22	2,000082E+22	1,013697E+23	4,000192E+22	1,413716E+23
-309	5,068571E+22	5,068447E+22	2,000005E+22	2,000040E+22	1,013702E+23	4,000045E+22	1,413706E+23
-308	5,068374E+22	5,068559E+22	2,000061E+22	1,999933E+22	1,013693E+23	3,999994E+22	1,413693E+23
-307	5,068522E+22	5,068621E+22	1,999939E+22	2,000030E+22	1,013714E+23	3,999969E+22	1,413711E+23
-306	5,068608E+22	5,068469E+22	1,999904E+22	1,999901E+22	1,013708E+23	3,999805E+22	1,413688E+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	5,068506E+22	5,068646E+22	1,999956E+22	1,999854E+22	1,013715E+23	3,999810E+22	1,413696E+23
-304	5,068758E+22	5,068620E+22	1,999825E+22	1,999936E+22	1,013738E+23	3,999761E+22	1,413714E+23
-303	5,068659E+22	5,068562E+22	1,999877E+22	1,999838E+22	1,013722E+23	3,999716E+22	1,413694E+23
-302	5,068515E+22	5,068734E+22	1,999944E+22	1,999923E+22	1,013725E+23	3,999868E+22	1,413712E+23
-301	5,068676E+22	5,068585E+22	1,999895E+22	1,999985E+22	1,013726E+23	3,999880E+22	1,413714E+23
-300	5,068458E+22	5,068529E+22	2,000052E+22	1,999935E+22	1,013699E+23	3,999987E+22	1,413697E+23
-299	5,068465E+22	5,068548E+22	2,000066E+22	2,000101E+22	1,013701E+23	4,000168E+22	1,413718E+23
-298	5,068523E+22	5,068320E+22	2,000086E+22	2,000110E+22	1,013684E+23	4,000196E+22	1,413704E+23
-297	5,068247E+22	5,068403E+22	2,000231E+22	2,000131E+22	1,013665E+23	4,000362E+22	1,413701E+23
-296	5,068376E+22	5,068373E+22	2,000155E+22	2,000294E+22	1,013675E+23	4,000450E+22	1,413720E+23
-295	5,068326E+22	5,068204E+22	2,000216E+22	2,000223E+22	1,013653E+23	4,000439E+22	1,413697E+23
-294	5,068151E+22	5,068356E+22	2,000307E+22	2,000241E+22	1,013651E+23	4,000547E+22	1,413705E+23
-293	5,068412E+22	5,068267E+22	2,000201E+22	2,000280E+22	1,013668E+23	4,000481E+22	1,413716E+23
-292	5,068271E+22	5,068242E+22	2,000273E+22	2,000149E+22	1,013651E+23	4,000421E+22	1,413693E+23
-291	5,068232E+22	5,068411E+22	2,000220E+22	2,000220E+22	1,013664E+23	4,000440E+22	1,413708E+23
-290	5,068409E+22	5,068293E+22	2,000111E+22	2,000170E+22	1,013670E+23	4,000281E+22	1,413698E+23
-289	5,068225E+22	5,068395E+22	2,000172E+22	2,000060E+22	1,013662E+23	4,000232E+22	1,413685E+23
-288	5,068435E+22	5,068463E+22	2,000041E+22	2,000124E+22	1,013690E+23	4,000165E+22	1,413706E+23
-287	5,068548E+22	5,068334E+22	2,000008E+22	2,000002E+22	1,013688E+23	4,000010E+22	1,413689E+23
-286	5,068358E+22	5,068532E+22	2,000077E+22	1,999974E+22	1,013689E+23	4,000051E+22	1,413694E+23
-285	5,068592E+22	5,068535E+22	1,999955E+22	2,000060E+22	1,013713E+23	4,000015E+22	1,413714E+23
-284	5,068474E+22	5,068441E+22	2,000033E+22	1,999980E+22	1,013692E+23	4,000013E+22	1,413693E+23
-283	5,068329E+22	5,068555E+22	2,000091E+22	2,000072E+22	1,013688E+23	4,000162E+22	1,413705E+23
-282	5,068526E+22	5,068382E+22	2,000049E+22	2,000125E+22	1,013691E+23	4,000174E+22	1,413708E+23
-281	5,068300E+22	5,068329E+22	2,000210E+22	2,000091E+22	1,013663E+23	4,000301E+22	1,413693E+23
-280	5,068312E+22	5,068372E+22	2,000201E+22	2,000254E+22	1,013668E+23	4,000454E+22	1,413714E+23
-279	5,068369E+22	5,068173E+22	2,000210E+22	2,000279E+22	1,013654E+23	4,000489E+22	1,413703E+23
-278	5,068045E+22	5,068243E+22	2,000369E+22	2,000292E+22	1,013629E+23	4,000661E+22	1,413695E+23
-277	5,068225E+22	5,068225E+22	2,000303E+22	2,000419E+22	1,013645E+23	4,000722E+22	1,413717E+23
-276	5,068208E+22	5,068051E+22	2,000375E+22	2,000336E+22	1,013626E+23	4,000711E+22	1,413697E+23
-275	5,068020E+22	5,068187E+22	2,000440E+22	2,000355E+22	1,013621E+23	4,000795E+22	1,413700E+23
-274	5,068265E+22	5,068131E+22	2,000327E+22	2,000398E+22	1,013640E+23	4,000725E+22	1,413712E+23
-273	5,068084E+22	5,068121E+22	2,000390E+22	2,000288E+22	1,013621E+23	4,000678E+22	1,413688E+23
-272	5,068068E+22	5,068277E+22	2,000322E+22	2,000339E+22	1,013634E+23	4,000661E+22	1,413701E+23
-271	5,068302E+22	5,068161E+22	2,000211E+22	2,000286E+22	1,013646E+23	4,000497E+22	1,413696E+23
-270	5,068102E+22	5,068236E+22	2,000284E+22	2,000166E+22	1,013634E+23	4,000451E+22	1,413679E+23
-269	5,068335E+22	5,068336E+22	2,000163E+22	2,000221E+22	1,013667E+23	4,000384E+22	1,413705E+23
-268	5,068428E+22	5,068228E+22	2,000136E+22	2,000124E+22	1,013666E+23	4,000260E+22	1,413692E+23
-267	5,068183E+22	5,068395E+22	2,000190E+22	2,000117E+22	1,013658E+23	4,000307E+22	1,413688E+23
-266	5,068422E+22	5,068384E+22	2,000087E+22	2,000198E+22	1,013681E+23	4,000285E+22	1,413709E+23
-265	5,068306E+22	5,068267E+22	2,000180E+22	2,000123E+22	1,013657E+23	4,000303E+22	1,413688E+23
-264	5,068196E+22	5,068364E+22	2,000231E+22	2,000196E+22	1,013656E+23	4,000427E+22	1,413699E+23
-263	5,068407E+22	5,068214E+22	2,000185E+22	2,000266E+22	1,013662E+23	4,000451E+22	1,413707E+23
-262	5,068104E+22	5,068166E+22	2,000353E+22	2,000250E+22	1,013627E+23	4,000604E+22	1,413687E+23
-261	5,068123E+22	5,068237E+22	2,000349E+22	2,000407E+22	1,013636E+23	4,000756E+22	1,413712E+23
-260	5,068196E+22	5,068027E+22	2,000371E+22	2,000433E+22	1,013622E+23	4,000804E+22	1,413703E+23
-259	5,067885E+22	5,068060E+22	2,000513E+22	2,000436E+22	1,013595E+23	4,000949E+22	1,413689E+23
-258	5,068104E+22	5,068046E+22	2,000455E+22	2,000541E+22	1,013615E+23	4,000996E+22	1,413715E+23
-257	5,068063E+22	5,067897E+22	2,000523E+22	2,000469E+22	1,013596E+23	4,000992E+22	1,413695E+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	5,067867E+22	5,068056E+22	2,000558E+22	2,000484E+22	1,013592E+23	4,001042E+22	1,413696E+23
-255	5,068101E+22	5,068013E+22	2,000430E+22	2,000537E+22	1,013611E+23	4,000967E+22	1,413708E+23
-254	5,067887E+22	5,067972E+22	2,000505E+22	2,000422E+22	1,013586E+23	4,000928E+22	1,413679E+23
-253	5,067939E+22	5,068125E+22	2,000442E+22	2,000440E+22	1,013606E+23	4,000882E+22	1,413695E+23
-252	5,068206E+22	5,068009E+22	2,000338E+22	2,000385E+22	1,013621E+23	4,000723E+22	1,413694E+23
-251	5,067994E+22	5,068083E+22	2,000388E+22	2,000276E+22	1,013608E+23	4,000663E+22	1,413674E+23
-250	5,068213E+22	5,068212E+22	2,000273E+22	2,000335E+22	1,013643E+23	4,000608E+22	1,413703E+23
-249	5,068258E+22	5,068123E+22	2,000255E+22	2,000259E+22	1,013638E+23	4,000514E+22	1,413690E+23
-248	5,068030E+22	5,068262E+22	2,000310E+22	2,000239E+22	1,013629E+23	4,000549E+22	1,413684E+23
-247	5,068287E+22	5,068242E+22	2,000216E+22	2,000324E+22	1,013653E+23	4,000540E+22	1,413707E+23
-246	5,068141E+22	5,068090E+22	2,000332E+22	2,000260E+22	1,013623E+23	4,000592E+22	1,413682E+23
-245	5,068046E+22	5,068198E+22	2,000390E+22	2,000332E+22	1,013624E+23	4,000723E+22	1,413697E+23
-244	5,068235E+22	5,068065E+22	2,000344E+22	2,000432E+22	1,013630E+23	4,000777E+22	1,413708E+23
-243	5,067906E+22	5,067986E+22	2,000487E+22	2,000428E+22	1,013589E+23	4,000915E+22	1,413681E+23
-242	5,067959E+22	5,068050E+22	2,000497E+22	2,000563E+22	1,013601E+23	4,001060E+22	1,413707E+23
-241	5,068047E+22	5,067854E+22	2,000525E+22	2,000577E+22	1,013590E+23	4,001102E+22	1,413700E+23
-240	5,067768E+22	5,067888E+22	2,000654E+22	2,000554E+22	1,013566E+23	4,001207E+22	1,413686E+23
-239	5,067977E+22	5,067919E+22	2,000586E+22	2,000665E+22	1,013590E+23	4,001251E+22	1,413715E+23
-238	5,067858E+22	5,067772E+22	2,000655E+22	2,000608E+22	1,013563E+23	4,001264E+22	1,413689E+23
-237	5,067666E+22	5,067935E+22	2,000689E+22	2,000612E+22	1,013560E+23	4,001301E+22	1,413690E+23
-236	5,067932E+22	5,067878E+22	2,000561E+22	2,000666E+22	1,013581E+23	4,001228E+22	1,413704E+23
-235	5,067749E+22	5,067784E+22	2,000613E+22	2,000541E+22	1,013553E+23	4,001154E+22	1,413669E+23
-234	5,067860E+22	5,067944E+22	2,000558E+22	2,000541E+22	1,013580E+23	4,001099E+22	1,413690E+23
-233	5,068106E+22	5,067875E+22	2,000452E+22	2,000498E+22	1,013598E+23	4,000950E+22	1,413693E+23
-232	5,067878E+22	5,067973E+22	2,000481E+22	2,000391E+22	1,013585E+23	4,000872E+22	1,413672E+23
-231	5,068071E+22	5,068121E+22	2,000371E+22	2,000458E+22	1,013619E+23	4,000829E+22	1,413702E+23
-230	5,068071E+22	5,067990E+22	2,000385E+22	2,000387E+22	1,013606E+23	4,000772E+22	1,413683E+23
-229	5,067881E+22	5,068112E+22	2,000461E+22	2,000351E+22	1,013599E+23	4,000811E+22	1,413680E+23
-228	5,068146E+22	5,068082E+22	2,000378E+22	2,000452E+22	1,013623E+23	4,000831E+22	1,413706E+23
-227	5,067973E+22	5,067903E+22	2,000473E+22	2,000415E+22	1,013588E+23	4,000888E+22	1,413676E+23
-226	5,067881E+22	5,068021E+22	2,000534E+22	2,000496E+22	1,013590E+23	4,001031E+22	1,413693E+23
-225	5,068041E+22	5,067909E+22	2,000491E+22	2,000606E+22	1,013595E+23	4,001097E+22	1,413705E+23
-224	5,067759E+22	5,067818E+22	2,000621E+22	2,000578E+22	1,013558E+23	4,001199E+22	1,413678E+23
-223	5,067837E+22	5,067893E+22	2,000634E+22	2,000695E+22	1,013573E+23	4,001330E+22	1,413706E+23
-222	5,067885E+22	5,067694E+22	2,000684E+22	2,000711E+22	1,013558E+23	4,001395E+22	1,413697E+23
-221	5,067610E+22	5,067752E+22	2,000810E+22	2,000680E+22	1,013536E+23	4,001491E+22	1,413685E+23
-220	5,067778E+22	5,067796E+22	2,000735E+22	2,000814E+22	1,013557E+23	4,001549E+22	1,413712E+23
-219	5,067645E+22	5,067600E+22	2,000777E+22	2,000764E+22	1,013525E+23	4,001541E+22	1,413679E+23
-218	5,067520E+22	5,067733E+22	2,000813E+22	2,000741E+22	1,013525E+23	4,001555E+22	1,413681E+23
-217	5,067814E+22	5,067700E+22	2,000683E+22	2,000780E+22	1,013551E+23	4,001462E+22	1,413698E+23
-216	5,067685E+22	5,067625E+22	2,000708E+22	2,000634E+22	1,013531E+23	4,001342E+22	1,413665E+23
-215	5,067778E+22	5,067844E+22	2,000646E+22	2,000638E+22	1,013562E+23	4,001285E+22	1,413691E+23
-214	5,067939E+22	5,067796E+22	2,000560E+22	2,000613E+22	1,013574E+23	4,001173E+22	1,413691E+23
-213	5,067711E+22	5,067890E+22	2,000607E+22	2,000500E+22	1,013560E+23	4,001106E+22	1,413671E+23
-212	5,067901E+22	5,068013E+22	2,000517E+22	2,000578E+22	1,013591E+23	4,001095E+22	1,413701E+23
-211	5,067907E+22	5,067809E+22	2,000523E+22	2,000520E+22	1,013572E+23	4,001042E+22	1,413676E+23
-210	5,067759E+22	5,067904E+22	2,000611E+22	2,000487E+22	1,013566E+23	4,001098E+22	1,413676E+23
-209	5,067992E+22	5,067911E+22	2,000523E+22	2,000613E+22	1,013590E+23	4,001136E+22	1,413704E+23
-208	5,067820E+22	5,067734E+22	2,000589E+22	2,000580E+22	1,013555E+23	4,001169E+22	1,413672E+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	5,067727E+22	5,067873E+22	2,000652E+22	2,000655E+22	1,013560E+23	4,001307E+22	1,413691E+23
-206	5,067865E+22	5,067742E+22	2,000638E+22	2,000752E+22	1,013561E+23	4,001390E+22	1,413700E+23
-205	5,067619E+22	5,067658E+22	2,000785E+22	2,000696E+22	1,013528E+23	4,001481E+22	1,413676E+23
-204	5,067689E+22	5,067755E+22	2,000806E+22	2,000822E+22	1,013544E+23	4,001628E+22	1,413707E+23
-203	5,067691E+22	5,067528E+22	2,000833E+22	2,000859E+22	1,013522E+23	4,001693E+22	1,413691E+23
-202	5,067421E+22	5,067581E+22	2,000958E+22	2,000834E+22	1,013500E+23	4,001792E+22	1,413679E+23
-201	5,067573E+22	5,067636E+22	2,000874E+22	2,000965E+22	1,013521E+23	4,001839E+22	1,413705E+23
-200	5,067507E+22	5,067418E+22	2,000887E+22	2,000894E+22	1,013493E+23	4,001781E+22	1,413671E+23
-199	5,067433E+22	5,067575E+22	2,000914E+22	2,000848E+22	1,013501E+23	4,001762E+22	1,413677E+23
-198	5,067701E+22	5,067560E+22	2,000801E+22	2,000885E+22	1,013526E+23	4,001686E+22	1,413695E+23
-197	5,067574E+22	5,067535E+22	2,000824E+22	2,000734E+22	1,013511E+23	4,001558E+22	1,413667E+23
-196	5,067620E+22	5,067777E+22	2,000765E+22	2,000758E+22	1,013540E+23	4,001524E+22	1,413692E+23
-195	5,067747E+22	5,067669E+22	2,000675E+22	2,000746E+22	1,013542E+23	4,001420E+22	1,413684E+23
-194	5,067573E+22	5,067710E+22	2,000743E+22	2,000623E+22	1,013528E+23	4,001366E+22	1,413665E+23
-193	5,067754E+22	5,067837E+22	2,000660E+22	2,000700E+22	1,013559E+23	4,001360E+22	1,413695E+23
-192	5,067802E+22	5,067626E+22	2,000641E+22	2,000649E+22	1,013543E+23	4,001290E+22	1,413672E+23
-191	5,067641E+22	5,067751E+22	2,000718E+22	2,000625E+22	1,013539E+23	4,001343E+22	1,413673E+23
-190	5,067802E+22	5,067773E+22	2,000653E+22	2,000767E+22	1,013557E+23	4,001419E+22	1,413699E+23
-189	5,067656E+22	5,067607E+22	2,000729E+22	2,000717E+22	1,013526E+23	4,001446E+22	1,413671E+23
-188	5,067567E+22	5,067739E+22	2,000810E+22	2,000791E+22	1,013531E+23	4,001601E+22	1,413691E+23
-187	5,067698E+22	5,067562E+22	2,000799E+22	2,000893E+22	1,013526E+23	4,001692E+22	1,413695E+23
-186	5,067485E+22	5,067460E+22	2,000959E+22	2,000840E+22	1,013494E+23	4,001799E+22	1,413674E+23
-185	5,067490E+22	5,067598E+22	2,000971E+22	2,000980E+22	1,013509E+23	4,001951E+22	1,413704E+23
-184	5,067502E+22	5,067361E+22	2,000959E+22	2,001026E+22	1,013486E+23	4,001984E+22	1,413685E+23
-183	5,067253E+22	5,067409E+22	2,001070E+22	2,000983E+22	1,013466E+23	4,002053E+22	1,413672E+23
-182	5,067409E+22	5,067457E+22	2,001003E+22	2,001096E+22	1,013487E+23	4,002099E+22	1,413696E+23
-181	5,067406E+22	5,067269E+22	2,001012E+22	2,000991E+22	1,013468E+23	4,002003E+22	1,413668E+23
-180	5,067333E+22	5,067469E+22	2,001038E+22	2,000951E+22	1,013480E+23	4,001989E+22	1,413679E+23
-179	5,067549E+22	5,067448E+22	2,000912E+22	2,001005E+22	1,013500E+23	4,001916E+22	1,413691E+23
-178	5,067426E+22	5,067415E+22	2,000945E+22	2,000858E+22	1,013484E+23	4,001803E+22	1,413664E+23
-177	5,067442E+22	5,067662E+22	2,000894E+22	2,000879E+22	1,013510E+23	4,001772E+22	1,413688E+23
-176	5,067617E+22	5,067503E+22	2,000784E+22	2,000861E+22	1,013512E+23	4,001645E+22	1,413677E+23
-175	5,067474E+22	5,067538E+22	2,000852E+22	2,000735E+22	1,013501E+23	4,001587E+22	1,413660E+23
-174	5,067620E+22	5,067669E+22	2,000789E+22	2,000826E+22	1,013529E+23	4,001615E+22	1,413690E+23
-173	5,067659E+22	5,067496E+22	2,000767E+22	2,000780E+22	1,013516E+23	4,001547E+22	1,413670E+23
-172	5,067472E+22	5,067644E+22	2,000846E+22	2,000776E+22	1,013512E+23	4,001622E+22	1,413674E+23
-171	5,067613E+22	5,067604E+22	2,000789E+22	2,000920E+22	1,013522E+23	4,001709E+22	1,413693E+23
-170	5,067522E+22	5,067412E+22	2,000891E+22	2,000855E+22	1,013493E+23	4,001747E+22	1,413668E+23
-169	5,067412E+22	5,067568E+22	2,000983E+22	2,000922E+22	1,013498E+23	4,001905E+22	1,413688E+23
-168	5,067553E+22	5,067385E+22	2,000947E+22	2,001038E+22	1,013494E+23	4,001985E+22	1,413692E+23
-167	5,067314E+22	5,067308E+22	2,001095E+22	2,000996E+22	1,013462E+23	4,002090E+22	1,413671E+23
-166	5,067259E+22	5,067445E+22	2,001118E+22	2,001145E+22	1,013470E+23	4,002263E+22	1,413697E+23
-165	5,067316E+22	5,067211E+22	2,001100E+22	2,001168E+22	1,013453E+23	4,002268E+22	1,413680E+23
-164	5,067110E+22	5,067261E+22	2,001205E+22	2,001114E+22	1,013437E+23	4,002320E+22	1,413669E+23
-163	5,067276E+22	5,067274E+22	2,001135E+22	2,001220E+22	1,013455E+23	4,002355E+22	1,413690E+23
-162	5,067320E+22	5,067105E+22	2,001145E+22	2,001109E+22	1,013443E+23	4,002255E+22	1,413668E+23
-161	5,067183E+22	5,067362E+22	2,001162E+22	2,001072E+22	1,013454E+23	4,002234E+22	1,413678E+23
-160	5,067401E+22	5,067331E+22	2,001008E+22	2,001131E+22	1,013473E+23	4,002140E+22	1,413687E+23
-159	5,067294E+22	5,067276E+22	2,001040E+22	2,000969E+22	1,013457E+23	4,002009E+22	1,413658E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-158	5,067284E+22	5,067503E+22	2,001017E+22	2,000983E+22	1,013479E+23	4,002001E+22	1,413679E+23
-157	5,067504E+22	5,067362E+22	2,000907E+22	2,000955E+22	1,013487E+23	4,001862E+22	1,413673E+23
-156	5,067354E+22	5,067416E+22	2,000973E+22	2,000852E+22	1,013477E+23	4,001825E+22	1,413660E+23
-155	5,067446E+22	5,067524E+22	2,000911E+22	2,000969E+22	1,013497E+23	4,001880E+22	1,413685E+23
-154	5,067509E+22	5,067344E+22	2,000901E+22	2,000929E+22	1,013485E+23	4,001830E+22	1,413668E+23
-153	5,067295E+22	5,067503E+22	2,000994E+22	2,000917E+22	1,013480E+23	4,001910E+22	1,413671E+23
-152	5,067478E+22	5,067430E+22	2,000926E+22	2,001058E+22	1,013491E+23	4,001984E+22	1,413689E+23
-151	5,067404E+22	5,067235E+22	2,001035E+22	2,000990E+22	1,013464E+23	4,002025E+22	1,413666E+23
-150	5,067232E+22	5,067405E+22	2,001148E+22	2,001074E+22	1,013464E+23	4,002222E+22	1,413686E+23
-149	5,067357E+22	5,067251E+22	2,001100E+22	2,001195E+22	1,013461E+23	4,002295E+22	1,413690E+23
-148	5,067109E+22	5,067172E+22	2,001239E+22	2,001167E+22	1,013428E+23	4,002406E+22	1,413669E+23
-147	5,067056E+22	5,067239E+22	2,001262E+22	2,001306E+22	1,013430E+23	4,002568E+22	1,413686E+23
-146	5,067195E+22	5,066996E+22	2,001250E+22	2,001302E+22	1,013419E+23	4,002552E+22	1,413674E+23
-145	5,066995E+22	5,067099E+22	2,001347E+22	2,001230E+22	1,013409E+23	4,002577E+22	1,413667E+23
-144	5,067177E+22	5,067123E+22	2,001245E+22	2,001338E+22	1,013430E+23	4,002582E+22	1,413688E+23
-143	5,067191E+22	5,067000E+22	2,001244E+22	2,001224E+22	1,013419E+23	4,002468E+22	1,413666E+23
-142	5,066998E+22	5,067260E+22	2,001278E+22	2,001188E+22	1,013426E+23	4,002466E+22	1,413672E+23
-141	5,067236E+22	5,067223E+22	2,001127E+22	2,001229E+22	1,013446E+23	4,002355E+22	1,413681E+23
-140	5,067158E+22	5,067156E+22	2,001161E+22	2,001076E+22	1,013431E+23	4,002237E+22	1,413655E+23
-139	5,067140E+22	5,067320E+22	2,001146E+22	2,001101E+22	1,013446E+23	4,002246E+22	1,413671E+23
-138	5,067391E+22	5,067192E+22	2,001041E+22	2,001086E+22	1,013458E+23	4,002127E+22	1,413671E+23
-137	5,067192E+22	5,067293E+22	2,001096E+22	2,000996E+22	1,013448E+23	4,002092E+22	1,413658E+23
-136	5,067296E+22	5,067370E+22	2,001017E+22	2,001121E+22	1,013467E+23	4,002138E+22	1,413680E+23
-135	5,067382E+22	5,067183E+22	2,001017E+22	2,001062E+22	1,013457E+23	4,002079E+22	1,413664E+23
-134	5,067146E+22	5,067337E+22	2,001145E+22	2,001042E+22	1,013448E+23	4,002187E+22	1,413667E+23
-133	5,067341E+22	5,067289E+22	2,001084E+22	2,001176E+22	1,013463E+23	4,002260E+22	1,413689E+23
-132	5,067241E+22	5,067115E+22	2,001191E+22	2,001140E+22	1,013436E+23	4,002330E+22	1,413669E+23
-131	5,067001E+22	5,067238E+22	2,001307E+22	2,001246E+22	1,013424E+23	4,002553E+22	1,413679E+23
-130	5,067165E+22	5,067067E+22	2,001262E+22	2,001366E+22	1,013423E+23	4,002628E+22	1,413686E+23
-129	5,066921E+22	5,066989E+22	2,001394E+22	2,001318E+22	1,013391E+23	4,002713E+22	1,413662E+23
-128	5,066936E+22	5,067031E+22	2,001393E+22	2,001445E+22	1,013397E+23	4,002837E+22	1,413680E+23
-127	5,067110E+22	5,066818E+22	2,001370E+22	2,001420E+22	1,013393E+23	4,002790E+22	1,413672E+23
-126	5,066851E+22	5,066966E+22	2,001477E+22	2,001353E+22	1,013382E+23	4,002830E+22	1,413665E+23
-125	5,067013E+22	5,067044E+22	2,001362E+22	2,001454E+22	1,013406E+23	4,002816E+22	1,413687E+23
-124	5,067017E+22	5,066917E+22	2,001357E+22	2,001348E+22	1,013393E+23	4,002705E+22	1,413664E+23
-123	5,066810E+22	5,067096E+22	2,001406E+22	2,001306E+22	1,013391E+23	4,002712E+22	1,413662E+23
-122	5,067113E+22	5,067042E+22	2,001261E+22	2,001335E+22	1,013416E+23	4,002596E+22	1,413675E+23
-121	5,067029E+22	5,067002E+22	2,001289E+22	2,001185E+22	1,013403E+23	4,002474E+22	1,413651E+23
-120	5,067028E+22	5,067158E+22	2,001246E+22	2,001232E+22	1,013419E+23	4,002478E+22	1,413666E+23
-119	5,067264E+22	5,067061E+22	2,001135E+22	2,001219E+22	1,013433E+23	4,002353E+22	1,413668E+23
-118	5,067028E+22	5,067170E+22	2,001214E+22	2,001130E+22	1,013420E+23	4,002344E+22	1,413654E+23
-117	5,067155E+22	5,067252E+22	2,001146E+22	2,001233E+22	1,013441E+23	4,002379E+22	1,413679E+23
-116	5,067255E+22	5,067064E+22	2,001160E+22	2,001185E+22	1,013432E+23	4,002345E+22	1,413666E+23
-115	5,066984E+22	5,067154E+22	2,001311E+22	2,001182E+22	1,013414E+23	4,002494E+22	1,413663E+23
-114	5,067171E+22	5,067117E+22	2,001258E+22	2,001334E+22	1,013429E+23	4,002592E+22	1,413688E+23
-113	5,067022E+22	5,066968E+22	2,001354E+22	2,001314E+22	1,013399E+23	4,002669E+22	1,413666E+23
-112	5,066814E+22	5,067024E+22	2,001443E+22	2,001424E+22	1,013384E+23	4,002867E+22	1,413670E+23
-111	5,067015E+22	5,066852E+22	2,001395E+22	2,001514E+22	1,013387E+23	4,002909E+22	1,413678E+23
-110	5,066784E+22	5,066800E+22	2,001537E+22	2,001449E+22	1,013358E+23	4,002985E+22	1,413657E+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	5,066818E+22	5,066890E+22	2,001527E+22	2,001555E+22	1,013371E+23	4,003083E+22	1,413679E+23
-108	5,066967E+22	5,066737E+22	2,001497E+22	2,001548E+22	1,013370E+23	4,003044E+22	1,413675E+23
-107	5,066648E+22	5,066846E+22	2,001612E+22	2,001490E+22	1,013349E+23	4,003101E+22	1,413660E+23
-106	5,066832E+22	5,066910E+22	2,001504E+22	2,001580E+22	1,013374E+23	4,003084E+22	1,413683E+23
-105	5,066840E+22	5,066780E+22	2,001494E+22	2,001464E+22	1,013362E+23	4,002958E+22	1,413658E+23
-104	5,066693E+22	5,066897E+22	2,001517E+22	2,001426E+22	1,013359E+23	4,002943E+22	1,413653E+23
-103	5,067023E+22	5,066865E+22	2,001365E+22	2,001448E+22	1,013389E+23	4,002813E+22	1,413670E+23
-102	5,066901E+22	5,066867E+22	2,001395E+22	2,001313E+22	1,013377E+23	4,002708E+22	1,413648E+23
-101	5,066892E+22	5,067061E+22	2,001344E+22	2,001355E+22	1,013395E+23	4,002699E+22	1,413665E+23
-100	5,067128E+22	5,066970E+22	2,001241E+22	2,001346E+22	1,013410E+23	4,002587E+22	1,413668E+23
-99	5,066872E+22	5,067008E+22	2,001354E+22	2,001252E+22	1,013388E+23	4,002606E+22	1,413649E+23
-98	5,067035E+22	5,067089E+22	2,001308E+22	2,001346E+22	1,013412E+23	4,002655E+22	1,413678E+23
-97	5,067096E+22	5,066920E+22	2,001326E+22	2,001315E+22	1,013402E+23	4,002640E+22	1,413666E+23
-96	5,066810E+22	5,066975E+22	2,001455E+22	2,001348E+22	1,013378E+23	4,002803E+22	1,413659E+23
-95	5,066981E+22	5,066944E+22	2,001394E+22	2,001499E+22	1,013393E+23	4,002893E+22	1,413682E+23
-94	5,066813E+22	5,066786E+22	2,001501E+22	2,001481E+22	1,013360E+23	4,002982E+22	1,413658E+23
-93	5,066655E+22	5,066852E+22	2,001583E+22	2,001563E+22	1,013351E+23	4,003146E+22	1,413665E+23
-92	5,066893E+22	5,066700E+22	2,001534E+22	2,001649E+22	1,013359E+23	4,003183E+22	1,413678E+23
-91	5,066637E+22	5,066624E+22	2,001691E+22	2,001588E+22	1,013326E+23	4,003279E+22	1,413654E+23
-90	5,066665E+22	5,066758E+22	2,001680E+22	2,001694E+22	1,013342E+23	4,003374E+22	1,413680E+23
-89	5,066763E+22	5,066634E+22	2,001639E+22	2,001690E+22	1,013340E+23	4,003330E+22	1,413673E+23
-88	5,066477E+22	5,066668E+22	2,001731E+22	2,001633E+22	1,013315E+23	4,003364E+22	1,413651E+23
-87	5,066696E+22	5,066720E+22	2,001619E+22	2,001691E+22	1,013342E+23	4,003310E+22	1,413673E+23
-86	5,066715E+22	5,066607E+22	2,001613E+22	2,001572E+22	1,013332E+23	4,003186E+22	1,413651E+23
-85	5,066594E+22	5,066760E+22	2,001620E+22	2,001525E+22	1,013335E+23	4,003145E+22	1,413650E+23
-84	5,066904E+22	5,066782E+22	2,001461E+22	2,001568E+22	1,013369E+23	4,003029E+22	1,413671E+23
-83	5,066740E+22	5,066748E+22	2,001509E+22	2,001442E+22	1,013349E+23	4,002951E+22	1,413644E+23
-82	5,066750E+22	5,066937E+22	2,001477E+22	2,001470E+22	1,013369E+23	4,002946E+22	1,413663E+23
-81	5,066976E+22	5,066856E+22	2,001387E+22	2,001457E+22	1,013383E+23	4,002844E+22	1,413668E+23
-80	5,066755E+22	5,066815E+22	2,001491E+22	2,001381E+22	1,013357E+23	4,002872E+22	1,413644E+23
-79	5,066893E+22	5,066908E+22	2,001452E+22	2,001480E+22	1,013380E+23	4,002932E+22	1,413673E+23
-78	5,066900E+22	5,066771E+22	2,001471E+22	2,001481E+22	1,013367E+23	4,002953E+22	1,413662E+23
-77	5,066614E+22	5,066820E+22	2,001587E+22	2,001513E+22	1,013343E+23	4,003100E+22	1,413653E+23
-76	5,066803E+22	5,066787E+22	2,001528E+22	2,001663E+22	1,013359E+23	4,003191E+22	1,413678E+23
-75	5,066649E+22	5,066570E+22	2,001656E+22	2,001629E+22	1,013322E+23	4,003285E+22	1,413650E+23
-74	5,066536E+22	5,066665E+22	2,001745E+22	2,001692E+22	1,013320E+23	4,003437E+22	1,413664E+23
-73	5,066741E+22	5,066572E+22	2,001695E+22	2,001782E+22	1,013331E+23	4,003477E+22	1,413679E+23
-72	5,066476E+22	5,066468E+22	2,001826E+22	2,001742E+22	1,013294E+23	4,003569E+22	1,413651E+23
-71	5,066485E+22	5,066615E+22	2,001812E+22	2,001831E+22	1,013310E+23	4,003643E+22	1,413674E+23
-70	5,066573E+22	5,066489E+22	2,001774E+22	2,001824E+22	1,013306E+23	4,003598E+22	1,413666E+23
-69	5,066338E+22	5,066511E+22	2,001850E+22	2,001743E+22	1,013285E+23	4,003592E+22	1,413644E+23
-68	5,066589E+22	5,066581E+22	2,001730E+22	2,001800E+22	1,013317E+23	4,003530E+22	1,413670E+23
-67	5,066585E+22	5,066444E+22	2,001736E+22	2,001693E+22	1,013303E+23	4,003429E+22	1,413646E+23
-66	5,066469E+22	5,066647E+22	2,001736E+22	2,001650E+22	1,013312E+23	4,003386E+22	1,413650E+23
-65	5,066742E+22	5,066690E+22	2,001578E+22	2,001692E+22	1,013343E+23	4,003270E+22	1,413670E+23
-64	5,066608E+22	5,066582E+22	2,001618E+22	2,001570E+22	1,013319E+23	4,003187E+22	1,413638E+23
-63	5,066639E+22	5,066769E+22	2,001597E+22	2,001569E+22	1,013341E+23	4,003166E+22	1,413657E+23
-62	5,066839E+22	5,066700E+22	2,001523E+22	2,001571E+22	1,013354E+23	4,003094E+22	1,413663E+23
-61	5,066614E+22	5,066677E+22	2,001621E+22	2,001509E+22	1,013329E+23	4,003130E+22	1,413642E+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	5,066714E+22	5,066795E+22	2,001579E+22	2,001633E+22	1,013351E+23	4,003212E+22	1,413672E+23
-59	5,066686E+22	5,066598E+22	2,001621E+22	2,001650E+22	1,013328E+23	4,003271E+22	1,413656E+23
-58	5,066444E+22	5,066641E+22	2,001743E+22	2,001664E+22	1,013309E+23	4,003407E+22	1,413649E+23
-57	5,066644E+22	5,066617E+22	2,001692E+22	2,001803E+22	1,013326E+23	4,003494E+22	1,413676E+23
-56	5,066536E+22	5,066354E+22	2,001804E+22	2,001780E+22	1,013289E+23	4,003583E+22	1,413647E+23
-55	5,066408E+22	5,066489E+22	2,001893E+22	2,001830E+22	1,013290E+23	4,003723E+22	1,413662E+23
-54	5,066552E+22	5,066449E+22	2,001842E+22	2,001940E+22	1,013300E+23	4,003782E+22	1,413678E+23
-53	5,066291E+22	5,066338E+22	2,001956E+22	2,001889E+22	1,013263E+23	4,003845E+22	1,413647E+23
-52	5,066310E+22	5,066479E+22	2,001939E+22	2,001963E+22	1,013279E+23	4,003902E+22	1,413669E+23
-51	5,066413E+22	5,066296E+22	2,001916E+22	2,001946E+22	1,013271E+23	4,003863E+22	1,413657E+23
-50	5,066223E+22	5,066339E+22	2,001984E+22	2,001849E+22	1,013256E+23	4,003833E+22	1,413639E+23
-49	5,066448E+22	5,066466E+22	2,001858E+22	2,001915E+22	1,013291E+23	4,003773E+22	1,413669E+23
-48	5,066454E+22	5,066298E+22	2,001833E+22	2,001830E+22	1,013275E+23	4,003662E+22	1,413641E+23
-47	5,066331E+22	5,066513E+22	2,001837E+22	2,001765E+22	1,013284E+23	4,003601E+22	1,413645E+23
-46	5,066592E+22	5,066573E+22	2,001694E+22	2,001804E+22	1,013317E+23	4,003498E+22	1,413666E+23
-45	5,066498E+22	5,066445E+22	2,001729E+22	2,001670E+22	1,013294E+23	4,003399E+22	1,413634E+23
-44	5,066523E+22	5,066643E+22	2,001720E+22	2,001678E+22	1,013317E+23	4,003397E+22	1,413656E+23
-43	5,066673E+22	5,066542E+22	2,001669E+22	2,001711E+22	1,013322E+23	4,003380E+22	1,413660E+23
-42	5,066435E+22	5,066537E+22	2,001764E+22	2,001664E+22	1,013297E+23	4,003428E+22	1,413640E+23
-41	5,066511E+22	5,066653E+22	2,001729E+22	2,001792E+22	1,013316E+23	4,003522E+22	1,413669E+23
-40	5,066533E+22	5,066372E+22	2,001759E+22	2,001813E+22	1,013290E+23	4,003572E+22	1,413648E+23
-39	5,066329E+22	5,066426E+22	2,001887E+22	2,001796E+22	1,013276E+23	4,003682E+22	1,413644E+23
-38	5,066509E+22	5,066449E+22	2,001845E+22	2,001941E+22	1,013296E+23	4,003786E+22	1,413675E+23
-37	5,066393E+22	5,066222E+22	2,001943E+22	2,001922E+22	1,013262E+23	4,003865E+22	1,413648E+23
-36	5,066227E+22	5,066394E+22	2,002028E+22	2,001980E+22	1,013262E+23	4,004008E+22	1,413663E+23
-35	5,066329E+22	5,066296E+22	2,002002E+22	2,002094E+22	1,013263E+23	4,004096E+22	1,413672E+23
-34	5,066110E+22	5,066182E+22	2,002111E+22	2,002024E+22	1,013229E+23	4,004135E+22	1,413643E+23
-33	5,066145E+22	5,066315E+22	2,002090E+22	2,002083E+22	1,013246E+23	4,004173E+22	1,413663E+23
-32	5,066291E+22	5,066081E+22	2,002040E+22	2,002082E+22	1,013237E+23	4,004122E+22	1,413649E+23
-31	5,066112E+22	5,066172E+22	2,002090E+22	2,001973E+22	1,013228E+23	4,004063E+22	1,413635E+23
-30	5,066295E+22	5,066350E+22	2,001960E+22	2,002050E+22	1,013264E+23	4,004010E+22	1,413665E+23
-29	5,066325E+22	5,066185E+22	2,001921E+22	2,001947E+22	1,013251E+23	4,003868E+22	1,413638E+23
-28	5,066219E+22	5,066401E+22	2,001934E+22	2,001859E+22	1,013262E+23	4,003794E+22	1,413641E+23
-27	5,066462E+22	5,066418E+22	2,001827E+22	2,001899E+22	1,013288E+23	4,003727E+22	1,413661E+23
-26	5,066376E+22	5,066315E+22	2,001869E+22	2,001773E+22	1,013269E+23	4,003641E+22	1,413633E+23
-25	5,066344E+22	5,066534E+22	2,001867E+22	2,001807E+22	1,013288E+23	4,003674E+22	1,413655E+23
-24	5,066490E+22	5,066371E+22	2,001799E+22	2,001878E+22	1,013286E+23	4,003677E+22	1,413654E+23
-23	5,066270E+22	5,066351E+22	2,001896E+22	2,001815E+22	1,013262E+23	4,003711E+22	1,413633E+23
-22	5,066349E+22	5,066476E+22	2,001874E+22	2,001943E+22	1,013282E+23	4,003816E+22	1,413664E+23
-21	5,066420E+22	5,066193E+22	2,001892E+22	2,001950E+22	1,013261E+23	4,003842E+22	1,413646E+23
-20	5,066212E+22	5,066282E+22	2,002026E+22	2,001931E+22	1,013249E+23	4,003958E+22	1,413645E+23
-19	5,066330E+22	5,066305E+22	2,002012E+22	2,002100E+22	1,013263E+23	4,004111E+22	1,413675E+23
-18	5,066190E+22	5,066101E+22	2,002104E+22	2,002083E+22	1,013229E+23	4,004187E+22	1,413648E+23
-17	5,065998E+22	5,066258E+22	2,002196E+22	2,002135E+22	1,013226E+23	4,004331E+22	1,413659E+23
-16	5,066154E+22	5,066068E+22	2,002146E+22	2,002247E+22	1,013222E+23	4,004393E+22	1,413661E+23
-15	5,065981E+22	5,065953E+22	2,002246E+22	2,002145E+22	1,013193E+23	4,004391E+22	1,413633E+23
-14	5,066011E+22	5,066142E+22	2,002218E+22	2,002210E+22	1,013215E+23	4,004427E+22	1,413658E+23
-13	5,066172E+22	5,065951E+22	2,002136E+22	2,002206E+22	1,013212E+23	4,004342E+22	1,413646E+23
-12	5,065982E+22	5,066087E+22	2,002178E+22	2,002090E+22	1,013207E+23	4,004268E+22	1,413634E+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							
-11	5,066138E+22	5,066232E+22	2,002080E+22	2,002162E+22	1,013237E+23	4,004242E+22	1,413661E+23
-10	5,066192E+22	5,066080E+22	2,002047E+22	2,002039E+22	1,013227E+23	4,004086E+22	1,413636E+23
-9	5,066084E+22	5,066287E+22	2,002076E+22	2,001953E+22	1,013237E+23	4,004029E+22	1,413640E+23
-8	5,066329E+22	5,066237E+22	2,001959E+22	2,002025E+22	1,013257E+23	4,003984E+22	1,413655E+23
-7	5,066230E+22	5,066155E+22	2,001995E+22	2,001913E+22	1,013238E+23	4,003908E+22	1,413629E+23
-6	5,066154E+22	5,066390E+22	2,001994E+22	2,001970E+22	1,013254E+23	4,003964E+22	1,413651E+23
-5	5,066333E+22	5,066204E+22	2,001913E+22	2,002032E+22	1,013254E+23	4,003946E+22	1,413648E+23
-4	5,066153E+22	5,066188E+22	2,002014E+22	2,001946E+22	1,013234E+23	4,003960E+22	1,413630E+23
-3	5,066216E+22	5,066287E+22	2,002028E+22	2,002073E+22	1,013250E+23	4,004101E+22	1,413660E+23
-2	5,066282E+22	5,066065E+22	2,002050E+22	2,002081E+22	1,013235E+23	4,004132E+22	1,413648E+23
-1	5,066022E+22	5,066175E+22	2,002194E+22	2,002080E+22	1,013220E+23	4,004274E+22	1,413647E+23
1	5,066111E+22	5,066129E+22	2,002170E+22	2,002272E+22	1,013224E+23	4,004442E+22	1,413668E+23
2	5,065996E+22	5,065912E+22	2,002260E+22	2,002239E+22	1,013191E+23	4,004499E+22	1,413641E+23
3	5,065811E+22	5,066062E+22	2,002349E+22	2,002283E+22	1,013187E+23	4,004632E+22	1,413650E+23
4	5,066026E+22	5,065866E+22	2,002273E+22	2,002380E+22	1,013189E+23	4,004653E+22	1,413654E+23
5	5,065877E+22	5,065795E+22	2,002355E+22	2,002268E+22	1,013167E+23	4,004623E+22	1,413630E+23
6	5,065860E+22	5,066001E+22	2,002343E+22	2,002346E+22	1,013186E+23	4,004689E+22	1,413655E+23
7	5,066014E+22	5,065867E+22	2,002252E+22	2,002330E+22	1,013188E+23	4,004582E+22	1,413646E+23
8	5,065822E+22	5,065992E+22	2,002307E+22	2,002200E+22	1,013181E+23	4,004507E+22	1,413632E+23
9	5,066004E+22	5,066059E+22	2,002206E+22	2,002271E+22	1,013206E+23	4,004476E+22	1,413654E+23
10	5,066084E+22	5,065912E+22	2,002173E+22	2,002136E+22	1,013200E+23	4,004309E+22	1,413630E+23
11	5,065935E+22	5,066147E+22	2,002206E+22	2,002076E+22	1,013208E+23	4,004282E+22	1,413636E+23
12	5,066174E+22	5,066107E+22	2,002063E+22	2,002166E+22	1,013228E+23	4,004229E+22	1,413651E+23
13	5,066073E+22	5,066032E+22	2,002096E+22	2,002055E+22	1,013210E+23	4,004151E+22	1,413626E+23
14	5,065989E+22	5,066226E+22	2,002131E+22	2,002114E+22	1,013221E+23	4,004245E+22	1,413646E+23
15	5,066199E+22	5,066057E+22	2,002053E+22	2,002156E+22	1,013226E+23	4,004208E+22	1,413646E+23
16	5,066021E+22	5,066044E+22	2,002172E+22	2,002071E+22	1,013206E+23	4,004242E+22	1,413631E+23
17	5,066072E+22	5,066099E+22	2,002183E+22	2,002223E+22	1,013217E+23	4,004406E+22	1,413658E+23
18	5,066107E+22	5,065904E+22	2,002205E+22	2,002241E+22	1,013201E+23	4,004446E+22	1,413646E+23
19	5,065799E+22	5,066023E+22	2,002354E+22	2,002255E+22	1,013182E+23	4,004609E+22	1,413643E+23
20	5,065923E+22	5,065939E+22	2,002310E+22	2,002431E+22	1,013186E+23	4,004741E+22	1,413660E+23
21	5,065852E+22	5,065720E+22	2,002393E+22	2,002372E+22	1,013157E+23	4,004765E+22	1,413634E+23
22	5,065665E+22	5,065856E+22	2,002501E+22	2,002416E+22	1,013152E+23	4,004917E+22	1,413644E+23
23	5,065880E+22	5,065736E+22	2,002409E+22	2,002505E+22	1,013162E+23	4,004914E+22	1,413653E+23
24	5,065715E+22	5,065704E+22	2,002488E+22	2,002401E+22	1,013142E+23	4,004889E+22	1,413631E+23
25	5,065693E+22	5,065853E+22	2,002465E+22	2,002485E+22	1,013155E+23	4,004951E+22	1,413650E+23
26	5,065873E+22	5,065727E+22	2,002377E+22	2,002444E+22	1,013160E+23	4,004821E+22	1,413642E+23
27	5,065681E+22	5,065852E+22	2,002436E+22	2,002310E+22	1,013153E+23	4,004746E+22	1,413628E+23
28	5,065890E+22	5,065902E+22	2,002316E+22	2,002377E+22	1,013179E+23	4,004693E+22	1,413648E+23
29	5,065973E+22	5,065783E+22	2,002275E+22	2,002252E+22	1,013176E+23	4,004527E+22	1,413628E+23
30	5,065766E+22	5,066002E+22	2,002327E+22	2,002220E+22	1,013177E+23	4,004548E+22	1,413632E+23
31	5,065998E+22	5,065996E+22	2,002182E+22	2,002304E+22	1,013199E+23	4,004486E+22	1,413648E+23
32	5,065928E+22	5,065892E+22	2,002226E+22	2,002183E+22	1,013182E+23	4,004409E+22	1,413623E+23
33	5,065865E+22	5,066010E+22	2,002266E+22	2,002241E+22	1,013188E+23	4,004506E+22	1,413638E+23
34	5,066092E+22	5,065879E+22	2,002197E+22	2,002274E+22	1,013197E+23	4,004471E+22	1,413644E+23
35	5,065863E+22	5,065903E+22	2,002326E+22	2,002214E+22	1,013177E+23	4,004540E+22	1,413631E+23
36	5,065886E+22	5,065961E+22	2,002322E+22	2,002381E+22	1,013185E+23	4,004703E+22	1,413655E+23
37	5,065918E+22	5,065766E+22	2,002344E+22	2,002397E+22	1,013168E+23	4,004741E+22	1,413643E+23
38	5,065593E+22	5,065832E+22	2,002522E+22	2,002415E+22	1,013143E+23	4,004938E+22	1,413636E+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	5,065744E+22	5,065772E+22	2,002469E+22	2,002569E+22	1,013152E+23	4,005038E+22	1,413655E+23
40	5,065705E+22	5,065550E+22	2,002552E+22	2,002511E+22	1,013126E+23	4,005064E+22	1,413632E+23
41	5,065516E+22	5,065655E+22	2,002643E+22	2,002573E+22	1,013117E+23	4,005216E+22	1,413639E+23
42	5,065726E+22	5,065589E+22	2,002540E+22	2,002655E+22	1,013131E+23	4,005195E+22	1,413651E+23
43	5,065539E+22	5,065578E+22	2,002617E+22	2,002547E+22	1,013112E+23	4,005164E+22	1,413628E+23
44	5,065561E+22	5,065700E+22	2,002575E+22	2,002603E+22	1,013126E+23	4,005178E+22	1,413644E+23
45	5,065772E+22	5,065582E+22	2,002482E+22	2,002534E+22	1,013135E+23	4,005016E+22	1,413637E+23
46	5,065556E+22	5,065697E+22	2,002566E+22	2,002414E+22	1,013125E+23	4,004980E+22	1,413623E+23
47	5,065736E+22	5,065803E+22	2,002434E+22	2,002482E+22	1,013154E+23	4,004916E+22	1,413645E+23
48	5,065800E+22	5,065687E+22	2,002396E+22	2,002381E+22	1,013149E+23	4,004777E+22	1,413626E+23
49	5,065601E+22	5,065829E+22	2,002445E+22	2,002362E+22	1,013143E+23	4,004807E+22	1,413624E+23
50	5,065869E+22	5,065822E+22	2,002308E+22	2,002426E+22	1,013169E+23	4,004735E+22	1,413642E+23
51	5,065805E+22	5,065731E+22	2,002362E+22	2,002305E+22	1,013154E+23	4,004668E+22	1,413620E+23
52	5,065763E+22	5,065840E+22	2,002390E+22	2,002364E+22	1,013160E+23	4,004753E+22	1,413636E+23
53	5,065963E+22	5,065752E+22	2,002324E+22	2,002408E+22	1,013171E+23	4,004732E+22	1,413645E+23
54	5,065661E+22	5,065765E+22	2,002483E+22	2,002383E+22	1,013143E+23	4,004866E+22	1,413629E+23
55	5,065658E+22	5,065836E+22	2,002481E+22	2,002538E+22	1,013149E+23	4,005018E+22	1,413651E+23
56	5,065727E+22	5,065599E+22	2,002513E+22	2,002553E+22	1,013133E+23	4,005066E+22	1,413639E+23
57	5,065433E+22	5,065582E+22	2,002683E+22	2,002570E+22	1,013101E+23	4,005253E+22	1,413627E+23
58	5,065610E+22	5,065561E+22	2,002624E+22	2,002712E+22	1,013117E+23	4,005336E+22	1,413651E+23
59	5,065546E+22	5,065396E+22	2,002695E+22	2,002666E+22	1,013094E+23	4,005362E+22	1,413630E+23
60	5,065361E+22	5,065512E+22	2,002757E+22	2,002723E+22	1,013087E+23	4,005480E+22	1,413635E+23
61	5,065587E+22	5,065473E+22	2,002652E+22	2,002781E+22	1,013106E+23	4,005433E+22	1,413649E+23
62	5,065388E+22	5,065430E+22	2,002753E+22	2,002666E+22	1,013082E+23	4,005418E+22	1,413624E+23
63	5,065414E+22	5,065584E+22	2,002707E+22	2,002691E+22	1,013100E+23	4,005398E+22	1,413640E+23
64	5,065646E+22	5,065459E+22	2,002614E+22	2,002636E+22	1,013111E+23	4,005251E+22	1,413636E+23
65	5,065400E+22	5,065518E+22	2,002686E+22	2,002548E+22	1,013092E+23	4,005234E+22	1,413615E+23
66	5,065571E+22	5,065660E+22	2,002549E+22	2,002619E+22	1,013123E+23	4,005168E+22	1,413640E+23
67	5,065636E+22	5,065542E+22	2,002513E+22	2,002520E+22	1,013118E+23	4,005034E+22	1,413621E+23
68	5,065492E+22	5,065650E+22	2,002546E+22	2,002483E+22	1,013114E+23	4,005029E+22	1,413617E+23
69	5,065789E+22	5,065668E+22	2,002417E+22	2,002525E+22	1,013146E+23	4,004942E+22	1,413640E+23
70	5,065681E+22	5,065586E+22	2,002502E+22	2,002428E+22	1,013127E+23	4,004930E+22	1,413620E+23
71	5,065584E+22	5,065756E+22	2,002532E+22	2,002490E+22	1,013134E+23	4,005022E+22	1,413636E+23
72	5,065761E+22	5,065654E+22	2,002480E+22	2,002563E+22	1,013141E+23	4,005044E+22	1,413646E+23
73	5,065448E+22	5,065567E+22	2,002647E+22	2,002557E+22	1,013101E+23	4,005204E+22	1,413622E+23
74	5,065477E+22	5,065629E+22	2,002648E+22	2,002693E+22	1,013111E+23	4,005341E+22	1,413645E+23
75	5,065563E+22	5,065392E+22	2,002679E+22	2,002710E+22	1,013096E+23	4,005389E+22	1,413634E+23
76	5,065315E+22	5,065366E+22	2,002816E+22	2,002725E+22	1,013068E+23	4,005541E+22	1,413622E+23
77	5,065482E+22	5,065404E+22	2,002746E+22	2,002858E+22	1,013089E+23	4,005605E+22	1,413649E+23
78	5,065371E+22	5,065264E+22	2,002832E+22	2,002826E+22	1,013064E+23	4,005658E+22	1,413629E+23
79	5,065184E+22	5,065409E+22	2,002888E+22	2,002843E+22	1,013059E+23	4,005731E+22	1,413632E+23
80	5,065438E+22	5,065346E+22	2,002795E+22	2,002888E+22	1,013078E+23	4,005683E+22	1,413647E+23
81	5,065247E+22	5,065240E+22	2,002891E+22	2,002777E+22	1,013049E+23	4,005668E+22	1,413615E+23
82	5,065272E+22	5,065423E+22	2,002840E+22	2,002800E+22	1,013070E+23	4,005639E+22	1,413633E+23
83	5,065469E+22	5,065334E+22	2,002739E+22	2,002769E+22	1,013080E+23	4,005508E+22	1,413631E+23
84	5,065252E+22	5,065367E+22	2,002777E+22	2,002686E+22	1,013062E+23	4,005463E+22	1,413608E+23
85	5,065450E+22	5,065519E+22	2,002642E+22	2,002736E+22	1,013097E+23	4,005378E+22	1,413635E+23
86	5,065515E+22	5,065396E+22	2,002631E+22	2,002639E+22	1,013091E+23	4,005270E+22	1,413618E+23
87	5,065378E+22	5,065537E+22	2,002666E+22	2,002576E+22	1,013092E+23	4,005242E+22	1,413616E+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	5,065674E+22	5,065562E+22	2,002556E+22	2,002642E+22	1,013124E+23	4,005198E+22	1,413643E+23
89	5,065508E+22	5,065429E+22	2,002647E+22	2,002584E+22	1,013094E+23	4,005231E+22	1,413617E+23
90	5,065381E+22	5,065610E+22	2,002687E+22	2,002651E+22	1,013099E+23	4,005338E+22	1,413633E+23
91	5,065554E+22	5,065480E+22	2,002644E+22	2,002730E+22	1,013103E+23	4,005374E+22	1,413641E+23
92	5,065302E+22	5,065330E+22	2,002787E+22	2,002712E+22	1,013063E+23	4,005499E+22	1,413613E+23
93	5,065367E+22	5,065419E+22	2,002786E+22	2,002826E+22	1,013079E+23	4,005612E+22	1,413640E+23
94	5,065420E+22	5,065210E+22	2,002828E+22	2,002861E+22	1,013063E+23	4,005689E+22	1,413632E+23
95	5,065134E+22	5,065261E+22	2,002952E+22	2,002864E+22	1,013039E+23	4,005816E+22	1,413621E+23
96	5,065305E+22	5,065307E+22	2,002892E+22	2,003005E+22	1,013061E+23	4,005897E+22	1,413651E+23
97	5,065181E+22	5,065093E+22	2,002984E+22	2,002971E+22	1,013027E+23	4,005955E+22	1,413623E+23
98	5,065020E+22	5,065248E+22	2,003043E+22	2,002961E+22	1,013027E+23	4,006004E+22	1,413627E+23
99	5,065282E+22	5,065183E+22	2,002945E+22	2,003008E+22	1,013047E+23	4,005953E+22	1,413642E+23
100	5,065118E+22	5,065054E+22	2,003005E+22	2,002908E+22	1,013017E+23	4,005912E+22	1,413608E+23
101	5,065132E+22	5,065282E+22	2,002937E+22	2,002929E+22	1,013041E+23	4,005866E+22	1,413628E+23
102	5,065298E+22	5,065201E+22	2,002845E+22	2,002916E+22	1,013050E+23	4,005761E+22	1,413626E+23
103	5,065109E+22	5,065255E+22	2,002876E+22	2,002795E+22	1,013036E+23	4,005671E+22	1,413604E+23
104	5,065358E+22	5,065392E+22	2,002760E+22	2,002834E+22	1,013075E+23	4,005594E+22	1,413634E+23
105	5,065410E+22	5,065226E+22	2,002758E+22	2,002747E+22	1,013064E+23	4,005505E+22	1,413614E+23
106	5,065251E+22	5,065409E+22	2,002805E+22	2,002688E+22	1,013066E+23	4,005492E+22	1,413615E+23
107	5,065482E+22	5,065454E+22	2,002705E+22	2,002783E+22	1,013094E+23	4,005488E+22	1,413642E+23
108	5,065330E+22	5,065269E+22	2,002778E+22	2,002746E+22	1,013060E+23	4,005524E+22	1,413612E+23
109	5,065216E+22	5,065428E+22	2,002824E+22	2,002795E+22	1,013064E+23	4,005620E+22	1,413626E+23
110	5,065384E+22	5,065288E+22	2,002800E+22	2,002885E+22	1,013067E+23	4,005685E+22	1,413636E+23
111	5,065160E+22	5,065161E+22	2,002929E+22	2,002841E+22	1,013032E+23	4,005771E+22	1,413609E+23
112	5,065230E+22	5,065264E+22	2,002937E+22	2,002974E+22	1,013049E+23	4,005911E+22	1,413640E+23
113	5,065231E+22	5,065046E+22	2,002977E+22	2,003033E+22	1,013028E+23	4,006010E+22	1,413629E+23
114	5,064941E+22	5,065119E+22	2,003106E+22	2,003021E+22	1,013006E+23	4,006127E+22	1,413619E+23
115	5,065111E+22	5,065153E+22	2,003057E+22	2,003150E+22	1,013026E+23	4,006207E+22	1,413647E+23
116	5,065045E+22	5,064891E+22	2,003119E+22	2,003102E+22	1,012994E+23	4,006221E+22	1,413616E+23
117	5,064899E+22	5,065066E+22	2,003168E+22	2,003070E+22	1,012997E+23	4,006239E+22	1,413620E+23
118	5,065118E+22	5,065036E+22	2,003072E+22	2,003141E+22	1,013015E+23	4,006213E+22	1,413637E+23
119	5,064944E+22	5,064953E+22	2,003107E+22	2,003029E+22	1,012990E+23	4,006136E+22	1,413603E+23
120	5,064989E+22	5,065173E+22	2,003048E+22	2,003056E+22	1,013016E+23	4,006104E+22	1,413627E+23
121	5,065156E+22	5,065040E+22	2,002963E+22	2,003040E+22	1,013020E+23	4,006003E+22	1,413620E+23
122	5,065003E+22	5,065113E+22	2,003001E+22	2,002893E+22	1,013012E+23	4,005895E+22	1,413601E+23
123	5,065247E+22	5,065259E+22	2,002899E+22	2,002937E+22	1,013051E+23	4,005836E+22	1,413634E+23
124	5,065295E+22	5,065072E+22	2,002875E+22	2,002874E+22	1,013037E+23	4,005749E+22	1,413612E+23
125	5,065097E+22	5,065285E+22	2,002924E+22	2,002824E+22	1,013038E+23	4,005748E+22	1,413613E+23
126	5,065276E+22	5,065313E+22	2,002844E+22	2,002943E+22	1,013059E+23	4,005787E+22	1,413638E+23
127	5,065143E+22	5,065115E+22	2,002915E+22	2,002881E+22	1,013026E+23	4,005796E+22	1,413605E+23
128	5,065084E+22	5,065248E+22	2,002975E+22	2,002932E+22	1,013033E+23	4,005907E+22	1,413624E+23
129	5,065229E+22	5,065072E+22	2,002955E+22	2,003036E+22	1,013030E+23	4,005991E+22	1,413629E+23
130	5,065000E+22	5,065002E+22	2,003083E+22	2,002992E+22	1,013000E+23	4,006075E+22	1,413608E+23
131	5,065033E+22	5,065132E+22	2,003097E+22	2,003137E+22	1,013017E+23	4,006235E+22	1,413640E+23
132	5,065054E+22	5,064877E+22	2,003117E+22	2,003199E+22	1,012993E+23	4,006316E+22	1,413625E+23
133	5,064786E+22	5,064951E+22	2,003250E+22	2,003156E+22	1,012974E+23	4,006406E+22	1,413614E+23
134	5,064941E+22	5,064983E+22	2,003212E+22	2,003285E+22	1,012992E+23	4,006498E+22	1,413642E+23
135	5,064896E+22	5,064744E+22	2,003254E+22	2,003217E+22	1,012964E+23	4,006471E+22	1,413611E+23
136	5,064761E+22	5,064927E+22	2,003298E+22	2,003204E+22	1,012969E+23	4,006501E+22	1,413619E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
137	5,064930E+22	5,064881E+22	2,003193E+22	2,003294E+22	1,012981E+23	4,006487E+22	1,413630E+23
138	5,064789E+22	5,064816E+22	2,003223E+22	2,003160E+22	1,012960E+23	4,006383E+22	1,413599E+23
139	5,064857E+22	5,065026E+22	2,003177E+22	2,003168E+22	1,012988E+23	4,006345E+22	1,413623E+23
140	5,065078E+22	5,064868E+22	2,003069E+22	2,003142E+22	1,012995E+23	4,006211E+22	1,413616E+23
141	5,064924E+22	5,064970E+22	2,003110E+22	2,002982E+22	1,012989E+23	4,006092E+22	1,413599E+23
142	5,065085E+22	5,065155E+22	2,003024E+22	2,003059E+22	1,013024E+23	4,006083E+22	1,413632E+23
143	5,065109E+22	5,064990E+22	2,002990E+22	2,002998E+22	1,013010E+23	4,005988E+22	1,413609E+23
144	5,064921E+22	5,065155E+22	2,003059E+22	2,002967E+22	1,013008E+23	4,006026E+22	1,413610E+23
145	5,065081E+22	5,065124E+22	2,002994E+22	2,003094E+22	1,013020E+23	4,006088E+22	1,413629E+23
146	5,064999E+22	5,064924E+22	2,003066E+22	2,003019E+22	1,012992E+23	4,006085E+22	1,413601E+23
147	5,064942E+22	5,065059E+22	2,003138E+22	2,003078E+22	1,013000E+23	4,006216E+22	1,413622E+23
148	5,065091E+22	5,064882E+22	2,003089E+22	2,003204E+22	1,012997E+23	4,006293E+22	1,413627E+23
149	5,064839E+22	5,064849E+22	2,003217E+22	2,003153E+22	1,012969E+23	4,006370E+22	1,413606E+23
150	5,064832E+22	5,064984E+22	2,003251E+22	2,003303E+22	1,012982E+23	4,006554E+22	1,413637E+23
151	5,064883E+22	5,064728E+22	2,003264E+22	2,003327E+22	1,012961E+23	4,006591E+22	1,413620E+23
152	5,064657E+22	5,064784E+22	2,003405E+22	2,003282E+22	1,012944E+23	4,006686E+22	1,413613E+23
153	5,064765E+22	5,064796E+22	2,003366E+22	2,003422E+22	1,012956E+23	4,006788E+22	1,413635E+23
154	5,064718E+22	5,064603E+22	2,003395E+22	2,003355E+22	1,012932E+23	4,006750E+22	1,413607E+23
155	5,064576E+22	5,064791E+22	2,003436E+22	2,003349E+22	1,012937E+23	4,006784E+22	1,413615E+23
156	5,064786E+22	5,064707E+22	2,003302E+22	2,003434E+22	1,012949E+23	4,006736E+22	1,413623E+23
157	5,064689E+22	5,064662E+22	2,003330E+22	2,003265E+22	1,012935E+23	4,006594E+22	1,413595E+23
158	5,064747E+22	5,064887E+22	2,003293E+22	2,003271E+22	1,012963E+23	4,006564E+22	1,413620E+23
159	5,064963E+22	5,064762E+22	2,003177E+22	2,003231E+22	1,012972E+23	4,006408E+22	1,413613E+23
160	5,064796E+22	5,064875E+22	2,003226E+22	2,003104E+22	1,012967E+23	4,006330E+22	1,413600E+23
161	5,064870E+22	5,065023E+22	2,003154E+22	2,003207E+22	1,012989E+23	4,006361E+22	1,413625E+23
162	5,064920E+22	5,064843E+22	2,003129E+22	2,003140E+22	1,012976E+23	4,006269E+22	1,413603E+23
163	5,064766E+22	5,064965E+22	2,003214E+22	2,003103E+22	1,012973E+23	4,006317E+22	1,413605E+23
164	5,064970E+22	5,064895E+22	2,003125E+22	2,003234E+22	1,012986E+23	4,006359E+22	1,413622E+23
165	5,064896E+22	5,064738E+22	2,003195E+22	2,003151E+22	1,012963E+23	4,006346E+22	1,413598E+23
166	5,064773E+22	5,064920E+22	2,003278E+22	2,003235E+22	1,012969E+23	4,006513E+22	1,413621E+23
167	5,064906E+22	5,064776E+22	2,003225E+22	2,003350E+22	1,012968E+23	4,006575E+22	1,413626E+23
168	5,064676E+22	5,064717E+22	2,003373E+22	2,003305E+22	1,012939E+23	4,006678E+22	1,413607E+23
169	5,064627E+22	5,064808E+22	2,003425E+22	2,003451E+22	1,012944E+23	4,006876E+22	1,413631E+23
170	5,064721E+22	5,064555E+22	2,003436E+22	2,003462E+22	1,012928E+23	4,006898E+22	1,413617E+23
171	5,064490E+22	5,064599E+22	2,003575E+22	2,003426E+22	1,012909E+23	4,007002E+22	1,413609E+23
172	5,064598E+22	5,064608E+22	2,003493E+22	2,003586E+22	1,012921E+23	4,007079E+22	1,413628E+23
173	5,064562E+22	5,064438E+22	2,003504E+22	2,003503E+22	1,012900E+23	4,007007E+22	1,413601E+23
174	5,064412E+22	5,064638E+22	2,003551E+22	2,003489E+22	1,012905E+23	4,007040E+22	1,413609E+23
175	5,064676E+22	5,064574E+22	2,003405E+22	2,003528E+22	1,012925E+23	4,006933E+22	1,413618E+23
176	5,064617E+22	5,064532E+22	2,003439E+22	2,003355E+22	1,012915E+23	4,006794E+22	1,413594E+23
177	5,064600E+22	5,064761E+22	2,003418E+22	2,003374E+22	1,012936E+23	4,006791E+22	1,413615E+23
178	5,064798E+22	5,064671E+22	2,003301E+22	2,003344E+22	1,012947E+23	4,006645E+22	1,413611E+23
179	5,064609E+22	5,064754E+22	2,003366E+22	2,003239E+22	1,012936E+23	4,006605E+22	1,413597E+23
180	5,064703E+22	5,064840E+22	2,003276E+22	2,003351E+22	1,012954E+23	4,006627E+22	1,413617E+23
181	5,064797E+22	5,064652E+22	2,003255E+22	2,003268E+22	1,012945E+23	4,006523E+22	1,413597E+23
182	5,064641E+22	5,064779E+22	2,003349E+22	2,003240E+22	1,012942E+23	4,006589E+22	1,413601E+23
183	5,064852E+22	5,064744E+22	2,003251E+22	2,003362E+22	1,012960E+23	4,006613E+22	1,413621E+23
184	5,064764E+22	5,064618E+22	2,003326E+22	2,003305E+22	1,012938E+23	4,006632E+22	1,413601E+23
185	5,064558E+22	5,064782E+22	2,003431E+22	2,003402E+22	1,012934E+23	4,006832E+22	1,413617E+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							
186	5,064709E+22	5,064633E+22	2,003395E+22	2,003501E+22	1,012934E+23	4,006896E+22	1,413624E+23
187	5,064505E+22	5,064535E+22	2,003561E+22	2,003452E+22	1,012904E+23	4,007012E+22	1,413605E+23
188	5,064470E+22	5,064581E+22	2,003583E+22	2,003600E+22	1,012905E+23	4,007183E+22	1,413623E+23
189	5,064565E+22	5,064363E+22	2,003580E+22	2,003609E+22	1,012893E+23	4,007189E+22	1,413612E+23
190	5,064298E+22	5,064439E+22	2,003705E+22	2,003590E+22	1,012874E+23	4,007295E+22	1,413603E+23
191	5,064421E+22	5,064467E+22	2,003604E+22	2,003722E+22	1,012889E+23	4,007327E+22	1,413621E+23
192	5,064441E+22	5,064306E+22	2,003616E+22	2,003629E+22	1,012875E+23	4,007246E+22	1,413599E+23
193	5,064270E+22	5,064487E+22	2,003677E+22	2,003598E+22	1,012876E+23	4,007275E+22	1,413603E+23
194	5,064566E+22	5,064452E+22	2,003537E+22	2,003619E+22	1,012902E+23	4,007155E+22	1,413617E+23
195	5,064492E+22	5,064412E+22	2,003579E+22	2,003463E+22	1,012890E+23	4,007041E+22	1,413595E+23
196	5,064434E+22	5,064620E+22	2,003529E+22	2,003507E+22	1,012905E+23	4,007036E+22	1,413609E+23
197	5,064632E+22	5,064528E+22	2,003412E+22	2,003478E+22	1,012916E+23	4,006890E+22	1,413605E+23
198	5,064444E+22	5,064585E+22	2,003488E+22	2,003378E+22	1,012903E+23	4,006866E+22	1,413589E+23
199	5,064587E+22	5,064669E+22	2,003392E+22	2,003461E+22	1,012926E+23	4,006852E+22	1,413611E+23
200	5,064718E+22	5,064495E+22	2,003373E+22	2,003387E+22	1,012921E+23	4,006761E+22	1,413597E+23
201	5,064482E+22	5,064636E+22	2,003485E+22	2,003378E+22	1,012912E+23	4,006863E+22	1,413598E+23
202	5,064677E+22	5,064642E+22	2,003397E+22	2,003506E+22	1,012932E+23	4,006903E+22	1,413622E+23
203	5,064572E+22	5,064487E+22	2,003497E+22	2,003463E+22	1,012906E+23	4,006960E+22	1,413602E+23
204	5,064370E+22	5,064596E+22	2,003590E+22	2,003562E+22	1,012897E+23	4,007152E+22	1,413612E+23
205	5,064556E+22	5,064431E+22	2,003556E+22	2,003645E+22	1,012899E+23	4,007201E+22	1,413619E+23
206	5,064334E+22	5,064328E+22	2,003723E+22	2,003609E+22	1,012866E+23	4,007332E+22	1,413599E+23
207	5,064306E+22	5,064405E+22	2,003719E+22	2,003746E+22	1,012871E+23	4,007466E+22	1,413618E+23
208	5,064407E+22	5,064213E+22	2,003702E+22	2,003771E+22	1,012862E+23	4,007473E+22	1,413609E+23
209	5,064096E+22	5,064279E+22	2,003835E+22	2,003747E+22	1,012837E+23	4,007582E+22	1,413596E+23
210	5,064276E+22	5,064321E+22	2,003740E+22	2,003842E+22	1,012860E+23	4,007583E+22	1,413618E+23
211	5,064331E+22	5,064156E+22	2,003763E+22	2,003732E+22	1,012849E+23	4,007495E+22	1,413598E+23
212	5,064161E+22	5,064323E+22	2,003798E+22	2,003701E+22	1,012848E+23	4,007499E+22	1,413598E+23
213	5,064436E+22	5,064325E+22	2,003654E+22	2,003724E+22	1,012876E+23	4,007379E+22	1,413614E+23
214	5,064307E+22	5,064302E+22	2,003696E+22	2,003598E+22	1,012861E+23	4,007294E+22	1,413590E+23
215	5,064259E+22	5,064494E+22	2,003636E+22	2,003629E+22	1,012875E+23	4,007265E+22	1,413602E+23
216	5,064502E+22	5,064389E+22	2,003524E+22	2,003605E+22	1,012889E+23	4,007129E+22	1,413602E+23
217	5,064300E+22	5,064415E+22	2,003614E+22	2,003503E+22	1,012871E+23	4,007117E+22	1,413583E+23
218	5,064475E+22	5,064519E+22	2,003529E+22	2,003577E+22	1,012899E+23	4,007106E+22	1,413610E+23
219	5,064590E+22	5,064365E+22	2,003521E+22	2,003528E+22	1,012896E+23	4,007049E+22	1,413600E+23
220	5,064311E+22	5,064482E+22	2,003613E+22	2,003539E+22	1,012879E+23	4,007153E+22	1,413595E+23
221	5,064497E+22	5,064484E+22	2,003542E+22	2,003661E+22	1,012898E+23	4,007203E+22	1,413618E+23
222	5,064390E+22	5,064307E+22	2,003655E+22	2,003621E+22	1,012870E+23	4,007276E+22	1,413597E+23
223	5,064216E+22	5,064397E+22	2,003741E+22	2,003692E+22	1,012861E+23	4,007433E+22	1,413605E+23
224	5,064422E+22	5,064254E+22	2,003702E+22	2,003787E+22	1,012868E+23	4,007490E+22	1,413617E+23
225	5,064133E+22	5,064157E+22	2,003872E+22	2,003767E+22	1,012829E+23	4,007639E+22	1,413593E+23
226	5,064109E+22	5,064266E+22	2,003867E+22	2,003898E+22	1,012838E+23	4,007766E+22	1,413614E+23
227	5,064230E+22	5,064069E+22	2,003857E+22	2,003922E+22	1,012830E+23	4,007779E+22	1,413608E+23
228	5,063945E+22	5,064098E+22	2,003966E+22	2,003884E+22	1,012804E+23	4,007850E+22	1,413589E+23
229	5,064168E+22	5,064153E+22	2,003876E+22	2,003953E+22	1,012832E+23	4,007829E+22	1,413615E+23
230	5,064204E+22	5,064010E+22	2,003895E+22	2,003851E+22	1,012821E+23	4,007746E+22	1,413596E+23
231	5,064020E+22	5,064202E+22	2,003908E+22	2,003814E+22	1,012822E+23	4,007721E+22	1,413594E+23
232	5,064279E+22	5,064225E+22	2,003755E+22	2,003857E+22	1,012850E+23	4,007611E+22	1,413611E+23
233	5,064104E+22	5,064162E+22	2,003813E+22	2,003738E+22	1,012827E+23	4,007551E+22	1,413582E+23
234	5,064118E+22	5,064343E+22	2,003765E+22	2,003743E+22	1,012846E+23	4,007508E+22	1,413597E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
235	5,064397E+22	5,064222E+22	2,003663E+22	2,003717E+22	1,012862E+23	4,007381E+22	1,413600E+23
236	5,064192E+22	5,064237E+22	2,003730E+22	2,003627E+22	1,012843E+23	4,007357E+22	1,413579E+23
237	5,064354E+22	5,064374E+22	2,003650E+22	2,003705E+22	1,012873E+23	4,007355E+22	1,413608E+23
238	5,064407E+22	5,064240E+22	2,003652E+22	2,003679E+22	1,012865E+23	4,007331E+22	1,413598E+23
239	5,064137E+22	5,064342E+22	2,003746E+22	2,003676E+22	1,012848E+23	4,007422E+22	1,413590E+23
240	5,064345E+22	5,064332E+22	2,003688E+22	2,003799E+22	1,012868E+23	4,007486E+22	1,413616E+23
241	5,064204E+22	5,064121E+22	2,003823E+22	2,003768E+22	1,012833E+23	4,007591E+22	1,413592E+23
242	5,064052E+22	5,064220E+22	2,003913E+22	2,003835E+22	1,012827E+23	4,007748E+22	1,413602E+23
243	5,064238E+22	5,064092E+22	2,003871E+22	2,003955E+22	1,012833E+23	4,007827E+22	1,413616E+23
244	5,063932E+22	5,063971E+22	2,004007E+22	2,003948E+22	1,012790E+23	4,007954E+22	1,413586E+23
245	5,063945E+22	5,064077E+22	2,004009E+22	2,004055E+22	1,012802E+23	4,008063E+22	1,413609E+23
246	5,064080E+22	5,063896E+22	2,004001E+22	2,004063E+22	1,012798E+23	4,008064E+22	1,413604E+23
247	5,063838E+22	5,063934E+22	2,004092E+22	2,003990E+22	1,012777E+23	4,008082E+22	1,413585E+23
248	5,064057E+22	5,064032E+22	2,003995E+22	2,004063E+22	1,012809E+23	4,008059E+22	1,413615E+23
249	5,064013E+22	5,063901E+22	2,004021E+22	2,003980E+22	1,012791E+23	4,008000E+22	1,413591E+23
250	5,063828E+22	5,064097E+22	2,004036E+22	2,003937E+22	1,012792E+23	4,007972E+22	1,413590E+23
251	5,064107E+22	5,064099E+22	2,003891E+22	2,003985E+22	1,012821E+23	4,007876E+22	1,413608E+23
252	5,063968E+22	5,063972E+22	2,003925E+22	2,003862E+22	1,012794E+23	4,007788E+22	1,413573E+23
253	5,064028E+22	5,064150E+22	2,003886E+22	2,003854E+22	1,012818E+23	4,007740E+22	1,413592E+23
254	5,064289E+22	5,064070E+22	2,003784E+22	2,003842E+22	1,012836E+23	4,007626E+22	1,413599E+23
255	5,064068E+22	5,064107E+22	2,003833E+22	2,003752E+22	1,012818E+23	4,007585E+22	1,413576E+23
256	5,064202E+22	5,064273E+22	2,003762E+22	2,003843E+22	1,012847E+23	4,007605E+22	1,413608E+23
257	5,064206E+22	5,064101E+22	2,003797E+22	2,003824E+22	1,012831E+23	4,007621E+22	1,413593E+23
258	5,063970E+22	5,064181E+22	2,003914E+22	2,003803E+22	1,012815E+23	4,007717E+22	1,413587E+23
259	5,064186E+22	5,064160E+22	2,003867E+22	2,003937E+22	1,012835E+23	4,007805E+22	1,413615E+23
260	5,064026E+22	5,063916E+22	2,003977E+22	2,003931E+22	1,012794E+23	4,007908E+22	1,413585E+23
261	5,063874E+22	5,064031E+22	2,004065E+22	2,004005E+22	1,012791E+23	4,008071E+22	1,413598E+23
262	5,064032E+22	5,063924E+22	2,004019E+22	2,004135E+22	1,012796E+23	4,008154E+22	1,413611E+23
263	5,063775E+22	5,063798E+22	2,004137E+22	2,004098E+22	1,012757E+23	4,008234E+22	1,413581E+23
264	5,063827E+22	5,063925E+22	2,004138E+22	2,004185E+22	1,012775E+23	4,008323E+22	1,413607E+23
265	5,063929E+22	5,063744E+22	2,004148E+22	2,004188E+22	1,012767E+23	4,008336E+22	1,413601E+23
266	5,063700E+22	5,063811E+22	2,004241E+22	2,004105E+22	1,012751E+23	4,008345E+22	1,413586E+23
267	5,063880E+22	5,063922E+22	2,004139E+22	2,004196E+22	1,012780E+23	4,008335E+22	1,413614E+23
268	5,063812E+22	5,063746E+22	2,004137E+22	2,004128E+22	1,012756E+23	4,008265E+22	1,413582E+23
269	5,063682E+22	5,063907E+22	2,004156E+22	2,004065E+22	1,012759E+23	4,008220E+22	1,413581E+23
270	5,063975E+22	5,063913E+22	2,004011E+22	2,004103E+22	1,012789E+23	4,008114E+22	1,413600E+23
271	5,063891E+22	5,063802E+22	2,004022E+22	2,003960E+22	1,012769E+23	4,007982E+22	1,413567E+23
272	5,063945E+22	5,064031E+22	2,003981E+22	2,003959E+22	1,012798E+23	4,007939E+22	1,413592E+23
273	5,064116E+22	5,063977E+22	2,003903E+22	2,003970E+22	1,012809E+23	4,007872E+22	1,413596E+23
274	5,063892E+22	5,064016E+22	2,003972E+22	2,003877E+22	1,012791E+23	4,007849E+22	1,413576E+23
275	5,064016E+22	5,064153E+22	2,003926E+22	2,003977E+22	1,012817E+23	4,007904E+22	1,413607E+23
276	5,064026E+22	5,063912E+22	2,003952E+22	2,003973E+22	1,012794E+23	4,007925E+22	1,413586E+23
277	5,063830E+22	5,063959E+22	2,004081E+22	2,003953E+22	1,012779E+23	4,008033E+22	1,413582E+23
278	5,064010E+22	5,063968E+22	2,004028E+22	2,004108E+22	1,012798E+23	4,008136E+22	1,413611E+23
279	5,063858E+22	5,063735E+22	2,004105E+22	2,004105E+22	1,012759E+23	4,008210E+22	1,413580E+23
280	5,063708E+22	5,063872E+22	2,004189E+22	2,004176E+22	1,012758E+23	4,008365E+22	1,413595E+23
281	5,063849E+22	5,063756E+22	2,004169E+22	2,004291E+22	1,012761E+23	4,008460E+22	1,413607E+23
282	5,063643E+22	5,063638E+22	2,004296E+22	2,004216E+22	1,012728E+23	4,008512E+22	1,413579E+23
283	5,063696E+22	5,063790E+22	2,004304E+22	2,004301E+22	1,012749E+23	4,008605E+22	1,413609E+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	5,063762E+22	5,063589E+22	2,004286E+22	2,004320E+22	1,012735E+23	4,008607E+22	1,413596E+23
285	5,063521E+22	5,063655E+22	2,004377E+22	2,004243E+22	1,012718E+23	4,008620E+22	1,413580E+23
286	5,063672E+22	5,063779E+22	2,004268E+22	2,004338E+22	1,012745E+23	4,008606E+22	1,413606E+23
287	5,063667E+22	5,063572E+22	2,004240E+22	2,004251E+22	1,012724E+23	4,008490E+22	1,413573E+23
288	5,063588E+22	5,063747E+22	2,004253E+22	2,004172E+22	1,012734E+23	4,008425E+22	1,413576E+23
289	5,063862E+22	5,063765E+22	2,004127E+22	2,004212E+22	1,012763E+23	4,008339E+22	1,413597E+23
290	5,063785E+22	5,063697E+22	2,004141E+22	2,004063E+22	1,012748E+23	4,008204E+22	1,413569E+23
291	5,063793E+22	5,063955E+22	2,004108E+22	2,004085E+22	1,012775E+23	4,008193E+22	1,413594E+23
292	5,063923E+22	5,063844E+22	2,004026E+22	2,004114E+22	1,012777E+23	4,008141E+22	1,413591E+23
293	5,063739E+22	5,063833E+22	2,004122E+22	2,004016E+22	1,012757E+23	4,008138E+22	1,413571E+23
294	5,063850E+22	5,063964E+22	2,004086E+22	2,004115E+22	1,012781E+23	4,008201E+22	1,413601E+23
295	5,063898E+22	5,063710E+22	2,004089E+22	2,004115E+22	1,012761E+23	4,008203E+22	1,413581E+23
296	5,063695E+22	5,063790E+22	2,004207E+22	2,004106E+22	1,012748E+23	4,008313E+22	1,413580E+23
297	5,063803E+22	5,063813E+22	2,004172E+22	2,004278E+22	1,012762E+23	4,008451E+22	1,413607E+23
298	5,063681E+22	5,063597E+22	2,004257E+22	2,004256E+22	1,012728E+23	4,008513E+22	1,413579E+23
299	5,063548E+22	5,063728E+22	2,004353E+22	2,004319E+22	1,012728E+23	4,008672E+22	1,413595E+23
300	5,063685E+22	5,063572E+22	2,004328E+22	2,004432E+22	1,012726E+23	4,008760E+22	1,413602E+23
301	5,063518E+22	5,063447E+22	2,004462E+22	2,004350E+22	1,012696E+23	4,008813E+22	1,413578E+23
302	5,063507E+22	5,063634E+22	2,004460E+22	2,004445E+22	1,012714E+23	4,008905E+22	1,413605E+23
303	5,063577E+22	5,063438E+22	2,004403E+22	2,004471E+22	1,012701E+23	4,008874E+22	1,413589E+23
304	5,063355E+22	5,063500E+22	2,004481E+22	2,004384E+22	1,012685E+23	4,008864E+22	1,413572E+23
305	5,063500E+22	5,063609E+22	2,004391E+22	2,004465E+22	1,012711E+23	4,008857E+22	1,413597E+23
306	5,063563E+22	5,063423E+22	2,004360E+22	2,004346E+22	1,012699E+23	4,008706E+22	1,413569E+23
307	5,063494E+22	5,063629E+22	2,004375E+22	2,004273E+22	1,012712E+23	4,008648E+22	1,413577E+23
308	5,063720E+22	5,063642E+22	2,004239E+22	2,004332E+22	1,012736E+23	4,008571E+22	1,413593E+23
309	5,063642E+22	5,063572E+22	2,004264E+22	2,004192E+22	1,012721E+23	4,008456E+22	1,413567E+23
310	5,063605E+22	5,063833E+22	2,004244E+22	2,004215E+22	1,012744E+23	4,008460E+22	1,413590E+23
311	5,063779E+22	5,063680E+22	2,004149E+22	2,004243E+22	1,012746E+23	4,008391E+22	1,413585E+23
312	5,063621E+22	5,063656E+22	2,004250E+22	2,004145E+22	1,012728E+23	4,008395E+22	1,413567E+23
313	5,063693E+22	5,063786E+22	2,004237E+22	2,004259E+22	1,012748E+23	4,008496E+22	1,413598E+23
314	5,063743E+22	5,063560E+22	2,004236E+22	2,004262E+22	1,012730E+23	4,008498E+22	1,413580E+23
315	5,063514E+22	5,063662E+22	2,004354E+22	2,004273E+22	1,012718E+23	4,008627E+22	1,413580E+23
316	5,063606E+22	5,063631E+22	2,004317E+22	2,004447E+22	1,012724E+23	4,008764E+22	1,413600E+23
317	5,063536E+22	5,063389E+22	2,004421E+22	2,004404E+22	1,012693E+23	4,008825E+22	1,413575E+23
318	5,063390E+22	5,063550E+22	2,004523E+22	2,004452E+22	1,012694E+23	4,008974E+22	1,413591E+23
319	5,063548E+22	5,063395E+22	2,004470E+22	2,004567E+22	1,012694E+23	4,009037E+22	1,413598E+23
320	5,063355E+22	5,063305E+22	2,004592E+22	2,004494E+22	1,012666E+23	4,009086E+22	1,413575E+23
321	5,063278E+22	5,063498E+22	2,004599E+22	2,004598E+22	1,012678E+23	4,009197E+22	1,413597E+23
322	5,063388E+22	5,063300E+22	2,004536E+22	2,004603E+22	1,012669E+23	4,009139E+22	1,413583E+23
323	5,063212E+22	5,063356E+22	2,004610E+22	2,004507E+22	1,012657E+23	4,009117E+22	1,413569E+23
324	5,063374E+22	5,063425E+22	2,004512E+22	2,004583E+22	1,012680E+23	4,009095E+22	1,413589E+23
325	5,063485E+22	5,063255E+22	2,004486E+22	2,004459E+22	1,012674E+23	4,008945E+22	1,413568E+23
326	5,063357E+22	5,063516E+22	2,004494E+22	2,004393E+22	1,012687E+23	4,008887E+22	1,413576E+23
327	5,063575E+22	5,063526E+22	2,004336E+22	2,004462E+22	1,012710E+23	4,008797E+22	1,413590E+23
328	5,063505E+22	5,063442E+22	2,004368E+22	2,004317E+22	1,012695E+23	4,008685E+22	1,413563E+23
329	5,063435E+22	5,063672E+22	2,004383E+22	2,004336E+22	1,012711E+23	4,008719E+22	1,413583E+23
330	5,063650E+22	5,063529E+22	2,004294E+22	2,004352E+22	1,012718E+23	4,008646E+22	1,413583E+23
331	5,063490E+22	5,063511E+22	2,004394E+22	2,004277E+22	1,012700E+23	4,008671E+22	1,413567E+23
332	5,063500E+22	5,063616E+22	2,004378E+22	2,004419E+22	1,012712E+23	4,008797E+22	1,413591E+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							
333	5,063569E+22	5,063390E+22	2,004385E+22	2,004429E+22	1,012696E+23	4,008814E+22	1,413577E+23
334	5,063316E+22	5,063497E+22	2,004511E+22	2,004431E+22	1,012681E+23	4,008942E+22	1,413576E+23
335	5,063457E+22	5,063444E+22	2,004461E+22	2,004596E+22	1,012690E+23	4,009057E+22	1,413596E+23
336	5,063416E+22	5,063211E+22	2,004566E+22	2,004542E+22	1,012663E+23	4,009109E+22	1,413574E+23
337	5,063212E+22	5,063386E+22	2,004687E+22	2,004598E+22	1,012660E+23	4,009286E+22	1,413588E+23
338	5,063360E+22	5,063270E+22	2,004622E+22	2,004713E+22	1,012663E+23	4,009335E+22	1,413596E+23
339	5,063153E+22	5,063179E+22	2,004732E+22	2,004656E+22	1,012633E+23	4,009388E+22	1,413572E+23
340	5,063072E+22	5,063304E+22	2,004736E+22	2,004752E+22	1,012638E+23	4,009488E+22	1,413586E+23
341	5,063267E+22	5,063090E+22	2,004676E+22	2,004731E+22	1,012636E+23	4,009406E+22	1,413576E+23
342	5,063100E+22	5,063188E+22	2,004739E+22	2,004616E+22	1,012629E+23	4,009355E+22	1,413564E+23
343	5,063289E+22	5,063275E+22	2,004612E+22	2,004694E+22	1,012656E+23	4,009305E+22	1,413587E+23
344	5,063371E+22	5,063156E+22	2,004578E+22	2,004571E+22	1,012653E+23	4,009149E+22	1,413568E+23
345	5,063178E+22	5,063425E+22	2,004612E+22	2,004513E+22	1,012660E+23	4,009124E+22	1,413573E+23
346	5,063412E+22	5,063424E+22	2,004462E+22	2,004564E+22	1,012684E+23	4,009027E+22	1,413586E+23
347	5,063359E+22	5,063320E+22	2,004504E+22	2,004434E+22	1,012668E+23	4,008938E+22	1,413562E+23
348	5,063278E+22	5,063483E+22	2,004525E+22	2,004466E+22	1,012676E+23	4,008991E+22	1,413575E+23
349	5,063518E+22	5,063334E+22	2,004443E+22	2,004496E+22	1,012685E+23	4,008939E+22	1,413579E+23
350	5,063309E+22	5,063361E+22	2,004533E+22	2,004436E+22	1,012667E+23	4,008969E+22	1,413564E+23
351	5,063335E+22	5,063441E+22	2,004496E+22	2,004588E+22	1,012678E+23	4,009084E+22	1,413586E+23
352	5,063424E+22	5,063217E+22	2,004512E+22	2,004581E+22	1,012664E+23	4,009093E+22	1,413573E+23
353	5,063156E+22	5,063320E+22	2,004669E+22	2,004571E+22	1,012648E+23	4,009240E+22	1,413572E+23
354	5,063317E+22	5,063292E+22	2,004625E+22	2,004718E+22	1,012661E+23	4,009343E+22	1,413595E+23
355	5,063255E+22	5,063086E+22	2,004728E+22	2,004688E+22	1,012634E+23	4,009417E+22	1,413576E+23
356	5,062985E+22	5,063222E+22	2,004845E+22	2,004763E+22	1,012621E+23	4,009608E+22	1,413581E+23
357	5,063159E+22	5,063091E+22	2,004780E+22	2,004877E+22	1,012625E+23	4,009657E+22	1,413591E+23
358	5,062958E+22	5,063003E+22	2,004881E+22	2,004802E+22	1,012596E+23	4,009683E+22	1,413564E+23
359	5,062949E+22	5,063100E+22	2,004856E+22	2,004885E+22	1,012605E+23	4,009741E+22	1,413579E+23
360	5,063189E+22	5,062921E+22	2,004786E+22	2,004845E+22	1,012611E+23	4,009631E+22	1,413574E+23
361	5,062977E+22	5,063057E+22	2,004860E+22	2,004732E+22	1,012603E+23	4,009592E+22	1,413563E+23
362	5,063145E+22	5,063202E+22	2,004725E+22	2,004803E+22	1,012635E+23	4,009528E+22	1,413588E+23
363	5,063209E+22	5,063083E+22	2,004689E+22	2,004694E+22	1,012629E+23	4,009384E+22	1,413568E+23
364	5,062986E+22	5,063265E+22	2,004742E+22	2,004636E+22	1,012625E+23	4,009377E+22	1,413563E+23
365	5,063276E+22	5,063243E+22	2,004606E+22	2,004679E+22	1,012652E+23	4,009285E+22	1,413580E+23
366	5,063215E+22	5,063149E+22	2,004645E+22	2,004554E+22	1,012636E+23	4,009200E+22	1,413556E+23
367	5,063150E+22	5,063300E+22	2,004642E+22	2,004609E+22	1,012645E+23	4,009251E+22	1,413570E+23
368	5,063375E+22	5,063186E+22	2,004553E+22	2,004646E+22	1,012656E+23	4,009199E+22	1,413576E+23
369	5,063124E+22	5,063218E+22	2,004665E+22	2,004590E+22	1,012634E+23	4,009254E+22	1,413560E+23
370	5,063179E+22	5,063307E+22	2,004639E+22	2,004718E+22	1,012649E+23	4,009356E+22	1,413584E+23
371	5,063286E+22	5,063084E+22	2,004666E+22	2,004717E+22	1,012637E+23	4,009383E+22	1,413575E+23
372	5,062988E+22	5,063132E+22	2,004844E+22	2,004717E+22	1,012612E+23	4,009561E+22	1,413568E+23
373	5,063149E+22	5,063114E+22	2,004806E+22	2,004874E+22	1,012626E+23	4,009680E+22	1,413594E+23
374	5,063031E+22	5,062937E+22	2,004895E+22	2,004861E+22	1,012597E+23	4,009755E+22	1,413572E+23
375	5,062790E+22	5,063021E+22	2,004979E+22	2,004941E+22	1,012581E+23	4,009920E+22	1,413573E+23
376	5,063004E+22	5,062887E+22	2,004908E+22	2,005025E+22	1,012589E+23	4,009933E+22	1,413582E+23
377	5,062825E+22	5,062817E+22	2,005015E+22	2,004930E+22	1,012564E+23	4,009945E+22	1,413559E+23
378	5,062852E+22	5,062958E+22	2,004981E+22	2,004985E+22	1,012581E+23	4,009965E+22	1,413577E+23
379	5,063065E+22	5,062840E+22	2,004902E+22	2,004960E+22	1,012590E+23	4,009862E+22	1,413577E+23
380	5,062792E+22	5,062948E+22	2,004981E+22	2,004858E+22	1,012574E+23	4,009839E+22	1,413558E+23
381	5,062970E+22	5,063073E+22	2,004859E+22	2,004923E+22	1,012604E+23	4,009782E+22	1,413583E+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							
382	5,063028E+22	5,062950E+22	2,004826E+22	2,004810E+22	1,012598E+23	4,009635E+22	1,413561E+23
383	5,062863E+22	5,063068E+22	2,004857E+22	2,004759E+22	1,012593E+23	4,009616E+22	1,413555E+23
384	5,063172E+22	5,063060E+22	2,004721E+22	2,004800E+22	1,012623E+23	4,009521E+22	1,413575E+23
385	5,063075E+22	5,062997E+22	2,004766E+22	2,004695E+22	1,012607E+23	4,009461E+22	1,413553E+23
386	5,062999E+22	5,063181E+22	2,004757E+22	2,004747E+22	1,012618E+23	4,009504E+22	1,413568E+23
387	5,063219E+22	5,063077E+22	2,004676E+22	2,004795E+22	1,012630E+23	4,009471E+22	1,413577E+23
388	5,062954E+22	5,063037E+22	2,004816E+22	2,004731E+22	1,012599E+23	4,009547E+22	1,413554E+23
389	5,063045E+22	5,063123E+22	2,004814E+22	2,004846E+22	1,012617E+23	4,009660E+22	1,413583E+23
390	5,063119E+22	5,062929E+22	2,004844E+22	2,004856E+22	1,012605E+23	4,009700E+22	1,413575E+23
391	5,062809E+22	5,062948E+22	2,004998E+22	2,004886E+22	1,012576E+23	4,009885E+22	1,413564E+23
392	5,062948E+22	5,062950E+22	2,004951E+22	2,005046E+22	1,012590E+23	4,009997E+22	1,413589E+23
393	5,062813E+22	5,062757E+22	2,005046E+22	2,005031E+22	1,012557E+23	4,010078E+22	1,413565E+23
394	5,062624E+22	5,062847E+22	2,005121E+22	2,005079E+22	1,012547E+23	4,010200E+22	1,413567E+23
395	5,062884E+22	5,062736E+22	2,005040E+22	2,005155E+22	1,012562E+23	4,010195E+22	1,413582E+23
396	5,062687E+22	5,062637E+22	2,005155E+22	2,005057E+22	1,012532E+23	4,010212E+22	1,413554E+23
397	5,062720E+22	5,062826E+22	2,005120E+22	2,005109E+22	1,012555E+23	4,010229E+22	1,413577E+23
398	5,062878E+22	5,062746E+22	2,005032E+22	2,005088E+22	1,012562E+23	4,010120E+22	1,413574E+23
399	5,062629E+22	5,062788E+22	2,005092E+22	2,004994E+22	1,012542E+23	4,010086E+22	1,413550E+23
400	5,062834E+22	5,062901E+22	2,004973E+22	2,005032E+22	1,012574E+23	4,010005E+22	1,413574E+23
401	5,062896E+22	5,062778E+22	2,004949E+22	2,004919E+22	1,012567E+23	4,009869E+22	1,413554E+23
402	5,062757E+22	5,062922E+22	2,004971E+22	2,004863E+22	1,012568E+23	4,009834E+22	1,413551E+23
403	5,063043E+22	5,062960E+22	2,004829E+22	2,004929E+22	1,012600E+23	4,009758E+22	1,413576E+23
404	5,062896E+22	5,062861E+22	2,004891E+22	2,004839E+22	1,012576E+23	4,009730E+22	1,413549E+23
405	5,062844E+22	5,063037E+22	2,004901E+22	2,004882E+22	1,012588E+23	4,009783E+22	1,413566E+23
406	5,063050E+22	5,062942E+22	2,004835E+22	2,004925E+22	1,012599E+23	4,009760E+22	1,413575E+23
407	5,062826E+22	5,062840E+22	2,004967E+22	2,004877E+22	1,012567E+23	4,009845E+22	1,413551E+23
408	5,062902E+22	5,062938E+22	2,004972E+22	2,004990E+22	1,012584E+23	4,009962E+22	1,413580E+23
409	5,062923E+22	5,062773E+22	2,005005E+22	2,005029E+22	1,012570E+23	4,010034E+22	1,413573E+23
410	5,062609E+22	5,062791E+22	2,005140E+22	2,005055E+22	1,012540E+23	4,010196E+22	1,413560E+23
411	5,062751E+22	5,062789E+22	2,005091E+22	2,005214E+22	1,012554E+23	4,010304E+22	1,413584E+23
412	5,062635E+22	5,062540E+22	2,005198E+22	2,005182E+22	1,012517E+23	4,010380E+22	1,413555E+23
413	5,062506E+22	5,062646E+22	2,005276E+22	2,005204E+22	1,012515E+23	4,010480E+22	1,413563E+23
414	5,062743E+22	5,062599E+22	2,005190E+22	2,005277E+22	1,012534E+23	4,010467E+22	1,413581E+23
415	5,062548E+22	5,062489E+22	2,005275E+22	2,005197E+22	1,012504E+23	4,010472E+22	1,413551E+23
416	5,062555E+22	5,062700E+22	2,005237E+22	2,005233E+22	1,012526E+23	4,010470E+22	1,413573E+23
417	5,062695E+22	5,062619E+22	2,005157E+22	2,005212E+22	1,012531E+23	4,010369E+22	1,413568E+23
418	5,062489E+22	5,062643E+22	2,005208E+22	2,005097E+22	1,012513E+23	4,010305E+22	1,413544E+23
419	5,062717E+22	5,062768E+22	2,005087E+22	2,005141E+22	1,012548E+23	4,010228E+22	1,413571E+23
420	5,062760E+22	5,062607E+22	2,005077E+22	2,005045E+22	1,012537E+23	4,010122E+22	1,413549E+23
421	5,062625E+22	5,062786E+22	2,005098E+22	2,004997E+22	1,012541E+23	4,010094E+22	1,413551E+23
422	5,062868E+22	5,062853E+22	2,004957E+22	2,005071E+22	1,012572E+23	4,010029E+22	1,413575E+23
423	5,062752E+22	5,062685E+22	2,005010E+22	2,004989E+22	1,012544E+23	4,009999E+22	1,413544E+23
424	5,062723E+22	5,062860E+22	2,005037E+22	2,005005E+22	1,012558E+23	4,010042E+22	1,413562E+23
425	5,062910E+22	5,062773E+22	2,004988E+22	2,005056E+22	1,012568E+23	4,010043E+22	1,413573E+23
426	5,062677E+22	5,062688E+22	2,005117E+22	2,005015E+22	1,012537E+23	4,010132E+22	1,413550E+23
427	5,062711E+22	5,062817E+22	2,005115E+22	2,005152E+22	1,012553E+23	4,010266E+22	1,413579E+23
428	5,062686E+22	5,062589E+22	2,005165E+22	2,005205E+22	1,012527E+23	4,010370E+22	1,413564E+23
429	5,062420E+22	5,062598E+22	2,005304E+22	2,005214E+22	1,012502E+23	4,010518E+22	1,413554E+23
430	5,062579E+22	5,062609E+22	2,005255E+22	2,005356E+22	1,012519E+23	4,010611E+22	1,413580E+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							
431	5,062521E+22	5,062321E+22	2,005339E+22	2,005329E+22	1,012484E+23	4,010668E+22	1,413551E+23
432	5,062394E+22	5,062474E+22	2,005412E+22	2,005334E+22	1,012487E+23	4,010746E+22	1,413561E+23
433	5,062574E+22	5,062482E+22	2,005324E+22	2,005421E+22	1,012506E+23	4,010745E+22	1,413580E+23
434	5,062376E+22	5,062380E+22	2,005392E+22	2,005329E+22	1,012476E+23	4,010721E+22	1,413548E+23
435	5,062386E+22	5,062582E+22	2,005353E+22	2,005354E+22	1,012497E+23	4,010707E+22	1,413568E+23
436	5,062532E+22	5,062439E+22	2,005292E+22	2,005327E+22	1,012497E+23	4,010618E+22	1,413559E+23
437	5,062377E+22	5,062471E+22	2,005341E+22	2,005202E+22	1,012485E+23	4,010543E+22	1,413539E+23
438	5,062573E+22	5,062642E+22	2,005217E+22	2,005257E+22	1,012522E+23	4,010474E+22	1,413569E+23
439	5,062627E+22	5,062457E+22	2,005180E+22	2,005191E+22	1,012508E+23	4,010371E+22	1,413546E+23
440	5,062486E+22	5,062644E+22	2,005205E+22	2,005127E+22	1,012513E+23	4,010332E+22	1,413546E+23
441	5,062713E+22	5,062721E+22	2,005085E+22	2,005201E+22	1,012543E+23	4,010286E+22	1,413572E+23
442	5,062636E+22	5,062538E+22	2,005135E+22	2,005103E+22	1,012517E+23	4,010238E+22	1,413541E+23
443	5,062593E+22	5,062721E+22	2,005175E+22	2,005125E+22	1,012531E+23	4,010300E+22	1,413561E+23
444	5,062731E+22	5,062604E+22	2,005150E+22	2,005205E+22	1,012534E+23	4,010355E+22	1,413569E+23
445	5,062486E+22	5,062530E+22	2,005278E+22	2,005180E+22	1,012502E+23	4,010458E+22	1,413547E+23
446	5,062482E+22	5,062663E+22	2,005280E+22	2,005323E+22	1,012514E+23	4,010603E+22	1,413575E+23
447	5,062512E+22	5,062355E+22	2,005311E+22	2,005381E+22	1,012487E+23	4,010692E+22	1,413556E+23
448	5,062292E+22	5,062371E+22	2,005451E+22	2,005354E+22	1,012466E+23	4,010805E+22	1,413547E+23
449	5,062447E+22	5,062429E+22	2,005406E+22	2,005494E+22	1,012488E+23	4,010900E+22	1,413578E+23
450	5,062390E+22	5,062187E+22	2,005471E+22	2,005461E+22	1,012458E+23	4,010932E+22	1,413551E+23
451	5,062223E+22	5,062389E+22	2,005537E+22	2,005472E+22	1,012461E+23	4,011009E+22	1,413562E+23
452	5,062359E+22	5,062347E+22	2,005470E+22	2,005562E+22	1,012471E+23	4,011033E+22	1,413574E+23
453	5,062198E+22	5,062235E+22	2,005539E+22	2,005454E+22	1,012443E+23	4,010993E+22	1,413543E+23
454	5,062219E+22	5,062435E+22	2,005499E+22	2,005469E+22	1,012465E+23	4,010968E+22	1,413562E+23
455	5,062414E+22	5,062233E+22	2,005412E+22	2,005459E+22	1,012465E+23	4,010871E+22	1,413552E+23
456	5,062276E+22	5,062303E+22	2,005450E+22	2,005327E+22	1,012458E+23	4,010776E+22	1,413536E+23
457	5,062431E+22	5,062517E+22	2,005323E+22	2,005396E+22	1,012495E+23	4,010719E+22	1,413567E+23
458	5,062491E+22	5,062338E+22	2,005274E+22	2,005318E+22	1,012483E+23	4,010592E+22	1,413542E+23
459	5,062363E+22	5,062529E+22	2,005309E+22	2,005237E+22	1,012489E+23	4,010546E+22	1,413544E+23
460	5,062570E+22	5,062552E+22	2,005228E+22	2,005310E+22	1,012512E+23	4,010538E+22	1,413566E+23
461	5,062505E+22	5,062390E+22	2,005291E+22	2,005218E+22	1,012490E+23	4,010509E+22	1,413540E+23
462	5,062404E+22	5,062598E+22	2,005339E+22	2,005264E+22	1,012500E+23	4,010603E+22	1,413560E+23
463	5,062529E+22	5,062424E+22	2,005296E+22	2,005383E+22	1,012495E+23	4,010680E+22	1,413563E+23
464	5,062299E+22	5,062336E+22	2,005425E+22	2,005346E+22	1,012463E+23	4,010771E+22	1,413541E+23
465	5,062297E+22	5,062468E+22	2,005435E+22	2,005486E+22	1,012477E+23	4,010921E+22	1,413569E+23
466	5,062382E+22	5,062166E+22	2,005451E+22	2,005525E+22	1,012455E+23	4,010976E+22	1,413552E+23
467	5,062175E+22	5,062217E+22	2,005587E+22	2,005492E+22	1,012439E+23	4,011079E+22	1,413547E+23
468	5,062276E+22	5,062277E+22	2,005566E+22	2,005646E+22	1,012455E+23	4,011212E+22	1,413576E+23
469	5,062203E+22	5,062075E+22	2,005623E+22	2,005613E+22	1,012428E+23	4,011236E+22	1,413551E+23
470	5,062003E+22	5,062271E+22	2,005693E+22	2,005616E+22	1,012427E+23	4,011309E+22	1,413558E+23
471	5,062190E+22	5,062143E+22	2,005607E+22	2,005707E+22	1,012433E+23	4,011314E+22	1,413565E+23
472	5,062080E+22	5,062020E+22	2,005667E+22	2,005568E+22	1,012410E+23	4,011235E+22	1,413534E+23
473	5,062092E+22	5,062261E+22	2,005623E+22	2,005588E+22	1,012435E+23	4,011211E+22	1,413556E+23
474	5,062302E+22	5,062101E+22	2,005504E+22	2,005577E+22	1,012440E+23	4,011082E+22	1,413548E+23
475	5,062142E+22	5,062210E+22	2,005534E+22	2,005445E+22	1,012435E+23	4,010979E+22	1,413533E+23
476	5,062266E+22	5,062393E+22	2,005443E+22	2,005515E+22	1,012466E+23	4,010958E+22	1,413562E+23
477	5,062354E+22	5,062221E+22	2,005405E+22	2,005421E+22	1,012458E+23	4,010826E+22	1,413540E+23
478	5,062215E+22	5,062406E+22	2,005462E+22	2,005342E+22	1,012462E+23	4,010804E+22	1,413543E+23
479	5,062431E+22	5,062365E+22	2,005375E+22	2,005447E+22	1,012480E+23	4,010821E+22	1,413562E+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							
480	5,062349E+22	5,062217E+22	2,005437E+22	2,005370E+22	1,012457E+23	4,010807E+22	1,413537E+23
481	5,062194E+22	5,062441E+22	2,005486E+22	2,005443E+22	1,012464E+23	4,010929E+22	1,413556E+23
482	5,062344E+22	5,062245E+22	2,005426E+22	2,005555E+22	1,012459E+23	4,010981E+22	1,413557E+23
483	5,062153E+22	5,062155E+22	2,005555E+22	2,005496E+22	1,012431E+23	4,011051E+22	1,413536E+23
484	5,062152E+22	5,062260E+22	2,005596E+22	2,005629E+22	1,012441E+23	4,011225E+22	1,413564E+23
485	5,062245E+22	5,062018E+22	2,005613E+22	2,005662E+22	1,012426E+23	4,011275E+22	1,413554E+23
486	5,061992E+22	5,062110E+22	2,005755E+22	2,005639E+22	1,012410E+23	4,011393E+22	1,413550E+23
487	5,062074E+22	5,062113E+22	2,005719E+22	2,005812E+22	1,012419E+23	4,011531E+22	1,413572E+23
488	5,062019E+22	5,061904E+22	2,005774E+22	2,005759E+22	1,012392E+23	4,011533E+22	1,413546E+23
489	5,061824E+22	5,062090E+22	2,005838E+22	2,005753E+22	1,012391E+23	4,011591E+22	1,413550E+23
490	5,062058E+22	5,061955E+22	2,005725E+22	2,005827E+22	1,012401E+23	4,011551E+22	1,413556E+23
491	5,061978E+22	5,061870E+22	2,005767E+22	2,005682E+22	1,012385E+23	4,011450E+22	1,413530E+23
492	5,061949E+22	5,062114E+22	2,005741E+22	2,005717E+22	1,012406E+23	4,011458E+22	1,413552E+23
493	5,062149E+22	5,062011E+22	2,005617E+22	2,005701E+22	1,012416E+23	4,011318E+22	1,413548E+23
494	5,061983E+22	5,062115E+22	2,005659E+22	2,005559E+22	1,012410E+23	4,011218E+22	1,413532E+23
495	5,062133E+22	5,062217E+22	2,005570E+22	2,005631E+22	1,012435E+23	4,011201E+22	1,413555E+23
496	5,062247E+22	5,062049E+22	2,005540E+22	2,005525E+22	1,012430E+23	4,011065E+22	1,413536E+23
497	5,062064E+22	5,062254E+22	2,005606E+22	2,005472E+22	1,012432E+23	4,011077E+22	1,413540E+23
498	5,062260E+22	5,062227E+22	2,005498E+22	2,005596E+22	1,012449E+23	4,011094E+22	1,413558E+23
499	5,062169E+22	5,062084E+22	2,005555E+22	2,005529E+22	1,012425E+23	4,011084E+22	1,413534E+23
500	5,061999E+22	5,062253E+22	2,005639E+22	2,005605E+22	1,012425E+23	4,011245E+22	1,413550E+23
501	5,062188E+22	5,062077E+22	2,005582E+22	2,005698E+22	1,012427E+23	4,011280E+22	1,413555E+23
502	5,062010E+22	5,061994E+22	2,005722E+22	2,005634E+22	1,012400E+23	4,011356E+22	1,413536E+23
503	5,062015E+22	5,062061E+22	2,005758E+22	2,005788E+22	1,012408E+23	4,011545E+22	1,413562E+23
504	5,062088E+22	5,061854E+22	2,005770E+22	2,005820E+22	1,012394E+23	4,011591E+22	1,413553E+23
505	5,061777E+22	5,061966E+22	2,005913E+22	2,005809E+22	1,012374E+23	4,011722E+22	1,413546E+23
506	5,061883E+22	5,061941E+22	2,005853E+22	2,005963E+22	1,012382E+23	4,011816E+22	1,413564E+23
507	5,061868E+22	5,061722E+22	2,005898E+22	2,005885E+22	1,012359E+23	4,011783E+22	1,413537E+23
508	5,061676E+22	5,061886E+22	2,005982E+22	2,005875E+22	1,012356E+23	4,011857E+22	1,413542E+23
509	5,061921E+22	5,061820E+22	2,005853E+22	2,005942E+22	1,012374E+23	4,011795E+22	1,413554E+23
510	5,061820E+22	5,061778E+22	2,005891E+22	2,005807E+22	1,012360E+23	4,011698E+22	1,413530E+23
511	5,061791E+22	5,061970E+22	2,005855E+22	2,005855E+22	1,012376E+23	4,011709E+22	1,413547E+23
512	5,062013E+22	5,061871E+22	2,005737E+22	2,005816E+22	1,012388E+23	4,011553E+22	1,413544E+23
513	5,061843E+22	5,061975E+22	2,005789E+22	2,005673E+22	1,012382E+23	4,011463E+22	1,413528E+23
514	5,062016E+22	5,062060E+22	2,005687E+22	2,005740E+22	1,012408E+23	4,011427E+22	1,413550E+23
515	5,062127E+22	5,061914E+22	2,005654E+22	2,005649E+22	1,012404E+23	4,011303E+22	1,413534E+23
516	5,061885E+22	5,062099E+22	2,005745E+22	2,005628E+22	1,012398E+23	4,011373E+22	1,413536E+23
517	5,062062E+22	5,062101E+22	2,005635E+22	2,005753E+22	1,012416E+23	4,011388E+22	1,413555E+23
518	5,061995E+22	5,061933E+22	2,005705E+22	2,005680E+22	1,012393E+23	4,011385E+22	1,413531E+23
519	5,061863E+22	5,062018E+22	2,005790E+22	2,005755E+22	1,012388E+23	4,011545E+22	1,413543E+23
520	5,062077E+22	5,061877E+22	2,005740E+22	2,005832E+22	1,012395E+23	4,011572E+22	1,413553E+23
521	5,061858E+22	5,061837E+22	2,005882E+22	2,005784E+22	1,012369E+23	4,011666E+22	1,413536E+23
522	5,061827E+22	5,061919E+22	2,005899E+22	2,005944E+22	1,012375E+23	4,011844E+22	1,413559E+23
523	5,061891E+22	5,061728E+22	2,005908E+22	2,005974E+22	1,012362E+23	4,011882E+22	1,413550E+23
524	5,061565E+22	5,061781E+22	2,006077E+22	2,005963E+22	1,012335E+23	4,012040E+22	1,413539E+23
525	5,061698E+22	5,061780E+22	2,006009E+22	2,006092E+22	1,012348E+23	4,012100E+22	1,413558E+23
526	5,061720E+22	5,061560E+22	2,006049E+22	2,006013E+22	1,012328E+23	4,012062E+22	1,413534E+23
527	5,061540E+22	5,061684E+22	2,006114E+22	2,006020E+22	1,012322E+23	4,012134E+22	1,413536E+23
528	5,061785E+22	5,061676E+22	2,005972E+22	2,006082E+22	1,012346E+23	4,012054E+22	1,413551E+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	5,061657E+22	5,061656E+22	2,006006E+22	2,005946E+22	1,012331E+23	4,011952E+22	1,413527E+23
530	5,061663E+22	5,061825E+22	2,005955E+22	2,005969E+22	1,012349E+23	4,011924E+22	1,413541E+23
531	5,061915E+22	5,061734E+22	2,005839E+22	2,005907E+22	1,012365E+23	4,011746E+22	1,413539E+23
532	5,061718E+22	5,061815E+22	2,005924E+22	2,005780E+22	1,012353E+23	4,011704E+22	1,413524E+23
533	5,061858E+22	5,061956E+22	2,005819E+22	2,005853E+22	1,012381E+23	4,011672E+22	1,413549E+23
534	5,061942E+22	5,061813E+22	2,005793E+22	2,005790E+22	1,012376E+23	4,011583E+22	1,413534E+23
535	5,061704E+22	5,061914E+22	2,005882E+22	2,005790E+22	1,012362E+23	4,011673E+22	1,413529E+23
536	5,061917E+22	5,061907E+22	2,005780E+22	2,005897E+22	1,012382E+23	4,011676E+22	1,413550E+23
537	5,061849E+22	5,061747E+22	2,005855E+22	2,005823E+22	1,012360E+23	4,011678E+22	1,413527E+23
538	5,061747E+22	5,061831E+22	2,005924E+22	2,005892E+22	1,012358E+23	4,011817E+22	1,413539E+23
539	5,061941E+22	5,061732E+22	2,005876E+22	2,005976E+22	1,012367E+23	4,011851E+22	1,413552E+23
540	5,061652E+22	5,061691E+22	2,006047E+22	2,005957E+22	1,012334E+23	4,012004E+22	1,413535E+23
541	5,061595E+22	5,061797E+22	2,006061E+22	2,006103E+22	1,012339E+23	4,012164E+22	1,413556E+23
542	5,061688E+22	5,061567E+22	2,006078E+22	2,006128E+22	1,012326E+23	4,012205E+22	1,413546E+23
543	5,061402E+22	5,061535E+22	2,006235E+22	2,006114E+22	1,012294E+23	4,012348E+22	1,413529E+23
544	5,061568E+22	5,061567E+22	2,006157E+22	2,006226E+22	1,012313E+23	4,012383E+22	1,413552E+23
545	5,061568E+22	5,061405E+22	2,006182E+22	2,006157E+22	1,012297E+23	4,012339E+22	1,413531E+23
546	5,061396E+22	5,061546E+22	2,006214E+22	2,006160E+22	1,012294E+23	4,012373E+22	1,413532E+23
547	5,061651E+22	5,061566E+22	2,006071E+22	2,006199E+22	1,012322E+23	4,012270E+22	1,413549E+23
548	5,061515E+22	5,061520E+22	2,006133E+22	2,006059E+22	1,012303E+23	4,012192E+22	1,413523E+23
549	5,061524E+22	5,061718E+22	2,006083E+22	2,006055E+22	1,012324E+23	4,012138E+22	1,413538E+23
550	5,061792E+22	5,061622E+22	2,005977E+22	2,006010E+22	1,012341E+23	4,011987E+22	1,413540E+23
551	5,061572E+22	5,061635E+22	2,006056E+22	2,005920E+22	1,012321E+23	4,011976E+22	1,413518E+23
552	5,061687E+22	5,061807E+22	2,005950E+22	2,006002E+22	1,012349E+23	4,011952E+22	1,413545E+23
553	5,061759E+22	5,061658E+22	2,005923E+22	2,005948E+22	1,012342E+23	4,011871E+22	1,413529E+23
554	5,061568E+22	5,061712E+22	2,005996E+22	2,005930E+22	1,012328E+23	4,011926E+22	1,413521E+23
555	5,061816E+22	5,061730E+22	2,005900E+22	2,006015E+22	1,012355E+23	4,011915E+22	1,413546E+23
556	5,061718E+22	5,061576E+22	2,006006E+22	2,005959E+22	1,012329E+23	4,011965E+22	1,413526E+23
557	5,061565E+22	5,061730E+22	2,006078E+22	2,006028E+22	1,012330E+23	4,012106E+22	1,413540E+23
558	5,061732E+22	5,061633E+22	2,006042E+22	2,006137E+22	1,012336E+23	4,012178E+22	1,413554E+23
559	5,061431E+22	5,061493E+22	2,006217E+22	2,006135E+22	1,012292E+23	4,012352E+22	1,413528E+23
560	5,061405E+22	5,061592E+22	2,006233E+22	2,006259E+22	1,012300E+23	4,012492E+22	1,413549E+23
561	5,061516E+22	5,061359E+22	2,006241E+22	2,006281E+22	1,012287E+23	4,012522E+22	1,413540E+23
562	5,061280E+22	5,061317E+22	2,006362E+22	2,006260E+22	1,012260E+23	4,012622E+22	1,413522E+23
563	5,061450E+22	5,061411E+22	2,006269E+22	2,006363E+22	1,012286E+23	4,012632E+22	1,413549E+23
564	5,061404E+22	5,061277E+22	2,006307E+22	2,006307E+22	1,012268E+23	4,012613E+22	1,413529E+23
565	5,061230E+22	5,061457E+22	2,006333E+22	2,006275E+22	1,012269E+23	4,012609E+22	1,413530E+23
566	5,061514E+22	5,061453E+22	2,006205E+22	2,006302E+22	1,012297E+23	4,012507E+22	1,413547E+23
567	5,061390E+22	5,061338E+22	2,006269E+22	2,006167E+22	1,012273E+23	4,012436E+22	1,413516E+23
568	5,061396E+22	5,061560E+22	2,006218E+22	2,006160E+22	1,012296E+23	4,012378E+22	1,413533E+23
569	5,061610E+22	5,061493E+22	2,006107E+22	2,006144E+22	1,012310E+23	4,012251E+22	1,413535E+23
570	5,061406E+22	5,061482E+22	2,006156E+22	2,006067E+22	1,012289E+23	4,012223E+22	1,413511E+23
571	5,061542E+22	5,061652E+22	2,006054E+22	2,006134E+22	1,012319E+23	4,012189E+22	1,413538E+23
572	5,061614E+22	5,061488E+22	2,006055E+22	2,006085E+22	1,012310E+23	4,012141E+22	1,413524E+23
573	5,061439E+22	5,061579E+22	2,006129E+22	2,006042E+22	1,012302E+23	4,012172E+22	1,413519E+23
574	5,061690E+22	5,061603E+22	2,006054E+22	2,006145E+22	1,012329E+23	4,012199E+22	1,413549E+23
575	5,061547E+22	5,061407E+22	2,006165E+22	2,006125E+22	1,012295E+23	4,012290E+22	1,413524E+23
576	5,061359E+22	5,061577E+22	2,006245E+22	2,006196E+22	1,012294E+23	4,012441E+22	1,413538E+23
577	5,061508E+22	5,061461E+22	2,006214E+22	2,006310E+22	1,012297E+23	4,012524E+22	1,413549E+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	5,061269E+22	5,061258E+22	2,006364E+22	2,006294E+22	1,012253E+23	4,012658E+22	1,413518E+23
579	5,061278E+22	5,061377E+22	2,006372E+22	2,006393E+22	1,012265E+23	4,012765E+22	1,413542E+23
580	5,061370E+22	5,061174E+22	2,006388E+22	2,006429E+22	1,012254E+23	4,012817E+22	1,413536E+23
581	5,061110E+22	5,061211E+22	2,006491E+22	2,006393E+22	1,012232E+23	4,012884E+22	1,413521E+23
582	5,061285E+22	5,061323E+22	2,006405E+22	2,006502E+22	1,012261E+23	4,012907E+22	1,413552E+23
583	5,061236E+22	5,061117E+22	2,006444E+22	2,006443E+22	1,012235E+23	4,012887E+22	1,413524E+23
584	5,061083E+22	5,061306E+22	2,006476E+22	2,006382E+22	1,012239E+23	4,012858E+22	1,413525E+23
585	5,061368E+22	5,061306E+22	2,006345E+22	2,006410E+22	1,012267E+23	4,012754E+22	1,413543E+23
586	5,061265E+22	5,061157E+22	2,006378E+22	2,006290E+22	1,012242E+23	4,012667E+22	1,413509E+23
587	5,061254E+22	5,061422E+22	2,006318E+22	2,006287E+22	1,012268E+23	4,012605E+22	1,413528E+23
588	5,061430E+22	5,061356E+22	2,006221E+22	2,006297E+22	1,012279E+23	4,012517E+22	1,413530E+23
589	5,061245E+22	5,061359E+22	2,006266E+22	2,006190E+22	1,012260E+23	4,012456E+22	1,413506E+23
590	5,061433E+22	5,061507E+22	2,006185E+22	2,006250E+22	1,012294E+23	4,012435E+22	1,413537E+23
591	5,061501E+22	5,061294E+22	2,006195E+22	2,006210E+22	1,012279E+23	4,012405E+22	1,413520E+23
592	5,061310E+22	5,061429E+22	2,006282E+22	2,006168E+22	1,012274E+23	4,012449E+22	1,413519E+23
593	5,061494E+22	5,061481E+22	2,006216E+22	2,006297E+22	1,012297E+23	4,012513E+22	1,413549E+23
594	5,061352E+22	5,061240E+22	2,006310E+22	2,006297E+22	1,012259E+23	4,012606E+22	1,413520E+23
595	5,061175E+22	5,061397E+22	2,006394E+22	2,006352E+22	1,012257E+23	4,012746E+22	1,413532E+23
596	5,061317E+22	5,061261E+22	2,006381E+22	2,006474E+22	1,012258E+23	4,012854E+22	1,413543E+23
597	5,061111E+22	5,061086E+22	2,006514E+22	2,006432E+22	1,012220E+23	4,012946E+22	1,413514E+23
598	5,061143E+22	5,061213E+22	2,006527E+22	2,006541E+22	1,012236E+23	4,013068E+22	1,413542E+23
599	5,061194E+22	5,061004E+22	2,006535E+22	2,006598E+22	1,012220E+23	4,013133E+22	1,413533E+23
600	5,060935E+22	5,061075E+22	2,006631E+22	2,006544E+22	1,012201E+23	4,013175E+22	1,413518E+23
601	5,061098E+22	5,061177E+22	2,006554E+22	2,006637E+22	1,012227E+23	4,013191E+22	1,413547E+23
602	5,061107E+22	5,060931E+22	2,006565E+22	2,006561E+22	1,012204E+23	4,013126E+22	1,413516E+23
603	5,060974E+22	5,061137E+22	2,006590E+22	2,006479E+22	1,012211E+23	4,013069E+22	1,413518E+23
604	5,061210E+22	5,061165E+22	2,006469E+22	2,006532E+22	1,012238E+23	4,013001E+22	1,413538E+23
605	5,061092E+22	5,061064E+22	2,006482E+22	2,006408E+22	1,012216E+23	4,012890E+22	1,413505E+23
606	5,061099E+22	5,061311E+22	2,006435E+22	2,006419E+22	1,012241E+23	4,012854E+22	1,413526E+23
607	5,061277E+22	5,061184E+22	2,006347E+22	2,006432E+22	1,012246E+23	4,012779E+22	1,413524E+23
608	5,061131E+22	5,061199E+22	2,006398E+22	2,006303E+22	1,012233E+23	4,012701E+22	1,413503E+23
609	5,061310E+22	5,061356E+22	2,006332E+22	2,006367E+22	1,012267E+23	4,012699E+22	1,413536E+23
610	5,061383E+22	5,061127E+22	2,006323E+22	2,006349E+22	1,012251E+23	4,012672E+22	1,413518E+23
611	5,061148E+22	5,061295E+22	2,006415E+22	2,006316E+22	1,012244E+23	4,012732E+22	1,413517E+23
612	5,061273E+22	5,061339E+22	2,006372E+22	2,006472E+22	1,012261E+23	4,012844E+22	1,413546E+23
613	5,061147E+22	5,061085E+22	2,006463E+22	2,006448E+22	1,012223E+23	4,012911E+22	1,413514E+23
614	5,061025E+22	5,061209E+22	2,006560E+22	2,006501E+22	1,012223E+23	4,013061E+22	1,413529E+23
615	5,061160E+22	5,061031E+22	2,006544E+22	2,006630E+22	1,012219E+23	4,013174E+22	1,413536E+23
616	5,060952E+22	5,060910E+22	2,006669E+22	2,006582E+22	1,012186E+23	4,013252E+22	1,413511E+23
617	5,060949E+22	5,061077E+22	2,006680E+22	2,006700E+22	1,012203E+23	4,013380E+22	1,413541E+23
618	5,061022E+22	5,060838E+22	2,006662E+22	2,006755E+22	1,012186E+23	4,013417E+22	1,413528E+23
619	5,060787E+22	5,060919E+22	2,006761E+22	2,006667E+22	1,012171E+23	4,013428E+22	1,413513E+23
620	5,060940E+22	5,061020E+22	2,006695E+22	2,006758E+22	1,012196E+23	4,013454E+22	1,413541E+23
621	5,060966E+22	5,060800E+22	2,006690E+22	2,006662E+22	1,012177E+23	4,013352E+22	1,413512E+23
622	5,060844E+22	5,061008E+22	2,006716E+22	2,006600E+22	1,012185E+23	4,013316E+22	1,413517E+23
623	5,061027E+22	5,061014E+22	2,006589E+22	2,006679E+22	1,012204E+23	4,013268E+22	1,413531E+23
624	5,060931E+22	5,060926E+22	2,006600E+22	2,006544E+22	1,012186E+23	4,013143E+22	1,413500E+23
625	5,060956E+22	5,061152E+22	2,006566E+22	2,006541E+22	1,012211E+23	4,013108E+22	1,413522E+23
626	5,061187E+22	5,060995E+22	2,006458E+22	2,006548E+22	1,012218E+23	4,013006E+22	1,413519E+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	5,061047E+22	5,061044E+22	2,006515E+22	2,006406E+22	1,012209E+23	4,012920E+22	1,413501E+23
628	5,061146E+22	5,061237E+22	2,006472E+22	2,006502E+22	1,012238E+23	4,012974E+22	1,413536E+23
629	5,061186E+22	5,061043E+22	2,006458E+22	2,006490E+22	1,012223E+23	4,012947E+22	1,413518E+23
630	5,060960E+22	5,061160E+22	2,006571E+22	2,006475E+22	1,012212E+23	4,013046E+22	1,413517E+23
631	5,061058E+22	5,061138E+22	2,006542E+22	2,006639E+22	1,012220E+23	4,013181E+22	1,413538E+23
632	5,060985E+22	5,060880E+22	2,006629E+22	2,006598E+22	1,012186E+23	4,013228E+22	1,413509E+23
633	5,060864E+22	5,060997E+22	2,006731E+22	2,006655E+22	1,012186E+23	4,013386E+22	1,413525E+23
634	5,061015E+22	5,060825E+22	2,006682E+22	2,006800E+22	1,012184E+23	4,013482E+22	1,413532E+23
635	5,060797E+22	5,060753E+22	2,006798E+22	2,006741E+22	1,012155E+23	4,013539E+22	1,413509E+23
636	5,060754E+22	5,060934E+22	2,006825E+22	2,006861E+22	1,012169E+23	4,013686E+22	1,413537E+23
637	5,060857E+22	5,060707E+22	2,006798E+22	2,006874E+22	1,012156E+23	4,013672E+22	1,413524E+23
638	5,060666E+22	5,060765E+22	2,006905E+22	2,006779E+22	1,012143E+23	4,013684E+22	1,413512E+23
639	5,060777E+22	5,060845E+22	2,006841E+22	2,006879E+22	1,012162E+23	4,013720E+22	1,413534E+23
640	5,060801E+22	5,060666E+22	2,006822E+22	2,006787E+22	1,012147E+23	4,013609E+22	1,413508E+23
641	5,060657E+22	5,060878E+22	2,006848E+22	2,006739E+22	1,012154E+23	4,013586E+22	1,413512E+23
642	5,060879E+22	5,060843E+22	2,006693E+22	2,006821E+22	1,012172E+23	4,013514E+22	1,413524E+23
643	5,060824E+22	5,060768E+22	2,006704E+22	2,006655E+22	1,012159E+23	4,013359E+22	1,413495E+23
644	5,060844E+22	5,061007E+22	2,006687E+22	2,006656E+22	1,012185E+23	4,013342E+22	1,413519E+23
645	5,061075E+22	5,060881E+22	2,006575E+22	2,006647E+22	1,012196E+23	4,013223E+22	1,413518E+23
646	5,060923E+22	5,060941E+22	2,006647E+22	2,006538E+22	1,012186E+23	4,013185E+22	1,413505E+23
647	5,060934E+22	5,061099E+22	2,006618E+22	2,006661E+22	1,012203E+23	4,013279E+22	1,413531E+23
648	5,060980E+22	5,060886E+22	2,006613E+22	2,006647E+22	1,012187E+23	4,013261E+22	1,413513E+23
649	5,060776E+22	5,060958E+22	2,006742E+22	2,006627E+22	1,012173E+23	4,013370E+22	1,413510E+23
650	5,060922E+22	5,060889E+22	2,006687E+22	2,006792E+22	1,012181E+23	4,013479E+22	1,413529E+23
651	5,060864E+22	5,060673E+22	2,006769E+22	2,006741E+22	1,012154E+23	4,013509E+22	1,413505E+23
652	5,060691E+22	5,060840E+22	2,006876E+22	2,006819E+22	1,012153E+23	4,013695E+22	1,413523E+23
653	5,060825E+22	5,060714E+22	2,006818E+22	2,006949E+22	1,012154E+23	4,013767E+22	1,413531E+23
654	5,060635E+22	5,060627E+22	2,006949E+22	2,006890E+22	1,012126E+23	4,013839E+22	1,413510E+23
655	5,060559E+22	5,060763E+22	2,006991E+22	2,007000E+22	1,012132E+23	4,013991E+22	1,413531E+23
656	5,060700E+22	5,060546E+22	2,006959E+22	2,006996E+22	1,012125E+23	4,013956E+22	1,413520E+23
657	5,060507E+22	5,060592E+22	2,007065E+22	2,006910E+22	1,012110E+23	4,013974E+22	1,413507E+23
658	5,060615E+22	5,060665E+22	2,006959E+22	2,007031E+22	1,012128E+23	4,013990E+22	1,413527E+23
659	5,060647E+22	5,060517E+22	2,006925E+22	2,006931E+22	1,012116E+23	4,013856E+22	1,413502E+23
660	5,060495E+22	5,060727E+22	2,006959E+22	2,006882E+22	1,012122E+23	4,013841E+22	1,413506E+23
661	5,060768E+22	5,060711E+22	2,006798E+22	2,006921E+22	1,012148E+23	4,013719E+22	1,413520E+23
662	5,060762E+22	5,060630E+22	2,006816E+22	2,006751E+22	1,012139E+23	4,013567E+22	1,413496E+23
663	5,060705E+22	5,060868E+22	2,006818E+22	2,006764E+22	1,012157E+23	4,013582E+22	1,413515E+23
664	5,060912E+22	5,060784E+22	2,006709E+22	2,006768E+22	1,012170E+23	4,013477E+22	1,413517E+23
665	5,060721E+22	5,060810E+22	2,006801E+22	2,006684E+22	1,012153E+23	4,013485E+22	1,413502E+23
666	5,060743E+22	5,060908E+22	2,006758E+22	2,006819E+22	1,012165E+23	4,013577E+22	1,413523E+23
667	5,060832E+22	5,060684E+22	2,006755E+22	2,006790E+22	1,012152E+23	4,013545E+22	1,413506E+23
668	5,060627E+22	5,060752E+22	2,006893E+22	2,006780E+22	1,012138E+23	4,013674E+22	1,413505E+23
669	5,060787E+22	5,060720E+22	2,006825E+22	2,006932E+22	1,012151E+23	4,013757E+22	1,413526E+23
670	5,060727E+22	5,060535E+22	2,006909E+22	2,006902E+22	1,012126E+23	4,013811E+22	1,413507E+23
671	5,060477E+22	5,060695E+22	2,007032E+22	2,006991E+22	1,012117E+23	4,014022E+22	1,413519E+23
672	5,060632E+22	5,060571E+22	2,006984E+22	2,007100E+22	1,012120E+23	4,014084E+22	1,413529E+23
673	5,060462E+22	5,060449E+22	2,007129E+22	2,007029E+22	1,012091E+23	4,014159E+22	1,413507E+23
674	5,060409E+22	5,060549E+22	2,007139E+22	2,007137E+22	1,012096E+23	4,014276E+22	1,413523E+23
675	5,060556E+22	5,060366E+22	2,007094E+22	2,007129E+22	1,012092E+23	4,014222E+22	1,413514E+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							
676	5,060324E+22	5,060444E+22	2,007189E+22	2,007063E+22	1,012077E+23	4,014252E+22	1,413502E+23
677	5,060444E+22	5,060537E+22	2,007064E+22	2,007161E+22	1,012098E+23	4,014224E+22	1,413521E+23
678	5,060529E+22	5,060388E+22	2,007033E+22	2,007054E+22	1,012092E+23	4,014087E+22	1,413500E+23
679	5,060364E+22	5,060574E+22	2,007078E+22	2,006990E+22	1,012094E+23	4,014068E+22	1,413501E+23
680	5,060661E+22	5,060579E+22	2,006925E+22	2,007013E+22	1,012124E+23	4,013938E+22	1,413518E+23
681	5,060638E+22	5,060504E+22	2,006958E+22	2,006860E+22	1,012114E+23	4,013818E+22	1,413496E+23
682	5,060544E+22	5,060721E+22	2,006937E+22	2,006902E+22	1,012126E+23	4,013839E+22	1,413510E+23
683	5,060736E+22	5,060642E+22	2,006833E+22	2,006912E+22	1,012138E+23	4,013746E+22	1,413512E+23
684	5,060534E+22	5,060636E+22	2,006941E+22	2,006841E+22	1,012117E+23	4,013781E+22	1,413495E+23
685	5,060596E+22	5,060723E+22	2,006892E+22	2,006947E+22	1,012132E+23	4,013839E+22	1,413516E+23
686	5,060729E+22	5,060506E+22	2,006893E+22	2,006927E+22	1,012123E+23	4,013821E+22	1,413506E+23
687	5,060457E+22	5,060579E+22	2,007043E+22	2,006933E+22	1,012104E+23	4,013976E+22	1,413501E+23
688	5,060602E+22	5,060596E+22	2,006982E+22	2,007089E+22	1,012120E+23	4,014070E+22	1,413527E+23
689	5,060526E+22	5,060397E+22	2,007082E+22	2,007068E+22	1,012092E+23	4,014150E+22	1,413507E+23
690	5,060287E+22	5,060506E+22	2,007191E+22	2,007154E+22	1,012079E+23	4,014344E+22	1,413514E+23
691	5,060480E+22	5,060382E+22	2,007143E+22	2,007242E+22	1,012086E+23	4,014385E+22	1,413525E+23
692	5,060298E+22	5,060255E+22	2,007288E+22	2,007180E+22	1,012055E+23	4,014468E+22	1,413502E+23
693	5,060251E+22	5,060386E+22	2,007273E+22	2,007272E+22	1,012064E+23	4,014545E+22	1,413518E+23
694	5,060409E+22	5,060228E+22	2,007210E+22	2,007279E+22	1,012064E+23	4,014488E+22	1,413513E+23
695	5,060127E+22	5,060290E+22	2,007309E+22	2,007212E+22	1,012042E+23	4,014521E+22	1,413494E+23
696	5,060303E+22	5,060396E+22	2,007188E+22	2,007276E+22	1,012070E+23	4,014464E+22	1,413516E+23
697	5,060421E+22	5,060235E+22	2,007168E+22	2,007152E+22	1,012066E+23	4,014320E+22	1,413498E+23
698	5,060264E+22	5,060406E+22	2,007192E+22	2,007090E+22	1,012067E+23	4,014283E+22	1,413495E+23
699	5,060544E+22	5,060454E+22	2,007041E+22	2,007116E+22	1,012100E+23	4,014157E+22	1,413515E+23
700	5,060454E+22	5,060395E+22	2,007081E+22	2,006999E+22	1,012085E+23	4,014080E+22	1,413493E+23
701	5,060355E+22	5,060600E+22	2,007056E+22	2,007032E+22	1,012096E+23	4,014088E+22	1,413504E+23
702	5,060586E+22	5,060495E+22	2,006961E+22	2,007051E+22	1,012108E+23	4,014013E+22	1,413509E+23
703	5,060368E+22	5,060448E+22	2,007085E+22	2,006982E+22	1,012082E+23	4,014067E+22	1,413488E+23
704	5,060466E+22	5,060547E+22	2,007045E+22	2,007080E+22	1,012101E+23	4,014125E+22	1,413514E+23
705	5,060583E+22	5,060347E+22	2,007055E+22	2,007081E+22	1,012093E+23	4,014137E+22	1,413507E+23
706	5,060282E+22	5,060411E+22	2,007180E+22	2,007109E+22	1,012069E+23	4,014289E+22	1,413498E+23
707	5,060421E+22	5,060435E+22	2,007133E+22	2,007255E+22	1,012086E+23	4,014388E+22	1,413524E+23
708	5,060342E+22	5,060221E+22	2,007248E+22	2,007234E+22	1,012056E+23	4,014482E+22	1,413504E+23
709	5,060135E+22	5,060314E+22	2,007344E+22	2,007283E+22	1,012045E+23	4,014627E+22	1,413508E+23
710	5,060347E+22	5,060209E+22	2,007291E+22	2,007376E+22	1,012056E+23	4,014667E+22	1,413522E+23
711	5,060103E+22	5,060087E+22	2,007433E+22	2,007328E+22	1,012019E+23	4,014761E+22	1,413495E+23
712	5,060053E+22	5,060247E+22	2,007412E+22	2,007414E+22	1,012030E+23	4,014826E+22	1,413513E+23
713	5,060226E+22	5,060088E+22	2,007354E+22	2,007420E+22	1,012031E+23	4,014775E+22	1,413509E+23
714	5,059984E+22	5,060111E+22	2,007426E+22	2,007342E+22	1,012009E+23	4,014768E+22	1,413486E+23
715	5,060204E+22	5,060232E+22	2,007311E+22	2,007380E+22	1,012044E+23	4,014690E+22	1,413513E+23
716	5,060306E+22	5,060094E+22	2,007292E+22	2,007266E+22	1,012040E+23	4,014558E+22	1,413496E+23
717	5,060132E+22	5,060290E+22	2,007301E+22	2,007198E+22	1,012042E+23	4,014498E+22	1,413492E+23
718	5,060389E+22	5,060361E+22	2,007148E+22	2,007248E+22	1,012075E+23	4,014397E+22	1,413515E+23
719	5,060244E+22	5,060256E+22	2,007209E+22	2,007148E+22	1,012050E+23	4,014356E+22	1,413486E+23
720	5,060190E+22	5,060438E+22	2,007200E+22	2,007161E+22	1,012063E+23	4,014361E+22	1,413499E+23
721	5,060455E+22	5,060312E+22	2,007117E+22	2,007181E+22	1,012077E+23	4,014298E+22	1,413507E+23
722	5,060244E+22	5,060243E+22	2,007215E+22	2,007124E+22	1,012049E+23	4,014340E+22	1,413483E+23
723	5,060336E+22	5,060383E+22	2,007181E+22	2,007227E+22	1,012072E+23	4,014408E+22	1,413513E+23
724	5,060396E+22	5,060208E+22	2,007200E+22	2,007251E+22	1,012060E+23	4,014451E+22	1,413505E+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	5,060101E+22	5,060268E+22	2,007326E+22	2,007258E+22	1,012037E+23	4,014583E+22	1,413495E+23
726	5,060266E+22	5,060283E+22	2,007286E+22	2,007399E+22	1,012055E+23	4,014685E+22	1,413523E+23
727	5,060147E+22	5,060033E+22	2,007420E+22	2,007382E+22	1,012018E+23	4,014801E+22	1,413498E+23
728	5,059964E+22	5,060139E+22	2,007516E+22	2,007421E+22	1,012010E+23	4,014936E+22	1,413504E+23
729	5,060160E+22	5,060045E+22	2,007457E+22	2,007534E+22	1,012020E+23	4,014990E+22	1,413519E+23
730	5,059905E+22	5,059904E+22	2,007560E+22	2,007501E+22	1,011981E+23	4,015061E+22	1,413487E+23
731	5,059895E+22	5,060067E+22	2,007541E+22	2,007563E+22	1,011996E+23	4,015104E+22	1,413507E+23
732	5,060083E+22	5,059918E+22	2,007484E+22	2,007555E+22	1,012000E+23	4,015039E+22	1,413504E+23
733	5,059890E+22	5,059956E+22	2,007538E+22	2,007438E+22	1,011985E+23	4,014975E+22	1,413482E+23
734	5,060112E+22	5,060116E+22	2,007420E+22	2,007478E+22	1,012023E+23	4,014898E+22	1,413513E+23
735	5,060128E+22	5,059992E+22	2,007413E+22	2,007386E+22	1,012012E+23	4,014800E+22	1,413492E+23
736	5,059944E+22	5,060192E+22	2,007429E+22	2,007320E+22	1,012014E+23	4,014749E+22	1,413488E+23
737	5,060201E+22	5,060233E+22	2,007293E+22	2,007382E+22	1,012043E+23	4,014675E+22	1,413511E+23
738	5,060091E+22	5,060062E+22	2,007333E+22	2,007288E+22	1,012015E+23	4,014621E+22	1,413477E+23
739	5,060086E+22	5,060233E+22	2,007335E+22	2,007289E+22	1,012032E+23	4,014624E+22	1,413494E+23
740	5,060335E+22	5,060138E+22	2,007255E+22	2,007327E+22	1,012047E+23	4,014582E+22	1,413505E+23
741	5,060117E+22	5,060094E+22	2,007333E+22	2,007265E+22	1,012021E+23	4,014598E+22	1,413481E+23
742	5,060177E+22	5,060266E+22	2,007308E+22	2,007381E+22	1,012044E+23	4,014688E+22	1,413513E+23
743	5,060183E+22	5,060064E+22	2,007356E+22	2,007410E+22	1,012025E+23	4,014766E+22	1,413501E+23
744	5,059919E+22	5,060097E+22	2,007503E+22	2,007394E+22	1,012002E+23	4,014896E+22	1,413491E+23
745	5,060091E+22	5,060103E+22	2,007475E+22	2,007540E+22	1,012019E+23	4,015015E+22	1,413521E+23
746	5,059966E+22	5,059822E+22	2,007577E+22	2,007543E+22	1,011979E+23	4,015121E+22	1,413491E+23
747	5,059782E+22	5,059948E+22	2,007668E+22	2,007587E+22	1,011973E+23	4,015255E+22	1,413499E+23
748	5,059950E+22	5,059880E+22	2,007599E+22	2,007710E+22	1,011983E+23	4,015309E+22	1,413514E+23
749	5,059746E+22	5,059734E+22	2,007679E+22	2,007643E+22	1,011948E+23	4,015322E+22	1,413480E+23
750	5,059786E+22	5,059919E+22	2,007658E+22	2,007684E+22	1,011971E+23	4,015342E+22	1,413505E+23
751	5,059948E+22	5,059773E+22	2,007616E+22	2,007667E+22	1,011972E+23	4,015284E+22	1,413500E+23
752	5,059767E+22	5,059838E+22	2,007674E+22	2,007539E+22	1,011960E+23	4,015213E+22	1,413482E+23
753	5,059948E+22	5,060018E+22	2,007559E+22	2,007600E+22	1,011997E+23	4,015159E+22	1,413512E+23
754	5,059934E+22	5,059849E+22	2,007529E+22	2,007533E+22	1,011978E+23	4,015061E+22	1,413484E+23
755	5,059794E+22	5,060013E+22	2,007557E+22	2,007456E+22	1,011981E+23	4,015013E+22	1,413482E+23
756	5,060059E+22	5,060044E+22	2,007424E+22	2,007513E+22	1,012010E+23	4,014938E+22	1,413504E+23
757	5,060000E+22	5,059878E+22	2,007443E+22	2,007399E+22	1,011988E+23	4,014843E+22	1,413472E+23
758	5,059997E+22	5,060092E+22	2,007443E+22	2,007408E+22	1,012009E+23	4,014851E+22	1,413494E+23
759	5,060150E+22	5,060019E+22	2,007386E+22	2,007470E+22	1,012017E+23	4,014855E+22	1,413502E+23
760	5,059926E+22	5,059989E+22	2,007484E+22	2,007404E+22	1,011992E+23	4,014888E+22	1,413480E+23
761	5,059978E+22	5,060133E+22	2,007484E+22	2,007526E+22	1,012011E+23	4,015010E+22	1,413512E+23
762	5,059993E+22	5,059867E+22	2,007522E+22	2,007568E+22	1,011986E+23	4,015090E+22	1,413495E+23
763	5,059770E+22	5,059874E+22	2,007678E+22	2,007549E+22	1,011964E+23	4,015227E+22	1,413487E+23
764	5,059904E+22	5,059903E+22	2,007643E+22	2,007712E+22	1,011981E+23	4,015355E+22	1,413516E+23
765	5,059792E+22	5,059640E+22	2,007708E+22	2,007714E+22	1,011943E+23	4,015422E+22	1,413485E+23
766	5,059615E+22	5,059788E+22	2,007788E+22	2,007754E+22	1,011940E+23	4,015542E+22	1,413495E+23
767	5,059765E+22	5,059712E+22	2,007740E+22	2,007862E+22	1,011948E+23	4,015602E+22	1,413508E+23
768	5,059624E+22	5,059579E+22	2,007824E+22	2,007753E+22	1,011920E+23	4,015577E+22	1,413478E+23
769	5,059669E+22	5,059785E+22	2,007810E+22	2,007787E+22	1,011945E+23	4,015597E+22	1,413505E+23
770	5,059802E+22	5,059631E+22	2,007743E+22	2,007788E+22	1,011943E+23	4,015531E+22	1,413496E+23
771	5,059608E+22	5,059699E+22	2,007804E+22	2,007668E+22	1,011931E+23	4,015472E+22	1,413478E+23
772	5,059744E+22	5,059890E+22	2,007689E+22	2,007740E+22	1,011963E+23	4,015429E+22	1,413506E+23
773	5,059786E+22	5,059684E+22	2,007635E+22	2,007657E+22	1,011947E+23	4,015292E+22	1,413476E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
774	5,059686E+22	5,059846E+22	2,007662E+22	2,007572E+22	1,011953E+23	4,015234E+22	1,413477E+23
775	5,059929E+22	5,059882E+22	2,007549E+22	2,007634E+22	1,011981E+23	4,015183E+22	1,413499E+23
776	5,059882E+22	5,059747E+22	2,007572E+22	2,007515E+22	1,011963E+23	4,015087E+22	1,413472E+23
777	5,059835E+22	5,059993E+22	2,007583E+22	2,007549E+22	1,011983E+23	4,015132E+22	1,413496E+23
778	5,059952E+22	5,059875E+22	2,007522E+22	2,007631E+22	1,011983E+23	4,015153E+22	1,413498E+23
779	5,059761E+22	5,059799E+22	2,007648E+22	2,007559E+22	1,011956E+23	4,015207E+22	1,413477E+23
780	5,059797E+22	5,059937E+22	2,007658E+22	2,007677E+22	1,011973E+23	4,015336E+22	1,413507E+23
781	5,059851E+22	5,059656E+22	2,007671E+22	2,007715E+22	1,011951E+23	4,015386E+22	1,413489E+23
782	5,059623E+22	5,059694E+22	2,007816E+22	2,007706E+22	1,011932E+23	4,015522E+22	1,413484E+23
783	5,059687E+22	5,059741E+22	2,007791E+22	2,007884E+22	1,011943E+23	4,015675E+22	1,413510E+23
784	5,059601E+22	5,059496E+22	2,007858E+22	2,007866E+22	1,011910E+23	4,015724E+22	1,413482E+23
785	5,059453E+22	5,059644E+22	2,007946E+22	2,007895E+22	1,011910E+23	4,015842E+22	1,413494E+23
786	5,059615E+22	5,059533E+22	2,007887E+22	2,007998E+22	1,011915E+23	4,015884E+22	1,413503E+23
787	5,059519E+22	5,059404E+22	2,007977E+22	2,007876E+22	1,011892E+23	4,015854E+22	1,413478E+23
788	5,059508E+22	5,059643E+22	2,007954E+22	2,007916E+22	1,011915E+23	4,015870E+22	1,413502E+23
789	5,059633E+22	5,059499E+22	2,007850E+22	2,007923E+22	1,011913E+23	4,015773E+22	1,413491E+23
790	5,059449E+22	5,059563E+22	2,007902E+22	2,007802E+22	1,011901E+23	4,015703E+22	1,413472E+23
791	5,059561E+22	5,059723E+22	2,007810E+22	2,007867E+22	1,011928E+23	4,015676E+22	1,413496E+23
792	5,059669E+22	5,059528E+22	2,007759E+22	2,007757E+22	1,011920E+23	4,015516E+22	1,413471E+23
793	5,059586E+22	5,059709E+22	2,007790E+22	2,007679E+22	1,011929E+23	4,015469E+22	1,413476E+23
794	5,059788E+22	5,059737E+22	2,007668E+22	2,007765E+22	1,011952E+23	4,015434E+22	1,413496E+23
795	5,059737E+22	5,059612E+22	2,007705E+22	2,007657E+22	1,011935E+23	4,015361E+22	1,413471E+23
796	5,059637E+22	5,059859E+22	2,007732E+22	2,007694E+22	1,011950E+23	4,015426E+22	1,413492E+23
797	5,059793E+22	5,059705E+22	2,007659E+22	2,007772E+22	1,011950E+23	4,015431E+22	1,413493E+23
798	5,059629E+22	5,059614E+22	2,007792E+22	2,007700E+22	1,011924E+23	4,015492E+22	1,413473E+23
799	5,059618E+22	5,059747E+22	2,007824E+22	2,007831E+22	1,011936E+23	4,015656E+22	1,413502E+23
800	5,059679E+22	5,059495E+22	2,007832E+22	2,007870E+22	1,011917E+23	4,015702E+22	1,413488E+23
801	5,059429E+22	5,059551E+22	2,007972E+22	2,007881E+22	1,011898E+23	4,015852E+22	1,413483E+23
802	5,059484E+22	5,059554E+22	2,007940E+22	2,008062E+22	1,011904E+23	4,016001E+22	1,413504E+23
803	5,059462E+22	5,059288E+22	2,008020E+22	2,008017E+22	1,011875E+23	4,016037E+22	1,413479E+23
804	5,059307E+22	5,059468E+22	2,008108E+22	2,008026E+22	1,011877E+23	4,016134E+22	1,413491E+23
805	5,059497E+22	5,059367E+22	2,008016E+22	2,008118E+22	1,011886E+23	4,016134E+22	1,413500E+23
806	5,059370E+22	5,059274E+22	2,008094E+22	2,008004E+22	1,011864E+23	4,016099E+22	1,413474E+23
807	5,059284E+22	5,059525E+22	2,008083E+22	2,008055E+22	1,011881E+23	4,016137E+22	1,413495E+23
808	5,059442E+22	5,059374E+22	2,007977E+22	2,008044E+22	1,011882E+23	4,016022E+22	1,413484E+23
809	5,059299E+22	5,059421E+22	2,008031E+22	2,007922E+22	1,011872E+23	4,015952E+22	1,413467E+23
810	5,059433E+22	5,059536E+22	2,007930E+22	2,007987E+22	1,011897E+23	4,015917E+22	1,413489E+23
811	5,059588E+22	5,059350E+22	2,007887E+22	2,007875E+22	1,011894E+23	4,015762E+22	1,413470E+23
812	5,059451E+22	5,059582E+22	2,007914E+22	2,007808E+22	1,011903E+23	4,015722E+22	1,413475E+23
813	5,059642E+22	5,059612E+22	2,007773E+22	2,007903E+22	1,011925E+23	4,015676E+22	1,413493E+23
814	5,059590E+22	5,059479E+22	2,007821E+22	2,007795E+22	1,011907E+23	4,015616E+22	1,413469E+23
815	5,059454E+22	5,059693E+22	2,007885E+22	2,007829E+22	1,011915E+23	4,015714E+22	1,413486E+23
816	5,059643E+22	5,059542E+22	2,007821E+22	2,007893E+22	1,011919E+23	4,015715E+22	1,413490E+23
817	5,059479E+22	5,059457E+22	2,007956E+22	2,007845E+22	1,011894E+23	4,015801E+22	1,413474E+23
818	5,059414E+22	5,059562E+22	2,007980E+22	2,008004E+22	1,011898E+23	4,015984E+22	1,413496E+23
819	5,059495E+22	5,059315E+22	2,007993E+22	2,008049E+22	1,011881E+23	4,016043E+22	1,413485E+23
820	5,059229E+22	5,059376E+22	2,008132E+22	2,008047E+22	1,011860E+23	4,016179E+22	1,413478E+23
821	5,059336E+22	5,059361E+22	2,008081E+22	2,008210E+22	1,011870E+23	4,016291E+22	1,413499E+23
822	5,059349E+22	5,059118E+22	2,008154E+22	2,008148E+22	1,011847E+23	4,016303E+22	1,413477E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
823	5,059140E+22	5,059308E+22	2,008259E+22	2,008157E+22	1,011845E+23	4,016416E+22	1,413487E+23
824	5,059321E+22	5,059253E+22	2,008157E+22	2,008245E+22	1,011857E+23	4,016403E+22	1,413498E+23
825	5,059178E+22	5,059165E+22	2,008226E+22	2,008150E+22	1,011834E+23	4,016376E+22	1,413472E+23
826	5,059080E+22	5,059346E+22	2,008211E+22	2,008201E+22	1,011843E+23	4,016412E+22	1,413484E+23
827	5,059319E+22	5,059173E+22	2,008112E+22	2,008169E+22	1,011849E+23	4,016280E+22	1,413477E+23
828	5,059187E+22	5,059245E+22	2,008156E+22	2,008030E+22	1,011843E+23	4,016186E+22	1,413462E+23
829	5,059352E+22	5,059376E+22	2,008029E+22	2,008097E+22	1,011873E+23	4,016126E+22	1,413485E+23
830	5,059479E+22	5,059242E+22	2,007980E+22	2,007992E+22	1,011872E+23	4,015972E+22	1,413469E+23
831	5,059264E+22	5,059483E+22	2,008037E+22	2,007937E+22	1,011875E+23	4,015974E+22	1,413472E+23
832	5,059467E+22	5,059509E+22	2,007912E+22	2,008019E+22	1,011898E+23	4,015931E+22	1,413491E+23
833	5,059429E+22	5,059350E+22	2,007975E+22	2,007928E+22	1,011878E+23	4,015904E+22	1,413468E+23
834	5,059281E+22	5,059497E+22	2,008047E+22	2,007977E+22	1,011878E+23	4,016024E+22	1,413480E+23
835	5,059499E+22	5,059333E+22	2,007991E+22	2,008053E+22	1,011883E+23	4,016044E+22	1,413488E+23
836	5,059284E+22	5,059285E+22	2,008113E+22	2,008020E+22	1,011857E+23	4,016133E+22	1,413470E+23
837	5,059237E+22	5,059374E+22	2,008108E+22	2,008184E+22	1,011861E+23	4,016293E+22	1,413490E+23
838	5,059334E+22	5,059129E+22	2,008124E+22	2,008212E+22	1,011846E+23	4,016336E+22	1,413480E+23
839	5,059060E+22	5,059192E+22	2,008288E+22	2,008191E+22	1,011825E+23	4,016480E+22	1,413473E+23
840	5,059200E+22	5,059207E+22	2,008240E+22	2,008327E+22	1,011841E+23	4,016566E+22	1,413497E+23
841	5,059198E+22	5,058997E+22	2,008310E+22	2,008282E+22	1,011819E+23	4,016592E+22	1,413479E+23
842	5,058927E+22	5,059159E+22	2,008407E+22	2,008307E+22	1,011809E+23	4,016714E+22	1,413480E+23
843	5,059125E+22	5,059092E+22	2,008307E+22	2,008394E+22	1,011822E+23	4,016701E+22	1,413492E+23
844	5,058984E+22	5,059002E+22	2,008366E+22	2,008287E+22	1,011799E+23	4,016653E+22	1,413464E+23
845	5,058959E+22	5,059148E+22	2,008322E+22	2,008325E+22	1,011811E+23	4,016647E+22	1,413475E+23
846	5,059239E+22	5,059007E+22	2,008214E+22	2,008280E+22	1,011825E+23	4,016494E+22	1,413474E+23
847	5,059070E+22	5,059110E+22	2,008269E+22	2,008145E+22	1,011818E+23	4,016415E+22	1,413459E+23
848	5,059214E+22	5,059295E+22	2,008141E+22	2,008208E+22	1,011851E+23	4,016349E+22	1,413486E+23
849	5,059319E+22	5,059172E+22	2,008098E+22	2,008124E+22	1,011849E+23	4,016223E+22	1,413471E+23
850	5,059073E+22	5,059325E+22	2,008178E+22	2,008073E+22	1,011840E+23	4,016251E+22	1,413465E+23
851	5,059324E+22	5,059324E+22	2,008074E+22	2,008148E+22	1,011865E+23	4,016222E+22	1,413487E+23
852	5,059275E+22	5,059167E+22	2,008134E+22	2,008063E+22	1,011844E+23	4,016197E+22	1,413464E+23
853	5,059134E+22	5,059293E+22	2,008181E+22	2,008133E+22	1,011843E+23	4,016314E+22	1,413474E+23
854	5,059334E+22	5,059171E+22	2,008115E+22	2,008218E+22	1,011850E+23	4,016333E+22	1,413484E+23
855	5,059077E+22	5,059120E+22	2,008254E+22	2,008188E+22	1,011820E+23	4,016441E+22	1,413464E+23
856	5,059065E+22	5,059221E+22	2,008260E+22	2,008324E+22	1,011829E+23	4,016584E+22	1,413487E+23
857	5,059192E+22	5,058988E+22	2,008283E+22	2,008353E+22	1,011818E+23	4,016636E+22	1,413482E+23
858	5,058895E+22	5,059004E+22	2,008460E+22	2,008335E+22	1,011790E+23	4,016795E+22	1,413469E+23
859	5,059043E+22	5,059034E+22	2,008417E+22	2,008474E+22	1,011808E+23	4,016890E+22	1,413497E+23
860	5,058983E+22	5,058856E+22	2,008470E+22	2,008441E+22	1,011784E+23	4,016910E+22	1,413475E+23
861	5,058734E+22	5,058975E+22	2,008533E+22	2,008472E+22	1,011771E+23	4,017005E+22	1,413471E+23
862	5,058969E+22	5,058904E+22	2,008424E+22	2,008534E+22	1,011787E+23	4,016957E+22	1,413483E+23
863	5,058845E+22	5,058818E+22	2,008490E+22	2,008409E+22	1,011766E+23	4,016899E+22	1,413456E+23
864	5,058865E+22	5,059007E+22	2,008439E+22	2,008421E+22	1,011787E+23	4,016860E+22	1,413473E+23
865	5,059127E+22	5,058921E+22	2,008327E+22	2,008393E+22	1,011805E+23	4,016720E+22	1,413477E+23
866	5,058898E+22	5,059003E+22	2,008390E+22	2,008275E+22	1,011790E+23	4,016665E+22	1,413457E+23
867	5,059051E+22	5,059169E+22	2,008280E+22	2,008333E+22	1,011822E+23	4,016613E+22	1,413483E+23
868	5,059134E+22	5,059037E+22	2,008245E+22	2,008248E+22	1,011817E+23	4,016493E+22	1,413466E+23
869	5,058941E+22	5,059127E+22	2,008306E+22	2,008205E+22	1,011807E+23	4,016511E+22	1,413458E+23
870	5,059199E+22	5,059131E+22	2,008203E+22	2,008280E+22	1,011833E+23	4,016483E+22	1,413481E+23
871	5,059111E+22	5,058995E+22	2,008273E+22	2,008217E+22	1,011811E+23	4,016489E+22	1,413460E+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							
872	5,058965E+22	5,059153E+22	2,008313E+22	2,008285E+22	1,011812E+23	4,016598E+22	1,413472E+23
873	5,059158E+22	5,059043E+22	2,008253E+22	2,008384E+22	1,011820E+23	4,016637E+22	1,413484E+23
874	5,058896E+22	5,058928E+22	2,008413E+22	2,008344E+22	1,011782E+23	4,016757E+22	1,413458E+23
875	5,058929E+22	5,059025E+22	2,008439E+22	2,008461E+22	1,011795E+23	4,016900E+22	1,413485E+23
876	5,059027E+22	5,058828E+22	2,008461E+22	2,008491E+22	1,011786E+23	4,016952E+22	1,413481E+23
877	5,058726E+22	5,058824E+22	2,008610E+22	2,008495E+22	1,011755E+23	4,017105E+22	1,413466E+23
878	5,058842E+22	5,058882E+22	2,008556E+22	2,008634E+22	1,011772E+23	4,017189E+22	1,413491E+23
879	5,058761E+22	5,058692E+22	2,008613E+22	2,008602E+22	1,011745E+23	4,017215E+22	1,413467E+23
880	5,058566E+22	5,058809E+22	2,008666E+22	2,008602E+22	1,011738E+23	4,017268E+22	1,413464E+23
881	5,058852E+22	5,058760E+22	2,008548E+22	2,008659E+22	1,011761E+23	4,017207E+22	1,413482E+23
882	5,058724E+22	5,058641E+22	2,008619E+22	2,008530E+22	1,011737E+23	4,017149E+22	1,413452E+23
883	5,058756E+22	5,058872E+22	2,008571E+22	2,008540E+22	1,011763E+23	4,017111E+22	1,413474E+23
884	5,058959E+22	5,058831E+22	2,008449E+22	2,008517E+22	1,011779E+23	4,016966E+22	1,413476E+23
885	5,058740E+22	5,058849E+22	2,008498E+22	2,008410E+22	1,011759E+23	4,016908E+22	1,413450E+23
886	5,058907E+22	5,059004E+22	2,008398E+22	2,008447E+22	1,011791E+23	4,016846E+22	1,413476E+23
887	5,058989E+22	5,058858E+22	2,008378E+22	2,008367E+22	1,011785E+23	4,016745E+22	1,413459E+23
888	5,058817E+22	5,058966E+22	2,008437E+22	2,008320E+22	1,011778E+23	4,016757E+22	1,413454E+23
889	5,059051E+22	5,059012E+22	2,008330E+22	2,008425E+22	1,011806E+23	4,016754E+22	1,413482E+23
890	5,058911E+22	5,058839E+22	2,008413E+22	2,008379E+22	1,011775E+23	4,016792E+22	1,413454E+23
891	5,058793E+22	5,058988E+22	2,008473E+22	2,008439E+22	1,011778E+23	4,016912E+22	1,413469E+23
892	5,058976E+22	5,058887E+22	2,008423E+22	2,008530E+22	1,011786E+23	4,016953E+22	1,413482E+23
893	5,058759E+22	5,058722E+22	2,008571E+22	2,008499E+22	1,011748E+23	4,017070E+22	1,413455E+23
894	5,058785E+22	5,058840E+22	2,008599E+22	2,008608E+22	1,011762E+23	4,017208E+22	1,413483E+23
895	5,058828E+22	5,058669E+22	2,008624E+22	2,008660E+22	1,011750E+23	4,017284E+22	1,413478E+23
896	5,058523E+22	5,058679E+22	2,008754E+22	2,008660E+22	1,011720E+23	4,017413E+22	1,413462E+23
897	5,058642E+22	5,058734E+22	2,008694E+22	2,008798E+22	1,011738E+23	4,017492E+22	1,413487E+23
898	5,058584E+22	5,058484E+22	2,008760E+22	2,008750E+22	1,011707E+23	4,017510E+22	1,413458E+23
899	5,058464E+22	5,058607E+22	2,008812E+22	2,008720E+22	1,011707E+23	4,017532E+22	1,413460E+23
900	5,058725E+22	5,058618E+22	2,008687E+22	2,008770E+22	1,011734E+23	4,017457E+22	1,413480E+23
901	5,058605E+22	5,058500E+22	2,008724E+22	2,008657E+22	1,011711E+23	4,017381E+22	1,413449E+23
902	5,058603E+22	5,058756E+22	2,008676E+22	2,008655E+22	1,011736E+23	4,017331E+22	1,413469E+23
903	5,058777E+22	5,058712E+22	2,008571E+22	2,008636E+22	1,011749E+23	4,017207E+22	1,413470E+23
904	5,058597E+22	5,058712E+22	2,008619E+22	2,008514E+22	1,011731E+23	4,017134E+22	1,413444E+23
905	5,058775E+22	5,058871E+22	2,008524E+22	2,008563E+22	1,011765E+23	4,017087E+22	1,413473E+23
906	5,058839E+22	5,058679E+22	2,008520E+22	2,008503E+22	1,011752E+23	4,017023E+22	1,413454E+23
907	5,058675E+22	5,058805E+22	2,008580E+22	2,008467E+22	1,011748E+23	4,017047E+22	1,413453E+23
908	5,058861E+22	5,058883E+22	2,008473E+22	2,008583E+22	1,011774E+23	4,017056E+22	1,413480E+23
909	5,058754E+22	5,058646E+22	2,008542E+22	2,008546E+22	1,011740E+23	4,017088E+22	1,413449E+23
910	5,058657E+22	5,058796E+22	2,008617E+22	2,008578E+22	1,011745E+23	4,017195E+22	1,413465E+23
911	5,058826E+22	5,058709E+22	2,008585E+22	2,008672E+22	1,011754E+23	4,017257E+22	1,413479E+23
912	5,058608E+22	5,058566E+22	2,008730E+22	2,008641E+22	1,011717E+23	4,017370E+22	1,413454E+23
913	5,058592E+22	5,058722E+22	2,008752E+22	2,008771E+22	1,011731E+23	4,017523E+22	1,413484E+23
914	5,058592E+22	5,058493E+22	2,008787E+22	2,008835E+22	1,011708E+23	4,017622E+22	1,413471E+23
915	5,058332E+22	5,058486E+22	2,008919E+22	2,008816E+22	1,011682E+23	4,017735E+22	1,413455E+23
916	5,058468E+22	5,058555E+22	2,008851E+22	2,008934E+22	1,011702E+23	4,017784E+22	1,413481E+23
917	5,058472E+22	5,058266E+22	2,008887E+22	2,008887E+22	1,011674E+23	4,017774E+22	1,413451E+23
918	5,058363E+22	5,058440E+22	2,008933E+22	2,008838E+22	1,011680E+23	4,017771E+22	1,413457E+23
919	5,058574E+22	5,058504E+22	2,008806E+22	2,008900E+22	1,011708E+23	4,017706E+22	1,413478E+23
920	5,058445E+22	5,058404E+22	2,008831E+22	2,008779E+22	1,011685E+23	4,017610E+22	1,413446E+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	5,058440E+22	5,058654E+22	2,008789E+22	2,008772E+22	1,011709E+23	4,017561E+22	1,413466E+23
922	5,058610E+22	5,058540E+22	2,008707E+22	2,008751E+22	1,011715E+23	4,017459E+22	1,413461E+23
923	5,058480E+22	5,058535E+22	2,008762E+22	2,008625E+22	1,011701E+23	4,017387E+22	1,413440E+23
924	5,058621E+22	5,058730E+22	2,008666E+22	2,008688E+22	1,011735E+23	4,017354E+22	1,413470E+23
925	5,058689E+22	5,058512E+22	2,008635E+22	2,008662E+22	1,011720E+23	4,017298E+22	1,413450E+23
926	5,058518E+22	5,058649E+22	2,008698E+22	2,008616E+22	1,011717E+23	4,017314E+22	1,413448E+23
927	5,058687E+22	5,058727E+22	2,008613E+22	2,008733E+22	1,011741E+23	4,017346E+22	1,413476E+23
928	5,058624E+22	5,058490E+22	2,008682E+22	2,008678E+22	1,011711E+23	4,017360E+22	1,413447E+23
929	5,058525E+22	5,058650E+22	2,008769E+22	2,008713E+22	1,011718E+23	4,017482E+22	1,413466E+23
930	5,058647E+22	5,058536E+22	2,008761E+22	2,008828E+22	1,011718E+23	4,017589E+22	1,413477E+23
931	5,058421E+22	5,058403E+22	2,008902E+22	2,008808E+22	1,011682E+23	4,017710E+22	1,413453E+23
932	5,058350E+22	5,058567E+22	2,008922E+22	2,008942E+22	1,011692E+23	4,017865E+22	1,413478E+23
933	5,058405E+22	5,058265E+22	2,008931E+22	2,009010E+22	1,011667E+23	4,017941E+22	1,413461E+23
934	5,058199E+22	5,058256E+22	2,009057E+22	2,008953E+22	1,011646E+23	4,018009E+22	1,413446E+23
935	5,058340E+22	5,058369E+22	2,008991E+22	2,009063E+22	1,011671E+23	4,018054E+22	1,413476E+23
936	5,058356E+22	5,058138E+22	2,009005E+22	2,009004E+22	1,011649E+23	4,018009E+22	1,413450E+23
937	5,058209E+22	5,058365E+22	2,009043E+22	2,008962E+22	1,011657E+23	4,018005E+22	1,413458E+23
938	5,058373E+22	5,058388E+22	2,008940E+22	2,009029E+22	1,011676E+23	4,017969E+22	1,413473E+23
939	5,058278E+22	5,058269E+22	2,008972E+22	2,008895E+22	1,011655E+23	4,017867E+22	1,413441E+23
940	5,058270E+22	5,058514E+22	2,008934E+22	2,008882E+22	1,011678E+23	4,017816E+22	1,413460E+23
941	5,058490E+22	5,058337E+22	2,008829E+22	2,008883E+22	1,011683E+23	4,017713E+22	1,413454E+23
942	5,058369E+22	5,058356E+22	2,008877E+22	2,008756E+22	1,011673E+23	4,017634E+22	1,413436E+23
943	5,058468E+22	5,058590E+22	2,008783E+22	2,008839E+22	1,011706E+23	4,017622E+22	1,413468E+23
944	5,058540E+22	5,058382E+22	2,008743E+22	2,008807E+22	1,011692E+23	4,017549E+22	1,413447E+23
945	5,058384E+22	5,058522E+22	2,008818E+22	2,008749E+22	1,011691E+23	4,017568E+22	1,413447E+23
946	5,058540E+22	5,058545E+22	2,008772E+22	2,008860E+22	1,011708E+23	4,017631E+22	1,413472E+23
947	5,058489E+22	5,058324E+22	2,008855E+22	2,008806E+22	1,011681E+23	4,017661E+22	1,413447E+23
948	5,058329E+22	5,058517E+22	2,008946E+22	2,008857E+22	1,011685E+23	4,017803E+22	1,413465E+23
949	5,058432E+22	5,058348E+22	2,008916E+22	2,009010E+22	1,011678E+23	4,017926E+22	1,413471E+23
950	5,058213E+22	5,058208E+22	2,009056E+22	2,008980E+22	1,011642E+23	4,018035E+22	1,413446E+23
951	5,058149E+22	5,058365E+22	2,009080E+22	2,009108E+22	1,011651E+23	4,018188E+22	1,413470E+23
952	5,058264E+22	5,058073E+22	2,009069E+22	2,009153E+22	1,011634E+23	4,018222E+22	1,413456E+23
953	5,058086E+22	5,058104E+22	2,009185E+22	2,009085E+22	1,011619E+23	4,018270E+22	1,413446E+23
954	5,058187E+22	5,058216E+22	2,009138E+22	2,009203E+22	1,011640E+23	4,018341E+22	1,413474E+23
955	5,058192E+22	5,058033E+22	2,009144E+22	2,009141E+22	1,011623E+23	4,018285E+22	1,413451E+23
956	5,058005E+22	5,058262E+22	2,009185E+22	2,009092E+22	1,011627E+23	4,018277E+22	1,413454E+23
957	5,058208E+22	5,058201E+22	2,009067E+22	2,009163E+22	1,011641E+23	4,018230E+22	1,413464E+23
958	5,058160E+22	5,058070E+22	2,009096E+22	2,009006E+22	1,011623E+23	4,018102E+22	1,413433E+23
959	5,058141E+22	5,058339E+22	2,009059E+22	2,009003E+22	1,011648E+23	4,018062E+22	1,413454E+23
960	5,058371E+22	5,058203E+22	2,008931E+22	2,009009E+22	1,011657E+23	4,017940E+22	1,413451E+23
961	5,058233E+22	5,058255E+22	2,008972E+22	2,008888E+22	1,011649E+23	4,017859E+22	1,413435E+23
962	5,058295E+22	5,058452E+22	2,008915E+22	2,008974E+22	1,011675E+23	4,017889E+22	1,413464E+23
963	5,058400E+22	5,058249E+22	2,008886E+22	2,008926E+22	1,011665E+23	4,017812E+22	1,413446E+23
964	5,058222E+22	5,058384E+22	2,008983E+22	2,008867E+22	1,011661E+23	4,017850E+22	1,413446E+23
965	5,058390E+22	5,058350E+22	2,008930E+22	2,009008E+22	1,011674E+23	4,017938E+22	1,413468E+23
966	5,058325E+22	5,058141E+22	2,009014E+22	2,008966E+22	1,011647E+23	4,017980E+22	1,413444E+23
967	5,058105E+22	5,058350E+22	2,009105E+22	2,009043E+22	1,011646E+23	4,018148E+22	1,413460E+23
968	5,058228E+22	5,058169E+22	2,009056E+22	2,009187E+22	1,011640E+23	4,018243E+22	1,413464E+23
969	5,058051E+22	5,058021E+22	2,009191E+22	2,009136E+22	1,011607E+23	4,018327E+22	1,413440E+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							
970	5,057999E+22	5,058148E+22	2,009241E+22	2,009252E+22	1,011615E+23	4,018493E+22	1,413464E+23
971	5,058138E+22	5,057913E+22	2,009225E+22	2,009283E+22	1,011605E+23	4,018508E+22	1,413456E+23
972	5,057916E+22	5,057998E+22	2,009340E+22	2,009219E+22	1,011591E+23	4,018559E+22	1,413447E+23
973	5,058003E+22	5,058067E+22	2,009274E+22	2,009355E+22	1,011607E+23	4,018629E+22	1,413470E+23
974	5,058017E+22	5,057880E+22	2,009279E+22	2,009274E+22	1,011590E+23	4,018554E+22	1,413445E+23
975	5,057832E+22	5,058099E+22	2,009322E+22	2,009219E+22	1,011593E+23	4,018541E+22	1,413447E+23
976	5,058079E+22	5,058032E+22	2,009181E+22	2,009276E+22	1,011611E+23	4,018457E+22	1,413457E+23
977	5,058059E+22	5,057928E+22	2,009200E+22	2,009121E+22	1,011599E+23	4,018321E+22	1,413431E+23
978	5,058004E+22	5,058184E+22	2,009182E+22	2,009134E+22	1,011619E+23	4,018316E+22	1,413450E+23
979	5,058216E+22	5,058097E+22	2,009051E+22	2,009141E+22	1,011631E+23	4,018192E+22	1,413451E+23
980	5,058063E+22	5,058151E+22	2,009102E+22	2,009015E+22	1,011621E+23	4,018117E+22	1,413433E+23
981	5,058153E+22	5,058261E+22	2,009048E+22	2,009106E+22	1,011641E+23	4,018154E+22	1,413457E+23
982	5,058281E+22	5,058064E+22	2,009032E+22	2,009046E+22	1,011634E+23	4,018078E+22	1,413442E+23
983	5,058063E+22	5,058217E+22	2,009141E+22	2,009009E+22	1,011628E+23	4,018150E+22	1,413443E+23
984	5,058204E+22	5,058203E+22	2,009071E+22	2,009166E+22	1,011641E+23	4,018237E+22	1,413464E+23
985	5,058125E+22	5,058004E+22	2,009149E+22	2,009137E+22	1,011613E+23	4,018286E+22	1,413441E+23
986	5,057888E+22	5,058149E+22	2,009271E+22	2,009217E+22	1,011604E+23	4,018488E+22	1,413453E+23
987	5,058055E+22	5,057985E+22	2,009221E+22	2,009340E+22	1,011604E+23	4,018560E+22	1,413460E+23
988	5,057900E+22	5,057848E+22	2,009357E+22	2,009276E+22	1,011575E+23	4,018633E+22	1,413438E+23
989	5,057867E+22	5,057941E+22	2,009395E+22	2,009407E+22	1,011581E+23	4,018802E+22	1,413461E+23
990	5,057995E+22	5,057758E+22	2,009372E+22	2,009433E+22	1,011575E+23	4,018805E+22	1,413456E+23
991	5,057718E+22	5,057868E+22	2,009485E+22	2,009378E+22	1,011559E+23	4,018863E+22	1,413445E+23
992	5,057823E+22	5,057922E+22	2,009400E+22	2,009494E+22	1,011575E+23	4,018894E+22	1,413464E+23
993	5,057878E+22	5,057720E+22	2,009396E+22	2,009390E+22	1,011560E+23	4,018787E+22	1,413438E+23
994	5,057691E+22	5,057904E+22	2,009461E+22	2,009333E+22	1,011560E+23	4,018794E+22	1,413439E+23
995	5,057950E+22	5,057897E+22	2,009306E+22	2,009385E+22	1,011585E+23	4,018690E+22	1,413454E+23
996	5,057899E+22	5,057827E+22	2,009320E+22	2,009243E+22	1,011573E+23	4,018563E+22	1,413429E+23
997	5,057842E+22	5,058034E+22	2,009295E+22	2,009277E+22	1,011588E+23	4,018572E+22	1,413445E+23
998	5,058075E+22	5,057947E+22	2,009174E+22	2,009266E+22	1,011602E+23	4,018439E+22	1,413446E+23
999	5,057916E+22	5,057998E+22	2,009239E+22	2,009140E+22	1,011591E+23	4,018379E+22	1,413429E+23
1000	5,058028E+22	5,058101E+22	2,009177E+22	2,009225E+22	1,011613E+23	4,018402E+22	1,413453E+23
1001	5,058152E+22	5,057921E+22	2,009162E+22	2,009180E+22	1,011607E+23	4,018342E+22	1,413442E+23
1002	5,057874E+22	5,058051E+22	2,009299E+22	2,009175E+22	1,011592E+23	4,018474E+22	1,413440E+23
1003	5,057990E+22	5,058064E+22	2,009226E+22	2,009334E+22	1,011605E+23	4,018560E+22	1,413461E+23
1004	5,057922E+22	5,057839E+22	2,009313E+22	2,009302E+22	1,011576E+23	4,018615E+22	1,413438E+23
1005	5,057735E+22	5,057899E+22	2,009430E+22	2,009380E+22	1,011563E+23	4,018810E+22	1,413444E+23
1006	5,057937E+22	5,057767E+22	2,009382E+22	2,009482E+22	1,011570E+23	4,018864E+22	1,413457E+23
1007	5,057753E+22	5,057683E+22	2,009516E+22	2,009428E+22	1,011544E+23	4,018944E+22	1,413438E+23
1008	5,057696E+22	5,057806E+22	2,009531E+22	2,009558E+22	1,011550E+23	4,019089E+22	1,413459E+23
1009	5,057811E+22	5,057650E+22	2,009502E+22	2,009578E+22	1,011546E+23	4,019080E+22	1,413454E+23
1010	5,057517E+22	5,057701E+22	2,009639E+22	2,009520E+22	1,011522E+23	4,019159E+22	1,413438E+23
1011	5,057640E+22	5,057771E+22	2,009547E+22	2,009611E+22	1,011541E+23	4,019158E+22	1,413457E+23
1012	5,057726E+22	5,057571E+22	2,009538E+22	2,009508E+22	1,011530E+23	4,019046E+22	1,413434E+23
1013	5,057561E+22	5,057700E+22	2,009584E+22	2,009471E+22	1,011526E+23	4,019056E+22	1,413432E+23
1014	5,057819E+22	5,057746E+22	2,009421E+22	2,009522E+22	1,011556E+23	4,018943E+22	1,413451E+23
1015	5,057740E+22	5,057703E+22	2,009431E+22	2,009385E+22	1,011544E+23	4,018816E+22	1,413426E+23
1016	5,057711E+22	5,057888E+22	2,009396E+22	2,009398E+22	1,011560E+23	4,018794E+22	1,413439E+23
1017	5,057974E+22	5,057809E+22	2,009282E+22	2,009367E+22	1,011578E+23	4,018649E+22	1,413443E+23
1018	5,057788E+22	5,057828E+22	2,009386E+22	2,009256E+22	1,011562E+23	4,018641E+22	1,413426E+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	5,057863E+22	5,057984E+22	2,009327E+22	2,009347E+22	1,011585E+23	4,018674E+22	1,413452E+23
1020	5,057951E+22	5,057811E+22	2,009318E+22	2,009332E+22	1,011576E+23	4,018650E+22	1,413441E+23
1021	5,057669E+22	5,057851E+22	2,009452E+22	2,009353E+22	1,011552E+23	4,018805E+22	1,413433E+23
1022	5,057819E+22	5,057857E+22	2,009386E+22	2,009496E+22	1,011568E+23	4,018882E+22	1,413456E+23
1023	5,057760E+22	5,057637E+22	2,009474E+22	2,009461E+22	1,011540E+23	4,018935E+22	1,413433E+23
1024	5,057613E+22	5,057705E+22	2,009572E+22	2,009529E+22	1,011532E+23	4,019101E+22	1,413442E+23
1025	5,057812E+22	5,057617E+22	2,009520E+22	2,009628E+22	1,011543E+23	4,019148E+22	1,413458E+23
1026	5,057560E+22	5,057538E+22	2,009677E+22	2,009594E+22	1,011510E+23	4,019271E+22	1,413437E+23
1027	5,057476E+22	5,057697E+22	2,009684E+22	2,009705E+22	1,011517E+23	4,019390E+22	1,413456E+23
1028	5,057606E+22	5,057503E+22	2,009660E+22	2,009717E+22	1,011511E+23	4,019378E+22	1,413449E+23
1029	5,057356E+22	5,057467E+22	2,009786E+22	2,009658E+22	1,011482E+23	4,019445E+22	1,413427E+23
1030	5,057516E+22	5,057565E+22	2,009685E+22	2,009732E+22	1,011508E+23	4,019417E+22	1,413450E+23
1031	5,057580E+22	5,057416E+22	2,009663E+22	2,009642E+22	1,011500E+23	4,019305E+22	1,413430E+23
1032	5,057425E+22	5,057566E+22	2,009677E+22	2,009604E+22	1,011499E+23	4,019281E+22	1,413427E+23
1033	5,057689E+22	5,057636E+22	2,009513E+22	2,009639E+22	1,011533E+23	4,019153E+22	1,413448E+23
1034	5,057600E+22	5,057563E+22	2,009557E+22	2,009499E+22	1,011516E+23	4,019057E+22	1,413422E+23
1035	5,057575E+22	5,057776E+22	2,009528E+22	2,009489E+22	1,011535E+23	4,019016E+22	1,413437E+23
1036	5,057839E+22	5,057693E+22	2,009429E+22	2,009476E+22	1,011553E+23	4,018906E+22	1,413444E+23
1037	5,057635E+22	5,057643E+22	2,009533E+22	2,009406E+22	1,011528E+23	4,018940E+22	1,413422E+23
1038	5,057678E+22	5,057824E+22	2,009476E+22	2,009510E+22	1,011550E+23	4,018987E+22	1,413449E+23
1039	5,057744E+22	5,057647E+22	2,009468E+22	2,009511E+22	1,011539E+23	4,018979E+22	1,413437E+23
1040	5,057514E+22	5,057635E+22	2,009584E+22	2,009514E+22	1,011515E+23	4,019098E+22	1,413425E+23
1041	5,057703E+22	5,057662E+22	2,009521E+22	2,009634E+22	1,011536E+23	4,019155E+22	1,413452E+23
1042	5,057625E+22	5,057448E+22	2,009633E+22	2,009606E+22	1,011507E+23	4,019239E+22	1,413431E+23
1043	5,057433E+22	5,057587E+22	2,009729E+22	2,009667E+22	1,011502E+23	4,019396E+22	1,413442E+23
1044	5,057600E+22	5,057521E+22	2,009685E+22	2,009785E+22	1,011512E+23	4,019470E+22	1,413459E+23
1045	5,057342E+22	5,057349E+22	2,009842E+22	2,009765E+22	1,011469E+23	4,019607E+22	1,413430E+23
1046	5,057285E+22	5,057500E+22	2,009850E+22	2,009851E+22	1,011478E+23	4,019701E+22	1,413449E+23
1047	5,057435E+22	5,057308E+22	2,009815E+22	2,009859E+22	1,011474E+23	4,019673E+22	1,413442E+23
1048	5,057237E+22	5,057259E+22	2,009904E+22	2,009792E+22	1,011450E+23	4,019696E+22	1,413419E+23
1049	5,057407E+22	5,057416E+22	2,009787E+22	2,009858E+22	1,011482E+23	4,019646E+22	1,413447E+23
1050	5,057428E+22	5,057289E+22	2,009777E+22	2,009782E+22	1,011472E+23	4,019559E+22	1,413428E+23
1051	5,057265E+22	5,057481E+22	2,009788E+22	2,009718E+22	1,011475E+23	4,019505E+22	1,413425E+23
1052	5,057553E+22	5,057530E+22	2,009643E+22	2,009742E+22	1,011508E+23	4,019385E+22	1,413447E+23
1053	5,057478E+22	5,057379E+22	2,009693E+22	2,009612E+22	1,011486E+23	4,019305E+22	1,413416E+23
1054	5,057450E+22	5,057617E+22	2,009672E+22	2,009599E+22	1,011507E+23	4,019271E+22	1,413434E+23
1055	5,057658E+22	5,057559E+22	2,009573E+22	2,009619E+22	1,011522E+23	4,019193E+22	1,413441E+23
1056	5,057457E+22	5,057488E+22	2,009653E+22	2,009568E+22	1,011494E+23	4,019221E+22	1,413417E+23
1057	5,057514E+22	5,057659E+22	2,009598E+22	2,009660E+22	1,011517E+23	4,019259E+22	1,413443E+23
1058	5,057574E+22	5,057453E+22	2,009617E+22	2,009666E+22	1,011503E+23	4,019283E+22	1,413431E+23
1059	5,057367E+22	5,057481E+22	2,009729E+22	2,009642E+22	1,011485E+23	4,019371E+22	1,413422E+23
1060	5,057565E+22	5,057513E+22	2,009682E+22	2,009773E+22	1,011508E+23	4,019456E+22	1,413453E+23
1061	5,057456E+22	5,057264E+22	2,009798E+22	2,009776E+22	1,011472E+23	4,019573E+22	1,413429E+23
1062	5,057235E+22	5,057434E+22	2,009896E+22	2,009834E+22	1,011467E+23	4,019731E+22	1,413440E+23
1063	5,057374E+22	5,057357E+22	2,009855E+22	2,009955E+22	1,011473E+23	4,019810E+22	1,413454E+23
1064	5,057175E+22	5,057129E+22	2,009985E+22	2,009918E+22	1,011430E+23	4,019903E+22	1,413421E+23
1065	5,057156E+22	5,057293E+22	2,009983E+22	2,009976E+22	1,011445E+23	4,019958E+22	1,413441E+23
1066	5,057291E+22	5,057124E+22	2,009954E+22	2,009995E+22	1,011442E+23	4,019949E+22	1,413436E+23
1067	5,057078E+22	5,057153E+22	2,010021E+22	2,009914E+22	1,011423E+23	4,019935E+22	1,413417E+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	5,057246E+22	5,057329E+22	2,009911E+22	2,009989E+22	1,011457E+23	4,019900E+22	1,413447E+23
1069	5,057268E+22	5,057139E+22	2,009904E+22	2,009915E+22	1,011441E+23	4,019819E+22	1,413423E+23
1070	5,057128E+22	5,057335E+22	2,009924E+22	2,009825E+22	1,011446E+23	4,019749E+22	1,413421E+23
1071	5,057412E+22	5,057391E+22	2,009784E+22	2,009853E+22	1,011480E+23	4,019637E+22	1,413444E+23
1072	5,057362E+22	5,057204E+22	2,009810E+22	2,009738E+22	1,011457E+23	4,019548E+22	1,413411E+23
1073	5,057306E+22	5,057475E+22	2,009786E+22	2,009734E+22	1,011478E+23	4,019520E+22	1,413430E+23
1074	5,057466E+22	5,057415E+22	2,009701E+22	2,009782E+22	1,011488E+23	4,019484E+22	1,413436E+23
1075	5,057270E+22	5,057346E+22	2,009777E+22	2,009709E+22	1,011462E+23	4,019486E+22	1,413410E+23
1076	5,057375E+22	5,057492E+22	2,009744E+22	2,009795E+22	1,011487E+23	4,019539E+22	1,413441E+23
1077	5,057447E+22	5,057234E+22	2,009769E+22	2,009808E+22	1,011468E+23	4,019577E+22	1,413426E+23
1078	5,057233E+22	5,057309E+22	2,009892E+22	2,009780E+22	1,011454E+23	4,019672E+22	1,413421E+23
1079	5,057369E+22	5,057381E+22	2,009852E+22	2,009933E+22	1,011475E+23	4,019785E+22	1,413454E+23
1080	5,057257E+22	5,057101E+22	2,009946E+22	2,009949E+22	1,011436E+23	4,019895E+22	1,413425E+23
1081	5,057043E+22	5,057264E+22	2,010047E+22	2,009988E+22	1,011431E+23	4,020035E+22	1,413434E+23
1082	5,057177E+22	5,057162E+22	2,010020E+22	2,010111E+22	1,011434E+23	4,020131E+22	1,413447E+23
1083	5,057008E+22	5,056962E+22	2,010131E+22	2,010048E+22	1,011397E+23	4,020179E+22	1,413415E+23
1084	5,057019E+22	5,057134E+22	2,010129E+22	2,010114E+22	1,011415E+23	4,020243E+22	1,413440E+23
1085	5,057129E+22	5,056954E+22	2,010089E+22	2,010154E+22	1,011408E+23	4,020243E+22	1,413433E+23
1086	5,056921E+22	5,057025E+22	2,010148E+22	2,010057E+22	1,011395E+23	4,020206E+22	1,413415E+23
1087	5,057079E+22	5,057195E+22	2,010046E+22	2,010118E+22	1,011427E+23	4,020165E+22	1,413444E+23
1088	5,057154E+22	5,056967E+22	2,010016E+22	2,010029E+22	1,011412E+23	4,020045E+22	1,413417E+23
1089	5,057034E+22	5,057176E+22	2,010034E+22	2,009916E+22	1,011421E+23	4,019950E+22	1,413416E+23
1090	5,057258E+22	5,057247E+22	2,009912E+22	2,009971E+22	1,011450E+23	4,019883E+22	1,413439E+23
1091	5,057179E+22	5,057110E+22	2,009924E+22	2,009861E+22	1,011429E+23	4,019785E+22	1,413407E+23
1092	5,057129E+22	5,057354E+22	2,009915E+22	2,009876E+22	1,011448E+23	4,019791E+22	1,413427E+23
1093	5,057289E+22	5,057224E+22	2,009842E+22	2,009935E+22	1,011451E+23	4,019778E+22	1,413429E+23
1094	5,057139E+22	5,057164E+22	2,009923E+22	2,009840E+22	1,011430E+23	4,019763E+22	1,413407E+23
1095	5,057238E+22	5,057319E+22	2,009903E+22	2,009929E+22	1,011456E+23	4,019833E+22	1,413439E+23
1096	5,057323E+22	5,057053E+22	2,009909E+22	2,009960E+22	1,011438E+23	4,019869E+22	1,413425E+23
1097	5,057072E+22	5,057165E+22	2,010035E+22	2,009936E+22	1,011424E+23	4,019971E+22	1,413421E+23
1098	5,057141E+22	5,057238E+22	2,010017E+22	2,010113E+22	1,011438E+23	4,020129E+22	1,413451E+23
1099	5,057039E+22	5,056951E+22	2,010105E+22	2,010105E+22	1,011399E+23	4,020210E+22	1,413420E+23
1100	5,056874E+22	5,057074E+22	2,010216E+22	2,010138E+22	1,011395E+23	4,020353E+22	1,413430E+23
1101	5,057014E+22	5,056931E+22	2,010183E+22	2,010267E+22	1,011394E+23	4,020450E+22	1,413439E+23
1102	5,056859E+22	5,056782E+22	2,010281E+22	2,010194E+22	1,011364E+23	4,020475E+22	1,413412E+23
1103	5,056841E+22	5,057000E+22	2,010274E+22	2,010267E+22	1,011384E+23	4,020541E+22	1,413438E+23
1104	5,056976E+22	5,056799E+22	2,010203E+22	2,010302E+22	1,011377E+23	4,020505E+22	1,413428E+23
1105	5,056788E+22	5,056880E+22	2,010263E+22	2,010171E+22	1,011367E+23	4,020434E+22	1,413410E+23
1106	5,056934E+22	5,057051E+22	2,010176E+22	2,010227E+22	1,011398E+23	4,020403E+22	1,413439E+23
1107	5,057018E+22	5,056845E+22	2,010134E+22	2,010120E+22	1,011386E+23	4,020254E+22	1,413412E+23
1108	5,056904E+22	5,057052E+22	2,010163E+22	2,010032E+22	1,011396E+23	4,020195E+22	1,413415E+23
1109	5,057073E+22	5,057095E+22	2,010040E+22	2,010120E+22	1,011417E+23	4,020160E+22	1,413433E+23
1110	5,057005E+22	5,056966E+22	2,010052E+22	2,010008E+22	1,011397E+23	4,020060E+22	1,413403E+23
1111	5,056967E+22	5,057184E+22	2,010058E+22	2,010017E+22	1,011415E+23	4,020074E+22	1,413422E+23
1112	5,057182E+22	5,057014E+22	2,009966E+22	2,010069E+22	1,011420E+23	4,020035E+22	1,413423E+23
1113	5,057046E+22	5,056989E+22	2,010050E+22	2,009958E+22	1,011404E+23	4,020008E+22	1,413404E+23
1114	5,057075E+22	5,057179E+22	2,010053E+22	2,010075E+22	1,011425E+23	4,020128E+22	1,413438E+23
1115	5,057116E+22	5,056961E+22	2,010055E+22	2,010109E+22	1,011408E+23	4,020164E+22	1,413424E+23
1116	5,056868E+22	5,057034E+22	2,010202E+22	2,010103E+22	1,011390E+23	4,020305E+22	1,413421E+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	5,056914E+22	5,057033E+22	2,010196E+22	2,010286E+22	1,011395E+23	4,020482E+22	1,413443E+23
1118	5,056867E+22	5,056745E+22	2,010279E+22	2,010261E+22	1,011361E+23	4,020540E+22	1,413415E+23
1119	5,056714E+22	5,056858E+22	2,010388E+22	2,010292E+22	1,011357E+23	4,020680E+22	1,413425E+23
1120	5,056877E+22	5,056722E+22	2,010317E+22	2,010431E+22	1,011360E+23	4,020748E+22	1,413435E+23
1121	5,056721E+22	5,056630E+22	2,010396E+22	2,010342E+22	1,011335E+23	4,020738E+22	1,413409E+23
1122	5,056658E+22	5,056861E+22	2,010403E+22	2,010416E+22	1,011352E+23	4,020819E+22	1,413434E+23
1123	5,056816E+22	5,056683E+22	2,010324E+22	2,010409E+22	1,011350E+23	4,020734E+22	1,413423E+23
1124	5,056675E+22	5,056739E+22	2,010396E+22	2,010270E+22	1,011341E+23	4,020666E+22	1,413408E+23
1125	5,056782E+22	5,056882E+22	2,010316E+22	2,010337E+22	1,011366E+23	4,020653E+22	1,413432E+23
1126	5,056863E+22	5,056716E+22	2,010266E+22	2,010239E+22	1,011358E+23	4,020505E+22	1,413408E+23
1127	5,056713E+22	5,056922E+22	2,010298E+22	2,010172E+22	1,011363E+23	4,020470E+22	1,413410E+23
1128	5,056910E+22	5,056923E+22	2,010151E+22	2,010271E+22	1,011383E+23	4,020422E+22	1,413426E+23
1129	5,056883E+22	5,056795E+22	2,010164E+22	2,010134E+22	1,011368E+23	4,020298E+22	1,413398E+23
1130	5,056837E+22	5,057017E+22	2,010189E+22	2,010147E+22	1,011385E+23	4,020336E+22	1,413419E+23
1131	5,057058E+22	5,056885E+22	2,010094E+22	2,010185E+22	1,011394E+23	4,020279E+22	1,413422E+23
1132	5,056914E+22	5,056867E+22	2,010197E+22	2,010103E+22	1,011378E+23	4,020300E+22	1,413408E+23
1133	5,056860E+22	5,057033E+22	2,010216E+22	2,010248E+22	1,011389E+23	4,020463E+22	1,413436E+23
1134	5,056905E+22	5,056803E+22	2,010226E+22	2,010280E+22	1,011371E+23	4,020506E+22	1,413421E+23
1135	5,056670E+22	5,056831E+22	2,010388E+22	2,010268E+22	1,011350E+23	4,020656E+22	1,413416E+23
1136	5,056767E+22	5,056781E+22	2,010349E+22	2,010445E+22	1,011355E+23	4,020794E+22	1,413434E+23
1137	5,056739E+22	5,056528E+22	2,010421E+22	2,010403E+22	1,011327E+23	4,020824E+22	1,413409E+23
1138	5,056542E+22	5,056693E+22	2,010529E+22	2,010452E+22	1,011324E+23	4,020981E+22	1,413422E+23
1139	5,056690E+22	5,056611E+22	2,010443E+22	2,010572E+22	1,011330E+23	4,021015E+22	1,413431E+23
1140	5,056563E+22	5,056513E+22	2,010534E+22	2,010480E+22	1,011308E+23	4,021014E+22	1,413409E+23
1141	5,056479E+22	5,056702E+22	2,010553E+22	2,010542E+22	1,011318E+23	4,021095E+22	1,413428E+23
1142	5,056673E+22	5,056537E+22	2,010472E+22	2,010517E+22	1,011321E+23	4,020989E+22	1,413420E+23
1143	5,056528E+22	5,056582E+22	2,010546E+22	2,010388E+22	1,011311E+23	4,020934E+22	1,413404E+23
1144	5,056630E+22	5,056710E+22	2,010431E+22	2,010478E+22	1,011334E+23	4,020909E+22	1,413425E+23
1145	5,056710E+22	5,056574E+22	2,010369E+22	2,010380E+22	1,011328E+23	4,020749E+22	1,413403E+23
1146	5,056545E+22	5,056767E+22	2,010411E+22	2,010322E+22	1,011331E+23	4,020732E+22	1,413404E+23
1147	5,056780E+22	5,056778E+22	2,010261E+22	2,010383E+22	1,011356E+23	4,020644E+22	1,413420E+23
1148	5,056807E+22	5,056645E+22	2,010286E+22	2,010244E+22	1,011345E+23	4,020530E+22	1,413398E+23
1149	5,056700E+22	5,056858E+22	2,010332E+22	2,010270E+22	1,011356E+23	4,020602E+22	1,413416E+23
1150	5,056899E+22	5,056774E+22	2,010245E+22	2,010321E+22	1,011367E+23	4,020566E+22	1,413424E+23
1151	5,056709E+22	5,056732E+22	2,010367E+22	2,010262E+22	1,011344E+23	4,020630E+22	1,413407E+23
1152	5,056655E+22	5,056837E+22	2,010372E+22	2,010418E+22	1,011349E+23	4,020790E+22	1,413428E+23
1153	5,056739E+22	5,056596E+22	2,010380E+22	2,010432E+22	1,011334E+23	4,020812E+22	1,413415E+23
1154	5,056499E+22	5,056609E+22	2,010547E+22	2,010428E+22	1,011311E+23	4,020975E+22	1,413408E+23
1155	5,056612E+22	5,056601E+22	2,010494E+22	2,010588E+22	1,011321E+23	4,021082E+22	1,413429E+23
1156	5,056599E+22	5,056380E+22	2,010561E+22	2,010563E+22	1,011298E+23	4,021124E+22	1,413410E+23
1157	5,056336E+22	5,056545E+22	2,010678E+22	2,010620E+22	1,011288E+23	4,021298E+22	1,413418E+23
1158	5,056508E+22	5,056476E+22	2,010598E+22	2,010717E+22	1,011298E+23	4,021314E+22	1,413430E+23
1159	5,056399E+22	5,056347E+22	2,010700E+22	2,010608E+22	1,011275E+23	4,021308E+22	1,413405E+23
1160	5,056344E+22	5,056502E+22	2,010689E+22	2,010664E+22	1,011285E+23	4,021353E+22	1,413420E+23
1161	5,056544E+22	5,056371E+22	2,010594E+22	2,010633E+22	1,011292E+23	4,021227E+22	1,413414E+23
1162	5,056350E+22	5,056440E+22	2,010665E+22	2,010531E+22	1,011279E+23	4,021196E+22	1,413399E+23
1163	5,056451E+22	5,056594E+22	2,010532E+22	2,010607E+22	1,011305E+23	4,021139E+22	1,413418E+23
1164	5,056579E+22	5,056443E+22	2,010479E+22	2,010509E+22	1,011302E+23	4,020988E+22	1,413401E+23
1165	5,056408E+22	5,056604E+22	2,010536E+22	2,010443E+22	1,011301E+23	4,020979E+22	1,413399E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1166	5,056679E+22	5,056633E+22	2,010397E+22	2,010488E+22	1,011331E+23	4,020885E+22	1,413420E+23
1167	5,056686E+22	5,056507E+22	2,010439E+22	2,010365E+22	1,011319E+23	4,020804E+22	1,413400E+23
1168	5,056546E+22	5,056703E+22	2,010463E+22	2,010418E+22	1,011325E+23	4,020881E+22	1,413413E+23
1169	5,056713E+22	5,056629E+22	2,010382E+22	2,010476E+22	1,011334E+23	4,020858E+22	1,413420E+23
1170	5,056500E+22	5,056555E+22	2,010522E+22	2,010434E+22	1,011305E+23	4,020956E+22	1,413401E+23
1171	5,056477E+22	5,056644E+22	2,010521E+22	2,010559E+22	1,011312E+23	4,021080E+22	1,413420E+23
1172	5,056612E+22	5,056401E+22	2,010532E+22	2,010579E+22	1,011301E+23	4,021111E+22	1,413412E+23
1173	5,056325E+22	5,056415E+22	2,010704E+22	2,010587E+22	1,011274E+23	4,021291E+22	1,413403E+23
1174	5,056430E+22	5,056461E+22	2,010651E+22	2,010746E+22	1,011289E+23	4,021397E+22	1,413429E+23
1175	5,056400E+22	5,056245E+22	2,010729E+22	2,010726E+22	1,011264E+23	4,021455E+22	1,413410E+23
1176	5,056156E+22	5,056362E+22	2,010825E+22	2,010775E+22	1,011252E+23	4,021600E+22	1,413412E+23
1177	5,056364E+22	5,056302E+22	2,010743E+22	2,010845E+22	1,011267E+23	4,021588E+22	1,413425E+23
1178	5,056246E+22	5,056170E+22	2,010844E+22	2,010743E+22	1,011242E+23	4,021587E+22	1,413400E+23
1179	5,056191E+22	5,056353E+22	2,010811E+22	2,010782E+22	1,011254E+23	4,021594E+22	1,413414E+23
1180	5,056404E+22	5,056247E+22	2,010705E+22	2,010772E+22	1,011265E+23	4,021477E+22	1,413413E+23
1181	5,056162E+22	5,056294E+22	2,010782E+22	2,010678E+22	1,011246E+23	4,021460E+22	1,413392E+23
1182	5,056312E+22	5,056454E+22	2,010658E+22	2,010728E+22	1,011277E+23	4,021386E+22	1,413415E+23
1183	5,056472E+22	5,056284E+22	2,010616E+22	2,010616E+22	1,011276E+23	4,021231E+22	1,413399E+23
1184	5,056311E+22	5,056423E+22	2,010653E+22	2,010551E+22	1,011273E+23	4,021205E+22	1,413394E+23
1185	5,056565E+22	5,056499E+22	2,010518E+22	2,010598E+22	1,011306E+23	4,021116E+22	1,413418E+23
1186	5,056496E+22	5,056386E+22	2,010572E+22	2,010514E+22	1,011288E+23	4,021086E+22	1,413397E+23
1187	5,056335E+22	5,056580E+22	2,010598E+22	2,010560E+22	1,011292E+23	4,021157E+22	1,413407E+23
1188	5,056538E+22	5,056475E+22	2,010529E+22	2,010629E+22	1,011301E+23	4,021158E+22	1,413417E+23
1189	5,056308E+22	5,056350E+22	2,010685E+22	2,010591E+22	1,011266E+23	4,021277E+22	1,413393E+23
1190	5,056327E+22	5,056449E+22	2,010688E+22	2,010706E+22	1,011278E+23	4,021394E+22	1,413417E+23
1191	5,056454E+22	5,056219E+22	2,010704E+22	2,010742E+22	1,011267E+23	4,021446E+22	1,413412E+23
1192	5,056153E+22	5,056232E+22	2,010844E+22	2,010767E+22	1,011238E+23	4,021611E+22	1,413400E+23
1193	5,056257E+22	5,056300E+22	2,010796E+22	2,010913E+22	1,011256E+23	4,021709E+22	1,413427E+23
1194	5,056215E+22	5,056074E+22	2,010885E+22	2,010888E+22	1,011229E+23	4,021773E+22	1,413406E+23
1195	5,056006E+22	5,056190E+22	2,010968E+22	2,010894E+22	1,011220E+23	4,021862E+22	1,413406E+23
1196	5,056242E+22	5,056142E+22	2,010882E+22	2,010965E+22	1,011238E+23	4,021847E+22	1,413423E+23
1197	5,056066E+22	5,056015E+22	2,010983E+22	2,010880E+22	1,011208E+23	4,021863E+22	1,413394E+23
1198	5,056009E+22	5,056226E+22	2,010945E+22	2,010915E+22	1,011223E+23	4,021860E+22	1,413409E+23
1199	5,056222E+22	5,056117E+22	2,010845E+22	2,010909E+22	1,011234E+23	4,021754E+22	1,413409E+23
1200	5,056025E+22	5,056116E+22	2,010891E+22	2,010807E+22	1,011214E+23	4,021698E+22	1,413384E+23
1201	5,056213E+22	5,056284E+22	2,010774E+22	2,010833E+22	1,011250E+23	4,021606E+22	1,413410E+23
1202	5,056356E+22	5,056138E+22	2,010738E+22	2,010733E+22	1,011249E+23	4,021470E+22	1,413396E+23
1203	5,056180E+22	5,056302E+22	2,010766E+22	2,010661E+22	1,011248E+23	4,021427E+22	1,413391E+23
1204	5,056409E+22	5,056401E+22	2,010638E+22	2,010737E+22	1,011281E+23	4,021375E+22	1,413418E+23
1205	5,056278E+22	5,056246E+22	2,010715E+22	2,010675E+22	1,011252E+23	4,021390E+22	1,413391E+23
1206	5,056151E+22	5,056408E+22	2,010758E+22	2,010704E+22	1,011256E+23	4,021463E+22	1,413402E+23
1207	5,056381E+22	5,056277E+22	2,010702E+22	2,010774E+22	1,011266E+23	4,021476E+22	1,413413E+23
1208	5,056172E+22	5,056120E+22	2,010829E+22	2,010746E+22	1,011229E+23	4,021575E+22	1,413387E+23
1209	5,056188E+22	5,056262E+22	2,010834E+22	2,010862E+22	1,011245E+23	4,021697E+22	1,413415E+23
1210	5,056260E+22	5,056070E+22	2,010852E+22	2,010920E+22	1,011233E+23	4,021772E+22	1,413410E+23
1211	5,055963E+22	5,056088E+22	2,010988E+22	2,010920E+22	1,011205E+23	4,021908E+22	1,413396E+23
1212	5,056102E+22	5,056154E+22	2,010949E+22	2,011056E+22	1,011226E+23	4,022006E+22	1,413426E+23
1213	5,056031E+22	5,055898E+22	2,011053E+22	2,011029E+22	1,011193E+23	4,022082E+22	1,413401E+23
1214	5,055847E+22	5,056027E+22	2,011135E+22	2,011021E+22	1,011187E+23	4,022156E+22	1,413403E+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							
1215	5,056067E+22	5,055990E+22	2,011041E+22	2,011107E+22	1,011206E+23	4,022148E+22	1,413420E+23
1216	5,055877E+22	5,055840E+22	2,011101E+22	2,011041E+22	1,011172E+23	4,022142E+22	1,413386E+23
1217	5,055852E+22	5,056057E+22	2,011062E+22	2,011058E+22	1,011191E+23	4,022120E+22	1,413403E+23
1218	5,056076E+22	5,055946E+22	2,010963E+22	2,011042E+22	1,011202E+23	4,022006E+22	1,413403E+23
1219	5,055929E+22	5,055959E+22	2,010995E+22	2,010901E+22	1,011189E+23	4,021896E+22	1,413378E+23
1220	5,056132E+22	5,056163E+22	2,010881E+22	2,010930E+22	1,011229E+23	4,021811E+22	1,413411E+23
1221	5,056187E+22	5,056030E+22	2,010863E+22	2,010855E+22	1,011222E+23	4,021718E+22	1,413393E+23
1222	5,055993E+22	5,056204E+22	2,010905E+22	2,010790E+22	1,011220E+23	4,021695E+22	1,413389E+23
1223	5,056205E+22	5,056270E+22	2,010798E+22	2,010880E+22	1,011247E+23	4,021678E+22	1,413415E+23
1224	5,056104E+22	5,056042E+22	2,010857E+22	2,010830E+22	1,011215E+23	4,021687E+22	1,413383E+23
1225	5,056025E+22	5,056188E+22	2,010908E+22	2,010848E+22	1,011221E+23	4,021756E+22	1,413397E+23
1226	5,056236E+22	5,056079E+22	2,010853E+22	2,010936E+22	1,011231E+23	4,021789E+22	1,413410E+23
1227	5,056030E+22	5,055955E+22	2,010958E+22	2,010900E+22	1,011199E+23	4,021858E+22	1,413384E+23
1228	5,056029E+22	5,056134E+22	2,010969E+22	2,011028E+22	1,011216E+23	4,021998E+22	1,413416E+23
1229	5,056048E+22	5,055926E+22	2,011014E+22	2,011089E+22	1,011197E+23	4,022104E+22	1,413408E+23
1230	5,055789E+22	5,055923E+22	2,011165E+22	2,011059E+22	1,011171E+23	4,022224E+22	1,413394E+23
1231	5,055930E+22	5,055979E+22	2,011137E+22	2,011190E+22	1,011191E+23	4,022327E+22	1,413423E+23
1232	5,055863E+22	5,055695E+22	2,011202E+22	2,011177E+22	1,011156E+23	4,022380E+22	1,413394E+23
1233	5,055673E+22	5,055841E+22	2,011275E+22	2,011172E+22	1,011151E+23	4,022447E+22	1,413396E+23
1234	5,055856E+22	5,055835E+22	2,011172E+22	2,011271E+22	1,011169E+23	4,022443E+22	1,413413E+23
1235	5,055717E+22	5,055681E+22	2,011207E+22	2,011173E+22	1,011140E+23	4,022380E+22	1,413378E+23
1236	5,055748E+22	5,055911E+22	2,011169E+22	2,011173E+22	1,011166E+23	4,022341E+22	1,413400E+23
1237	5,055951E+22	5,055803E+22	2,011087E+22	2,011150E+22	1,011175E+23	4,022237E+22	1,413399E+23
1238	5,055820E+22	5,055839E+22	2,011126E+22	2,010997E+22	1,011166E+23	4,022123E+22	1,413378E+23
1239	5,055979E+22	5,056064E+22	2,011023E+22	2,011048E+22	1,011204E+23	4,022071E+22	1,413411E+23
1240	5,056000E+22	5,055889E+22	2,010984E+22	2,011005E+22	1,011189E+23	4,021988E+22	1,413388E+23
1241	5,055826E+22	5,056027E+22	2,011043E+22	2,010937E+22	1,011185E+23	4,021981E+22	1,413383E+23
1242	5,056036E+22	5,056075E+22	2,010944E+22	2,011029E+22	1,011211E+23	4,021973E+22	1,413408E+23
1243	5,055986E+22	5,055840E+22	2,010984E+22	2,010959E+22	1,011183E+23	4,021943E+22	1,413377E+23
1244	5,055922E+22	5,056023E+22	2,011036E+22	2,010987E+22	1,011194E+23	4,022022E+22	1,413397E+23
1245	5,056050E+22	5,055936E+22	2,011000E+22	2,011096E+22	1,011199E+23	4,022097E+22	1,413408E+23
1246	5,055835E+22	5,055838E+22	2,011120E+22	2,011054E+22	1,011167E+23	4,022174E+22	1,413385E+23
1247	5,055826E+22	5,055997E+22	2,011152E+22	2,011182E+22	1,011182E+23	4,022334E+22	1,413416E+23
1248	5,055854E+22	5,055725E+22	2,011182E+22	2,011249E+22	1,011158E+23	4,022432E+22	1,413401E+23
1249	5,055634E+22	5,055708E+22	2,011338E+22	2,011209E+22	1,011134E+23	4,022547E+22	1,413389E+23
1250	5,055741E+22	5,055781E+22	2,011300E+22	2,011352E+22	1,011152E+23	4,022652E+22	1,413417E+23
1251	5,055688E+22	5,055518E+22	2,011328E+22	2,011335E+22	1,011121E+23	4,022663E+22	1,413387E+23
1252	5,055514E+22	5,055690E+22	2,011387E+22	2,011329E+22	1,011120E+23	4,022716E+22	1,413392E+23
1253	5,055675E+22	5,055674E+22	2,011300E+22	2,011417E+22	1,011135E+23	4,022717E+22	1,413407E+23
1254	5,055602E+22	5,055533E+22	2,011338E+22	2,011276E+22	1,011113E+23	4,022614E+22	1,413375E+23
1255	5,055646E+22	5,055776E+22	2,011309E+22	2,011266E+22	1,011142E+23	4,022575E+22	1,413400E+23
1256	5,055823E+22	5,055663E+22	2,011206E+22	2,011262E+22	1,011149E+23	4,022467E+22	1,413395E+23
1257	5,055674E+22	5,055710E+22	2,011252E+22	2,011122E+22	1,011138E+23	4,022374E+22	1,413376E+23
1258	5,055768E+22	5,055941E+22	2,011157E+22	2,011191E+22	1,011171E+23	4,022348E+22	1,413406E+23
1259	5,055833E+22	5,055731E+22	2,011102E+22	2,011139E+22	1,011156E+23	4,022241E+22	1,413380E+23
1260	5,055705E+22	5,055852E+22	2,011165E+22	2,011069E+22	1,011156E+23	4,022234E+22	1,413379E+23
1261	5,055890E+22	5,055897E+22	2,011087E+22	2,011169E+22	1,011179E+23	4,022256E+22	1,413404E+23
1262	5,055861E+22	5,055687E+22	2,011128E+22	2,011092E+22	1,011155E+23	4,022220E+22	1,413377E+23
1263	5,055754E+22	5,055897E+22	2,011191E+22	2,011140E+22	1,011165E+23	4,022331E+22	1,413398E+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	5,055849E+22	5,055781E+22	2,011144E+22	2,011271E+22	1,011163E+23	4,022415E+22	1,413405E+23
1265	5,055661E+22	5,055642E+22	2,011288E+22	2,011218E+22	1,011130E+23	4,022507E+22	1,413381E+23
1266	5,055634E+22	5,055796E+22	2,011330E+22	2,011338E+22	1,011143E+23	4,022668E+22	1,413410E+23
1267	5,055706E+22	5,055517E+22	2,011333E+22	2,011392E+22	1,011122E+23	4,022725E+22	1,413395E+23
1268	5,055487E+22	5,055528E+22	2,011477E+22	2,011359E+22	1,011102E+23	4,022836E+22	1,413385E+23
1269	5,055524E+22	5,055624E+22	2,011445E+22	2,011516E+22	1,011115E+23	4,022961E+22	1,413411E+23
1270	5,055496E+22	5,055379E+22	2,011469E+22	2,011479E+22	1,011088E+23	4,022948E+22	1,413382E+23
1271	5,055353E+22	5,055548E+22	2,011535E+22	2,011461E+22	1,011090E+23	4,022996E+22	1,413390E+23
1272	5,055539E+22	5,055498E+22	2,011431E+22	2,011542E+22	1,011104E+23	4,022973E+22	1,413401E+23
1273	5,055509E+22	5,055363E+22	2,011475E+22	2,011388E+22	1,011087E+23	4,022864E+22	1,413374E+23
1274	5,055500E+22	5,055643E+22	2,011443E+22	2,011386E+22	1,011114E+23	4,022829E+22	1,413397E+23
1275	5,055667E+22	5,055543E+22	2,011310E+22	2,011390E+22	1,011121E+23	4,022700E+22	1,413391E+23
1276	5,055518E+22	5,055589E+22	2,011357E+22	2,011262E+22	1,011111E+23	4,022619E+22	1,413373E+23
1277	5,055577E+22	5,055778E+22	2,011288E+22	2,011330E+22	1,011136E+23	4,022619E+22	1,413397E+23
1278	5,055700E+22	5,055565E+22	2,011240E+22	2,011255E+22	1,011126E+23	4,022495E+22	1,413376E+23
1279	5,055593E+22	5,055691E+22	2,011307E+22	2,011190E+22	1,011128E+23	4,022497E+22	1,413378E+23
1280	5,055740E+22	5,055720E+22	2,011218E+22	2,011314E+22	1,011146E+23	4,022532E+22	1,413399E+23
1281	5,055704E+22	5,055533E+22	2,011272E+22	2,011247E+22	1,011124E+23	4,022519E+22	1,413376E+23
1282	5,055544E+22	5,055750E+22	2,011347E+22	2,011301E+22	1,011129E+23	4,022649E+22	1,413394E+23
1283	5,055675E+22	5,055606E+22	2,011293E+22	2,011421E+22	1,011128E+23	4,022714E+22	1,413400E+23
1284	5,055521E+22	5,055460E+22	2,011442E+22	2,011365E+22	1,011098E+23	4,022807E+22	1,413379E+23
1285	5,055445E+22	5,055605E+22	2,011503E+22	2,011491E+22	1,011105E+23	4,022994E+22	1,413404E+23
1286	5,055530E+22	5,055354E+22	2,011498E+22	2,011542E+22	1,011088E+23	4,023040E+22	1,413392E+23
1287	5,055294E+22	5,055381E+22	2,011632E+22	2,011526E+22	1,011068E+23	4,023158E+22	1,413383E+23
1288	5,055320E+22	5,055440E+22	2,011584E+22	2,011688E+22	1,011076E+23	4,023273E+22	1,413403E+23
1289	5,055359E+22	5,055182E+22	2,011616E+22	2,011625E+22	1,011054E+23	4,023240E+22	1,413378E+23
1290	5,055216E+22	5,055374E+22	2,011679E+22	2,011584E+22	1,011059E+23	4,023263E+22	1,413385E+23
1291	5,055441E+22	5,055342E+22	2,011546E+22	2,011650E+22	1,011078E+23	4,023196E+22	1,413398E+23
1292	5,055391E+22	5,055247E+22	2,011583E+22	2,011503E+22	1,011064E+23	4,023086E+22	1,413372E+23
1293	5,055294E+22	5,055542E+22	2,011568E+22	2,011517E+22	1,011084E+23	4,023085E+22	1,413392E+23
1294	5,055479E+22	5,055433E+22	2,011437E+22	2,011509E+22	1,011091E+23	4,022946E+22	1,413386E+23
1295	5,055356E+22	5,055443E+22	2,011493E+22	2,011386E+22	1,011080E+23	4,022879E+22	1,413368E+23
1296	5,055434E+22	5,055583E+22	2,011416E+22	2,011460E+22	1,011102E+23	4,022877E+22	1,413389E+23
1297	5,055604E+22	5,055367E+22	2,011377E+22	2,011385E+22	1,011097E+23	4,022761E+22	1,413373E+23
1298	5,055447E+22	5,055537E+22	2,011443E+22	2,011332E+22	1,011098E+23	4,022775E+22	1,413376E+23
1299	5,055590E+22	5,055580E+22	2,011334E+22	2,011466E+22	1,011117E+23	4,022799E+22	1,413397E+23
1300	5,055548E+22	5,055394E+22	2,011400E+22	2,011402E+22	1,011094E+23	4,022801E+22	1,413374E+23
1301	5,055348E+22	5,055582E+22	2,011513E+22	2,011450E+22	1,011093E+23	4,022963E+22	1,413389E+23
1302	5,055512E+22	5,055436E+22	2,011467E+22	2,011551E+22	1,011095E+23	4,023017E+22	1,413397E+23
1303	5,055358E+22	5,055291E+22	2,011619E+22	2,011514E+22	1,011065E+23	4,023132E+22	1,413378E+23
1304	5,055236E+22	5,055412E+22	2,011663E+22	2,011665E+22	1,011065E+23	4,023328E+22	1,413398E+23
1305	5,055334E+22	5,055170E+22	2,011659E+22	2,011721E+22	1,011050E+23	4,023380E+22	1,413388E+23
1306	5,055086E+22	5,055207E+22	2,011786E+22	2,011694E+22	1,011029E+23	4,023481E+22	1,413377E+23
1307	5,055178E+22	5,055250E+22	2,011716E+22	2,011832E+22	1,011043E+23	4,023548E+22	1,413398E+23
1308	5,055262E+22	5,055025E+22	2,011739E+22	2,011748E+22	1,011029E+23	4,023488E+22	1,413377E+23
1309	5,055076E+22	5,055227E+22	2,011816E+22	2,011702E+22	1,011030E+23	4,023519E+22	1,413382E+23
1310	5,055286E+22	5,055240E+22	2,011678E+22	2,011761E+22	1,011053E+23	4,023439E+22	1,413396E+23
1311	5,055213E+22	5,055155E+22	2,011708E+22	2,011636E+22	1,011037E+23	4,023344E+22	1,413371E+23
1312	5,055089E+22	5,055374E+22	2,011691E+22	2,011659E+22	1,011046E+23	4,023350E+22	1,413381E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1313	5,055342E+22	5,055236E+22	2,011574E+22	2,011636E+22	1,011058E+23	4,023210E+22	1,413379E+23
1314	5,055232E+22	5,055256E+22	2,011623E+22	2,011503E+22	1,011049E+23	4,023126E+22	1,413361E+23
1315	5,055344E+22	5,055404E+22	2,011524E+22	2,011578E+22	1,011075E+23	4,023102E+22	1,413385E+23
1316	5,055493E+22	5,055244E+22	2,011480E+22	2,011514E+22	1,011074E+23	4,022994E+22	1,413373E+23
1317	5,055252E+22	5,055426E+22	2,011574E+22	2,011476E+22	1,011068E+23	4,023051E+22	1,413373E+23
1318	5,055402E+22	5,055469E+22	2,011486E+22	2,011596E+22	1,011087E+23	4,023082E+22	1,413395E+23
1319	5,055375E+22	5,055256E+22	2,011569E+22	2,011546E+22	1,011063E+23	4,023114E+22	1,413374E+23
1320	5,055159E+22	5,055377E+22	2,011687E+22	2,011607E+22	1,011054E+23	4,023294E+22	1,413383E+23
1321	5,055354E+22	5,055223E+22	2,011647E+22	2,011716E+22	1,011058E+23	4,023363E+22	1,413394E+23
1322	5,055154E+22	5,055107E+22	2,011784E+22	2,011693E+22	1,011026E+23	4,023477E+22	1,413374E+23
1323	5,055054E+22	5,055222E+22	2,011796E+22	2,011849E+22	1,011028E+23	4,023644E+22	1,413392E+23
1324	5,055178E+22	5,054989E+22	2,011787E+22	2,011887E+22	1,011017E+23	4,023674E+22	1,413384E+23
1325	5,054925E+22	5,055027E+22	2,011934E+22	2,011837E+22	1,010995E+23	4,023771E+22	1,413372E+23
1326	5,055060E+22	5,055101E+22	2,011861E+22	2,011937E+22	1,011016E+23	4,023798E+22	1,413396E+23
1327	5,055129E+22	5,054906E+22	2,011881E+22	2,011863E+22	1,011004E+23	4,023744E+22	1,413378E+23
1328	5,054881E+22	5,055092E+22	2,011950E+22	2,011834E+22	1,010997E+23	4,023785E+22	1,413376E+23
1329	5,055098E+22	5,055096E+22	2,011817E+22	2,011896E+22	1,011019E+23	4,023712E+22	1,413391E+23
1330	5,055013E+22	5,055001E+22	2,011844E+22	2,011769E+22	1,011001E+23	4,023613E+22	1,413363E+23
1331	5,054962E+22	5,055181E+22	2,011802E+22	2,011784E+22	1,011014E+23	4,023586E+22	1,413373E+23
1332	5,055253E+22	5,055066E+22	2,011679E+22	2,011753E+22	1,011032E+23	4,023432E+22	1,413375E+23
1333	5,055110E+22	5,055108E+22	2,011742E+22	2,011626E+22	1,011022E+23	4,023368E+22	1,413359E+23
1334	5,055207E+22	5,055304E+22	2,011645E+22	2,011699E+22	1,011051E+23	4,023343E+22	1,413385E+23
1335	5,055325E+22	5,055162E+22	2,011610E+22	2,011660E+22	1,011049E+23	4,023270E+22	1,413376E+23
1336	5,055052E+22	5,055264E+22	2,011726E+22	2,011630E+22	1,011032E+23	4,023356E+22	1,413367E+23
1337	5,055242E+22	5,055273E+22	2,011663E+22	2,011740E+22	1,011052E+23	4,023403E+22	1,413392E+23
1338	5,055204E+22	5,055062E+22	2,011745E+22	2,011695E+22	1,011027E+23	4,023439E+22	1,413371E+23
1339	5,055005E+22	5,055162E+22	2,011837E+22	2,011772E+22	1,011017E+23	4,023608E+22	1,413378E+23
1340	5,055182E+22	5,055054E+22	2,011785E+22	2,011890E+22	1,011024E+23	4,023675E+22	1,413391E+23
1341	5,054941E+22	5,054937E+22	2,011929E+22	2,011868E+22	1,010988E+23	4,023797E+22	1,413368E+23
1342	5,054875E+22	5,055061E+22	2,011947E+22	2,011991E+22	1,010994E+23	4,023939E+22	1,413387E+23
1343	5,055035E+22	5,054848E+22	2,011939E+22	2,012023E+22	1,010988E+23	4,023963E+22	1,413385E+23
1344	5,054770E+22	5,054843E+22	2,012090E+22	2,011970E+22	1,010961E+23	4,024059E+22	1,413367E+23
1345	5,054920E+22	5,054936E+22	2,012025E+22	2,012067E+22	1,010986E+23	4,024091E+22	1,413395E+23
1346	5,054933E+22	5,054780E+22	2,012027E+22	2,012004E+22	1,010971E+23	4,024031E+22	1,413374E+23
1347	5,054699E+22	5,054929E+22	2,012065E+22	2,011984E+22	1,010963E+23	4,024049E+22	1,413368E+23
1348	5,054942E+22	5,054931E+22	2,011926E+22	2,012029E+22	1,010987E+23	4,023956E+22	1,413383E+23
1349	5,054869E+22	5,054821E+22	2,011963E+22	2,011890E+22	1,010969E+23	4,023853E+22	1,413354E+23
1350	5,054865E+22	5,055030E+22	2,011919E+22	2,011880E+22	1,010990E+23	4,023799E+22	1,413370E+23
1351	5,055147E+22	5,054963E+22	2,011794E+22	2,011869E+22	1,011011E+23	4,023663E+22	1,413377E+23
1352	5,054938E+22	5,054987E+22	2,011864E+22	2,011763E+22	1,010993E+23	4,023627E+22	1,413355E+23
1353	5,055039E+22	5,055174E+22	2,011791E+22	2,011836E+22	1,011021E+23	4,023627E+22	1,413384E+23
1354	5,055131E+22	5,055020E+22	2,011769E+22	2,011799E+22	1,011015E+23	4,023568E+22	1,413372E+23
1355	5,054909E+22	5,055064E+22	2,011873E+22	2,011776E+22	1,010997E+23	4,023648E+22	1,413362E+23
1356	5,055109E+22	5,055076E+22	2,011809E+22	2,011885E+22	1,011019E+23	4,023694E+22	1,413388E+23
1357	5,055027E+22	5,054876E+22	2,011900E+22	2,011860E+22	1,010990E+23	4,023760E+22	1,413366E+23
1358	5,054825E+22	5,055007E+22	2,011981E+22	2,011932E+22	1,010983E+23	4,023913E+22	1,413375E+23
1359	5,054989E+22	5,054910E+22	2,011929E+22	2,012064E+22	1,010990E+23	4,023994E+22	1,413389E+23
1360	5,054747E+22	5,054738E+22	2,012088E+22	2,012031E+22	1,010948E+23	4,024119E+22	1,413360E+23
1361	5,054741E+22	5,054859E+22	2,012121E+22	2,012128E+22	1,010960E+23	4,024249E+22	1,413385E+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	5,054879E+22	5,054686E+22	2,012109E+22	2,012153E+22	1,010956E+23	4,024262E+22	1,413383E+23
1363	5,054621E+22	5,054674E+22	2,012228E+22	2,012113E+22	1,010929E+23	4,024341E+22	1,413364E+23
1364	5,054733E+22	5,054803E+22	2,012151E+22	2,012211E+22	1,010954E+23	4,024362E+22	1,413390E+23
1365	5,054713E+22	5,054637E+22	2,012159E+22	2,012153E+22	1,010935E+23	4,024312E+22	1,413366E+23
1366	5,054531E+22	5,054773E+22	2,012190E+22	2,012105E+22	1,010930E+23	4,024295E+22	1,413360E+23
1367	5,054818E+22	5,054789E+22	2,012047E+22	2,012150E+22	1,010961E+23	4,024197E+22	1,413380E+23
1368	5,054749E+22	5,054644E+22	2,012086E+22	2,012011E+22	1,010939E+23	4,024097E+22	1,413349E+23
1369	5,054764E+22	5,054881E+22	2,012051E+22	2,012001E+22	1,010965E+23	4,024052E+22	1,413370E+23
1370	5,054986E+22	5,054865E+22	2,011922E+22	2,012001E+22	1,010985E+23	4,023923E+22	1,413377E+23
1371	5,054789E+22	5,054835E+22	2,011980E+22	2,011909E+22	1,010962E+23	4,023889E+22	1,413351E+23
1372	5,054892E+22	5,055015E+22	2,011923E+22	2,011966E+22	1,010991E+23	4,023888E+22	1,413379E+23
1373	5,054977E+22	5,054838E+22	2,011917E+22	2,011931E+22	1,010981E+23	4,023848E+22	1,413366E+23
1374	5,054768E+22	5,054886E+22	2,012021E+22	2,011901E+22	1,010965E+23	4,023923E+22	1,413358E+23
1375	5,054940E+22	5,054941E+22	2,011953E+22	2,012040E+22	1,010988E+23	4,023994E+22	1,413387E+23
1376	5,054807E+22	5,054702E+22	2,012051E+22	2,012035E+22	1,010951E+23	4,024086E+22	1,413360E+23
1377	5,054636E+22	5,054824E+22	2,012149E+22	2,012099E+22	1,010946E+23	4,024248E+22	1,413371E+23
1378	5,054798E+22	5,054740E+22	2,012103E+22	2,012218E+22	1,010954E+23	4,024321E+22	1,413386E+23
1379	5,054613E+22	5,054530E+22	2,012241E+22	2,012185E+22	1,010914E+23	4,024426E+22	1,413357E+23
1380	5,054609E+22	5,054683E+22	2,012273E+22	2,012267E+22	1,010929E+23	4,024539E+22	1,413383E+23
1381	5,054696E+22	5,054535E+22	2,012261E+22	2,012306E+22	1,010923E+23	4,024566E+22	1,413380E+23
1382	5,054428E+22	5,054546E+22	2,012362E+22	2,012260E+22	1,010897E+23	4,024622E+22	1,413360E+23
1383	5,054537E+22	5,054676E+22	2,012278E+22	2,012362E+22	1,010921E+23	4,024640E+22	1,413385E+23
1384	5,054532E+22	5,054442E+22	2,012295E+22	2,012293E+22	1,010897E+23	4,024588E+22	1,413356E+23
1385	5,054430E+22	5,054574E+22	2,012329E+22	2,012220E+22	1,010900E+23	4,024549E+22	1,413355E+23
1386	5,054703E+22	5,054639E+22	2,012179E+22	2,012258E+22	1,010934E+23	4,024438E+22	1,413378E+23
1387	5,054648E+22	5,054500E+22	2,012188E+22	2,012137E+22	1,010915E+23	4,024326E+22	1,413347E+23
1388	5,054627E+22	5,054770E+22	2,012154E+22	2,012121E+22	1,010940E+23	4,024275E+22	1,413367E+23
1389	5,054801E+22	5,054747E+22	2,012048E+22	2,012129E+22	1,010955E+23	4,024177E+22	1,413372E+23
1390	5,054635E+22	5,054699E+22	2,012112E+22	2,012022E+22	1,010933E+23	4,024135E+22	1,413347E+23
1391	5,054740E+22	5,054871E+22	2,012064E+22	2,012092E+22	1,010961E+23	4,024156E+22	1,413377E+23
1392	5,054803E+22	5,054646E+22	2,012075E+22	2,012080E+22	1,010945E+23	4,024155E+22	1,413360E+23
1393	5,054611E+22	5,054701E+22	2,012183E+22	2,012062E+22	1,010931E+23	4,024245E+22	1,413356E+23
1394	5,054730E+22	5,054790E+22	2,012112E+22	2,012214E+22	1,010952E+23	4,024325E+22	1,413385E+23
1395	5,054635E+22	5,054500E+22	2,012190E+22	2,012217E+22	1,010914E+23	4,024407E+22	1,413354E+23
1396	5,054491E+22	5,054623E+22	2,012297E+22	2,012251E+22	1,010911E+23	4,024548E+22	1,413366E+23
1397	5,054646E+22	5,054555E+22	2,012265E+22	2,012364E+22	1,010920E+23	4,024629E+22	1,413383E+23
1398	5,054471E+22	5,054372E+22	2,012396E+22	2,012318E+22	1,010884E+23	4,024714E+22	1,413356E+23
1399	5,054424E+22	5,054570E+22	2,012420E+22	2,012417E+22	1,010899E+23	4,024837E+22	1,413383E+23
1400	5,054464E+22	5,054379E+22	2,012414E+22	2,012468E+22	1,010884E+23	4,024882E+22	1,413373E+23
1401	5,054239E+22	5,054365E+22	2,012519E+22	2,012407E+22	1,010860E+23	4,024926E+22	1,413353E+23
1402	5,054363E+22	5,054508E+22	2,012428E+22	2,012491E+22	1,010887E+23	4,024919E+22	1,413379E+23
1403	5,054432E+22	5,054233E+22	2,012412E+22	2,012423E+22	1,010867E+23	4,024835E+22	1,413350E+23
1404	5,054345E+22	5,054411E+22	2,012440E+22	2,012333E+22	1,010876E+23	4,024773E+22	1,413353E+23
1405	5,054570E+22	5,054524E+22	2,012290E+22	2,012383E+22	1,010909E+23	4,024673E+22	1,413377E+23
1406	5,054495E+22	5,054406E+22	2,012291E+22	2,012256E+22	1,010890E+23	4,024547E+22	1,413345E+23
1407	5,054460E+22	5,054676E+22	2,012269E+22	2,012242E+22	1,010914E+23	4,024511E+22	1,413365E+23
1408	5,054625E+22	5,054576E+22	2,012191E+22	2,012251E+22	1,010920E+23	4,024442E+22	1,413364E+23
1409	5,054506E+22	5,054511E+22	2,012270E+22	2,012144E+22	1,010902E+23	4,024414E+22	1,413343E+23
1410	5,054573E+22	5,054713E+22	2,012222E+22	2,012227E+22	1,010929E+23	4,024449E+22	1,413374E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1411	5,054639E+22	5,054461E+22	2,012207E+22	2,012251E+22	1,010910E+23	4,024458E+22	1,413356E+23
1412	5,054437E+22	5,054532E+22	2,012314E+22	2,012228E+22	1,010897E+23	4,024541E+22	1,413351E+23
1413	5,054541E+22	5,054614E+22	2,012261E+22	2,012379E+22	1,010916E+23	4,024640E+22	1,413380E+23
1414	5,054490E+22	5,054330E+22	2,012339E+22	2,012357E+22	1,010882E+23	4,024696E+22	1,413352E+23
1415	5,054355E+22	5,054474E+22	2,012450E+22	2,012390E+22	1,010883E+23	4,024841E+22	1,413367E+23
1416	5,054469E+22	5,054379E+22	2,012440E+22	2,012517E+22	1,010885E+23	4,024957E+22	1,413380E+23
1417	5,054292E+22	5,054216E+22	2,012569E+22	2,012479E+22	1,010851E+23	4,025048E+22	1,413356E+23
1418	5,054189E+22	5,054428E+22	2,012587E+22	2,012580E+22	1,010862E+23	4,025166E+22	1,413378E+23
1419	5,054281E+22	5,054170E+22	2,012553E+22	2,012636E+22	1,010845E+23	4,025189E+22	1,413364E+23
1420	5,054113E+22	5,054149E+22	2,012646E+22	2,012537E+22	1,010826E+23	4,025184E+22	1,413345E+23
1421	5,054240E+22	5,054319E+22	2,012557E+22	2,012611E+22	1,010856E+23	4,025168E+22	1,413373E+23
1422	5,054328E+22	5,054107E+22	2,012518E+22	2,012529E+22	1,010843E+23	4,025047E+22	1,413348E+23
1423	5,054205E+22	5,054336E+22	2,012539E+22	2,012449E+22	1,010854E+23	4,024988E+22	1,413353E+23
1424	5,054374E+22	5,054415E+22	2,012417E+22	2,012509E+22	1,010879E+23	4,024926E+22	1,413371E+23
1425	5,054332E+22	5,054274E+22	2,012434E+22	2,012374E+22	1,010861E+23	4,024808E+22	1,413341E+23
1426	5,054283E+22	5,054535E+22	2,012422E+22	2,012356E+22	1,010882E+23	4,024779E+22	1,413360E+23
1427	5,054495E+22	5,054374E+22	2,012325E+22	2,012391E+22	1,010887E+23	4,024716E+22	1,413358E+23
1428	5,054383E+22	5,054319E+22	2,012400E+22	2,012286E+22	1,010870E+23	4,024686E+22	1,413339E+23
1429	5,054403E+22	5,054552E+22	2,012356E+22	2,012392E+22	1,010896E+23	4,024747E+22	1,413370E+23
1430	5,054472E+22	5,054316E+22	2,012327E+22	2,012412E+22	1,010879E+23	4,024739E+22	1,413353E+23
1431	5,054281E+22	5,054389E+22	2,012445E+22	2,012380E+22	1,010867E+23	4,024825E+22	1,413349E+23
1432	5,054381E+22	5,054421E+22	2,012428E+22	2,012522E+22	1,010880E+23	4,024951E+22	1,413375E+23
1433	5,054357E+22	5,054152E+22	2,012519E+22	2,012493E+22	1,010851E+23	4,025012E+22	1,413352E+23
1434	5,054167E+22	5,054338E+22	2,012635E+22	2,012535E+22	1,010850E+23	4,025169E+22	1,413367E+23
1435	5,054267E+22	5,054201E+22	2,012596E+22	2,012693E+22	1,010847E+23	4,025289E+22	1,413376E+23
1436	5,054084E+22	5,054035E+22	2,012719E+22	2,012646E+22	1,010812E+23	4,025365E+22	1,413348E+23
1437	5,053983E+22	5,054235E+22	2,012736E+22	2,012738E+22	1,010822E+23	4,025474E+22	1,413369E+23
1438	5,054133E+22	5,053982E+22	2,012679E+22	2,012768E+22	1,010812E+23	4,025447E+22	1,413356E+23
1439	5,054003E+22	5,054000E+22	2,012760E+22	2,012659E+22	1,010800E+23	4,025419E+22	1,413342E+23
1440	5,054105E+22	5,054166E+22	2,012688E+22	2,012737E+22	1,010827E+23	4,025426E+22	1,413370E+23
1441	5,054186E+22	5,054003E+22	2,012646E+22	2,012653E+22	1,010819E+23	4,025299E+22	1,413349E+23
1442	5,054017E+22	5,054246E+22	2,012672E+22	2,012571E+22	1,010826E+23	4,025243E+22	1,413351E+23
1443	5,054215E+22	5,054242E+22	2,012540E+22	2,012640E+22	1,010846E+23	4,025180E+22	1,413364E+23
1444	5,054211E+22	5,054085E+22	2,012561E+22	2,012489E+22	1,010830E+23	4,025051E+22	1,413335E+23
1445	5,054147E+22	5,054350E+22	2,012557E+22	2,012482E+22	1,010850E+23	4,025039E+22	1,413354E+23
1446	5,054359E+22	5,054226E+22	2,012441E+22	2,012524E+22	1,010858E+23	4,024964E+22	1,413355E+23
1447	5,054229E+22	5,054205E+22	2,012508E+22	2,012433E+22	1,010843E+23	4,024942E+22	1,413338E+23
1448	5,054211E+22	5,054393E+22	2,012500E+22	2,012547E+22	1,010860E+23	4,025047E+22	1,413365E+23
1449	5,054318E+22	5,054163E+22	2,012487E+22	2,012553E+22	1,010848E+23	4,025040E+22	1,413352E+23
1450	5,054115E+22	5,054237E+22	2,012621E+22	2,012514E+22	1,010835E+23	4,025135E+22	1,413349E+23
1451	5,054233E+22	5,054222E+22	2,012597E+22	2,012680E+22	1,010845E+23	4,025278E+22	1,413373E+23
1452	5,054199E+22	5,053969E+22	2,012684E+22	2,012655E+22	1,010817E+23	4,025340E+22	1,413351E+23
1453	5,053939E+22	5,054168E+22	2,012797E+22	2,012717E+22	1,010811E+23	4,025515E+22	1,413362E+23
1454	5,054049E+22	5,054033E+22	2,012736E+22	2,012866E+22	1,010808E+23	4,025601E+22	1,413368E+23
1455	5,053910E+22	5,053853E+22	2,012849E+22	2,012800E+22	1,010776E+23	4,025649E+22	1,413341E+23
1456	5,053829E+22	5,054015E+22	2,012889E+22	2,012875E+22	1,010784E+23	4,025764E+22	1,413361E+23
1457	5,054021E+22	5,053818E+22	2,012824E+22	2,012888E+22	1,010784E+23	4,025712E+22	1,413355E+23
1458	5,053853E+22	5,053894E+22	2,012900E+22	2,012778E+22	1,010775E+23	4,025678E+22	1,413342E+23
1459	5,053945E+22	5,054031E+22	2,012809E+22	2,012877E+22	1,010798E+23	4,025685E+22	1,413366E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1460	5,054025E+22	5,053867E+22	2,012768E+22	2,012777E+22	1,010789E+23	4,025545E+22	1,413344E+23
1461	5,053846E+22	5,054094E+22	2,012805E+22	2,012692E+22	1,010794E+23	4,025497E+22	1,413344E+23
1462	5,054080E+22	5,054084E+22	2,012657E+22	2,012750E+22	1,010816E+23	4,025406E+22	1,413357E+23
1463	5,054097E+22	5,053941E+22	2,012673E+22	2,012609E+22	1,010804E+23	4,025282E+22	1,413332E+23
1464	5,053997E+22	5,054185E+22	2,012692E+22	2,012624E+22	1,010818E+23	4,025317E+22	1,413350E+23
1465	5,054199E+22	5,054101E+22	2,012575E+22	2,012673E+22	1,010830E+23	4,025248E+22	1,413355E+23
1466	5,054048E+22	5,054087E+22	2,012652E+22	2,012581E+22	1,010813E+23	4,025233E+22	1,413337E+23
1467	5,054065E+22	5,054191E+22	2,012644E+22	2,012698E+22	1,010826E+23	4,025343E+22	1,413360E+23
1468	5,054192E+22	5,053965E+22	2,012644E+22	2,012687E+22	1,010816E+23	4,025331E+22	1,413349E+23
1469	5,053954E+22	5,054060E+22	2,012788E+22	2,012662E+22	1,010801E+23	4,025450E+22	1,413346E+23
1470	5,054041E+22	5,054068E+22	2,012747E+22	2,012837E+22	1,010811E+23	4,025584E+22	1,413369E+23
1471	5,053986E+22	5,053834E+22	2,012826E+22	2,012827E+22	1,010782E+23	4,025653E+22	1,413347E+23
1472	5,053709E+22	5,053969E+22	2,012965E+22	2,012891E+22	1,010768E+23	4,025856E+22	1,413353E+23
1473	5,053867E+22	5,053844E+22	2,012900E+22	2,013016E+22	1,010771E+23	4,025916E+22	1,413363E+23
1474	5,053757E+22	5,053681E+22	2,013008E+22	2,012933E+22	1,010744E+23	4,025941E+22	1,413338E+23
1475	5,053712E+22	5,053808E+22	2,013029E+22	2,013019E+22	1,010752E+23	4,026048E+22	1,413357E+23
1476	5,053900E+22	5,053668E+22	2,012956E+22	2,013023E+22	1,010757E+23	4,025979E+22	1,413355E+23
1477	5,053677E+22	5,053775E+22	2,013027E+22	2,012922E+22	1,010745E+23	4,025949E+22	1,413340E+23
1478	5,053771E+22	5,053906E+22	2,012922E+22	2,013003E+22	1,010768E+23	4,025925E+22	1,413360E+23
1479	5,053885E+22	5,053729E+22	2,012879E+22	2,012889E+22	1,010761E+23	4,025768E+22	1,413338E+23
1480	5,053704E+22	5,053905E+22	2,012944E+22	2,012806E+22	1,010761E+23	4,025750E+22	1,413336E+23
1481	5,053951E+22	5,053944E+22	2,012791E+22	2,012864E+22	1,010789E+23	4,025655E+22	1,413355E+23
1482	5,053936E+22	5,053829E+22	2,012804E+22	2,012740E+22	1,010777E+23	4,025545E+22	1,413331E+23
1483	5,053830E+22	5,054022E+22	2,012816E+22	2,012783E+22	1,010785E+23	4,025599E+22	1,413345E+23
1484	5,054048E+22	5,053937E+22	2,012708E+22	2,012816E+22	1,010799E+23	4,025523E+22	1,413351E+23
1485	5,053885E+22	5,053912E+22	2,012799E+22	2,012722E+22	1,010780E+23	4,025521E+22	1,413332E+23
1486	5,053926E+22	5,054020E+22	2,012785E+22	2,012829E+22	1,010795E+23	4,025614E+22	1,413356E+23
1487	5,054055E+22	5,053814E+22	2,012786E+22	2,012830E+22	1,010787E+23	4,025616E+22	1,413348E+23
1488	5,053757E+22	5,053884E+22	2,012960E+22	2,012832E+22	1,010764E+23	4,025792E+22	1,413343E+23
1489	5,053819E+22	5,053926E+22	2,012913E+22	2,013009E+22	1,010775E+23	4,025922E+22	1,413367E+23
1490	5,053766E+22	5,053669E+22	2,012996E+22	2,012996E+22	1,010744E+23	4,025992E+22	1,413343E+23
1491	5,053547E+22	5,053718E+22	2,013123E+22	2,013057E+22	1,010726E+23	4,026181E+22	1,413345E+23
1492	5,053751E+22	5,053620E+22	2,013054E+22	2,013155E+22	1,010737E+23	4,026209E+22	1,413358E+23
1493	5,053621E+22	5,053511E+22	2,013154E+22	2,013074E+22	1,010713E+23	4,026228E+22	1,413336E+23
1494	5,053560E+22	5,053684E+22	2,013148E+22	2,013154E+22	1,010724E+23	4,026303E+22	1,413355E+23
1495	5,053729E+22	5,053578E+22	2,013069E+22	2,013154E+22	1,010731E+23	4,026223E+22	1,413353E+23
1496	5,053487E+22	5,053630E+22	2,013171E+22	2,013052E+22	1,010712E+23	4,026222E+22	1,413334E+23
1497	5,053603E+22	5,053769E+22	2,013065E+22	2,013111E+22	1,010737E+23	4,026176E+22	1,413355E+23
1498	5,053738E+22	5,053593E+22	2,013021E+22	2,013002E+22	1,010733E+23	4,026023E+22	1,413335E+23
1499	5,053584E+22	5,053701E+22	2,013069E+22	2,012944E+22	1,010729E+23	4,026013E+22	1,413330E+23
1500	5,053818E+22	5,053781E+22	2,012912E+22	2,013005E+22	1,010760E+23	4,025916E+22	1,413352E+23
1501	5,053769E+22	5,053695E+22	2,012919E+22	2,012892E+22	1,010746E+23	4,025811E+22	1,413328E+23
1502	5,053685E+22	5,053865E+22	2,012923E+22	2,012917E+22	1,010755E+23	4,025840E+22	1,413339E+23
1503	5,053931E+22	5,053786E+22	2,012827E+22	2,012933E+22	1,010772E+23	4,025761E+22	1,413348E+23
1504	5,053752E+22	5,053729E+22	2,012959E+22	2,012849E+22	1,010748E+23	4,025808E+22	1,413329E+23
1505	5,053759E+22	5,053887E+22	2,012951E+22	2,012959E+22	1,010765E+23	4,025910E+22	1,413356E+23
1506	5,053844E+22	5,053698E+22	2,012956E+22	2,012988E+22	1,010754E+23	4,025945E+22	1,413349E+23
1507	5,053538E+22	5,053679E+22	2,013124E+22	2,013019E+22	1,010722E+23	4,026142E+22	1,413336E+23
1508	5,053626E+22	5,053713E+22	2,013080E+22	2,013179E+22	1,010734E+23	4,026260E+22	1,413360E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1509	5,053589E+22	5,053458E+22	2,013158E+22	2,013159E+22	1,010705E+23	4,026318E+22	1,413336E+23
1510	5,053416E+22	5,053516E+22	2,013261E+22	2,013205E+22	1,010693E+23	4,026466E+22	1,413340E+23
1511	5,053633E+22	5,053472E+22	2,013184E+22	2,013296E+22	1,010710E+23	4,026480E+22	1,413358E+23
1512	5,053449E+22	5,053372E+22	2,013303E+22	2,013228E+22	1,010682E+23	4,026531E+22	1,413335E+23
1513	5,053364E+22	5,053591E+22	2,013291E+22	2,013291E+22	1,010695E+23	4,026582E+22	1,413354E+23
1514	5,053541E+22	5,053456E+22	2,013216E+22	2,013281E+22	1,010700E+23	4,026497E+22	1,413349E+23
1515	5,053337E+22	5,053413E+22	2,013310E+22	2,013182E+22	1,010675E+23	4,026492E+22	1,413324E+23
1516	5,053484E+22	5,053573E+22	2,013196E+22	2,013225E+22	1,010706E+23	4,026421E+22	1,413348E+23
1517	5,053592E+22	5,053431E+22	2,013142E+22	2,013131E+22	1,010702E+23	4,026274E+22	1,413330E+23
1518	5,053441E+22	5,053562E+22	2,013162E+22	2,013078E+22	1,010700E+23	4,026241E+22	1,413324E+23
1519	5,053681E+22	5,053665E+22	2,013007E+22	2,013131E+22	1,010735E+23	4,026138E+22	1,413348E+23
1520	5,053619E+22	5,053543E+22	2,013052E+22	2,013018E+22	1,010716E+23	4,026070E+22	1,413323E+23
1521	5,053545E+22	5,053742E+22	2,013065E+22	2,013021E+22	1,010729E+23	4,026086E+22	1,413337E+23
1522	5,053788E+22	5,053662E+22	2,012987E+22	2,013053E+22	1,010745E+23	4,026040E+22	1,413349E+23
1523	5,053593E+22	5,053537E+22	2,013122E+22	2,013010E+22	1,010713E+23	4,026132E+22	1,413326E+23
1524	5,053565E+22	5,053717E+22	2,013115E+22	2,013131E+22	1,010728E+23	4,026246E+22	1,413353E+23
1525	5,053615E+22	5,053525E+22	2,013118E+22	2,013178E+22	1,010714E+23	4,026296E+22	1,413344E+23
1526	5,053360E+22	5,053459E+22	2,013264E+22	2,013191E+22	1,010682E+23	4,026455E+22	1,413327E+23
1527	5,053495E+22	5,053505E+22	2,013220E+22	2,013326E+22	1,010700E+23	4,026545E+22	1,413355E+23
1528	5,053455E+22	5,053259E+22	2,013318E+22	2,013307E+22	1,010671E+23	4,026624E+22	1,413334E+23
1529	5,053259E+22	5,053393E+22	2,013413E+22	2,013339E+22	1,010665E+23	4,026751E+22	1,413340E+23
1530	5,053440E+22	5,053385E+22	2,013340E+22	2,013442E+22	1,010683E+23	4,026782E+22	1,413361E+23
1531	5,053251E+22	5,053204E+22	2,013452E+22	2,013385E+22	1,010646E+23	4,026837E+22	1,413329E+23
1532	5,053181E+22	5,053409E+22	2,013443E+22	2,013420E+22	1,010659E+23	4,026864E+22	1,413345E+23
1533	5,053371E+22	5,053278E+22	2,013358E+22	2,013408E+22	1,010665E+23	4,026766E+22	1,413341E+23
1534	5,053220E+22	5,053216E+22	2,013418E+22	2,013304E+22	1,010644E+23	4,026722E+22	1,413316E+23
1535	5,053375E+22	5,053425E+22	2,013295E+22	2,013345E+22	1,010680E+23	4,026640E+22	1,413344E+23
1536	5,053443E+22	5,053301E+22	2,013255E+22	2,013271E+22	1,010674E+23	4,026526E+22	1,413327E+23
1537	5,053281E+22	5,053470E+22	2,013274E+22	2,013199E+22	1,010675E+23	4,026473E+22	1,413322E+23
1538	5,053538E+22	5,053554E+22	2,013141E+22	2,013245E+22	1,010709E+23	4,026386E+22	1,413348E+23
1539	5,053495E+22	5,053349E+22	2,013195E+22	2,013143E+22	1,010684E+23	4,026338E+22	1,413318E+23
1540	5,053416E+22	5,053570E+22	2,013222E+22	2,013141E+22	1,010699E+23	4,026363E+22	1,413335E+23
1541	5,053600E+22	5,053518E+22	2,013144E+22	2,013205E+22	1,010712E+23	4,026350E+22	1,413347E+23
1542	5,053394E+22	5,053373E+22	2,013257E+22	2,013184E+22	1,010677E+23	4,026441E+22	1,413321E+23
1543	5,053373E+22	5,053549E+22	2,013253E+22	2,013298E+22	1,010692E+23	4,026552E+22	1,413347E+23
1544	5,053425E+22	5,053317E+22	2,013283E+22	2,013348E+22	1,010674E+23	4,026630E+22	1,413337E+23
1545	5,053206E+22	5,053289E+22	2,013420E+22	2,013332E+22	1,010649E+23	4,026753E+22	1,413325E+23
1546	5,053361E+22	5,053346E+22	2,013384E+22	2,013469E+22	1,010671E+23	4,026853E+22	1,413356E+23
1547	5,053299E+22	5,053070E+22	2,013478E+22	2,013472E+22	1,010637E+23	4,026951E+22	1,413332E+23
1548	5,053078E+22	5,053250E+22	2,013569E+22	2,013495E+22	1,010633E+23	4,027063E+22	1,413339E+23
1549	5,053222E+22	5,053237E+22	2,013496E+22	2,013598E+22	1,010646E+23	4,027094E+22	1,413355E+23
1550	5,053083E+22	5,053007E+22	2,013583E+22	2,013525E+22	1,010609E+23	4,027108E+22	1,413320E+23
1551	5,053055E+22	5,053220E+22	2,013564E+22	2,013533E+22	1,010628E+23	4,027097E+22	1,413337E+23
1552	5,053232E+22	5,053099E+22	2,013490E+22	2,013531E+22	1,010633E+23	4,027021E+22	1,413335E+23
1553	5,053071E+22	5,053111E+22	2,013529E+22	2,013418E+22	1,010618E+23	4,026947E+22	1,413313E+23
1554	5,053218E+22	5,053338E+22	2,013414E+22	2,013471E+22	1,010656E+23	4,026885E+22	1,413344E+23
1555	5,053285E+22	5,053149E+22	2,013379E+22	2,013407E+22	1,010643E+23	4,026786E+22	1,413322E+23
1556	5,053148E+22	5,053319E+22	2,013409E+22	2,013312E+22	1,010647E+23	4,026721E+22	1,413319E+23
1557	5,053392E+22	5,053407E+22	2,013287E+22	2,013363E+22	1,010680E+23	4,026649E+22	1,413345E+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	5,053372E+22	5,053175E+22	2,013322E+22	2,013277E+22	1,010655E+23	4,026600E+22	1,413315E+23
1559	5,053266E+22	5,053422E+22	2,013351E+22	2,013286E+22	1,010669E+23	4,026637E+22	1,413333E+23
1560	5,053395E+22	5,053368E+22	2,013292E+22	2,013382E+22	1,010676E+23	4,026674E+22	1,413344E+23
1561	5,053194E+22	5,053223E+22	2,013400E+22	2,013342E+22	1,010642E+23	4,026743E+22	1,413316E+23
1562	5,053212E+22	5,053368E+22	2,013415E+22	2,013450E+22	1,010658E+23	4,026865E+22	1,413345E+23
1563	5,053289E+22	5,053081E+22	2,013444E+22	2,013502E+22	1,010637E+23	4,026946E+22	1,413332E+23
1564	5,053071E+22	5,053096E+22	2,013584E+22	2,013475E+22	1,010617E+23	4,027058E+22	1,413322E+23
1565	5,053169E+22	5,053207E+22	2,013550E+22	2,013626E+22	1,010638E+23	4,027177E+22	1,413355E+23
1566	5,053105E+22	5,052917E+22	2,013618E+22	2,013637E+22	1,010602E+23	4,027255E+22	1,413328E+23
1567	5,052888E+22	5,053095E+22	2,013711E+22	2,013637E+22	1,010598E+23	4,027348E+22	1,413333E+23
1568	5,053029E+22	5,053057E+22	2,013652E+22	2,013740E+22	1,010609E+23	4,027392E+22	1,413348E+23
1569	5,052919E+22	5,052852E+22	2,013721E+22	2,013642E+22	1,010577E+23	4,027363E+22	1,413313E+23
1570	5,052921E+22	5,053071E+22	2,013703E+22	2,013659E+22	1,010599E+23	4,027362E+22	1,413335E+23
1571	5,053081E+22	5,052928E+22	2,013616E+22	2,013681E+22	1,010601E+23	4,027297E+22	1,413331E+23
1572	5,052922E+22	5,052981E+22	2,013647E+22	2,013557E+22	1,010590E+23	4,027204E+22	1,413311E+23
1573	5,053055E+22	5,053206E+22	2,013540E+22	2,013603E+22	1,010626E+23	4,027143E+22	1,413340E+23
1574	5,053171E+22	5,052978E+22	2,013489E+22	2,013525E+22	1,010615E+23	4,027014E+22	1,413316E+23
1575	5,053055E+22	5,053162E+22	2,013526E+22	2,013410E+22	1,010622E+23	4,026936E+22	1,413315E+23
1576	5,053244E+22	5,053258E+22	2,013428E+22	2,013488E+22	1,010650E+23	4,026916E+22	1,413342E+23
1577	5,053188E+22	5,053077E+22	2,013456E+22	2,013412E+22	1,010626E+23	4,026868E+22	1,413313E+23
1578	5,053074E+22	5,053297E+22	2,013498E+22	2,013442E+22	1,010637E+23	4,026940E+22	1,413331E+23
1579	5,053193E+22	5,053160E+22	2,013450E+22	2,013551E+22	1,010635E+23	4,027001E+22	1,413335E+23
1580	5,053040E+22	5,053021E+22	2,013558E+22	2,013489E+22	1,010606E+23	4,027048E+22	1,413311E+23
1581	5,053059E+22	5,053171E+22	2,013581E+22	2,013596E+22	1,010623E+23	4,027178E+22	1,413341E+23
1582	5,053157E+22	5,052887E+22	2,013588E+22	2,013660E+22	1,010604E+23	4,027249E+22	1,413329E+23
1583	5,052917E+22	5,052951E+22	2,013726E+22	2,013630E+22	1,010587E+23	4,027357E+22	1,413322E+23
1584	5,052948E+22	5,053068E+22	2,013712E+22	2,013800E+22	1,010602E+23	4,027512E+22	1,413353E+23
1585	5,052890E+22	5,052784E+22	2,013772E+22	2,013785E+22	1,010567E+23	4,027556E+22	1,413323E+23
1586	5,052719E+22	5,052919E+22	2,013871E+22	2,013775E+22	1,010564E+23	4,027646E+22	1,413328E+23
1587	5,052869E+22	5,052835E+22	2,013806E+22	2,013881E+22	1,010570E+23	4,027687E+22	1,413339E+23
1588	5,052782E+22	5,052675E+22	2,013858E+22	2,013774E+22	1,010546E+23	4,027632E+22	1,413309E+23
1589	5,052750E+22	5,052935E+22	2,013835E+22	2,013801E+22	1,010568E+23	4,027636E+22	1,413332E+23
1590	5,052935E+22	5,052784E+22	2,013717E+22	2,013824E+22	1,010572E+23	4,027541E+22	1,413326E+23
1591	5,052799E+22	5,052844E+22	2,013753E+22	2,013669E+22	1,010564E+23	4,027421E+22	1,413306E+23
1592	5,052921E+22	5,053066E+22	2,013669E+22	2,013713E+22	1,010599E+23	4,027382E+22	1,413337E+23
1593	5,053046E+22	5,052862E+22	2,013611E+22	2,013619E+22	1,010591E+23	4,027229E+22	1,413314E+23
1594	5,052924E+22	5,053037E+22	2,013665E+22	2,013530E+22	1,010596E+23	4,027196E+22	1,413316E+23
1595	5,053054E+22	5,053103E+22	2,013569E+22	2,013643E+22	1,010616E+23	4,027212E+22	1,413337E+23
1596	5,052995E+22	5,052919E+22	2,013598E+22	2,013572E+22	1,010591E+23	4,027171E+22	1,413308E+23
1597	5,052882E+22	5,053109E+22	2,013656E+22	2,013601E+22	1,010599E+23	4,027257E+22	1,413325E+23
1598	5,053063E+22	5,052931E+22	2,013586E+22	2,013704E+22	1,010599E+23	4,027290E+22	1,413328E+23
1599	5,052934E+22	5,052825E+22	2,013695E+22	2,013622E+22	1,010576E+23	4,027317E+22	1,413308E+23
1600	5,052898E+22	5,053014E+22	2,013738E+22	2,013751E+22	1,010591E+23	4,027489E+22	1,413340E+23
1601	5,052952E+22	5,052789E+22	2,013738E+22	2,013813E+22	1,010574E+23	4,027551E+22	1,413329E+23
1602	5,052708E+22	5,052828E+22	2,013895E+22	2,013796E+22	1,010554E+23	4,027691E+22	1,413323E+23
1603	5,052721E+22	5,052870E+22	2,013890E+22	2,013967E+22	1,010559E+23	4,027857E+22	1,413345E+23
1604	5,052714E+22	5,052583E+22	2,013942E+22	2,013932E+22	1,010530E+23	4,027873E+22	1,413317E+23
1605	5,052557E+22	5,052713E+22	2,014034E+22	2,013919E+22	1,010527E+23	4,027953E+22	1,413322E+23
1606	5,052739E+22	5,052630E+22	2,013929E+22	2,014034E+22	1,010537E+23	4,027963E+22	1,413333E+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							
1607	5,052659E+22	5,052534E+22	2,013961E+22	2,013913E+22	1,010519E+23	4,027875E+22	1,413307E+23
1608	5,052590E+22	5,052805E+22	2,013952E+22	2,013943E+22	1,010540E+23	4,027895E+22	1,413329E+23
1609	5,052788E+22	5,052681E+22	2,013831E+22	2,013928E+22	1,010547E+23	4,027759E+22	1,413323E+23
1610	5,052699E+22	5,052713E+22	2,013879E+22	2,013764E+22	1,010541E+23	4,027643E+22	1,413306E+23
1611	5,052777E+22	5,052895E+22	2,013809E+22	2,013820E+22	1,010567E+23	4,027629E+22	1,413330E+23
1612	5,052892E+22	5,052731E+22	2,013748E+22	2,013738E+22	1,010562E+23	4,027487E+22	1,413311E+23
1613	5,052724E+22	5,052901E+22	2,013809E+22	2,013677E+22	1,010563E+23	4,027486E+22	1,413311E+23
1614	5,052869E+22	5,052924E+22	2,013694E+22	2,013806E+22	1,010579E+23	4,027500E+22	1,413329E+23
1615	5,052850E+22	5,052737E+22	2,013724E+22	2,013714E+22	1,010559E+23	4,027438E+22	1,413303E+23
1616	5,052735E+22	5,052918E+22	2,013801E+22	2,013748E+22	1,010565E+23	4,027549E+22	1,413320E+23
1617	5,052927E+22	5,052784E+22	2,013727E+22	2,013835E+22	1,010571E+23	4,027562E+22	1,413327E+23
1618	5,052800E+22	5,052687E+22	2,013852E+22	2,013774E+22	1,010549E+23	4,027625E+22	1,413311E+23
1619	5,052686E+22	5,052859E+22	2,013907E+22	2,013927E+22	1,010554E+23	4,027834E+22	1,413338E+23
1620	5,052741E+22	5,052636E+22	2,013911E+22	2,013984E+22	1,010538E+23	4,027895E+22	1,413327E+23
1621	5,052499E+22	5,052630E+22	2,014079E+22	2,013959E+22	1,010513E+23	4,028038E+22	1,413317E+23
1622	5,052566E+22	5,052628E+22	2,014042E+22	2,014122E+22	1,010519E+23	4,028164E+22	1,413336E+23
1623	5,052591E+22	5,052373E+22	2,014077E+22	2,014067E+22	1,010496E+23	4,028145E+22	1,413311E+23
1624	5,052400E+22	5,052548E+22	2,014169E+22	2,014070E+22	1,010495E+23	4,028239E+22	1,413319E+23
1625	5,052569E+22	5,052528E+22	2,014042E+22	2,014165E+22	1,010510E+23	4,028207E+22	1,413330E+23
1626	5,052510E+22	5,052425E+22	2,014085E+22	2,014040E+22	1,010493E+23	4,028125E+22	1,413306E+23
1627	5,052424E+22	5,052655E+22	2,014088E+22	2,014060E+22	1,010508E+23	4,028147E+22	1,413323E+23
1628	5,052654E+22	5,052540E+22	2,013968E+22	2,014027E+22	1,010519E+23	4,027995E+22	1,413319E+23
1629	5,052553E+22	5,052562E+22	2,014028E+22	2,013877E+22	1,010512E+23	4,027905E+22	1,413302E+23
1630	5,052628E+22	5,052726E+22	2,013928E+22	2,013959E+22	1,010535E+23	4,027888E+22	1,413324E+23
1631	5,052732E+22	5,052589E+22	2,013860E+22	2,013885E+22	1,010532E+23	4,027745E+22	1,413307E+23
1632	5,052541E+22	5,052739E+22	2,013935E+22	2,013840E+22	1,010528E+23	4,027775E+22	1,413305E+23
1633	5,052716E+22	5,052763E+22	2,013817E+22	2,013936E+22	1,010548E+23	4,027753E+22	1,413323E+23
1634	5,052753E+22	5,052566E+22	2,013860E+22	2,013842E+22	1,010532E+23	4,027702E+22	1,413302E+23
1635	5,052594E+22	5,052735E+22	2,013954E+22	2,013886E+22	1,010533E+23	4,027840E+22	1,413317E+23
1636	5,052763E+22	5,052653E+22	2,013888E+22	2,013981E+22	1,010542E+23	4,027870E+22	1,413329E+23
1637	5,052587E+22	5,052551E+22	2,014030E+22	2,013942E+22	1,010514E+23	4,027972E+22	1,413311E+23
1638	5,052474E+22	5,052667E+22	2,014070E+22	2,014102E+22	1,010514E+23	4,028172E+22	1,413331E+23
1639	5,052568E+22	5,052438E+22	2,014071E+22	2,014139E+22	1,010501E+23	4,028210E+22	1,413322E+23
1640	5,052329E+22	5,052412E+22	2,014241E+22	2,014118E+22	1,010474E+23	4,028359E+22	1,413310E+23
1641	5,052408E+22	5,052453E+22	2,014184E+22	2,014260E+22	1,010486E+23	4,028443E+22	1,413330E+23
1642	5,052457E+22	5,052229E+22	2,014209E+22	2,014216E+22	1,010469E+23	4,028426E+22	1,413311E+23
1643	5,052207E+22	5,052398E+22	2,014303E+22	2,014227E+22	1,010461E+23	4,028530E+22	1,413313E+23
1644	5,052399E+22	5,052401E+22	2,014181E+22	2,014299E+22	1,010480E+23	4,028479E+22	1,413328E+23
1645	5,052358E+22	5,052271E+22	2,014233E+22	2,014156E+22	1,010463E+23	4,028390E+22	1,413302E+23
1646	5,052304E+22	5,052467E+22	2,014211E+22	2,014169E+22	1,010477E+23	4,028381E+22	1,413315E+23
1647	5,052541E+22	5,052388E+22	2,014083E+22	2,014132E+22	1,010493E+23	4,028215E+22	1,413314E+23
1648	5,052382E+22	5,052425E+22	2,014148E+22	2,014017E+22	1,010481E+23	4,028164E+22	1,413297E+23
1649	5,052437E+22	5,052617E+22	2,014037E+22	2,014091E+22	1,010505E+23	4,028129E+22	1,413318E+23
1650	5,052583E+22	5,052451E+22	2,013981E+22	2,014024E+22	1,010503E+23	4,028005E+22	1,413304E+23
1651	5,052385E+22	5,052555E+22	2,014072E+22	2,013976E+22	1,010494E+23	4,028048E+22	1,413299E+23
1652	5,052603E+22	5,052597E+22	2,013964E+22	2,014058E+22	1,010520E+23	4,028022E+22	1,413322E+23
1653	5,052622E+22	5,052407E+22	2,014023E+22	2,013977E+22	1,010503E+23	4,028000E+22	1,413303E+23
1654	5,052440E+22	5,052570E+22	2,014098E+22	2,014046E+22	1,010501E+23	4,028145E+22	1,413315E+23
1655	5,052581E+22	5,052508E+22	2,014037E+22	2,014147E+22	1,010509E+23	4,028185E+22	1,413327E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1656	5,052371E+22	5,052376E+22	2,014198E+22	2,014124E+22	1,010475E+23	4,028323E+22	1,413307E+23
1657	5,052283E+22	5,052478E+22	2,014227E+22	2,014249E+22	1,010476E+23	4,028476E+22	1,413324E+23
1658	5,052425E+22	5,052236E+22	2,014228E+22	2,014286E+22	1,010466E+23	4,028514E+22	1,413317E+23
1659	5,052152E+22	5,052210E+22	2,014396E+22	2,014273E+22	1,010436E+23	4,028669E+22	1,413303E+23
1660	5,052232E+22	5,052303E+22	2,014333E+22	2,014410E+22	1,010454E+23	4,028743E+22	1,413328E+23
1661	5,052262E+22	5,052097E+22	2,014364E+22	2,014369E+22	1,010436E+23	4,028733E+22	1,413309E+23
1662	5,052042E+22	5,052227E+22	2,014433E+22	2,014371E+22	1,010427E+23	4,028803E+22	1,413307E+23
1663	5,052271E+22	5,052241E+22	2,014310E+22	2,014412E+22	1,010451E+23	4,028722E+22	1,413323E+23
1664	5,052221E+22	5,052111E+22	2,014366E+22	2,014278E+22	1,010433E+23	4,028644E+22	1,413298E+23
1665	5,052161E+22	5,052332E+22	2,014327E+22	2,014275E+22	1,010449E+23	4,028602E+22	1,413309E+23
1666	5,052401E+22	5,052273E+22	2,014196E+22	2,014263E+22	1,010467E+23	4,028459E+22	1,413313E+23
1667	5,052192E+22	5,052281E+22	2,014267E+22	2,014166E+22	1,010447E+23	4,028433E+22	1,413291E+23
1668	5,052282E+22	5,052467E+22	2,014170E+22	2,014223E+22	1,010475E+23	4,028393E+22	1,413314E+23
1669	5,052457E+22	5,052281E+22	2,014127E+22	2,014148E+22	1,010474E+23	4,028275E+22	1,413301E+23
1670	5,052285E+22	5,052356E+22	2,014199E+22	2,014102E+22	1,010464E+23	4,028300E+22	1,413294E+23
1671	5,052493E+22	5,052448E+22	2,014098E+22	2,014184E+22	1,010494E+23	4,028282E+22	1,413322E+23
1672	5,052439E+22	5,052278E+22	2,014169E+22	2,014138E+22	1,010472E+23	4,028307E+22	1,413302E+23
1673	5,052219E+22	5,052447E+22	2,014246E+22	2,014198E+22	1,010467E+23	4,028443E+22	1,413311E+23
1674	5,052390E+22	5,052356E+22	2,014196E+22	2,014306E+22	1,010475E+23	4,028503E+22	1,413325E+23
1675	5,052160E+22	5,052162E+22	2,014371E+22	2,014287E+22	1,010432E+23	4,028657E+22	1,413298E+23
1676	5,052116E+22	5,052274E+22	2,014401E+22	2,014398E+22	1,010439E+23	4,028799E+22	1,413319E+23
1677	5,052260E+22	5,052045E+22	2,014400E+22	2,014446E+22	1,010430E+23	4,028846E+22	1,413315E+23
1678	5,051987E+22	5,052020E+22	2,014530E+22	2,014447E+22	1,010401E+23	4,028977E+22	1,413298E+23
1679	5,052074E+22	5,052151E+22	2,014464E+22	2,014567E+22	1,010422E+23	4,029032E+22	1,413326E+23
1680	5,052091E+22	5,051939E+22	2,014503E+22	2,014520E+22	1,010403E+23	4,029023E+22	1,413305E+23
1681	5,051903E+22	5,052074E+22	2,014561E+22	2,014475E+22	1,010398E+23	4,029035E+22	1,413301E+23
1682	5,052163E+22	5,052097E+22	2,014437E+22	2,014516E+22	1,010426E+23	4,028952E+22	1,413321E+23
1683	5,052051E+22	5,051965E+22	2,014498E+22	2,014401E+22	1,010402E+23	4,028899E+22	1,413291E+23
1684	5,051982E+22	5,052214E+22	2,014457E+22	2,014402E+22	1,010420E+23	4,028859E+22	1,413306E+23
1685	5,052210E+22	5,052145E+22	2,014336E+22	2,014402E+22	1,010435E+23	4,028738E+22	1,413309E+23
1686	5,052047E+22	5,052099E+22	2,014382E+22	2,014305E+22	1,010415E+23	4,028688E+22	1,413283E+23
1687	5,052183E+22	5,052288E+22	2,014292E+22	2,014341E+22	1,010447E+23	4,028633E+22	1,413310E+23
1688	5,052337E+22	5,052121E+22	2,014259E+22	2,014280E+22	1,010446E+23	4,028539E+22	1,413300E+23
1689	5,052153E+22	5,052226E+22	2,014321E+22	2,014223E+22	1,010438E+23	4,028544E+22	1,413292E+23
1690	5,052330E+22	5,052337E+22	2,014232E+22	2,014333E+22	1,010467E+23	4,028564E+22	1,413323E+23
1691	5,052208E+22	5,052132E+22	2,014326E+22	2,014311E+22	1,010434E+23	4,028637E+22	1,413298E+23
1692	5,052017E+22	5,052266E+22	2,014420E+22	2,014354E+22	1,010428E+23	4,028773E+22	1,413306E+23
1693	5,052208E+22	5,052147E+22	2,014383E+22	2,014459E+22	1,010435E+23	4,028842E+22	1,413320E+23
1694	5,052014E+22	5,051920E+22	2,014523E+22	2,014448E+22	1,010393E+23	4,028971E+22	1,413291E+23
1695	5,051974E+22	5,052075E+22	2,014549E+22	2,014556E+22	1,010405E+23	4,029105E+22	1,413315E+23
1696	5,052068E+22	5,051892E+22	2,014546E+22	2,014623E+22	1,010396E+23	4,029168E+22	1,413313E+23
1697	5,051802E+22	5,051883E+22	2,014661E+22	2,014593E+22	1,010369E+23	4,029254E+22	1,413294E+23
1698	5,051927E+22	5,052014E+22	2,014605E+22	2,014699E+22	1,010394E+23	4,029304E+22	1,413324E+23
1699	5,051921E+22	5,051779E+22	2,014655E+22	2,014646E+22	1,010370E+23	4,029300E+22	1,413300E+23
1700	5,051756E+22	5,051925E+22	2,014713E+22	2,014585E+22	1,010368E+23	4,029298E+22	1,413298E+23
1701	5,051997E+22	5,051961E+22	2,014588E+22	2,014643E+22	1,010396E+23	4,029231E+22	1,413319E+23
1702	5,051878E+22	5,051802E+22	2,014611E+22	2,014555E+22	1,010368E+23	4,029167E+22	1,413285E+23
1703	5,051832E+22	5,052056E+22	2,014573E+22	2,014547E+22	1,010389E+23	4,029120E+22	1,413301E+23
1704	5,052065E+22	5,051974E+22	2,014455E+22	2,014542E+22	1,010404E+23	4,028997E+22	1,413304E+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	5,051944E+22	5,051933E+22	2,014487E+22	2,014407E+22	1,010388E+23	4,028895E+22	1,413277E+23
1706	5,052102E+22	5,052155E+22	2,014404E+22	2,014445E+22	1,010426E+23	4,028850E+22	1,413311E+23
1707	5,052169E+22	5,051997E+22	2,014392E+22	2,014410E+22	1,010417E+23	4,028802E+22	1,413297E+23
1708	5,051958E+22	5,052119E+22	2,014474E+22	2,014361E+22	1,010408E+23	4,028835E+22	1,413291E+23
1709	5,052110E+22	5,052201E+22	2,014407E+22	2,014485E+22	1,010431E+23	4,028892E+22	1,413320E+23
1710	5,052016E+22	5,051919E+22	2,014485E+22	2,014477E+22	1,010394E+23	4,028962E+22	1,413290E+23
1711	5,051872E+22	5,052038E+22	2,014583E+22	2,014508E+22	1,010391E+23	4,029091E+22	1,413300E+23
1712	5,052046E+22	5,051932E+22	2,014543E+22	2,014630E+22	1,010398E+23	4,029173E+22	1,413315E+23
1713	5,051861E+22	5,051744E+22	2,014657E+22	2,014604E+22	1,010360E+23	4,029262E+22	1,413287E+23
1714	5,051818E+22	5,051939E+22	2,014683E+22	2,014722E+22	1,010376E+23	4,029404E+22	1,413316E+23
1715	5,051858E+22	5,051748E+22	2,014700E+22	2,014789E+22	1,010361E+23	4,029489E+22	1,413310E+23
1716	5,051634E+22	5,051730E+22	2,014828E+22	2,014726E+22	1,010336E+23	4,029553E+22	1,413292E+23
1717	5,051767E+22	5,051849E+22	2,014781E+22	2,014820E+22	1,010362E+23	4,029602E+22	1,413322E+23
1718	5,051773E+22	5,051591E+22	2,014795E+22	2,014781E+22	1,010336E+23	4,029576E+22	1,413294E+23
1719	5,051605E+22	5,051756E+22	2,014844E+22	2,014722E+22	1,010336E+23	4,029567E+22	1,413293E+23
1720	5,051792E+22	5,051820E+22	2,014712E+22	2,014800E+22	1,010361E+23	4,029512E+22	1,413312E+23
1721	5,051714E+22	5,051655E+22	2,014710E+22	2,014684E+22	1,010337E+23	4,029394E+22	1,413276E+23
1722	5,051723E+22	5,051902E+22	2,014678E+22	2,014662E+22	1,010362E+23	4,029339E+22	1,413296E+23
1723	5,051936E+22	5,051821E+22	2,014579E+22	2,014655E+22	1,010376E+23	4,029234E+22	1,413299E+23
1724	5,051838E+22	5,051802E+22	2,014620E+22	2,014509E+22	1,010364E+23	4,029129E+22	1,413277E+23
1725	5,051949E+22	5,052044E+22	2,014555E+22	2,014568E+22	1,010399E+23	4,029123E+22	1,413312E+23
1726	5,051985E+22	5,051855E+22	2,014524E+22	2,014569E+22	1,010384E+23	4,029093E+22	1,413293E+23
1727	5,051780E+22	5,051942E+22	2,014626E+22	2,014521E+22	1,010372E+23	4,029147E+22	1,413287E+23
1728	5,051917E+22	5,052001E+22	2,014570E+22	2,014650E+22	1,010392E+23	4,029219E+22	1,413314E+23
1729	5,051873E+22	5,051706E+22	2,014626E+22	2,014620E+22	1,010358E+23	4,029246E+22	1,413282E+23
1730	5,051751E+22	5,051851E+22	2,014723E+22	2,014658E+22	1,010360E+23	4,029380E+22	1,413298E+23
1731	5,051853E+22	5,051773E+22	2,014696E+22	2,014799E+22	1,010363E+23	4,029495E+22	1,413312E+23
1732	5,051664E+22	5,051616E+22	2,014817E+22	2,014763E+22	1,010328E+23	4,029580E+22	1,413286E+23
1733	5,051618E+22	5,051804E+22	2,014862E+22	2,014875E+22	1,010342E+23	4,029737E+22	1,413316E+23
1734	5,051682E+22	5,051558E+22	2,014861E+22	2,014943E+22	1,010324E+23	4,029804E+22	1,413304E+23
1735	5,051496E+22	5,051534E+22	2,014991E+22	2,014864E+22	1,010303E+23	4,029855E+22	1,413289E+23
1736	5,051595E+22	5,051669E+22	2,014932E+22	2,014966E+22	1,010326E+23	4,029899E+22	1,413316E+23
1737	5,051604E+22	5,051429E+22	2,014909E+22	2,014920E+22	1,010303E+23	4,029829E+22	1,413286E+23
1738	5,051451E+22	5,051618E+22	2,014946E+22	2,014867E+22	1,010307E+23	4,029813E+22	1,413288E+23
1739	5,051611E+22	5,051664E+22	2,014830E+22	2,014940E+22	1,010327E+23	4,029770E+22	1,413304E+23
1740	5,051597E+22	5,051504E+22	2,014835E+22	2,014786E+22	1,010310E+23	4,029621E+22	1,413272E+23
1741	5,051625E+22	5,051761E+22	2,014815E+22	2,014755E+22	1,010339E+23	4,029570E+22	1,413296E+23
1742	5,051820E+22	5,051671E+22	2,014699E+22	2,014769E+22	1,010349E+23	4,029468E+22	1,413296E+23
1743	5,051699E+22	5,051672E+22	2,014753E+22	2,014638E+22	1,010337E+23	4,029391E+22	1,413276E+23
1744	5,051733E+22	5,051918E+22	2,014699E+22	2,014721E+22	1,010365E+23	4,029420E+22	1,413307E+23
1745	5,051796E+22	5,051696E+22	2,014657E+22	2,014714E+22	1,010349E+23	4,029371E+22	1,413286E+23
1746	5,051637E+22	5,051758E+22	2,014765E+22	2,014667E+22	1,010339E+23	4,029431E+22	1,413283E+23
1747	5,051743E+22	5,051804E+22	2,014728E+22	2,014805E+22	1,010355E+23	4,029532E+22	1,413308E+23
1748	5,051728E+22	5,051534E+22	2,014785E+22	2,014768E+22	1,010326E+23	4,029553E+22	1,413281E+23
1749	5,051579E+22	5,051704E+22	2,014890E+22	2,014823E+22	1,010328E+23	4,029713E+22	1,413300E+23
1750	5,051658E+22	5,051610E+22	2,014847E+22	2,014984E+22	1,010327E+23	4,029831E+22	1,413310E+23
1751	5,051502E+22	5,051427E+22	2,014983E+22	2,014930E+22	1,010293E+23	4,029913E+22	1,413284E+23
1752	5,051432E+22	5,051609E+22	2,015035E+22	2,015027E+22	1,010304E+23	4,030062E+22	1,413310E+23
1753	5,051539E+22	5,051366E+22	2,015002E+22	2,015071E+22	1,010291E+23	4,030072E+22	1,413298E+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							
1754	5,051357E+22	5,051363E+22	2,015120E+22	2,014997E+22	1,010272E+23	4,030117E+22	1,413284E+23
1755	5,051379E+22	5,051523E+22	2,015068E+22	2,015115E+22	1,010290E+23	4,030183E+22	1,413309E+23
1756	5,051415E+22	5,051301E+22	2,015040E+22	2,015053E+22	1,010272E+23	4,030093E+22	1,413281E+23
1757	5,051291E+22	5,051478E+22	2,015085E+22	2,014991E+22	1,010277E+23	4,030076E+22	1,413284E+23
1758	5,051486E+22	5,051489E+22	2,014951E+22	2,015060E+22	1,010297E+23	4,030012E+22	1,413299E+23
1759	5,051514E+22	5,051337E+22	2,014963E+22	2,014894E+22	1,010285E+23	4,029857E+22	1,413271E+23
1760	5,051489E+22	5,051628E+22	2,014945E+22	2,014875E+22	1,010312E+23	4,029820E+22	1,413294E+23
1761	5,051669E+22	5,051554E+22	2,014805E+22	2,014896E+22	1,010322E+23	4,029702E+22	1,413293E+23
1762	5,051538E+22	5,051553E+22	2,014867E+22	2,014784E+22	1,010309E+23	4,029652E+22	1,413274E+23
1763	5,051524E+22	5,051758E+22	2,014844E+22	2,014872E+22	1,010328E+23	4,029717E+22	1,413300E+23
1764	5,051641E+22	5,051517E+22	2,014812E+22	2,014845E+22	1,010316E+23	4,029658E+22	1,413282E+23
1765	5,051507E+22	5,051576E+22	2,014926E+22	2,014804E+22	1,010308E+23	4,029730E+22	1,413281E+23
1766	5,051593E+22	5,051605E+22	2,014874E+22	2,014966E+22	1,010320E+23	4,029840E+22	1,413304E+23
1767	5,051568E+22	5,051366E+22	2,014939E+22	2,014936E+22	1,010293E+23	4,029876E+22	1,413281E+23
1768	5,051368E+22	5,051551E+22	2,015049E+22	2,014994E+22	1,010292E+23	4,030044E+22	1,413296E+23
1769	5,051477E+22	5,051431E+22	2,014996E+22	2,015135E+22	1,010291E+23	4,030131E+22	1,413304E+23
1770	5,051358E+22	5,051250E+22	2,015135E+22	2,015072E+22	1,010261E+23	4,030207E+22	1,413282E+23
1771	5,051244E+22	5,051425E+22	2,015201E+22	2,015170E+22	1,010267E+23	4,030371E+22	1,413304E+23
1772	5,051366E+22	5,051210E+22	2,015160E+22	2,015206E+22	1,010258E+23	4,030366E+22	1,413294E+23
1773	5,051171E+22	5,051226E+22	2,015268E+22	2,015149E+22	1,010240E+23	4,030417E+22	1,413281E+23
1774	5,051183E+22	5,051350E+22	2,015196E+22	2,015277E+22	1,010253E+23	4,030474E+22	1,413301E+23
1775	5,051281E+22	5,051117E+22	2,015174E+22	2,015192E+22	1,010240E+23	4,030366E+22	1,413276E+23
1776	5,051163E+22	5,051305E+22	2,015215E+22	2,015110E+22	1,010247E+23	4,030325E+22	1,413279E+23
1777	5,051395E+22	5,051334E+22	2,015057E+22	2,015161E+22	1,010273E+23	4,030218E+22	1,413295E+23
1778	5,051411E+22	5,051225E+22	2,015064E+22	2,015005E+22	1,010264E+23	4,030069E+22	1,413271E+23
1779	5,051287E+22	5,051527E+22	2,015070E+22	2,015006E+22	1,010281E+23	4,030076E+22	1,413289E+23
1780	5,051474E+22	5,051451E+22	2,014942E+22	2,015023E+22	1,010292E+23	4,029965E+22	1,413289E+23
1781	5,051364E+22	5,051404E+22	2,015021E+22	2,014921E+22	1,010277E+23	4,029942E+22	1,413271E+23
1782	5,051368E+22	5,051552E+22	2,014992E+22	2,015019E+22	1,010292E+23	4,030011E+22	1,413293E+23
1783	5,051532E+22	5,051306E+22	2,014964E+22	2,014992E+22	1,010284E+23	4,029956E+22	1,413279E+23
1784	5,051348E+22	5,051396E+22	2,015075E+22	2,014962E+22	1,010274E+23	4,030037E+22	1,413278E+23
1785	5,051433E+22	5,051449E+22	2,014999E+22	2,015128E+22	1,010288E+23	4,030126E+22	1,413301E+23
1786	5,051405E+22	5,051220E+22	2,015072E+22	2,015099E+22	1,010262E+23	4,030171E+22	1,413280E+23
1787	5,051162E+22	5,051381E+22	2,015218E+22	2,015149E+22	1,010254E+23	4,030367E+22	1,413291E+23
1788	5,051311E+22	5,051264E+22	2,015171E+22	2,015263E+22	1,010258E+23	4,030434E+22	1,413301E+23
1789	5,051195E+22	5,051084E+22	2,015312E+22	2,015212E+22	1,010228E+23	4,030524E+22	1,413280E+23
1790	5,051043E+22	5,051239E+22	2,015357E+22	2,015332E+22	1,010228E+23	4,030689E+22	1,413297E+23
1791	5,051174E+22	5,051036E+22	2,015311E+22	2,015373E+22	1,010221E+23	4,030684E+22	1,413289E+23
1792	5,050964E+22	5,051060E+22	2,015409E+22	2,015308E+22	1,010202E+23	4,030717E+22	1,413274E+23
1793	5,051047E+22	5,051167E+22	2,015312E+22	2,015409E+22	1,010221E+23	4,030721E+22	1,413293E+23
1794	5,051193E+22	5,050964E+22	2,015282E+22	2,015305E+22	1,010216E+23	4,030587E+22	1,413274E+23
1795	5,051036E+22	5,051167E+22	2,015339E+22	2,015220E+22	1,010220E+23	4,030559E+22	1,413276E+23
1796	5,051259E+22	5,051237E+22	2,015183E+22	2,015264E+22	1,010250E+23	4,030447E+22	1,413294E+23
1797	5,051246E+22	5,051142E+22	2,015194E+22	2,015136E+22	1,010239E+23	4,030330E+22	1,413272E+23
1798	5,051091E+22	5,051370E+22	2,015201E+22	2,015153E+22	1,010246E+23	4,030354E+22	1,413281E+23
1799	5,051325E+22	5,051257E+22	2,015091E+22	2,015161E+22	1,010258E+23	4,030252E+22	1,413283E+23
1800	5,051223E+22	5,051205E+22	2,015163E+22	2,015053E+22	1,010243E+23	4,030216E+22	1,413264E+23
1801	5,051258E+22	5,051347E+22	2,015112E+22	2,015151E+22	1,010261E+23	4,030262E+22	1,413287E+23
1802	5,051406E+22	5,051160E+22	2,015081E+22	2,015137E+22	1,010257E+23	4,030218E+22	1,413278E+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							
1803	5,051142E+22	5,051266E+22	2,015215E+22	2,015121E+22	1,010241E+23	4,030336E+22	1,413275E+23
1804	5,051234E+22	5,051326E+22	2,015160E+22	2,015271E+22	1,010256E+23	4,030431E+22	1,413299E+23
1805	5,051224E+22	5,051076E+22	2,015251E+22	2,015250E+22	1,010230E+23	4,030501E+22	1,413280E+23
1806	5,050971E+22	5,051176E+22	2,015396E+22	2,015307E+22	1,010215E+23	4,030703E+22	1,413285E+23
1807	5,051149E+22	5,051056E+22	2,015354E+22	2,015424E+22	1,010221E+23	4,030778E+22	1,413298E+23
1808	5,050990E+22	5,050899E+22	2,015476E+22	2,015385E+22	1,010189E+23	4,030861E+22	1,413275E+23
1809	5,050857E+22	5,051053E+22	2,015483E+22	2,015506E+22	1,010191E+23	4,030990E+22	1,413290E+23
1810	5,051019E+22	5,050867E+22	2,015428E+22	2,015533E+22	1,010189E+23	4,030960E+22	1,413285E+23
1811	5,050808E+22	5,050883E+22	2,015541E+22	2,015443E+22	1,010169E+23	4,030984E+22	1,413268E+23
1812	5,050945E+22	5,051024E+22	2,015444E+22	2,015505E+22	1,010197E+23	4,030949E+22	1,413292E+23
1813	5,051086E+22	5,050854E+22	2,015413E+22	2,015408E+22	1,010194E+23	4,030822E+22	1,413276E+23
1814	5,050868E+22	5,051044E+22	2,015467E+22	2,015343E+22	1,010191E+23	4,030810E+22	1,413272E+23
1815	5,051085E+22	5,051111E+22	2,015319E+22	2,015393E+22	1,010220E+23	4,030712E+22	1,413291E+23
1816	5,051040E+22	5,050993E+22	2,015333E+22	2,015271E+22	1,010203E+23	4,030604E+22	1,413264E+23
1817	5,050947E+22	5,051177E+22	2,015320E+22	2,015282E+22	1,010212E+23	4,030602E+22	1,413273E+23
1818	5,051219E+22	5,051077E+22	2,015205E+22	2,015288E+22	1,010230E+23	4,030493E+22	1,413279E+23
1819	5,051082E+22	5,051037E+22	2,015293E+22	2,015189E+22	1,010212E+23	4,030482E+22	1,413260E+23
1820	5,051114E+22	5,051225E+22	2,015245E+22	2,015284E+22	1,010234E+23	4,030529E+22	1,413287E+23
1821	5,051231E+22	5,051060E+22	2,015224E+22	2,015295E+22	1,010229E+23	4,030519E+22	1,413281E+23
1822	5,050937E+22	5,051100E+22	2,015376E+22	2,015288E+22	1,010204E+23	4,030664E+22	1,413270E+23
1823	5,051068E+22	5,051125E+22	2,015346E+22	2,015424E+22	1,010219E+23	4,030769E+22	1,413296E+23
1824	5,051045E+22	5,050877E+22	2,015434E+22	2,015402E+22	1,010192E+23	4,030836E+22	1,413276E+23
1825	5,050813E+22	5,050961E+22	2,015548E+22	2,015468E+22	1,010177E+23	4,031015E+22	1,413279E+23
1826	5,050970E+22	5,050887E+22	2,015491E+22	2,015593E+22	1,010186E+23	4,031084E+22	1,413294E+23
1827	5,050770E+22	5,050735E+22	2,015617E+22	2,015557E+22	1,010151E+23	4,031174E+22	1,413268E+23
1828	5,050681E+22	5,050894E+22	2,015628E+22	2,015644E+22	1,010158E+23	4,031272E+22	1,413285E+23
1829	5,050888E+22	5,050729E+22	2,015572E+22	2,015662E+22	1,010162E+23	4,031234E+22	1,413285E+23
1830	5,050680E+22	5,050710E+22	2,015680E+22	2,015565E+22	1,010139E+23	4,031245E+22	1,413263E+23
1831	5,050828E+22	5,050869E+22	2,015593E+22	2,015621E+22	1,010170E+23	4,031213E+22	1,413291E+23
1832	5,050909E+22	5,050742E+22	2,015547E+22	2,015535E+22	1,010165E+23	4,031082E+22	1,413273E+23
1833	5,050693E+22	5,050895E+22	2,015574E+22	2,015482E+22	1,010159E+23	4,031056E+22	1,413264E+23
1834	5,050920E+22	5,050959E+22	2,015429E+22	2,015526E+22	1,010188E+23	4,030955E+22	1,413284E+23
1835	5,050882E+22	5,050812E+22	2,015458E+22	2,015399E+22	1,010169E+23	4,030857E+22	1,413255E+23
1836	5,050836E+22	5,051010E+22	2,015447E+22	2,015389E+22	1,010185E+23	4,030837E+22	1,413268E+23
1837	5,051103E+22	5,050952E+22	2,015333E+22	2,015417E+22	1,010205E+23	4,030750E+22	1,413280E+23
1838	5,050907E+22	5,050895E+22	2,015425E+22	2,015340E+22	1,010180E+23	4,030765E+22	1,413257E+23
1839	5,050937E+22	5,051082E+22	2,015402E+22	2,015437E+22	1,010202E+23	4,030839E+22	1,413286E+23
1840	5,051027E+22	5,050908E+22	2,015393E+22	2,015448E+22	1,010193E+23	4,030841E+22	1,413278E+23
1841	5,050781E+22	5,050892E+22	2,015534E+22	2,015442E+22	1,010167E+23	4,030976E+22	1,413265E+23
1842	5,050922E+22	5,050931E+22	2,015502E+22	2,015575E+22	1,010185E+23	4,031076E+22	1,413293E+23
1843	5,050858E+22	5,050686E+22	2,015598E+22	2,015571E+22	1,010154E+23	4,031168E+22	1,413271E+23
1844	5,050629E+22	5,050803E+22	2,015700E+22	2,015629E+22	1,010143E+23	4,031329E+22	1,413276E+23
1845	5,050780E+22	5,050745E+22	2,015637E+22	2,015767E+22	1,010153E+23	4,031404E+22	1,413293E+23
1846	5,050581E+22	5,050542E+22	2,015768E+22	2,015720E+22	1,010112E+23	4,031488E+22	1,413261E+23
1847	5,050560E+22	5,050698E+22	2,015788E+22	2,015773E+22	1,010126E+23	4,031562E+22	1,413282E+23
1848	5,050746E+22	5,050568E+22	2,015725E+22	2,015777E+22	1,010131E+23	4,031502E+22	1,413282E+23
1849	5,050550E+22	5,050553E+22	2,015801E+22	2,015689E+22	1,010110E+23	4,031490E+22	1,413259E+23
1850	5,050660E+22	5,050754E+22	2,015705E+22	2,015747E+22	1,010141E+23	4,031451E+22	1,413287E+23
1851	5,050694E+22	5,050616E+22	2,015670E+22	2,015673E+22	1,010131E+23	4,031343E+22	1,413265E+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	5,050523E+22	5,050751E+22	2,015699E+22	2,015598E+22	1,010127E+23	4,031297E+22	1,413257E+23
1853	5,050787E+22	5,050816E+22	2,015554E+22	2,015648E+22	1,010160E+23	4,031203E+22	1,413281E+23
1854	5,050754E+22	5,050629E+22	2,015586E+22	2,015528E+22	1,010138E+23	4,031114E+22	1,413250E+23
1855	5,050732E+22	5,050841E+22	2,015586E+22	2,015520E+22	1,010157E+23	4,031106E+22	1,413268E+23
1856	5,050936E+22	5,050832E+22	2,015470E+22	2,015561E+22	1,010177E+23	4,031031E+22	1,413280E+23
1857	5,050752E+22	5,050738E+22	2,015548E+22	2,015498E+22	1,010149E+23	4,031046E+22	1,413254E+23
1858	5,050780E+22	5,050918E+22	2,015543E+22	2,015581E+22	1,010170E+23	4,031124E+22	1,413282E+23
1859	5,050858E+22	5,050723E+22	2,015556E+22	2,015594E+22	1,010158E+23	4,031150E+22	1,413273E+23
1860	5,050632E+22	5,050708E+22	2,015699E+22	2,015577E+22	1,010134E+23	4,031276E+22	1,413262E+23
1861	5,050746E+22	5,050788E+22	2,015663E+22	2,015737E+22	1,010153E+23	4,031399E+22	1,413293E+23
1862	5,050634E+22	5,050508E+22	2,015755E+22	2,015751E+22	1,010114E+23	4,031506E+22	1,413265E+23
1863	5,050430E+22	5,050610E+22	2,015869E+22	2,015800E+22	1,010104E+23	4,031668E+22	1,413271E+23
1864	5,050584E+22	5,050570E+22	2,015804E+22	2,015919E+22	1,010115E+23	4,031723E+22	1,413288E+23
1865	5,050452E+22	5,050335E+22	2,015906E+22	2,015863E+22	1,010079E+23	4,031769E+22	1,413256E+23
1866	5,050442E+22	5,050531E+22	2,015923E+22	2,015899E+22	1,010097E+23	4,031821E+22	1,413279E+23
1867	5,050582E+22	5,050432E+22	2,015861E+22	2,015912E+22	1,010101E+23	4,031773E+22	1,413279E+23
1868	5,050374E+22	5,050442E+22	2,015925E+22	2,015817E+22	1,010082E+23	4,031742E+22	1,413256E+23
1869	5,050472E+22	5,050648E+22	2,015826E+22	2,015886E+22	1,010112E+23	4,031712E+22	1,413283E+23
1870	5,050513E+22	5,050433E+22	2,015801E+22	2,015808E+22	1,010095E+23	4,031610E+22	1,413256E+23
1871	5,050419E+22	5,050549E+22	2,015838E+22	2,015714E+22	1,010097E+23	4,031552E+22	1,413252E+23
1872	5,050669E+22	5,050654E+22	2,015688E+22	2,015761E+22	1,010132E+23	4,031449E+22	1,413277E+23
1873	5,050648E+22	5,050470E+22	2,015691E+22	2,015661E+22	1,010112E+23	4,031351E+22	1,413247E+23
1874	5,050591E+22	5,050725E+22	2,015695E+22	2,015653E+22	1,010132E+23	4,031348E+22	1,413266E+23
1875	5,050745E+22	5,050707E+22	2,015606E+22	2,015704E+22	1,010145E+23	4,031310E+22	1,413276E+23
1876	5,050591E+22	5,050597E+22	2,015698E+22	2,015626E+22	1,010119E+23	4,031324E+22	1,413251E+23
1877	5,050624E+22	5,050771E+22	2,015702E+22	2,015719E+22	1,010139E+23	4,031421E+22	1,413282E+23
1878	5,050674E+22	5,050525E+22	2,015728E+22	2,015753E+22	1,010120E+23	4,031481E+22	1,413268E+23
1879	5,050466E+22	5,050512E+22	2,015873E+22	2,015744E+22	1,010098E+23	4,031617E+22	1,413259E+23
1880	5,050521E+22	5,050621E+22	2,015827E+22	2,015914E+22	1,010114E+23	4,031742E+22	1,413288E+23
1881	5,050449E+22	5,050301E+22	2,015895E+22	2,015936E+22	1,010075E+23	4,031830E+22	1,413258E+23
1882	5,050284E+22	5,050408E+22	2,016010E+22	2,015952E+22	1,010069E+23	4,031962E+22	1,413265E+23
1883	5,050438E+22	5,050382E+22	2,015957E+22	2,016058E+22	1,010082E+23	4,032015E+22	1,413284E+23
1884	5,050328E+22	5,050187E+22	2,016048E+22	2,015980E+22	1,010052E+23	4,032028E+22	1,413254E+23
1885	5,050278E+22	5,050431E+22	2,016057E+22	2,016029E+22	1,010071E+23	4,032086E+22	1,413280E+23
1886	5,050363E+22	5,050299E+22	2,016000E+22	2,016057E+22	1,010066E+23	4,032057E+22	1,413272E+23
1887	5,050192E+22	5,050277E+22	2,016071E+22	2,015953E+22	1,010047E+23	4,032024E+22	1,413249E+23
1888	5,050292E+22	5,050485E+22	2,015970E+22	2,016008E+22	1,010078E+23	4,031978E+22	1,413275E+23
1889	5,050409E+22	5,050231E+22	2,015914E+22	2,015935E+22	1,010064E+23	4,031849E+22	1,413249E+23
1890	5,050334E+22	5,050381E+22	2,015945E+22	2,015831E+22	1,010071E+23	4,031776E+22	1,413249E+23
1891	5,050539E+22	5,050527E+22	2,015804E+22	2,015893E+22	1,010107E+23	4,031696E+22	1,413276E+23
1892	5,050503E+22	5,050371E+22	2,015802E+22	2,015788E+22	1,010087E+23	4,031590E+22	1,413246E+23
1893	5,050424E+22	5,050631E+22	2,015823E+22	2,015788E+22	1,010105E+23	4,031611E+22	1,413267E+23
1894	5,050564E+22	5,050536E+22	2,015762E+22	2,015841E+22	1,010110E+23	4,031603E+22	1,413270E+23
1895	5,050447E+22	5,050395E+22	2,015872E+22	2,015762E+22	1,010084E+23	4,031634E+22	1,413248E+23
1896	5,050436E+22	5,050598E+22	2,015877E+22	2,015864E+22	1,010103E+23	4,031741E+22	1,413278E+23
1897	5,050494E+22	5,050325E+22	2,015872E+22	2,015932E+22	1,010082E+23	4,031804E+22	1,413262E+23
1898	5,050274E+22	5,050331E+22	2,016012E+22	2,015920E+22	1,010060E+23	4,031933E+22	1,413254E+23
1899	5,050318E+22	5,050433E+22	2,015981E+22	2,016087E+22	1,010075E+23	4,032069E+22	1,413282E+23
1900	5,050297E+22	5,050125E+22	2,016043E+22	2,016078E+22	1,010042E+23	4,032121E+22	1,413254E+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							
1901	5,050154E+22	5,050263E+22	2,016158E+22	2,016088E+22	1,010042E+23	4,032245E+22	1,413266E+23
1902	5,050276E+22	5,050213E+22	2,016120E+22	2,016199E+22	1,010049E+23	4,032319E+22	1,413281E+23
1903	5,050167E+22	5,050041E+22	2,016210E+22	2,016124E+22	1,010021E+23	4,032334E+22	1,413254E+23
1904	5,050056E+22	5,050308E+22	2,016209E+22	2,016175E+22	1,010036E+23	4,032384E+22	1,413275E+23
1905	5,050182E+22	5,050111E+22	2,016125E+22	2,016212E+22	1,010029E+23	4,032337E+22	1,413263E+23
1906	5,050066E+22	5,050080E+22	2,016190E+22	2,016078E+22	1,010015E+23	4,032268E+22	1,413241E+23
1907	5,050175E+22	5,050298E+22	2,016093E+22	2,016126E+22	1,010047E+23	4,032219E+22	1,413269E+23
1908	5,050314E+22	5,050102E+22	2,016019E+22	2,016041E+22	1,010042E+23	4,032061E+22	1,413248E+23
1909	5,050209E+22	5,050302E+22	2,016044E+22	2,015950E+22	1,010051E+23	4,031994E+22	1,413251E+23
1910	5,050347E+22	5,050414E+22	2,015932E+22	2,016025E+22	1,010076E+23	4,031957E+22	1,413272E+23
1911	5,050339E+22	5,050237E+22	2,015950E+22	2,015914E+22	1,010058E+23	4,031864E+22	1,413244E+23
1912	5,050236E+22	5,050479E+22	2,015986E+22	2,015910E+22	1,010071E+23	4,031896E+22	1,413261E+23
1913	5,050418E+22	5,050328E+22	2,015909E+22	2,015989E+22	1,010075E+23	4,031898E+22	1,413264E+23
1914	5,050309E+22	5,050196E+22	2,016017E+22	2,015915E+22	1,010050E+23	4,031932E+22	1,413244E+23
1915	5,050249E+22	5,050417E+22	2,016026E+22	2,016039E+22	1,010067E+23	4,032065E+22	1,413273E+23
1916	5,050310E+22	5,050169E+22	2,016005E+22	2,016103E+22	1,010048E+23	4,032108E+22	1,413259E+23
1917	5,050106E+22	5,050176E+22	2,016149E+22	2,016084E+22	1,010028E+23	4,032233E+22	1,413252E+23
1918	5,050152E+22	5,050232E+22	2,016150E+22	2,016237E+22	1,010038E+23	4,032387E+22	1,413277E+23
1919	5,050172E+22	5,049942E+22	2,016219E+22	2,016211E+22	1,010011E+23	4,032430E+22	1,413254E+23
1920	5,049974E+22	5,050126E+22	2,016333E+22	2,016221E+22	1,010010E+23	4,032554E+22	1,413265E+23
1921	5,050086E+22	5,050053E+22	2,016265E+22	2,016361E+22	1,010014E+23	4,032626E+22	1,413276E+23
1922	5,049966E+22	5,049882E+22	2,016348E+22	2,016279E+22	1,009985E+23	4,032627E+22	1,413248E+23
1923	5,049853E+22	5,050132E+22	2,016351E+22	2,016324E+22	1,009999E+23	4,032675E+22	1,413266E+23
1924	5,050041E+22	5,049938E+22	2,016246E+22	2,016335E+22	1,009998E+23	4,032580E+22	1,413256E+23
1925	5,049962E+22	5,049937E+22	2,016297E+22	2,016195E+22	1,009990E+23	4,032493E+22	1,413239E+23
1926	5,050051E+22	5,050144E+22	2,016216E+22	2,016248E+22	1,010019E+23	4,032464E+22	1,413266E+23
1927	5,050183E+22	5,049986E+22	2,016143E+22	2,016164E+22	1,010017E+23	4,032307E+22	1,413248E+23
1928	5,050023E+22	5,050211E+22	2,016176E+22	2,016074E+22	1,010023E+23	4,032250E+22	1,413248E+23
1929	5,050189E+22	5,050245E+22	2,016058E+22	2,016161E+22	1,010043E+23	4,032220E+22	1,413265E+23
1930	5,050209E+22	5,050048E+22	2,016088E+22	2,016039E+22	1,010026E+23	4,032127E+22	1,413238E+23
1931	5,050088E+22	5,050288E+22	2,016135E+22	2,016046E+22	1,010038E+23	4,032181E+22	1,413256E+23
1932	5,050264E+22	5,050168E+22	2,016043E+22	2,016131E+22	1,010043E+23	4,032173E+22	1,413261E+23
1933	5,050135E+22	5,050069E+22	2,016143E+22	2,016076E+22	1,010020E+23	4,032219E+22	1,413242E+23
1934	5,050038E+22	5,050241E+22	2,016182E+22	2,016209E+22	1,010028E+23	4,032391E+22	1,413267E+23
1935	5,050139E+22	5,049995E+22	2,016175E+22	2,016257E+22	1,010013E+23	4,032432E+22	1,413257E+23
1936	5,049933E+22	5,050015E+22	2,016327E+22	2,016224E+22	1,009995E+23	4,032551E+22	1,413250E+23
1937	5,050008E+22	5,050030E+22	2,016314E+22	2,016395E+22	1,010004E+23	4,032709E+22	1,413275E+23
1938	5,050023E+22	5,049769E+22	2,016380E+22	2,016366E+22	1,009979E+23	4,032746E+22	1,413254E+23
1939	5,049765E+22	5,049968E+22	2,016489E+22	2,016391E+22	1,009973E+23	4,032880E+22	1,413261E+23
1940	5,049879E+22	5,049909E+22	2,016398E+22	2,016520E+22	1,009979E+23	4,032918E+22	1,413271E+23
1941	5,049799E+22	5,049723E+22	2,016469E+22	2,016423E+22	1,009952E+23	4,032892E+22	1,413241E+23
1942	5,049701E+22	5,049918E+22	2,016493E+22	2,016452E+22	1,009962E+23	4,032944E+22	1,413256E+23
1943	5,049938E+22	5,049772E+22	2,016379E+22	2,016444E+22	1,009971E+23	4,032823E+22	1,413253E+23
1944	5,049825E+22	5,049824E+22	2,016423E+22	2,016304E+22	1,009965E+23	4,032727E+22	1,413238E+23
1945	5,049904E+22	5,050010E+22	2,016327E+22	2,016381E+22	1,009991E+23	4,032708E+22	1,413262E+23
1946	5,050029E+22	5,049860E+22	2,016261E+22	2,016287E+22	1,009989E+23	4,032548E+22	1,413244E+23
1947	5,049851E+22	5,050060E+22	2,016312E+22	2,016198E+22	1,009991E+23	4,032510E+22	1,413242E+23
1948	5,050045E+22	5,050092E+22	2,016186E+22	2,016276E+22	1,010014E+23	4,032462E+22	1,413260E+23
1949	5,050082E+22	5,049899E+22	2,016214E+22	2,016170E+22	1,009998E+23	4,032383E+22	1,413236E+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	5,049920E+22	5,050106E+22	2,016288E+22	2,016199E+22	1,010003E+23	4,032487E+22	1,413251E+23
1951	5,050089E+22	5,050022E+22	2,016193E+22	2,016294E+22	1,010011E+23	4,032487E+22	1,413260E+23
1952	5,049931E+22	5,049930E+22	2,016298E+22	2,016240E+22	1,009986E+23	4,032538E+22	1,413240E+23
1953	5,049878E+22	5,050027E+22	2,016335E+22	2,016379E+22	1,009991E+23	4,032713E+22	1,413262E+23
1954	5,050010E+22	5,049788E+22	2,016338E+22	2,016405E+22	1,009980E+23	4,032743E+22	1,413254E+23
1955	5,049780E+22	5,049832E+22	2,016498E+22	2,016377E+22	1,009961E+23	4,032875E+22	1,413249E+23
1956	5,049831E+22	5,049882E+22	2,016465E+22	2,016546E+22	1,009971E+23	4,033011E+22	1,413272E+23
1957	5,049817E+22	5,049647E+22	2,016519E+22	2,016530E+22	1,009946E+23	4,033050E+22	1,413251E+23
1958	5,049534E+22	5,049786E+22	2,016649E+22	2,016554E+22	1,009932E+23	4,033202E+22	1,413252E+23
1959	5,049694E+22	5,049722E+22	2,016554E+22	2,016658E+22	1,009942E+23	4,033212E+22	1,413263E+23
1960	5,049643E+22	5,049555E+22	2,016616E+22	2,016545E+22	1,009920E+23	4,033160E+22	1,413236E+23
1961	5,049596E+22	5,049714E+22	2,016618E+22	2,016584E+22	1,009931E+23	4,033202E+22	1,413251E+23
1962	5,049833E+22	5,049623E+22	2,016498E+22	2,016569E+22	1,009946E+23	4,033067E+22	1,413252E+23
1963	5,049669E+22	5,049712E+22	2,016539E+22	2,016438E+22	1,009938E+23	4,032977E+22	1,413236E+23
1964	5,049741E+22	5,049899E+22	2,016433E+22	2,016502E+22	1,009964E+23	4,032935E+22	1,413258E+23
1965	5,049889E+22	5,049737E+22	2,016373E+22	2,016401E+22	1,009963E+23	4,032774E+22	1,413240E+23
1966	5,049704E+22	5,049872E+22	2,016458E+22	2,016317E+22	1,009958E+23	4,032775E+22	1,413235E+23
1967	5,049904E+22	5,049937E+22	2,016334E+22	2,016397E+22	1,009984E+23	4,032731E+22	1,413257E+23
1968	5,049904E+22	5,049775E+22	2,016359E+22	2,016312E+22	1,009968E+23	4,032671E+22	1,413235E+23
1969	5,049739E+22	5,049925E+22	2,016424E+22	2,016374E+22	1,009966E+23	4,032797E+22	1,413246E+23
1970	5,049923E+22	5,049844E+22	2,016339E+22	2,016458E+22	1,009977E+23	4,032797E+22	1,413256E+23
1971	5,049764E+22	5,049739E+22	2,016456E+22	2,016397E+22	1,009950E+23	4,032853E+22	1,413236E+23
1972	5,049737E+22	5,049850E+22	2,016484E+22	2,016520E+22	1,009959E+23	4,033004E+22	1,413259E+23
1973	5,049876E+22	5,049639E+22	2,016485E+22	2,016550E+22	1,009952E+23	4,033035E+22	1,413255E+23
1974	5,049583E+22	5,049653E+22	2,016672E+22	2,016542E+22	1,009924E+23	4,033214E+22	1,413245E+23
1975	5,049610E+22	5,049743E+22	2,016631E+22	2,016709E+22	1,009935E+23	4,033340E+22	1,413269E+23
1976	5,049591E+22	5,049491E+22	2,016683E+22	2,016690E+22	1,009908E+23	4,033373E+22	1,413245E+23
1977	5,049368E+22	5,049542E+22	2,016799E+22	2,016713E+22	1,009891E+23	4,033511E+22	1,413242E+23
1978	5,049581E+22	5,049504E+22	2,016696E+22	2,016788E+22	1,009909E+23	4,033484E+22	1,413257E+23
1979	5,049519E+22	5,049384E+22	2,016746E+22	2,016673E+22	1,009890E+23	4,033420E+22	1,413232E+23
1980	5,049463E+22	5,049598E+22	2,016723E+22	2,016706E+22	1,009906E+23	4,033429E+22	1,413249E+23
1981	5,049678E+22	5,049544E+22	2,016598E+22	2,016691E+22	1,009922E+23	4,033289E+22	1,413251E+23
1982	5,049484E+22	5,049577E+22	2,016675E+22	2,016563E+22	1,009906E+23	4,033238E+22	1,413230E+23
1983	5,049575E+22	5,049767E+22	2,016576E+22	2,016608E+22	1,009934E+23	4,033184E+22	1,413253E+23
1984	5,049732E+22	5,049600E+22	2,016520E+22	2,016516E+22	1,009933E+23	4,033036E+22	1,413237E+23
1985	5,049575E+22	5,049665E+22	2,016594E+22	2,016464E+22	1,009924E+23	4,033059E+22	1,413230E+23
1986	5,049765E+22	5,049762E+22	2,016469E+22	2,016551E+22	1,009953E+23	4,033020E+22	1,413255E+23
1987	5,049728E+22	5,049625E+22	2,016490E+22	2,016482E+22	1,009935E+23	4,032972E+22	1,413232E+23
1988	5,049585E+22	5,049758E+22	2,016543E+22	2,016527E+22	1,009934E+23	4,033070E+22	1,413241E+23
1989	5,049793E+22	5,049679E+22	2,016471E+22	2,016594E+22	1,009947E+23	4,033065E+22	1,413254E+23
1990	5,049623E+22	5,049545E+22	2,016623E+22	2,016534E+22	1,009917E+23	4,033157E+22	1,413233E+23
1991	5,049571E+22	5,049702E+22	2,016657E+22	2,016653E+22	1,009927E+23	4,033310E+22	1,413258E+23
1992	5,049659E+22	5,049519E+22	2,016660E+22	2,016707E+22	1,009918E+23	4,033367E+22	1,413255E+23
1993	5,049361E+22	5,049456E+22	2,016836E+22	2,016727E+22	1,009882E+23	4,033563E+22	1,413238E+23
1994	5,049406E+22	5,049536E+22	2,016797E+22	2,016875E+22	1,009894E+23	4,033672E+22	1,413261E+23
1995	5,049409E+22	5,049284E+22	2,016839E+22	2,016847E+22	1,009869E+23	4,033686E+22	1,413238E+23
1996	5,049242E+22	5,049344E+22	2,016924E+22	2,016849E+22	1,009859E+23	4,033773E+22	1,413236E+23
1997	5,049476E+22	5,049361E+22	2,016811E+22	2,016917E+22	1,009884E+23	4,033728E+22	1,413256E+23
1998	5,049370E+22	5,049251E+22	2,016877E+22	2,016810E+22	1,009862E+23	4,033688E+22	1,413231E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1999	5,049287E+22	5,049513E+22	2,016850E+22	2,016828E+22	1,009880E+23	4,033678E+22	1,413248E+23
2000	5,049497E+22	5,049445E+22	2,016734E+22	2,016808E+22	1,009894E+23	4,033542E+22	1,413248E+23
2001	5,049343E+22	5,049374E+22	2,016810E+22	2,016691E+22	1,009872E+23	4,033501E+22	1,413222E+23
2002	5,049459E+22	5,049579E+22	2,016714E+22	2,016724E+22	1,009904E+23	4,033438E+22	1,413248E+23
2003	5,049590E+22	5,049433E+22	2,016650E+22	2,016652E+22	1,009902E+23	4,033302E+22	1,413233E+23
2004	5,049427E+22	5,049517E+22	2,016700E+22	2,016608E+22	1,009894E+23	4,033308E+22	1,413225E+23
2005	5,049613E+22	5,049637E+22	2,016574E+22	2,016693E+22	1,009925E+23	4,033267E+22	1,413252E+23
2006	5,049557E+22	5,049451E+22	2,016633E+22	2,016624E+22	1,009901E+23	4,033257E+22	1,413226E+23
2007	5,049431E+22	5,049613E+22	2,016698E+22	2,016646E+22	1,009904E+23	4,033344E+22	1,413239E+23
2008	5,049639E+22	5,049541E+22	2,016640E+22	2,016723E+22	1,009918E+23	4,033364E+22	1,413254E+23
2009	5,049461E+22	5,049344E+22	2,016796E+22	2,016701E+22	1,009880E+23	4,033498E+22	1,413230E+23
2010	5,049375E+22	5,049531E+22	2,016830E+22	2,016826E+22	1,009891E+23	4,033657E+22	1,413256E+23
2011	5,049422E+22	5,049349E+22	2,016827E+22	2,016897E+22	1,009877E+23	4,033724E+22	1,413249E+23
2012	5,049168E+22	5,049244E+22	2,016978E+22	2,016900E+22	1,009841E+23	4,033878E+22	1,413229E+23
2013	5,049266E+22	5,049330E+22	2,016932E+22	2,017021E+22	1,009860E+23	4,033953E+22	1,413255E+23
2014	5,049274E+22	5,049080E+22	2,016990E+22	2,016987E+22	1,009835E+23	4,033977E+22	1,413233E+23
2015	5,049103E+22	5,049219E+22	2,017062E+22	2,016972E+22	1,009832E+23	4,034033E+22	1,413236E+23
2016	5,049301E+22	5,049279E+22	2,016951E+22	2,017048E+22	1,009858E+23	4,033999E+22	1,413258E+23
2017	5,049191E+22	5,049103E+22	2,017012E+22	2,016957E+22	1,009829E+23	4,033969E+22	1,413226E+23
2018	5,049124E+22	5,049351E+22	2,016993E+22	2,016949E+22	1,009847E+23	4,033942E+22	1,413242E+23
2019	5,049338E+22	5,049283E+22	2,016873E+22	2,016929E+22	1,009862E+23	4,033802E+22	1,413242E+23
2020	5,049230E+22	5,049191E+22	2,016920E+22	2,016810E+22	1,009842E+23	4,033729E+22	1,413215E+23
2021	5,049343E+22	5,049428E+22	2,016818E+22	2,016847E+22	1,009877E+23	4,033665E+22	1,413244E+23
2022	5,049431E+22	5,049293E+22	2,016771E+22	2,016797E+22	1,009872E+23	4,033568E+22	1,413229E+23
2023	5,049256E+22	5,049408E+22	2,016819E+22	2,016741E+22	1,009866E+23	4,033560E+22	1,413222E+23
2024	5,049453E+22	5,049509E+22	2,016719E+22	2,016823E+22	1,009896E+23	4,033542E+22	1,413250E+23
2025	5,049426E+22	5,049245E+22	2,016786E+22	2,016763E+22	1,009867E+23	4,033550E+22	1,413222E+23
2026	5,049299E+22	5,049429E+22	2,016865E+22	2,016778E+22	1,009873E+23	4,033642E+22	1,413237E+23
2027	5,049450E+22	5,049389E+22	2,016809E+22	2,016883E+22	1,009884E+23	4,033692E+22	1,413253E+23
2028	5,049255E+22	5,049180E+22	2,016942E+22	2,016879E+22	1,009843E+23	4,033821E+22	1,413226E+23
2029	5,049165E+22	5,049365E+22	2,016976E+22	2,016998E+22	1,009853E+23	4,033974E+22	1,413250E+23
2030	5,049216E+22	5,049137E+22	2,016994E+22	2,017068E+22	1,009835E+23	4,034062E+22	1,413241E+23
2031	5,049004E+22	5,049064E+22	2,017132E+22	2,017040E+22	1,009807E+23	4,034172E+22	1,413224E+23
2032	5,049132E+22	5,049170E+22	2,017090E+22	2,017158E+22	1,009830E+23	4,034248E+22	1,413255E+23
2033	5,049139E+22	5,048894E+22	2,017138E+22	2,017142E+22	1,009803E+23	4,034280E+22	1,413231E+23
2034	5,048950E+22	5,049088E+22	2,017204E+22	2,017115E+22	1,009804E+23	4,034319E+22	1,413236E+23
2035	5,049110E+22	5,049154E+22	2,017090E+22	2,017191E+22	1,009826E+23	4,034281E+22	1,413254E+23
2036	5,049035E+22	5,048931E+22	2,017131E+22	2,017084E+22	1,009797E+23	4,034215E+22	1,413218E+23
2037	5,049003E+22	5,049182E+22	2,017106E+22	2,017051E+22	1,009818E+23	4,034157E+22	1,413234E+23
2038	5,049197E+22	5,049105E+22	2,017001E+22	2,017044E+22	1,009830E+23	4,034046E+22	1,413235E+23
2039	5,049078E+22	5,049078E+22	2,017034E+22	2,016923E+22	1,009816E+23	4,033957E+22	1,413211E+23
2040	5,049177E+22	5,049331E+22	2,016941E+22	2,016978E+22	1,009851E+23	4,033920E+22	1,413243E+23
2041	5,049262E+22	5,049128E+22	2,016901E+22	2,016947E+22	1,009839E+23	4,033848E+22	1,413224E+23
2042	5,049115E+22	5,049244E+22	2,016963E+22	2,016869E+22	1,009836E+23	4,033832E+22	1,413219E+23
2043	5,049300E+22	5,049348E+22	2,016874E+22	2,016955E+22	1,009865E+23	4,033829E+22	1,413248E+23
2044	5,049295E+22	5,049066E+22	2,016926E+22	2,016909E+22	1,009836E+23	4,033835E+22	1,413220E+23
2045	5,049144E+22	5,049273E+22	2,017007E+22	2,016930E+22	1,009842E+23	4,033937E+22	1,413235E+23
2046	5,049232E+22	5,049230E+22	2,016971E+22	2,017064E+22	1,009846E+23	4,034034E+22	1,413250E+23
2047	5,049037E+22	5,049028E+22	2,017096E+22	2,017046E+22	1,009807E+23	4,034142E+22	1,413221E+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	5,048984E+22	5,049178E+22	2,017145E+22	2,017157E+22	1,009816E+23	4,034302E+22	1,413246E+23
2049	5,049074E+22	5,048894E+22	2,017159E+22	2,017228E+22	1,009797E+23	4,034387E+22	1,413236E+23
2050	5,048885E+22	5,048865E+22	2,017291E+22	2,017181E+22	1,009775E+23	4,034472E+22	1,413222E+23
2051	5,048962E+22	5,049031E+22	2,017246E+22	2,017308E+22	1,009799E+23	4,034553E+22	1,413255E+23
2052	5,048966E+22	5,048761E+22	2,017261E+22	2,017292E+22	1,009773E+23	4,034553E+22	1,413228E+23
2053	5,048771E+22	5,048953E+22	2,017329E+22	2,017242E+22	1,009772E+23	4,034571E+22	1,413229E+23
2054	5,048922E+22	5,048992E+22	2,017234E+22	2,017314E+22	1,009791E+23	4,034549E+22	1,413246E+23
2055	5,048877E+22	5,048790E+22	2,017259E+22	2,017188E+22	1,009767E+23	4,034447E+22	1,413211E+23
2056	5,048866E+22	5,049039E+22	2,017240E+22	2,017168E+22	1,009791E+23	4,034408E+22	1,413231E+23
2057	5,049051E+22	5,048933E+22	2,017127E+22	2,017191E+22	1,009798E+23	4,034318E+22	1,413230E+23
2058	5,048932E+22	5,048941E+22	2,017152E+22	2,017065E+22	1,009787E+23	4,034217E+22	1,413209E+23
2059	5,049011E+22	5,049194E+22	2,017070E+22	2,017120E+22	1,009821E+23	4,034189E+22	1,413239E+23
2060	5,049142E+22	5,048951E+22	2,017015E+22	2,017077E+22	1,009809E+23	4,034092E+22	1,413219E+23
2061	5,049015E+22	5,049079E+22	2,017087E+22	2,016980E+22	1,009809E+23	4,034067E+22	1,413216E+23
2062	5,049149E+22	5,049189E+22	2,017026E+22	2,017088E+22	1,009834E+23	4,034114E+22	1,413245E+23
2063	5,049103E+22	5,048956E+22	2,017074E+22	2,017052E+22	1,009806E+23	4,034126E+22	1,413218E+23
2064	5,048933E+22	5,049145E+22	2,017170E+22	2,017096E+22	1,009808E+23	4,034267E+22	1,413235E+23
2065	5,049014E+22	5,049017E+22	2,017143E+22	2,017247E+22	1,009803E+23	4,034389E+22	1,413242E+23
2066	5,048870E+22	5,048815E+22	2,017267E+22	2,017206E+22	1,009769E+23	4,034473E+22	1,413216E+23
2067	5,048828E+22	5,048971E+22	2,017313E+22	2,017311E+22	1,009780E+23	4,034624E+22	1,413242E+23
2068	5,048944E+22	5,048694E+22	2,017300E+22	2,017386E+22	1,009764E+23	4,034685E+22	1,413232E+23
2069	5,048744E+22	5,048724E+22	2,017422E+22	2,017327E+22	1,009747E+23	4,034749E+22	1,413222E+23
2070	5,048757E+22	5,048899E+22	2,017393E+22	2,017466E+22	1,009766E+23	4,034859E+22	1,413251E+23
2071	5,048758E+22	5,048648E+22	2,017401E+22	2,017425E+22	1,009741E+23	4,034826E+22	1,413223E+23
2072	5,048607E+22	5,048798E+22	2,017477E+22	2,017365E+22	1,009740E+23	4,034842E+22	1,413225E+23
2073	5,048770E+22	5,048781E+22	2,017378E+22	2,017443E+22	1,009755E+23	4,034822E+22	1,413237E+23
2074	5,048750E+22	5,048618E+22	2,017390E+22	2,017311E+22	1,009737E+23	4,034701E+22	1,413207E+23
2075	5,048704E+22	5,048899E+22	2,017366E+22	2,017306E+22	1,009760E+23	4,034672E+22	1,413227E+23
2076	5,048904E+22	5,048789E+22	2,017225E+22	2,017335E+22	1,009769E+23	4,034561E+22	1,413225E+23
2077	5,048807E+22	5,048802E+22	2,017254E+22	2,017183E+22	1,009761E+23	4,034438E+22	1,413205E+23
2078	5,048872E+22	5,049041E+22	2,017202E+22	2,017237E+22	1,009791E+23	4,034439E+22	1,413235E+23
2079	5,049011E+22	5,048833E+22	2,017146E+22	2,017181E+22	1,009784E+23	4,034326E+22	1,413217E+23
2080	5,048879E+22	5,048948E+22	2,017241E+22	2,017109E+22	1,009783E+23	4,034350E+22	1,413218E+23
2081	5,048958E+22	5,049026E+22	2,017188E+22	2,017254E+22	1,009798E+23	4,034442E+22	1,413243E+23
2082	5,048906E+22	5,048794E+22	2,017234E+22	2,017226E+22	1,009770E+23	4,034460E+22	1,413216E+23
2083	5,048722E+22	5,048950E+22	2,017342E+22	2,017272E+22	1,009767E+23	4,034614E+22	1,413229E+23
2084	5,048864E+22	5,048780E+22	2,017287E+22	2,017412E+22	1,009764E+23	4,034699E+22	1,413234E+23
2085	5,048753E+22	5,048602E+22	2,017405E+22	2,017344E+22	1,009735E+23	4,034749E+22	1,413210E+23
2086	5,048670E+22	5,048798E+22	2,017469E+22	2,017463E+22	1,009747E+23	4,034932E+22	1,413240E+23
2087	5,048751E+22	5,048595E+22	2,017442E+22	2,017529E+22	1,009735E+23	4,034971E+22	1,413232E+23
2088	5,048543E+22	5,048614E+22	2,017580E+22	2,017479E+22	1,009716E+23	4,035059E+22	1,413222E+23
2089	5,048542E+22	5,048719E+22	2,017559E+22	2,017618E+22	1,009726E+23	4,035177E+22	1,413244E+23
2090	5,048592E+22	5,048462E+22	2,017558E+22	2,017556E+22	1,009705E+23	4,035115E+22	1,413217E+23
2091	5,048451E+22	5,048606E+22	2,017628E+22	2,017495E+22	1,009706E+23	4,035123E+22	1,413218E+23
2092	5,048647E+22	5,048587E+22	2,017490E+22	2,017583E+22	1,009723E+23	4,035073E+22	1,413231E+23
2093	5,048631E+22	5,048479E+22	2,017485E+22	2,017441E+22	1,009711E+23	4,034926E+22	1,413204E+23
2094	5,048550E+22	5,048771E+22	2,017475E+22	2,017446E+22	1,009732E+23	4,034921E+22	1,413224E+23
2095	5,048756E+22	5,048685E+22	2,017335E+22	2,017445E+22	1,009744E+23	4,034780E+22	1,413222E+23
2096	5,048704E+22	5,048671E+22	2,017386E+22	2,017288E+22	1,009737E+23	4,034674E+22	1,413205E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2097	5,048738E+22	5,048865E+22	2,017351E+22	2,017354E+22	1,009760E+23	4,034705E+22	1,413231E+23
2098	5,048864E+22	5,048695E+22	2,017299E+22	2,017311E+22	1,009756E+23	4,034609E+22	1,413217E+23
2099	5,048675E+22	5,048807E+22	2,017400E+22	2,017267E+22	1,009748E+23	4,034667E+22	1,413215E+23
2100	5,048748E+22	5,048839E+22	2,017327E+22	2,017431E+22	1,009759E+23	4,034758E+22	1,413235E+23
2101	5,048732E+22	5,048601E+22	2,017373E+22	2,017383E+22	1,009733E+23	4,034757E+22	1,413209E+23
2102	5,048554E+22	5,048735E+22	2,017498E+22	2,017431E+22	1,009729E+23	4,034929E+22	1,413222E+23
2103	5,048714E+22	5,048613E+22	2,017435E+22	2,017552E+22	1,009733E+23	4,034987E+22	1,413231E+23
2104	5,048619E+22	5,048454E+22	2,017563E+22	2,017498E+22	1,009707E+23	4,035060E+22	1,413213E+23
2105	5,048473E+22	5,048639E+22	2,017634E+22	2,017634E+22	1,009711E+23	4,035269E+22	1,413238E+23
2106	5,048553E+22	5,048456E+22	2,017607E+22	2,017692E+22	1,009701E+23	4,035299E+22	1,413231E+23
2107	5,048341E+22	5,048434E+22	2,017752E+22	2,017632E+22	1,009677E+23	4,035384E+22	1,413216E+23
2108	5,048389E+22	5,048495E+22	2,017699E+22	2,017759E+22	1,009688E+23	4,035459E+22	1,413234E+23
2109	5,048476E+22	5,048267E+22	2,017681E+22	2,017677E+22	1,009674E+23	4,035358E+22	1,413210E+23
2110	5,048302E+22	5,048441E+22	2,017752E+22	2,017632E+22	1,009674E+23	4,035384E+22	1,413213E+23
2111	5,048483E+22	5,048492E+22	2,017595E+22	2,017707E+22	1,009697E+23	4,035302E+22	1,413228E+23
2112	5,048489E+22	5,048378E+22	2,017600E+22	2,017567E+22	1,009687E+23	4,035167E+22	1,413203E+23
2113	5,048396E+22	5,048623E+22	2,017608E+22	2,017566E+22	1,009702E+23	4,035175E+22	1,413219E+23
2114	5,048638E+22	5,048545E+22	2,017473E+22	2,017548E+22	1,009718E+23	4,035021E+22	1,413220E+23
2115	5,048563E+22	5,048520E+22	2,017539E+22	2,017405E+22	1,009708E+23	4,034944E+22	1,413203E+23
2116	5,048588E+22	5,048697E+22	2,017480E+22	2,017496E+22	1,009728E+23	4,034976E+22	1,413226E+23
2117	5,048694E+22	5,048546E+22	2,017421E+22	2,017464E+22	1,009724E+23	4,034885E+22	1,413213E+23
2118	5,048471E+22	5,048634E+22	2,017541E+22	2,017442E+22	1,009710E+23	4,034982E+22	1,413209E+23
2119	5,048569E+22	5,048668E+22	2,017464E+22	2,017577E+22	1,009724E+23	4,035042E+22	1,413228E+23
2120	5,048611E+22	5,048411E+22	2,017523E+22	2,017525E+22	1,009702E+23	4,035048E+22	1,413207E+23
2121	5,048410E+22	5,048531E+22	2,017659E+22	2,017580E+22	1,009694E+23	4,035239E+22	1,413218E+23
2122	5,048557E+22	5,048465E+22	2,017601E+22	2,017703E+22	1,009702E+23	4,035304E+22	1,413233E+23
2123	5,048410E+22	5,048319E+22	2,017739E+22	2,017664E+22	1,009673E+23	4,035403E+22	1,413213E+23
2124	5,048264E+22	5,048459E+22	2,017790E+22	2,017803E+22	1,009672E+23	4,035593E+22	1,413232E+23
2125	5,048377E+22	5,048270E+22	2,017759E+22	2,017836E+22	1,009665E+23	4,035595E+22	1,413224E+23
2126	5,048169E+22	5,048231E+22	2,017905E+22	2,017779E+22	1,009640E+23	4,035684E+22	1,413208E+23
2127	5,048231E+22	5,048332E+22	2,017831E+22	2,017885E+22	1,009656E+23	4,035716E+22	1,413228E+23
2128	5,048349E+22	5,048131E+22	2,017806E+22	2,017816E+22	1,009648E+23	4,035622E+22	1,413210E+23
2129	5,048133E+22	5,048296E+22	2,017876E+22	2,017782E+22	1,009643E+23	4,035658E+22	1,413209E+23
2130	5,048330E+22	5,048372E+22	2,017723E+22	2,017838E+22	1,009670E+23	4,035562E+22	1,413226E+23
2131	5,048348E+22	5,048234E+22	2,017738E+22	2,017681E+22	1,009658E+23	4,035419E+22	1,413200E+23
2132	5,048282E+22	5,048435E+22	2,017726E+22	2,017675E+22	1,009672E+23	4,035401E+22	1,413212E+23
2133	5,048528E+22	5,048395E+22	2,017590E+22	2,017651E+22	1,009692E+23	4,035241E+22	1,413216E+23
2134	5,048392E+22	5,048378E+22	2,017667E+22	2,017547E+22	1,009677E+23	4,035214E+22	1,413198E+23
2135	5,048381E+22	5,048584E+22	2,017603E+22	2,017637E+22	1,009697E+23	4,035240E+22	1,413221E+23
2136	5,048521E+22	5,048403E+22	2,017559E+22	2,017617E+22	1,009692E+23	4,035176E+22	1,413210E+23
2137	5,048294E+22	5,048429E+22	2,017694E+22	2,017594E+22	1,009672E+23	4,035289E+22	1,413201E+23
2138	5,048440E+22	5,048479E+22	2,017625E+22	2,017715E+22	1,009692E+23	4,035340E+22	1,413226E+23
2139	5,048470E+22	5,048234E+22	2,017694E+22	2,017671E+22	1,009670E+23	4,035365E+22	1,413207E+23
2140	5,048257E+22	5,048353E+22	2,017808E+22	2,017746E+22	1,009661E+23	4,035554E+22	1,413216E+23
2141	5,048379E+22	5,048325E+22	2,017749E+22	2,017868E+22	1,009670E+23	4,035617E+22	1,413232E+23
2142	5,048192E+22	5,048154E+22	2,017904E+22	2,017844E+22	1,009635E+23	4,035748E+22	1,413209E+23
2143	5,048066E+22	5,048288E+22	2,017945E+22	2,017945E+22	1,009635E+23	4,035890E+22	1,413224E+23
2144	5,048237E+22	5,048080E+22	2,017913E+22	2,017974E+22	1,009632E+23	4,035887E+22	1,413220E+23
2145	5,048006E+22	5,048033E+22	2,018055E+22	2,017924E+22	1,009604E+23	4,035979E+22	1,413202E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2146	5,048077E+22	5,048187E+22	2,017969E+22	2,018022E+22	1,009626E+23	4,035991E+22	1,413226E+23
2147	5,048165E+22	5,048006E+22	2,017945E+22	2,017957E+22	1,009617E+23	4,035902E+22	1,413207E+23
2148	5,047980E+22	5,048137E+22	2,017988E+22	2,017916E+22	1,009612E+23	4,035904E+22	1,413202E+23
2149	5,048212E+22	5,048218E+22	2,017838E+22	2,017942E+22	1,009643E+23	4,035780E+22	1,413221E+23
2150	5,048218E+22	5,048078E+22	2,017864E+22	2,017796E+22	1,009630E+23	4,035659E+22	1,413195E+23
2151	5,048144E+22	5,048309E+22	2,017843E+22	2,017775E+22	1,009645E+23	4,035618E+22	1,413207E+23
2152	5,048387E+22	5,048281E+22	2,017712E+22	2,017781E+22	1,009667E+23	4,035493E+22	1,413216E+23
2153	5,048196E+22	5,048231E+22	2,017800E+22	2,017705E+22	1,009643E+23	4,035504E+22	1,413193E+23
2154	5,048207E+22	5,048424E+22	2,017749E+22	2,017784E+22	1,009663E+23	4,035533E+22	1,413216E+23
2155	5,048367E+22	5,048216E+22	2,017719E+22	2,017759E+22	1,009658E+23	4,035478E+22	1,413206E+23
2156	5,048180E+22	5,048208E+22	2,017830E+22	2,017737E+22	1,009639E+23	4,035567E+22	1,413196E+23
2157	5,048323E+22	5,048307E+22	2,017766E+22	2,017854E+22	1,009663E+23	4,035620E+22	1,413225E+23
2158	5,048285E+22	5,048094E+22	2,017847E+22	2,017842E+22	1,009638E+23	4,035689E+22	1,413207E+23
2159	5,048033E+22	5,048234E+22	2,017960E+22	2,017903E+22	1,009627E+23	4,035863E+22	1,413213E+23
2160	5,048183E+22	5,048181E+22	2,017916E+22	2,018031E+22	1,009636E+23	4,035946E+22	1,413231E+23
2161	5,047985E+22	5,047946E+22	2,018080E+22	2,018006E+22	1,009593E+23	4,036086E+22	1,413202E+23
2162	5,047899E+22	5,048087E+22	2,018117E+22	2,018090E+22	1,009599E+23	4,036206E+22	1,413219E+23
2163	5,048073E+22	5,047895E+22	2,018076E+22	2,018123E+22	1,009597E+23	4,036199E+22	1,413217E+23
2164	5,047853E+22	5,047840E+22	2,018174E+22	2,018084E+22	1,009569E+23	4,036259E+22	1,413195E+23
2165	5,047932E+22	5,048041E+22	2,018084E+22	2,018166E+22	1,009597E+23	4,036250E+22	1,413222E+23
2166	5,048007E+22	5,047860E+22	2,018066E+22	2,018097E+22	1,009587E+23	4,036163E+22	1,413203E+23
2167	5,047849E+22	5,047999E+22	2,018102E+22	2,018010E+22	1,009585E+23	4,036112E+22	1,413196E+23
2168	5,048117E+22	5,048087E+22	2,017959E+22	2,018036E+22	1,009620E+23	4,035994E+22	1,413220E+23
2169	5,048061E+22	5,047936E+22	2,017995E+22	2,017913E+22	1,009600E+23	4,035908E+22	1,413191E+23
2170	5,047968E+22	5,048194E+22	2,017979E+22	2,017902E+22	1,009616E+23	4,035881E+22	1,413204E+23
2171	5,048182E+22	5,048153E+22	2,017859E+22	2,017927E+22	1,009634E+23	4,035786E+22	1,413212E+23
2172	5,048030E+22	5,048039E+22	2,017925E+22	2,017857E+22	1,009607E+23	4,035782E+22	1,413185E+23
2173	5,048091E+22	5,048230E+22	2,017881E+22	2,017917E+22	1,009632E+23	4,035798E+22	1,413212E+23
2174	5,048234E+22	5,048035E+22	2,017861E+22	2,017908E+22	1,009627E+23	4,035769E+22	1,413204E+23
2175	5,048041E+22	5,048066E+22	2,017964E+22	2,017873E+22	1,009611E+23	4,035837E+22	1,413194E+23
2176	5,048169E+22	5,048187E+22	2,017913E+22	2,018012E+22	1,009636E+23	4,035925E+22	1,413228E+23
2177	5,048060E+22	5,047950E+22	2,018015E+22	2,018022E+22	1,009601E+23	4,036037E+22	1,413205E+23
2178	5,047830E+22	5,048062E+22	2,018139E+22	2,018063E+22	1,009589E+23	4,036201E+22	1,413209E+23
2179	5,047988E+22	5,047973E+22	2,018104E+22	2,018182E+22	1,009596E+23	4,036286E+22	1,413225E+23
2180	5,047834E+22	5,047704E+22	2,018230E+22	2,018161E+22	1,009554E+23	4,036390E+22	1,413193E+23
2181	5,047761E+22	5,047884E+22	2,018256E+22	2,018236E+22	1,009564E+23	4,036492E+22	1,413214E+23
2182	5,047888E+22	5,047741E+22	2,018210E+22	2,018289E+22	1,009563E+23	4,036499E+22	1,413213E+23
2183	5,047676E+22	5,047718E+22	2,018289E+22	2,018218E+22	1,009539E+23	4,036507E+22	1,413190E+23
2184	5,047797E+22	5,047915E+22	2,018209E+22	2,018286E+22	1,009571E+23	4,036495E+22	1,413221E+23
2185	5,047853E+22	5,047713E+22	2,018204E+22	2,018210E+22	1,009557E+23	4,036414E+22	1,413198E+23
2186	5,047719E+22	5,047860E+22	2,018244E+22	2,018109E+22	1,009558E+23	4,036353E+22	1,413193E+23
2187	5,047956E+22	5,047960E+22	2,018108E+22	2,018153E+22	1,009592E+23	4,036261E+22	1,413218E+23
2188	5,047893E+22	5,047779E+22	2,018110E+22	2,018065E+22	1,009567E+23	4,036175E+22	1,413185E+23
2189	5,047807E+22	5,048035E+22	2,018099E+22	2,018054E+22	1,009584E+23	4,036152E+22	1,413199E+23
2190	5,048017E+22	5,047977E+22	2,017988E+22	2,018084E+22	1,009599E+23	4,036072E+22	1,413207E+23
2191	5,047911E+22	5,047859E+22	2,018041E+22	2,017978E+22	1,009577E+23	4,036019E+22	1,413179E+23
2192	5,048006E+22	5,048076E+22	2,018009E+22	2,018039E+22	1,009608E+23	4,036048E+22	1,413213E+23
2193	5,048076E+22	5,047892E+22	2,018006E+22	2,018052E+22	1,009597E+23	4,036058E+22	1,413203E+23
2194	5,047848E+22	5,047948E+22	2,018128E+22	2,018022E+22	1,009580E+23	4,036150E+22	1,413195E+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							
2195	5,047938E+22	5,048052E+22	2,018098E+22	2,018171E+22	1,009599E+23	4,036269E+22	1,413226E+23
2196	5,047855E+22	5,047733E+22	2,018180E+22	2,018193E+22	1,009559E+23	4,036373E+22	1,413196E+23
2197	5,047670E+22	5,047832E+22	2,018306E+22	2,018218E+22	1,009550E+23	4,036524E+22	1,413203E+23
2198	5,047816E+22	5,047756E+22	2,018264E+22	2,018350E+22	1,009557E+23	4,036614E+22	1,413219E+23
2199	5,047675E+22	5,047526E+22	2,018360E+22	2,018310E+22	1,009520E+23	4,036670E+22	1,413187E+23
2200	5,047615E+22	5,047750E+22	2,018382E+22	2,018392E+22	1,009537E+23	4,036774E+22	1,413214E+23
2201	5,047693E+22	5,047605E+22	2,018349E+22	2,018446E+22	1,009530E+23	4,036795E+22	1,413209E+23
2202	5,047522E+22	5,047579E+22	2,018437E+22	2,018340E+22	1,009510E+23	4,036777E+22	1,413188E+23
2203	5,047653E+22	5,047764E+22	2,018368E+22	2,018392E+22	1,009542E+23	4,036759E+22	1,413218E+23
2204	5,047722E+22	5,047536E+22	2,018330E+22	2,018329E+22	1,009526E+23	4,036659E+22	1,413192E+23
2205	5,047582E+22	5,047706E+22	2,018367E+22	2,018234E+22	1,009529E+23	4,036601E+22	1,413189E+23
2206	5,047755E+22	5,047827E+22	2,018229E+22	2,018306E+22	1,009558E+23	4,036535E+22	1,413212E+23
2207	5,047719E+22	5,047642E+22	2,018214E+22	2,018200E+22	1,009536E+23	4,036414E+22	1,413178E+23
2208	5,047693E+22	5,047874E+22	2,018213E+22	2,018181E+22	1,009557E+23	4,036394E+22	1,413196E+23
2209	5,047883E+22	5,047806E+22	2,018122E+22	2,018212E+22	1,009569E+23	4,036334E+22	1,413202E+23
2210	5,047803E+22	5,047713E+22	2,018182E+22	2,018091E+22	1,009552E+23	4,036273E+22	1,413179E+23
2211	5,047850E+22	5,047944E+22	2,018169E+22	2,018171E+22	1,009579E+23	4,036340E+22	1,413213E+23
2212	5,047888E+22	5,047742E+22	2,018149E+22	2,018219E+22	1,009563E+23	4,036368E+22	1,413200E+23
2213	5,047661E+22	5,047772E+22	2,018289E+22	2,018190E+22	1,009543E+23	4,036478E+22	1,413191E+23
2214	5,047725E+22	5,047850E+22	2,018271E+22	2,018345E+22	1,009558E+23	4,036616E+22	1,413219E+23
2215	5,047692E+22	5,047518E+22	2,018331E+22	2,018340E+22	1,009521E+23	4,036671E+22	1,413188E+23
2216	5,047540E+22	5,047632E+22	2,018452E+22	2,018369E+22	1,009517E+23	4,036821E+22	1,413199E+23
2217	5,047623E+22	5,047587E+22	2,018417E+22	2,018517E+22	1,009521E+23	4,036934E+22	1,413214E+23
2218	5,047486E+22	5,047396E+22	2,018510E+22	2,018464E+22	1,009488E+23	4,036974E+22	1,413186E+23
2219	5,047421E+22	5,047619E+22	2,018547E+22	2,018537E+22	1,009504E+23	4,037084E+22	1,413212E+23
2220	5,047531E+22	5,047427E+22	2,018492E+22	2,018587E+22	1,009496E+23	4,037079E+22	1,413204E+23
2221	5,047400E+22	5,047398E+22	2,018582E+22	2,018461E+22	1,009480E+23	4,037044E+22	1,413184E+23
2222	5,047496E+22	5,047601E+22	2,018508E+22	2,018524E+22	1,009510E+23	4,037032E+22	1,413213E+23
2223	5,047570E+22	5,047391E+22	2,018439E+22	2,018456E+22	1,009496E+23	4,036896E+22	1,413186E+23
2224	5,047441E+22	5,047580E+22	2,018470E+22	2,018375E+22	1,009502E+23	4,036845E+22	1,413187E+23
2225	5,047575E+22	5,047680E+22	2,018348E+22	2,018450E+22	1,009525E+23	4,036797E+22	1,413205E+23
2226	5,047591E+22	5,047484E+22	2,018342E+22	2,018312E+22	1,009508E+23	4,036653E+22	1,413173E+23
2227	5,047585E+22	5,047719E+22	2,018355E+22	2,018284E+22	1,009530E+23	4,036639E+22	1,413194E+23
2228	5,047767E+22	5,047635E+22	2,018248E+22	2,018336E+22	1,009540E+23	4,036583E+22	1,413199E+23
2229	5,047664E+22	5,047570E+22	2,018323E+22	2,018230E+22	1,009523E+23	4,036552E+22	1,413179E+23
2230	5,047629E+22	5,047815E+22	2,018323E+22	2,018334E+22	1,009544E+23	4,036657E+22	1,413210E+23
2231	5,047681E+22	5,047584E+22	2,018295E+22	2,018374E+22	1,009527E+23	4,036668E+22	1,413193E+23
2232	5,047500E+22	5,047585E+22	2,018443E+22	2,018345E+22	1,009508E+23	4,036788E+22	1,413187E+23
2233	5,047534E+22	5,047644E+22	2,018439E+22	2,018507E+22	1,009518E+23	4,036946E+22	1,413212E+23
2234	5,047534E+22	5,047334E+22	2,018496E+22	2,018492E+22	1,009487E+23	4,036988E+22	1,413186E+23
2235	5,047367E+22	5,047472E+22	2,018619E+22	2,018533E+22	1,009484E+23	4,037151E+22	1,413199E+23
2236	5,047436E+22	5,047417E+22	2,018560E+22	2,018697E+22	1,009485E+23	4,037257E+22	1,413211E+23
2237	5,047332E+22	5,047222E+22	2,018662E+22	2,018623E+22	1,009455E+23	4,037285E+22	1,413184E+23
2238	5,047252E+22	5,047438E+22	2,018704E+22	2,018680E+22	1,009469E+23	4,037383E+22	1,413207E+23
2239	5,047406E+22	5,047257E+22	2,018620E+22	2,018699E+22	1,009466E+23	4,037319E+22	1,413198E+23
2240	5,047289E+22	5,047247E+22	2,018701E+22	2,018578E+22	1,009454E+23	4,037279E+22	1,413181E+23
2241	5,047296E+22	5,047470E+22	2,018636E+22	2,018659E+22	1,009477E+23	4,037295E+22	1,413206E+23
2242	5,047383E+22	5,047279E+22	2,018562E+22	2,018582E+22	1,009466E+23	4,037144E+22	1,413181E+23
2243	5,047271E+22	5,047437E+22	2,018605E+22	2,018498E+22	1,009471E+23	4,037103E+22	1,413181E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2244	5,047443E+22	5,047493E+22	2,018469E+22	2,018575E+22	1,009494E+23	4,037044E+22	1,413198E+23
2245	5,047506E+22	5,047308E+22	2,018469E+22	2,018426E+22	1,009481E+23	4,036895E+22	1,413171E+23
2246	5,047448E+22	5,047572E+22	2,018490E+22	2,018412E+22	1,009502E+23	4,036902E+22	1,413192E+23
2247	5,047616E+22	5,047513E+22	2,018365E+22	2,018470E+22	1,009513E+23	4,036835E+22	1,413196E+23
2248	5,047499E+22	5,047448E+22	2,018451E+22	2,018387E+22	1,009495E+23	4,036837E+22	1,413178E+23
2249	5,047404E+22	5,047653E+22	2,018484E+22	2,018499E+22	1,009506E+23	4,036983E+22	1,413204E+23
2250	5,047505E+22	5,047397E+22	2,018464E+22	2,018518E+22	1,009490E+23	4,036982E+22	1,413188E+23
2251	5,047347E+22	5,047383E+22	2,018619E+22	2,018492E+22	1,009473E+23	4,037110E+22	1,413184E+23
2252	5,047375E+22	5,047427E+22	2,018592E+22	2,018675E+22	1,009480E+23	4,037267E+22	1,413207E+23
2253	5,047372E+22	5,047155E+22	2,018651E+22	2,018664E+22	1,009453E+23	4,037315E+22	1,413184E+23
2254	5,047159E+22	5,047319E+22	2,018775E+22	2,018708E+22	1,009448E+23	4,037483E+22	1,413196E+23
2255	5,047266E+22	5,047249E+22	2,018702E+22	2,018845E+22	1,009452E+23	4,037546E+22	1,413206E+23
2256	5,047205E+22	5,047061E+22	2,018804E+22	2,018755E+22	1,009427E+23	4,037559E+22	1,413183E+23
2257	5,047083E+22	5,047275E+22	2,018855E+22	2,018805E+22	1,009436E+23	4,037660E+22	1,413202E+23
2258	5,047245E+22	5,047115E+22	2,018765E+22	2,018815E+22	1,009436E+23	4,037580E+22	1,413194E+23
2259	5,047110E+22	5,047123E+22	2,018840E+22	2,018712E+22	1,009423E+23	4,037552E+22	1,413179E+23
2260	5,047106E+22	5,047308E+22	2,018753E+22	2,018811E+22	1,009441E+23	4,037564E+22	1,413198E+23
2261	5,047245E+22	5,047103E+22	2,018689E+22	2,018718E+22	1,009435E+23	4,037407E+22	1,413175E+23
2262	5,047143E+22	5,047261E+22	2,018730E+22	2,018620E+22	1,009440E+23	4,037350E+22	1,413175E+23
2263	5,047355E+22	5,047329E+22	2,018574E+22	2,018678E+22	1,009468E+23	4,037252E+22	1,413194E+23
2264	5,047413E+22	5,047189E+22	2,018574E+22	2,018540E+22	1,009460E+23	4,037114E+22	1,413172E+23
2265	5,047253E+22	5,047467E+22	2,018621E+22	2,018548E+22	1,009472E+23	4,037169E+22	1,413189E+23
2266	5,047412E+22	5,047410E+22	2,018513E+22	2,018605E+22	1,009482E+23	4,037118E+22	1,413194E+23
2267	5,047306E+22	5,047296E+22	2,018620E+22	2,018534E+22	1,009460E+23	4,037154E+22	1,413176E+23
2268	5,047225E+22	5,047434E+22	2,018645E+22	2,018659E+22	1,009466E+23	4,037304E+22	1,413196E+23
2269	5,047375E+22	5,047175E+22	2,018630E+22	2,018677E+22	1,009455E+23	4,037307E+22	1,413186E+23
2270	5,047182E+22	5,047183E+22	2,018777E+22	2,018662E+22	1,009436E+23	4,037439E+22	1,413180E+23
2271	5,047217E+22	5,047260E+22	2,018726E+22	2,018844E+22	1,009448E+23	4,037569E+22	1,413205E+23
2272	5,047219E+22	5,047013E+22	2,018783E+22	2,018831E+22	1,009423E+23	4,037613E+22	1,413185E+23
2273	5,046958E+22	5,047156E+22	2,018936E+22	2,018862E+22	1,009411E+23	4,037798E+22	1,413191E+23
2274	5,047106E+22	5,047094E+22	2,018867E+22	2,018963E+22	1,009420E+23	4,037830E+22	1,413203E+23
2275	5,047050E+22	5,046902E+22	2,018969E+22	2,018879E+22	1,009395E+23	4,037848E+22	1,413180E+23
2276	5,046894E+22	5,047097E+22	2,019000E+22	2,018949E+22	1,009399E+23	4,037949E+22	1,413194E+23
2277	5,047062E+22	5,046958E+22	2,018903E+22	2,018966E+22	1,009402E+23	4,037869E+22	1,413189E+23
2278	5,046904E+22	5,046966E+22	2,018970E+22	2,018863E+22	1,009387E+23	4,037833E+22	1,413170E+23
2279	5,046969E+22	5,047132E+22	2,018860E+22	2,018937E+22	1,009410E+23	4,037798E+22	1,413190E+23
2280	5,047161E+22	5,046949E+22	2,018791E+22	2,018830E+22	1,009411E+23	4,037620E+22	1,413173E+23
2281	5,047022E+22	5,047120E+22	2,018850E+22	2,018730E+22	1,009414E+23	4,037580E+22	1,413172E+23
2282	5,047229E+22	5,047226E+22	2,018700E+22	2,018781E+22	1,009446E+23	4,037481E+22	1,413194E+23
2283	5,047250E+22	5,047099E+22	2,018711E+22	2,018673E+22	1,009435E+23	4,037385E+22	1,413173E+23
2284	5,047053E+22	5,047314E+22	2,018761E+22	2,018705E+22	1,009437E+23	4,037466E+22	1,413183E+23
2285	5,047247E+22	5,047217E+22	2,018675E+22	2,018757E+22	1,009446E+23	4,037432E+22	1,413190E+23
2286	5,047144E+22	5,047089E+22	2,018781E+22	2,018684E+22	1,009423E+23	4,037466E+22	1,413170E+23
2287	5,047104E+22	5,047215E+22	2,018782E+22	2,018804E+22	1,009432E+23	4,037586E+22	1,413190E+23
2288	5,047243E+22	5,047012E+22	2,018761E+22	2,018835E+22	1,009425E+23	4,037596E+22	1,413185E+23
2289	5,046974E+22	5,047044E+22	2,018921E+22	2,018830E+22	1,009402E+23	4,037751E+22	1,413177E+23
2290	5,047012E+22	5,047128E+22	2,018886E+22	2,018991E+22	1,009414E+23	4,037877E+22	1,413202E+23
2291	5,047034E+22	5,046869E+22	2,018959E+22	2,018976E+22	1,009390E+23	4,037936E+22	1,413184E+23
2292	5,046775E+22	5,046959E+22	2,019105E+22	2,019009E+22	1,009373E+23	4,038113E+22	1,413185E+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							
2293	5,046953E+22	5,046899E+22	2,019039E+22	2,019107E+22	1,009385E+23	4,038147E+22	1,413200E+23
2294	5,046857E+22	5,046730E+22	2,019123E+22	2,019035E+22	1,009359E+23	4,038158E+22	1,413174E+23
2295	5,046718E+22	5,046926E+22	2,019115E+22	2,019106E+22	1,009364E+23	4,038221E+22	1,413186E+23
2296	5,046913E+22	5,046807E+22	2,019009E+22	2,019114E+22	1,009372E+23	4,038123E+22	1,413184E+23
2297	5,046753E+22	5,046798E+22	2,019087E+22	2,018992E+22	1,009355E+23	4,038079E+22	1,413163E+23
2298	5,046873E+22	5,046987E+22	2,018982E+22	2,019028E+22	1,009386E+23	4,038010E+22	1,413187E+23
2299	5,047066E+22	5,046837E+22	2,018915E+22	2,018927E+22	1,009390E+23	4,037842E+22	1,413175E+23
2300	5,046869E+22	5,046994E+22	2,018973E+22	2,018852E+22	1,009386E+23	4,037825E+22	1,413169E+23
2301	5,047059E+22	5,047108E+22	2,018841E+22	2,018915E+22	1,009417E+23	4,037756E+22	1,413192E+23
2302	5,047040E+22	5,046955E+22	2,018862E+22	2,018821E+22	1,009400E+23	4,037683E+22	1,413168E+23
2303	5,046894E+22	5,047120E+22	2,018898E+22	2,018847E+22	1,009401E+23	4,037746E+22	1,413176E+23
2304	5,047125E+22	5,047030E+22	2,018805E+22	2,018899E+22	1,009415E+23	4,037704E+22	1,413186E+23
2305	5,046983E+22	5,046899E+22	2,018924E+22	2,018836E+22	1,009388E+23	4,037760E+22	1,413164E+23
2306	5,046946E+22	5,047069E+22	2,018928E+22	2,018948E+22	1,009401E+23	4,037877E+22	1,413189E+23
2307	5,047059E+22	5,046892E+22	2,018912E+22	2,019003E+22	1,009395E+23	4,037915E+22	1,413187E+23
2308	5,046765E+22	5,046871E+22	2,019084E+22	2,019005E+22	1,009364E+23	4,038089E+22	1,413172E+23
2309	5,046846E+22	5,046930E+22	2,019070E+22	2,019146E+22	1,009378E+23	4,038217E+22	1,413199E+23
2310	5,046857E+22	5,046673E+22	2,019139E+22	2,019125E+22	1,009353E+23	4,038263E+22	1,413179E+23
2311	5,046626E+22	5,046754E+22	2,019250E+22	2,019155E+22	1,009338E+23	4,038405E+22	1,413179E+23
2312	5,046785E+22	5,046741E+22	2,019167E+22	2,019260E+22	1,009353E+23	4,038428E+22	1,413195E+23
2313	5,046638E+22	5,046581E+22	2,019253E+22	2,019194E+22	1,009322E+23	4,038447E+22	1,413167E+23
2314	5,046543E+22	5,046778E+22	2,019246E+22	2,019233E+22	1,009332E+23	4,038479E+22	1,413180E+23
2315	5,046782E+22	5,046670E+22	2,019141E+22	2,019234E+22	1,009345E+23	4,038375E+22	1,413183E+23
2316	5,046636E+22	5,046630E+22	2,019212E+22	2,019107E+22	1,009327E+23	4,038319E+22	1,413159E+23
2317	5,046777E+22	5,046836E+22	2,019121E+22	2,019137E+22	1,009361E+23	4,038258E+22	1,413187E+23
2318	5,046909E+22	5,046730E+22	2,019048E+22	2,019052E+22	1,009364E+23	4,038100E+22	1,413174E+23
2319	5,046710E+22	5,046859E+22	2,019084E+22	2,018991E+22	1,009357E+23	4,038075E+22	1,413164E+23
2320	5,046891E+22	5,046968E+22	2,018961E+22	2,019055E+22	1,009386E+23	4,038016E+22	1,413187E+23
2321	5,046865E+22	5,046776E+22	2,018998E+22	2,018961E+22	1,009364E+23	4,037959E+22	1,413160E+23
2322	5,046761E+22	5,046932E+22	2,019039E+22	2,018966E+22	1,009369E+23	4,038005E+22	1,413170E+23
2323	5,046990E+22	5,046878E+22	2,018949E+22	2,019039E+22	1,009387E+23	4,037988E+22	1,413186E+23
2324	5,046802E+22	5,046735E+22	2,019065E+22	2,018998E+22	1,009354E+23	4,038063E+22	1,413160E+23
2325	5,046764E+22	5,046911E+22	2,019092E+22	2,019113E+22	1,009367E+23	4,038205E+22	1,413188E+23
2326	5,046849E+22	5,046734E+22	2,019087E+22	2,019165E+22	1,009358E+23	4,038251E+22	1,413183E+23
2327	5,046606E+22	5,046664E+22	2,019243E+22	2,019160E+22	1,009327E+23	4,038403E+22	1,413167E+23
2328	5,046701E+22	5,046744E+22	2,019227E+22	2,019292E+22	1,009345E+23	4,038519E+22	1,413196E+23
2329	5,046673E+22	5,046488E+22	2,019298E+22	2,019283E+22	1,009316E+23	4,038580E+22	1,413174E+23
2330	5,046443E+22	5,046599E+22	2,019397E+22	2,019303E+22	1,009304E+23	4,038700E+22	1,413174E+23
2331	5,046595E+22	5,046612E+22	2,019304E+22	2,019422E+22	1,009321E+23	4,038726E+22	1,413193E+23
2332	5,046453E+22	5,046399E+22	2,019388E+22	2,019349E+22	1,009285E+23	4,038737E+22	1,413159E+23
2333	5,046432E+22	5,046588E+22	2,019394E+22	2,019358E+22	1,009302E+23	4,038752E+22	1,413177E+23
2334	5,046663E+22	5,046512E+22	2,019281E+22	2,019344E+22	1,009317E+23	4,038625E+22	1,413180E+23
2335	5,046533E+22	5,046481E+22	2,019323E+22	2,019221E+22	1,009301E+23	4,038545E+22	1,413156E+23
2336	5,046632E+22	5,046735E+22	2,019225E+22	2,019256E+22	1,009337E+23	4,038481E+22	1,413185E+23
2337	5,046695E+22	5,046613E+22	2,019169E+22	2,019188E+22	1,009331E+23	4,038357E+22	1,413167E+23
2338	5,046527E+22	5,046719E+22	2,019216E+22	2,019110E+22	1,009325E+23	4,038326E+22	1,413157E+23
2339	5,046737E+22	5,046817E+22	2,019098E+22	2,019184E+22	1,009355E+23	4,038283E+22	1,413184E+23
2340	5,046717E+22	5,046576E+22	2,019138E+22	2,019103E+22	1,009329E+23	4,038241E+22	1,413153E+23
2341	5,046646E+22	5,046741E+22	2,019192E+22	2,019111E+22	1,009339E+23	4,038303E+22	1,413169E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2342	5,046817E+22	5,046732E+22	2,019099E+22	2,019198E+22	1,009355E+23	4,038297E+22	1,413185E+23
2343	5,046642E+22	5,046569E+22	2,019196E+22	2,019168E+22	1,009321E+23	4,038364E+22	1,413158E+23
2344	5,046603E+22	5,046747E+22	2,019238E+22	2,019268E+22	1,009335E+23	4,038506E+22	1,413186E+23
2345	5,046670E+22	5,046549E+22	2,019254E+22	2,019316E+22	1,009322E+23	4,038571E+22	1,413179E+23
2346	5,046452E+22	5,046484E+22	2,019411E+22	2,019292E+22	1,009294E+23	4,038703E+22	1,413164E+23
2347	5,046521E+22	5,046599E+22	2,019389E+22	2,019446E+22	1,009312E+23	4,038835E+22	1,413195E+23
2348	5,046449E+22	5,046317E+22	2,019453E+22	2,019457E+22	1,009277E+23	4,038909E+22	1,413168E+23
2349	5,046251E+22	5,046414E+22	2,019558E+22	2,019468E+22	1,009266E+23	4,039026E+22	1,413169E+23
2350	5,046406E+22	5,046443E+22	2,019462E+22	2,019569E+22	1,009285E+23	4,039031E+22	1,413188E+23
2351	5,046344E+22	5,046204E+22	2,019510E+22	2,019480E+22	1,009255E+23	4,038990E+22	1,413154E+23
2352	5,046336E+22	5,046433E+22	2,019510E+22	2,019470E+22	1,009277E+23	4,038979E+22	1,413175E+23
2353	5,046519E+22	5,046388E+22	2,019401E+22	2,019462E+22	1,009291E+23	4,038863E+22	1,413177E+23
2354	5,046374E+22	5,046378E+22	2,019437E+22	2,019335E+22	1,009275E+23	4,038773E+22	1,413152E+23
2355	5,046447E+22	5,046642E+22	2,019346E+22	2,019388E+22	1,009309E+23	4,038733E+22	1,413182E+23
2356	5,046509E+22	5,046441E+22	2,019302E+22	2,019326E+22	1,009295E+23	4,038628E+22	1,413158E+23
2357	5,046410E+22	5,046511E+22	2,019364E+22	2,019235E+22	1,009292E+23	4,038599E+22	1,413152E+23
2358	5,046607E+22	5,046638E+22	2,019243E+22	2,019309E+22	1,009324E+23	4,038552E+22	1,413180E+23
2359	5,046603E+22	5,046397E+22	2,019253E+22	2,019246E+22	1,009300E+23	4,038500E+22	1,413150E+23
2360	5,046498E+22	5,046610E+22	2,019310E+22	2,019258E+22	1,009311E+23	4,038569E+22	1,413168E+23
2361	5,046615E+22	5,046596E+22	2,019242E+22	2,019356E+22	1,009321E+23	4,038599E+22	1,413181E+23
2362	5,046465E+22	5,046419E+22	2,019356E+22	2,019306E+22	1,009288E+23	4,038663E+22	1,413155E+23
2363	5,046435E+22	5,046597E+22	2,019407E+22	2,019413E+22	1,009303E+23	4,038820E+22	1,413185E+23
2364	5,046481E+22	5,046350E+22	2,019433E+22	2,019478E+22	1,009283E+23	4,038911E+22	1,413174E+23
2365	5,046286E+22	5,046286E+22	2,019593E+22	2,019461E+22	1,009257E+23	4,039053E+22	1,413162E+23
2366	5,046300E+22	5,046432E+22	2,019556E+22	2,019622E+22	1,009273E+23	4,039178E+22	1,413191E+23
2367	5,046266E+22	5,046119E+22	2,019586E+22	2,019638E+22	1,009239E+23	4,039224E+22	1,413161E+23
2368	5,046110E+22	5,046224E+22	2,019685E+22	2,019616E+22	1,009233E+23	4,039301E+22	1,413164E+23
2369	5,046269E+22	5,046254E+22	2,019597E+22	2,019698E+22	1,009252E+23	4,039295E+22	1,413182E+23
2370	5,046236E+22	5,046061E+22	2,019635E+22	2,019580E+22	1,009230E+23	4,039214E+22	1,413151E+23
2371	5,046197E+22	5,046342E+22	2,019629E+22	2,019581E+22	1,009254E+23	4,039210E+22	1,413175E+23
2372	5,046316E+22	5,046272E+22	2,019529E+22	2,019593E+22	1,009259E+23	4,039122E+22	1,413171E+23
2373	5,046198E+22	5,046233E+22	2,019580E+22	2,019465E+22	1,009243E+23	4,039045E+22	1,413148E+23
2374	5,046259E+22	5,046484E+22	2,019492E+22	2,019510E+22	1,009274E+23	4,039002E+22	1,413175E+23
2375	5,046393E+22	5,046240E+22	2,019420E+22	2,019457E+22	1,009263E+23	4,038878E+22	1,413151E+23
2376	5,046317E+22	5,046333E+22	2,019477E+22	2,019360E+22	1,009265E+23	4,038837E+22	1,413149E+23
2377	5,046467E+22	5,046488E+22	2,019367E+22	2,019451E+22	1,009296E+23	4,038818E+22	1,413177E+23
2378	5,046452E+22	5,046287E+22	2,019373E+22	2,019385E+22	1,009274E+23	4,038758E+22	1,413150E+23
2379	5,046323E+22	5,046507E+22	2,019446E+22	2,019409E+22	1,009283E+23	4,038855E+22	1,413168E+23
2380	5,046425E+22	5,046423E+22	2,019410E+22	2,019509E+22	1,009285E+23	4,038919E+22	1,413177E+23
2381	5,046322E+22	5,046212E+22	2,019544E+22	2,019453E+22	1,009253E+23	4,038997E+22	1,413153E+23
2382	5,046247E+22	5,046418E+22	2,019594E+22	2,019564E+22	1,009266E+23	4,039157E+22	1,413182E+23
2383	5,046304E+22	5,046150E+22	2,019581E+22	2,019655E+22	1,009245E+23	4,039236E+22	1,413169E+23
2384	5,046089E+22	5,046105E+22	2,019731E+22	2,019635E+22	1,009219E+23	4,039366E+22	1,413156E+23
2385	5,046088E+22	5,046248E+22	2,019703E+22	2,019791E+22	1,009234E+23	4,039494E+22	1,413183E+23
2386	5,046111E+22	5,045945E+22	2,019724E+22	2,019770E+22	1,009206E+23	4,039494E+22	1,413155E+23
2387	5,045988E+22	5,046082E+22	2,019819E+22	2,019739E+22	1,009207E+23	4,039558E+22	1,413163E+23
2388	5,046127E+22	5,046096E+22	2,019743E+22	2,019822E+22	1,009222E+23	4,039564E+22	1,413179E+23
2389	5,046099E+22	5,045926E+22	2,019782E+22	2,019705E+22	1,009202E+23	4,039486E+22	1,413151E+23
2390	5,045994E+22	5,046238E+22	2,019770E+22	2,019710E+22	1,009223E+23	4,039479E+22	1,413171E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2391	5,046143E+22	5,046108E+22	2,019645E+22	2,019737E+22	1,009225E+23	4,039382E+22	1,413163E+23
2392	5,046064E+22	5,046050E+22	2,019696E+22	2,019590E+22	1,009211E+23	4,039286E+22	1,413140E+23
2393	5,046131E+22	5,046294E+22	2,019616E+22	2,019633E+22	1,009243E+23	4,039249E+22	1,413167E+23
2394	5,046287E+22	5,046094E+22	2,019531E+22	2,019570E+22	1,009238E+23	4,039101E+22	1,413148E+23
2395	5,046188E+22	5,046238E+22	2,019584E+22	2,019492E+22	1,009243E+23	4,039076E+22	1,413150E+23
2396	5,046275E+22	5,046363E+22	2,019504E+22	2,019599E+22	1,009264E+23	4,039103E+22	1,413174E+23
2397	5,046285E+22	5,046144E+22	2,019536E+22	2,019529E+22	1,009243E+23	4,039065E+22	1,413149E+23
2398	5,046133E+22	5,046350E+22	2,019623E+22	2,019544E+22	1,009248E+23	4,039167E+22	1,413165E+23
2399	5,046271E+22	5,046212E+22	2,019570E+22	2,019666E+22	1,009248E+23	4,039235E+22	1,413172E+23
2400	5,046174E+22	5,046012E+22	2,019699E+22	2,019611E+22	1,009219E+23	4,039311E+22	1,413150E+23
2401	5,046045E+22	5,046224E+22	2,019750E+22	2,019741E+22	1,009227E+23	4,039490E+22	1,413176E+23
2402	5,046105E+22	5,045989E+22	2,019720E+22	2,019825E+22	1,009209E+23	4,039546E+22	1,413164E+23
2403	5,045913E+22	5,045950E+22	2,019866E+22	2,019799E+22	1,009186E+23	4,039665E+22	1,413153E+23
2404	5,045921E+22	5,046045E+22	2,019863E+22	2,019938E+22	1,009197E+23	4,039801E+22	1,413177E+23
2405	5,046000E+22	5,045765E+22	2,019888E+22	2,019894E+22	1,009176E+23	4,039781E+22	1,413155E+23
2406	5,045832E+22	5,045951E+22	2,019978E+22	2,019855E+22	1,009178E+23	4,039833E+22	1,413161E+23
2407	5,045962E+22	5,045954E+22	2,019871E+22	2,019963E+22	1,009192E+23	4,039834E+22	1,413175E+23
2408	5,045914E+22	5,045793E+22	2,019904E+22	2,019844E+22	1,009171E+23	4,039747E+22	1,413145E+23
2409	5,045790E+22	5,046077E+22	2,019901E+22	2,019848E+22	1,009187E+23	4,039749E+22	1,413162E+23
2410	5,045994E+22	5,045948E+22	2,019761E+22	2,019852E+22	1,009194E+23	4,039614E+22	1,413156E+23
2411	5,045958E+22	5,045906E+22	2,019803E+22	2,019707E+22	1,009186E+23	4,039511E+22	1,413137E+23
2412	5,046009E+22	5,046131E+22	2,019744E+22	2,019760E+22	1,009214E+23	4,039504E+22	1,413164E+23
2413	5,046169E+22	5,045964E+22	2,019663E+22	2,019702E+22	1,009213E+23	4,039364E+22	1,413150E+23
2414	5,046008E+22	5,046139E+22	2,019724E+22	2,019627E+22	1,009215E+23	4,039351E+22	1,413150E+23
2415	5,046118E+22	5,046196E+22	2,019637E+22	2,019748E+22	1,009231E+23	4,039385E+22	1,413170E+23
2416	5,046144E+22	5,045951E+22	2,019683E+22	2,019666E+22	1,009210E+23	4,039349E+22	1,413144E+23
2417	5,045970E+22	5,046149E+22	2,019786E+22	2,019687E+22	1,009212E+23	4,039472E+22	1,413159E+23
2418	5,046104E+22	5,046043E+22	2,019716E+22	2,019810E+22	1,009215E+23	4,039527E+22	1,413167E+23
2419	5,045984E+22	5,045874E+22	2,019838E+22	2,019779E+22	1,009186E+23	4,039616E+22	1,413147E+23
2420	5,045820E+22	5,046042E+22	2,019912E+22	2,019917E+22	1,009186E+23	4,039829E+22	1,413169E+23
2421	5,045925E+22	5,045804E+22	2,019892E+22	2,019985E+22	1,009173E+23	4,039877E+22	1,413161E+23
2422	5,045740E+22	5,045784E+22	2,020037E+22	2,019938E+22	1,009152E+23	4,039975E+22	1,413150E+23
2423	5,045792E+22	5,045847E+22	2,020014E+22	2,020086E+22	1,009164E+23	4,040099E+22	1,413174E+23
2424	5,045868E+22	5,045605E+22	2,020032E+22	2,020033E+22	1,009147E+23	4,040066E+22	1,413154E+23
2425	5,045641E+22	5,045810E+22	2,020117E+22	2,020006E+22	1,009145E+23	4,040123E+22	1,413157E+23
2426	5,045763E+22	5,045832E+22	2,019991E+22	2,020104E+22	1,009160E+23	4,040095E+22	1,413169E+23
2427	5,045748E+22	5,045657E+22	2,020017E+22	2,019980E+22	1,009141E+23	4,039997E+22	1,413140E+23
2428	5,045642E+22	5,045873E+22	2,020038E+22	2,019974E+22	1,009151E+23	4,040011E+22	1,413153E+23
2429	5,045901E+22	5,045777E+22	2,019896E+22	2,019963E+22	1,009168E+23	4,039860E+22	1,413154E+23
2430	5,045834E+22	5,045785E+22	2,019927E+22	2,019818E+22	1,009162E+23	4,039745E+22	1,413136E+23
2431	5,045871E+22	5,045989E+22	2,019854E+22	2,019897E+22	1,009186E+23	4,039751E+22	1,413161E+23
2432	5,046014E+22	5,045840E+22	2,019782E+22	2,019833E+22	1,009185E+23	4,039615E+22	1,413147E+23
2433	5,045825E+22	5,045981E+22	2,019866E+22	2,019761E+22	1,009181E+23	4,039627E+22	1,413143E+23
2434	5,045958E+22	5,046038E+22	2,019779E+22	2,019870E+22	1,009200E+23	4,039649E+22	1,413164E+23
2435	5,046003E+22	5,045799E+22	2,019824E+22	2,019805E+22	1,009180E+23	4,039630E+22	1,413143E+23
2436	5,045787E+22	5,045955E+22	2,019953E+22	2,019849E+22	1,009174E+23	4,039802E+22	1,413154E+23
2437	5,045917E+22	5,045882E+22	2,019881E+22	2,019982E+22	1,009180E+23	4,039863E+22	1,413166E+23
2438	5,045766E+22	5,045724E+22	2,020000E+22	2,019951E+22	1,009149E+23	4,039950E+22	1,413144E+23
2439	5,045652E+22	5,045821E+22	2,020066E+22	2,020093E+22	1,009147E+23	4,040159E+22	1,413163E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2440	5,045798E+22	5,045596E+22	2,020049E+22	2,020133E+22	1,009139E+23	4,040182E+22	1,413158E+23
2441	5,045596E+22	5,045597E+22	2,020196E+22	2,020082E+22	1,009119E+23	4,040278E+22	1,413147E+23
2442	5,045634E+22	5,045710E+22	2,020152E+22	2,020220E+22	1,009134E+23	4,040372E+22	1,413172E+23
2443	5,045681E+22	5,045502E+22	2,020158E+22	2,020180E+22	1,009118E+23	4,040338E+22	1,413152E+23
2444	5,045423E+22	5,045653E+22	2,020266E+22	2,020154E+22	1,009108E+23	4,040420E+22	1,413150E+23
2445	5,045591E+22	5,045664E+22	2,020139E+22	2,020231E+22	1,009125E+23	4,040370E+22	1,413162E+23
2446	5,045596E+22	5,045499E+22	2,020157E+22	2,020094E+22	1,009109E+23	4,040251E+22	1,413135E+23
2447	5,045546E+22	5,045674E+22	2,020154E+22	2,020100E+22	1,009122E+23	4,040254E+22	1,413147E+23
2448	5,045802E+22	5,045620E+22	2,020008E+22	2,020085E+22	1,009142E+23	4,040093E+22	1,413152E+23
2449	5,045683E+22	5,045664E+22	2,020040E+22	2,019952E+22	1,009135E+23	4,039992E+22	1,413134E+23
2450	5,045709E+22	5,045881E+22	2,019961E+22	2,020021E+22	1,009159E+23	4,039983E+22	1,413157E+23
2451	5,045865E+22	5,045719E+22	2,019902E+22	2,019958E+22	1,009158E+23	4,039860E+22	1,413144E+23
2452	5,045668E+22	5,045791E+22	2,020026E+22	2,019890E+22	1,009146E+23	4,039916E+22	1,413137E+23
2453	5,045807E+22	5,045868E+22	2,019945E+22	2,020001E+22	1,009168E+23	4,039946E+22	1,413162E+23
2454	5,045810E+22	5,045659E+22	2,019987E+22	2,019958E+22	1,009147E+23	4,039945E+22	1,413141E+23
2455	5,045594E+22	5,045758E+22	2,020100E+22	2,020036E+22	1,009135E+23	4,040136E+22	1,413149E+23
2456	5,045730E+22	5,045690E+22	2,020035E+22	2,020159E+22	1,009142E+23	4,040194E+22	1,413161E+23
2457	5,045585E+22	5,045522E+22	2,020159E+22	2,020117E+22	1,009111E+23	4,040276E+22	1,413138E+23
2458	5,045509E+22	5,045638E+22	2,020213E+22	2,020236E+22	1,009115E+23	4,040449E+22	1,413160E+23
2459	5,045671E+22	5,045452E+22	2,020192E+22	2,020276E+22	1,009112E+23	4,040468E+22	1,413159E+23
2460	5,045422E+22	5,045429E+22	2,020363E+22	2,020236E+22	1,009085E+23	4,040599E+22	1,413145E+23
2461	5,045436E+22	5,045586E+22	2,020312E+22	2,020369E+22	1,009102E+23	4,040681E+22	1,413170E+23
2462	5,045468E+22	5,045373E+22	2,020309E+22	2,020325E+22	1,009084E+23	4,040634E+22	1,413147E+23
2463	5,045261E+22	5,045426E+22	2,020402E+22	2,020301E+22	1,009069E+23	4,040704E+22	1,413139E+23
2464	5,045479E+22	5,045458E+22	2,020268E+22	2,020351E+22	1,009094E+23	4,040619E+22	1,413156E+23
2465	5,045478E+22	5,045326E+22	2,020274E+22	2,020214E+22	1,009080E+23	4,040488E+22	1,413129E+23
2466	5,045423E+22	5,045554E+22	2,020250E+22	2,020215E+22	1,009098E+23	4,040465E+22	1,413144E+23
2467	5,045657E+22	5,045546E+22	2,020103E+22	2,020206E+22	1,009120E+23	4,040309E+22	1,413151E+23
2468	5,045502E+22	5,045533E+22	2,020175E+22	2,020079E+22	1,009103E+23	4,040253E+22	1,413129E+23
2469	5,045545E+22	5,045749E+22	2,020112E+22	2,020132E+22	1,009129E+23	4,040244E+22	1,413154E+23
2470	5,045702E+22	5,045580E+22	2,020059E+22	2,020078E+22	1,009128E+23	4,040137E+22	1,413142E+23
2471	5,045527E+22	5,045579E+22	2,020175E+22	2,020046E+22	1,009111E+23	4,040222E+22	1,413133E+23
2472	5,045652E+22	5,045683E+22	2,020093E+22	2,020165E+22	1,009134E+23	4,040258E+22	1,413159E+23
2473	5,045613E+22	5,045490E+22	2,020130E+22	2,020141E+22	1,009110E+23	4,040271E+22	1,413137E+23
2474	5,045421E+22	5,045582E+22	2,020231E+22	2,020203E+22	1,009100E+23	4,040434E+22	1,413144E+23
2475	5,045593E+22	5,045515E+22	2,020174E+22	2,020310E+22	1,009111E+23	4,040484E+22	1,413159E+23
2476	5,045448E+22	5,045322E+22	2,020331E+22	2,020261E+22	1,009077E+23	4,040591E+22	1,413136E+23
2477	5,045364E+22	5,045488E+22	2,020384E+22	2,020366E+22	1,009085E+23	4,040751E+22	1,413160E+23
2478	5,045467E+22	5,045340E+22	2,020363E+22	2,020421E+22	1,009081E+23	4,040783E+22	1,413159E+23
2479	5,045208E+22	5,045254E+22	2,020516E+22	2,020407E+22	1,009046E+23	4,040923E+22	1,413138E+23
2480	5,045229E+22	5,045395E+22	2,020465E+22	2,020521E+22	1,009062E+23	4,040986E+22	1,413161E+23
2481	5,045280E+22	5,045174E+22	2,020454E+22	2,020469E+22	1,009045E+23	4,040923E+22	1,413138E+23
2482	5,045138E+22	5,045237E+22	2,020515E+22	2,020425E+22	1,009037E+23	4,040940E+22	1,413131E+23
2483	5,045381E+22	5,045317E+22	2,020372E+22	2,020470E+22	1,009070E+23	4,040842E+22	1,413154E+23
2484	5,045344E+22	5,045194E+22	2,020395E+22	2,020341E+22	1,009054E+23	4,040736E+22	1,413127E+23
2485	5,045265E+22	5,045470E+22	2,020370E+22	2,020333E+22	1,009074E+23	4,040703E+22	1,413144E+23
2486	5,045480E+22	5,045455E+22	2,020237E+22	2,020324E+22	1,009094E+23	4,040561E+22	1,413150E+23
2487	5,045362E+22	5,045336E+22	2,020313E+22	2,020212E+22	1,009070E+23	4,040524E+22	1,413122E+23
2488	5,045420E+22	5,045555E+22	2,020258E+22	2,020254E+22	1,009097E+23	4,040513E+22	1,413149E+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							
2489	5,045548E+22	5,045405E+22	2,020201E+22	2,020223E+22	1,009095E+23	4,040424E+22	1,413138E+23
2490	5,045365E+22	5,045418E+22	2,020295E+22	2,020201E+22	1,009078E+23	4,040497E+22	1,413128E+23
2491	5,045484E+22	5,045547E+22	2,020215E+22	2,020326E+22	1,009103E+23	4,040540E+22	1,413157E+23
2492	5,045430E+22	5,045304E+22	2,020286E+22	2,020300E+22	1,009073E+23	4,040586E+22	1,413132E+23
2493	5,045263E+22	5,045421E+22	2,020396E+22	2,020338E+22	1,009068E+23	4,040733E+22	1,413142E+23
2494	5,045439E+22	5,045373E+22	2,020347E+22	2,020444E+22	1,009081E+23	4,040792E+22	1,413160E+23
2495	5,045292E+22	5,045118E+22	2,020501E+22	2,020425E+22	1,009041E+23	4,040926E+22	1,413134E+23
2496	5,045175E+22	5,045323E+22	2,020553E+22	2,020529E+22	1,009050E+23	4,041082E+22	1,413158E+23
2497	5,045235E+22	5,045182E+22	2,020520E+22	2,020597E+22	1,009042E+23	4,041117E+22	1,413153E+23
2498	5,045012E+22	5,045061E+22	2,020649E+22	2,020567E+22	1,009007E+23	4,041217E+22	1,413129E+23
2499	5,045088E+22	5,045205E+22	2,020590E+22	2,020656E+22	1,009029E+23	4,041246E+22	1,413154E+23
2500	5,045152E+22	5,044975E+22	2,020592E+22	2,020596E+22	1,009013E+23	4,041188E+22	1,413131E+23
2501	5,045019E+22	5,045111E+22	2,020639E+22	2,020534E+22	1,009013E+23	4,041173E+22	1,413130E+23
2502	5,045228E+22	5,045238E+22	2,020496E+22	2,020588E+22	1,009047E+23	4,041084E+22	1,413155E+23
2503	5,045181E+22	5,045057E+22	2,020517E+22	2,020479E+22	1,009024E+23	4,040995E+22	1,413123E+23
2504	5,045110E+22	5,045322E+22	2,020505E+22	2,020449E+22	1,009043E+23	4,040953E+22	1,413139E+23
2505	5,045318E+22	5,045297E+22	2,020376E+22	2,020444E+22	1,009062E+23	4,040819E+22	1,413143E+23
2506	5,045240E+22	5,045160E+22	2,020432E+22	2,020336E+22	1,009040E+23	4,040767E+22	1,413117E+23
2507	5,045297E+22	5,045400E+22	2,020378E+22	2,020388E+22	1,009070E+23	4,040766E+22	1,413146E+23
2508	5,045380E+22	5,045251E+22	2,020341E+22	2,020381E+22	1,009063E+23	4,040722E+22	1,413135E+23
2509	5,045189E+22	5,045293E+22	2,020428E+22	2,020351E+22	1,009048E+23	4,040779E+22	1,413126E+23
2510	5,045306E+22	5,045403E+22	2,020370E+22	2,020472E+22	1,009071E+23	4,040843E+22	1,413155E+23
2511	5,045288E+22	5,045087E+22	2,020446E+22	2,020454E+22	1,009038E+23	4,040900E+22	1,413128E+23
2512	5,045128E+22	5,045223E+22	2,020565E+22	2,020476E+22	1,009035E+23	4,041042E+22	1,413139E+23
2513	5,045249E+22	5,045211E+22	2,020519E+22	2,020603E+22	1,009046E+23	4,041123E+22	1,413158E+23
2514	5,045088E+22	5,044962E+22	2,020647E+22	2,020597E+22	1,009005E+23	4,041243E+22	1,413129E+23
2515	5,044960E+22	5,045169E+22	2,020696E+22	2,020695E+22	1,009013E+23	4,041391E+22	1,413152E+23
2516	5,045023E+22	5,044981E+22	2,020683E+22	2,020759E+22	1,009000E+23	4,041442E+22	1,413145E+23
2517	5,044850E+22	5,044882E+22	2,020795E+22	2,020697E+22	1,008973E+23	4,041492E+22	1,413122E+23
2518	5,044958E+22	5,045049E+22	2,020735E+22	2,020780E+22	1,009001E+23	4,041515E+22	1,413152E+23
2519	5,045035E+22	5,044794E+22	2,020722E+22	2,020737E+22	1,008983E+23	4,041460E+22	1,413129E+23
2520	5,044886E+22	5,044983E+22	2,020764E+22	2,020665E+22	1,008987E+23	4,041428E+22	1,413130E+23
2521	5,045052E+22	5,045128E+22	2,020621E+22	2,020721E+22	1,009018E+23	4,041342E+22	1,413152E+23
2522	5,045036E+22	5,044906E+22	2,020627E+22	2,020601E+22	1,008994E+23	4,041229E+22	1,413117E+23
2523	5,044994E+22	5,045169E+22	2,020621E+22	2,020553E+22	1,009016E+23	4,041174E+22	1,413134E+23
2524	5,045183E+22	5,045124E+22	2,020512E+22	2,020562E+22	1,009031E+23	4,041074E+22	1,413138E+23
2525	5,045087E+22	5,045038E+22	2,020559E+22	2,020457E+22	1,009012E+23	4,041017E+22	1,413114E+23
2526	5,045117E+22	5,045294E+22	2,020512E+22	2,020529E+22	1,009041E+23	4,041041E+22	1,413145E+23
2527	5,045193E+22	5,045069E+22	2,020480E+22	2,020546E+22	1,009026E+23	4,041026E+22	1,413129E+23
2528	5,045030E+22	5,045109E+22	2,020581E+22	2,020494E+22	1,009014E+23	4,041075E+22	1,413122E+23
2529	5,045144E+22	5,045223E+22	2,020532E+22	2,020616E+22	1,009037E+23	4,041148E+22	1,413152E+23
2530	5,045152E+22	5,044902E+22	2,020593E+22	2,020604E+22	1,009005E+23	4,041197E+22	1,413125E+23
2531	5,044975E+22	5,045069E+22	2,020714E+22	2,020629E+22	1,009004E+23	4,041343E+22	1,413139E+23
2532	5,045033E+22	5,045053E+22	2,020686E+22	2,020779E+22	1,009009E+23	4,041465E+22	1,413155E+23
2533	5,044866E+22	5,044819E+22	2,020803E+22	2,020760E+22	1,008968E+23	4,041564E+22	1,413125E+23
2534	5,044769E+22	5,044989E+22	2,020861E+22	2,020848E+22	1,008976E+23	4,041709E+22	1,413147E+23
2535	5,044877E+22	5,044739E+22	2,020839E+22	2,020912E+22	1,008962E+23	4,041751E+22	1,413137E+23
2536	5,044741E+22	5,044686E+22	2,020938E+22	2,020827E+22	1,008943E+23	4,041765E+22	1,413119E+23
2537	5,044808E+22	5,044908E+22	2,020873E+22	2,020916E+22	1,008972E+23	4,041789E+22	1,413151E+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	5,044882E+22	5,044677E+22	2,020830E+22	2,020875E+22	1,008956E+23	4,041704E+22	1,413126E+23
2539	5,044730E+22	5,044871E+22	2,020875E+22	2,020783E+22	1,008960E+23	4,041657E+22	1,413126E+23
2540	5,044879E+22	5,044983E+22	2,020760E+22	2,020837E+22	1,008986E+23	4,041597E+22	1,413146E+23
2541	5,044888E+22	5,044778E+22	2,020754E+22	2,020701E+22	1,008967E+23	4,041455E+22	1,413112E+23
2542	5,044851E+22	5,045027E+22	2,020758E+22	2,020668E+22	1,008988E+23	4,041427E+22	1,413130E+23
2543	5,045028E+22	5,044946E+22	2,020645E+22	2,020712E+22	1,008997E+23	4,041357E+22	1,413133E+23
2544	5,044931E+22	5,044886E+22	2,020685E+22	2,020609E+22	1,008982E+23	4,041294E+22	1,413111E+23
2545	5,044936E+22	5,045138E+22	2,020650E+22	2,020686E+22	1,009007E+23	4,041336E+22	1,413141E+23
2546	5,045060E+22	5,044881E+22	2,020604E+22	2,020693E+22	1,008994E+23	4,041297E+22	1,413124E+23
2547	5,044923E+22	5,044932E+22	2,020715E+22	2,020619E+22	1,008985E+23	4,041335E+22	1,413119E+23
2548	5,044994E+22	5,045053E+22	2,020695E+22	2,020757E+22	1,009005E+23	4,041452E+22	1,413150E+23
2549	5,044962E+22	5,044785E+22	2,020750E+22	2,020750E+22	1,008975E+23	4,041501E+22	1,413125E+23
2550	5,044753E+22	5,044944E+22	2,020885E+22	2,020795E+22	1,008970E+23	4,041680E+22	1,413138E+23
2551	5,044803E+22	5,044846E+22	2,020859E+22	2,020962E+22	1,008965E+23	4,041821E+22	1,413147E+23
2552	5,044685E+22	5,044602E+22	2,020973E+22	2,020918E+22	1,008929E+23	4,041891E+22	1,413118E+23
2553	5,044608E+22	5,044781E+22	2,021024E+22	2,020998E+22	1,008939E+23	4,042022E+22	1,413141E+23
2554	5,044760E+22	5,044543E+22	2,020968E+22	2,021061E+22	1,008930E+23	4,042029E+22	1,413133E+23
2555	5,044624E+22	5,044555E+22	2,021056E+22	2,020962E+22	1,008918E+23	4,042018E+22	1,413120E+23
2556	5,044636E+22	5,044792E+22	2,021002E+22	2,021059E+22	1,008943E+23	4,042061E+22	1,413149E+23
2557	5,044695E+22	5,044585E+22	2,020954E+22	2,020993E+22	1,008928E+23	4,041947E+22	1,413123E+23
2558	5,044574E+22	5,044739E+22	2,021012E+22	2,020891E+22	1,008931E+23	4,041903E+22	1,413122E+23
2559	5,044731E+22	5,044781E+22	2,020898E+22	2,020956E+22	1,008951E+23	4,041854E+22	1,413137E+23
2560	5,044761E+22	5,044606E+22	2,020886E+22	2,020820E+22	1,008937E+23	4,041706E+22	1,413107E+23
2561	5,044687E+22	5,044879E+22	2,020887E+22	2,020808E+22	1,008957E+23	4,041695E+22	1,413126E+23
2562	5,044870E+22	5,044794E+22	2,020749E+22	2,020865E+22	1,008966E+23	4,041614E+22	1,413128E+23
2563	5,044793E+22	5,044740E+22	2,020794E+22	2,020740E+22	1,008953E+23	4,041535E+22	1,413107E+23
2564	5,044789E+22	5,044968E+22	2,020791E+22	2,020816E+22	1,008976E+23	4,041608E+22	1,413136E+23
2565	5,044921E+22	5,044751E+22	2,020746E+22	2,020809E+22	1,008967E+23	4,041555E+22	1,413123E+23
2566	5,044780E+22	5,044793E+22	2,020880E+22	2,020756E+22	1,008957E+23	4,041635E+22	1,413121E+23
2567	5,044797E+22	5,044879E+22	2,020868E+22	2,020928E+22	1,008968E+23	4,041796E+22	1,413147E+23
2568	5,044755E+22	5,044623E+22	2,020920E+22	2,020929E+22	1,008938E+23	4,041849E+22	1,413123E+23
2569	5,044528E+22	5,044748E+22	2,021061E+22	2,020977E+22	1,008928E+23	4,042038E+22	1,413131E+23
2570	5,044640E+22	5,044612E+22	2,021008E+22	2,021132E+22	1,008925E+23	4,042140E+22	1,413139E+23
2571	5,044572E+22	5,044390E+22	2,021108E+22	2,021059E+22	1,008896E+23	4,042167E+22	1,413113E+23
2572	5,044465E+22	5,044603E+22	2,021172E+22	2,021145E+22	1,008907E+23	4,042317E+22	1,413138E+23
2573	5,044589E+22	5,044450E+22	2,021096E+22	2,021192E+22	1,008904E+23	4,042288E+22	1,413133E+23
2574	5,044439E+22	5,044457E+22	2,021194E+22	2,021098E+22	1,008890E+23	4,042291E+22	1,413119E+23
2575	5,044435E+22	5,044629E+22	2,021152E+22	2,021194E+22	1,008906E+23	4,042347E+22	1,413141E+23
2576	5,044540E+22	5,044416E+22	2,021099E+22	2,021109E+22	1,008896E+23	4,042207E+22	1,413116E+23
2577	5,044422E+22	5,044559E+22	2,021156E+22	2,021010E+22	1,008898E+23	4,042166E+22	1,413115E+23
2578	5,044609E+22	5,044598E+22	2,021008E+22	2,021089E+22	1,008921E+23	4,042097E+22	1,413130E+23
2579	5,044642E+22	5,044466E+22	2,020983E+22	2,020951E+22	1,008911E+23	4,041933E+22	1,413104E+23
2580	5,044530E+22	5,044744E+22	2,021001E+22	2,020954E+22	1,008927E+23	4,041955E+22	1,413123E+23
2581	5,044716E+22	5,044681E+22	2,020865E+22	2,020987E+22	1,008940E+23	4,041851E+22	1,413125E+23
2582	5,044676E+22	5,044599E+22	2,020933E+22	2,020857E+22	1,008927E+23	4,041790E+22	1,413106E+23
2583	5,044652E+22	5,044782E+22	2,020948E+22	2,020944E+22	1,008943E+23	4,041893E+22	1,413133E+23
2584	5,044771E+22	5,044600E+22	2,020910E+22	2,020948E+22	1,008937E+23	4,041857E+22	1,413123E+23
2585	5,044570E+22	5,044648E+22	2,021053E+22	2,020923E+22	1,008922E+23	4,041976E+22	1,413119E+23
2586	5,044579E+22	5,044696E+22	2,021020E+22	2,021113E+22	1,008927E+23	4,042133E+22	1,413141E+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	5,044569E+22	5,044430E+22	2,021071E+22	2,021096E+22	1,008900E+23	4,042167E+22	1,413117E+23
2588	5,044356E+22	5,044526E+22	2,021221E+22	2,021140E+22	1,008888E+23	4,042361E+22	1,413124E+23
2589	5,044486E+22	5,044437E+22	2,021154E+22	2,021271E+22	1,008892E+23	4,042426E+22	1,413135E+23
2590	5,044441E+22	5,044243E+22	2,021257E+22	2,021202E+22	1,008868E+23	4,042458E+22	1,413114E+23
2591	5,044288E+22	5,044445E+22	2,021322E+22	2,021301E+22	1,008873E+23	4,042623E+22	1,413136E+23
2592	5,044408E+22	5,044324E+22	2,021245E+22	2,021338E+22	1,008873E+23	4,042583E+22	1,413131E+23
2593	5,044250E+22	5,044301E+22	2,021349E+22	2,021234E+22	1,008855E+23	4,042583E+22	1,413113E+23
2594	5,044292E+22	5,04427E+22	2,021280E+22	2,021319E+22	1,008872E+23	4,042599E+22	1,413132E+23
2595	5,044432E+22	5,044239E+22	2,021212E+22	2,021217E+22	1,008867E+23	4,042428E+22	1,413110E+23
2596	5,044282E+22	5,044396E+22	2,021273E+22	2,021139E+22	1,008868E+23	4,042413E+22	1,413109E+23
2597	5,044443E+22	5,044503E+22	2,021111E+22	2,021211E+22	1,008895E+23	4,042323E+22	1,413127E+23
2598	5,044491E+22	5,044363E+22	2,021097E+22	2,021081E+22	1,008885E+23	4,042177E+22	1,413103E+23
2599	5,044368E+22	5,044581E+22	2,021137E+22	2,021084E+22	1,008895E+23	4,042221E+22	1,413117E+23
2600	5,044592E+22	5,044529E+22	2,021010E+22	2,021102E+22	1,008912E+23	4,042112E+22	1,413123E+23
2601	5,044535E+22	5,044438E+22	2,021095E+22	2,020987E+22	1,008897E+23	4,042082E+22	1,413105E+23
2602	5,044503E+22	5,044610E+22	2,021093E+22	2,021098E+22	1,008911E+23	4,042191E+22	1,413130E+23
2603	5,044603E+22	5,044452E+22	2,021047E+22	2,021111E+22	1,008905E+23	4,042158E+22	1,413121E+23
2604	5,044354E+22	5,044471E+22	2,021208E+22	2,021109E+22	1,008882E+23	4,042317E+22	1,413114E+23
2605	5,044378E+22	5,044523E+22	2,021168E+22	2,021270E+22	1,008890E+23	4,042438E+22	1,413134E+23
2606	5,044426E+22	5,044227E+22	2,021226E+22	2,021245E+22	1,008865E+23	4,042471E+22	1,413112E+23
2607	5,044207E+22	5,044304E+22	2,021383E+22	2,021292E+22	1,008851E+23	4,042675E+22	1,413119E+23
2608	5,044341E+22	5,044278E+22	2,021314E+22	2,021417E+22	1,008862E+23	4,042731E+22	1,413135E+23
2609	5,044245E+22	5,044113E+22	2,021420E+22	2,021357E+22	1,008836E+23	4,042777E+22	1,413114E+23
2610	5,044095E+22	5,044287E+22	2,021462E+22	2,021455E+22	1,008838E+23	4,042917E+22	1,413130E+23
2611	5,044244E+22	5,044163E+22	2,021381E+22	2,021465E+22	1,008841E+23	4,042845E+22	1,413125E+23
2612	5,044087E+22	5,044117E+22	2,021490E+22	2,021364E+22	1,008820E+23	4,042854E+22	1,413106E+23
2613	5,044139E+22	5,044281E+22	2,021401E+22	2,021430E+22	1,008842E+23	4,042831E+22	1,413125E+23
2614	5,044305E+22	5,044109E+22	2,021330E+22	2,021344E+22	1,008841E+23	4,042674E+22	1,413109E+23
2615	5,044121E+22	5,044251E+22	2,021391E+22	2,021284E+22	1,008837E+23	4,042676E+22	1,413105E+23
2616	5,044296E+22	5,044377E+22	2,021235E+22	2,021345E+22	1,008867E+23	4,042581E+22	1,413125E+23
2617	5,044350E+22	5,044218E+22	2,021236E+22	2,021204E+22	1,008857E+23	4,042440E+22	1,413101E+23
2618	5,044264E+22	5,044393E+22	2,021259E+22	2,021203E+22	1,008866E+23	4,042462E+22	1,413112E+23
2619	5,044490E+22	5,044377E+22	2,021137E+22	2,021215E+22	1,008887E+23	4,042352E+22	1,413122E+23
2620	5,044370E+22	5,044292E+22	2,021235E+22	2,021136E+22	1,008866E+23	4,042371E+22	1,413103E+23
2621	5,044282E+22	5,044492E+22	2,021230E+22	2,021246E+22	1,008877E+23	4,042476E+22	1,413125E+23
2622	5,044402E+22	5,044305E+22	2,021200E+22	2,021274E+22	1,008871E+23	4,042473E+22	1,413118E+23
2623	5,044155E+22	5,044249E+22	2,021373E+22	2,021272E+22	1,008840E+23	4,042646E+22	1,413105E+23
2624	5,044230E+22	5,044314E+22	2,021337E+22	2,021417E+22	1,008854E+23	4,042754E+22	1,413130E+23
2625	5,044278E+22	5,044038E+22	2,021399E+22	2,021395E+22	1,008832E+23	4,042794E+22	1,413111E+23
2626	5,044061E+22	5,044121E+22	2,021527E+22	2,021456E+22	1,008818E+23	4,042983E+22	1,413116E+23
2627	5,044178E+22	5,044147E+22	2,021453E+22	2,021574E+22	1,008832E+23	4,043027E+22	1,413135E+23
2628	5,044041E+22	5,043964E+22	2,021571E+22	2,021524E+22	1,008800E+23	4,043095E+22	1,413110E+23
2629	5,043901E+22	5,044137E+22	2,021604E+22	2,021582E+22	1,008804E+23	4,043186E+22	1,413122E+23
2630	5,044107E+22	5,043993E+22	2,021522E+22	2,021586E+22	1,008810E+23	4,043108E+22	1,413121E+23
2631	5,043932E+22	5,043925E+22	2,021628E+22	2,021495E+22	1,008786E+23	4,043123E+22	1,413098E+23
2632	5,043993E+22	5,044139E+22	2,021531E+22	2,021559E+22	1,008813E+23	4,043090E+22	1,413122E+23
2633	5,044131E+22	5,043988E+22	2,021461E+22	2,021482E+22	1,008812E+23	4,042944E+22	1,413106E+23
2634	5,043978E+22	5,044097E+22	2,021499E+22	2,021422E+22	1,008807E+23	4,042921E+22	1,413100E+23
2635	5,044190E+22	5,044227E+22	2,021348E+22	2,021453E+22	1,008842E+23	4,042801E+22	1,413122E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2636	5,044225E+22	5,044059E+22	2,021363E+22	2,021323E+22	1,008828E+23	4,042686E+22	1,413097E+23
2637	5,044124E+22	5,044269E+22	2,021382E+22	2,021307E+22	1,008839E+23	4,042689E+22	1,413108E+23
2638	5,044341E+22	5,044257E+22	2,021271E+22	2,021349E+22	1,008860E+23	4,042620E+22	1,413122E+23
2639	5,044159E+22	5,044137E+22	2,021385E+22	2,021302E+22	1,008830E+23	4,042687E+22	1,413098E+23
2640	5,044089E+22	5,044324E+22	2,021390E+22	2,021407E+22	1,008841E+23	4,042797E+22	1,413121E+23
2641	5,044222E+22	5,044104E+22	2,021374E+22	2,021430E+22	1,008833E+23	4,042804E+22	1,413113E+23
2642	5,044028E+22	5,044013E+22	2,021518E+22	2,021427E+22	1,008804E+23	4,042945E+22	1,413099E+23
2643	5,044114E+22	5,044126E+22	2,021482E+22	2,021561E+22	1,008824E+23	4,043043E+22	1,413128E+23
2644	5,044099E+22	5,043891E+22	2,021551E+22	2,021565E+22	1,008799E+23	4,043115E+22	1,413111E+23
2645	5,043846E+22	5,044011E+22	2,021670E+22	2,021606E+22	1,008786E+23	4,043276E+22	1,413113E+23
2646	5,043983E+22	5,044015E+22	2,021611E+22	2,021724E+22	1,008800E+23	4,043335E+22	1,413133E+23
2647	5,043840E+22	5,043773E+22	2,021737E+22	2,021672E+22	1,008761E+23	4,043408E+22	1,413102E+23
2648	5,043743E+22	5,043950E+22	2,021765E+22	2,021711E+22	1,008769E+23	4,043476E+22	1,413117E+23
2649	5,043951E+22	5,043823E+22	2,021676E+22	2,021722E+22	1,008777E+23	4,043398E+22	1,413117E+23
2650	5,043799E+22	5,043744E+22	2,021738E+22	2,021644E+22	1,008754E+23	4,043382E+22	1,413092E+23
2651	5,043865E+22	5,044003E+22	2,021635E+22	2,021696E+22	1,008787E+23	4,043331E+22	1,413120E+23
2652	5,043984E+22	5,043851E+22	2,021571E+22	2,021618E+22	1,008784E+23	4,043189E+22	1,413102E+23
2653	5,043849E+22	5,043961E+22	2,021605E+22	2,021515E+22	1,008781E+23	4,043120E+22	1,413093E+23
2654	5,044095E+22	5,044096E+22	2,021469E+22	2,021546E+22	1,008819E+23	4,043015E+22	1,413121E+23
2655	5,044074E+22	5,043913E+22	2,021500E+22	2,021442E+22	1,008799E+23	4,042941E+22	1,413093E+23
2656	5,043945E+22	5,044147E+22	2,021530E+22	2,021439E+22	1,008809E+23	4,042969E+22	1,413106E+23
2657	5,044120E+22	5,044127E+22	2,021432E+22	2,021504E+22	1,008825E+23	4,042936E+22	1,413118E+23
2658	5,043971E+22	5,043935E+22	2,021525E+22	2,021470E+22	1,008791E+23	4,042995E+22	1,413090E+23
2659	5,043950E+22	5,044114E+22	2,021537E+22	2,021555E+22	1,008806E+23	4,043092E+22	1,413116E+23
2660	5,044075E+22	5,043901E+22	2,021525E+22	2,021592E+22	1,008798E+23	4,043117E+22	1,413109E+23
2661	5,043878E+22	5,043856E+22	2,021657E+22	2,021572E+22	1,008773E+23	4,043229E+22	1,413096E+23
2662	5,043961E+22	5,043999E+22	2,021630E+22	2,021722E+22	1,008796E+23	4,043352E+22	1,413131E+23
2663	5,043880E+22	5,043747E+22	2,021715E+22	2,021742E+22	1,008763E+23	4,043457E+22	1,413108E+23
2664	5,043648E+22	5,043852E+22	2,021846E+22	2,021760E+22	1,008750E+23	4,043606E+22	1,413111E+23
2665	5,043796E+22	5,043822E+22	2,021794E+22	2,021866E+22	1,008762E+23	4,043660E+22	1,413128E+23
2666	5,043701E+22	5,043546E+22	2,021880E+22	2,021817E+22	1,008725E+23	4,043696E+22	1,413094E+23
2667	5,043622E+22	5,043761E+22	2,021892E+22	2,021844E+22	1,008738E+23	4,043735E+22	1,413112E+23
2668	5,043777E+22	5,043673E+22	2,021796E+22	2,021875E+22	1,008745E+23	4,043671E+22	1,413112E+23
2669	5,043627E+22	5,043634E+22	2,021836E+22	2,021767E+22	1,008726E+23	4,043603E+22	1,413086E+23
2670	5,043737E+22	5,043880E+22	2,021747E+22	2,021807E+22	1,008762E+23	4,043554E+22	1,413117E+23
2671	5,043838E+22	5,043705E+22	2,021702E+22	2,021726E+22	1,008754E+23	4,043427E+22	1,413097E+23
2672	5,043729E+22	5,043827E+22	2,021743E+22	2,021610E+22	1,008756E+23	4,043354E+22	1,413091E+23
2673	5,043938E+22	5,043970E+22	2,021622E+22	2,021661E+22	1,008791E+23	4,043283E+22	1,413119E+23
2674	5,043909E+22	5,043758E+22	2,021624E+22	2,021597E+22	1,008767E+23	4,043221E+22	1,413089E+23
2675	5,043775E+22	5,043988E+22	2,021660E+22	2,021598E+22	1,008776E+23	4,043258E+22	1,413102E+23
2676	5,043931E+22	5,043943E+22	2,021574E+22	2,021675E+22	1,008787E+23	4,043249E+22	1,413112E+23
2677	5,043828E+22	5,043744E+22	2,021652E+22	2,021605E+22	1,008757E+23	4,043257E+22	1,413083E+23
2678	5,043850E+22	5,043934E+22	2,021675E+22	2,021690E+22	1,008778E+23	4,043365E+22	1,413115E+23
2679	5,043914E+22	5,043740E+22	2,021679E+22	2,021746E+22	1,008765E+23	4,043425E+22	1,413108E+23
2680	5,043695E+22	5,043729E+22	2,021824E+22	2,021726E+22	1,008742E+23	4,043550E+22	1,413097E+23
2681	5,043736E+22	5,043871E+22	2,021818E+22	2,021883E+22	1,008761E+23	4,043701E+22	1,413131E+23
2682	5,043685E+22	5,043545E+22	2,021879E+22	2,021909E+22	1,008723E+23	4,043789E+22	1,413102E+23
2683	5,043490E+22	5,043636E+22	2,022009E+22	2,021906E+22	1,008713E+23	4,043915E+22	1,413104E+23
2684	5,043625E+22	5,043619E+22	2,021945E+22	2,022021E+22	1,008724E+23	4,043965E+22	1,413121E+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							
2685	5,043542E+22	5,043375E+22	2,021998E+22	2,021951E+22	1,008692E+23	4,043949E+22	1,413087E+23
2686	5,043484E+22	5,043628E+22	2,022006E+22	2,021985E+22	1,008711E+23	4,043991E+22	1,413110E+23
2687	5,043596E+22	5,043544E+22	2,021919E+22	2,022020E+22	1,008714E+23	4,043939E+22	1,413108E+23
2688	5,043486E+22	5,043502E+22	2,021969E+22	2,021880E+22	1,008699E+23	4,043849E+22	1,413084E+23
2689	5,043606E+22	5,043739E+22	2,021895E+22	2,021905E+22	1,008734E+23	4,043800E+22	1,413115E+23
2690	5,043722E+22	5,043535E+22	2,021822E+22	2,021839E+22	1,008726E+23	4,043662E+22	1,413092E+23
2691	5,043601E+22	5,043680E+22	2,021868E+22	2,021732E+22	1,008728E+23	4,043601E+22	1,413088E+23
2692	5,043734E+22	5,043838E+22	2,021750E+22	2,021817E+22	1,008757E+23	4,043567E+22	1,413114E+23
2693	5,043712E+22	5,043620E+22	2,021739E+22	2,021741E+22	1,008733E+23	4,043481E+22	1,413081E+23
2694	5,043637E+22	5,043816E+22	2,021789E+22	2,021740E+22	1,008745E+23	4,043528E+22	1,413098E+23
2695	5,043780E+22	5,043749E+22	2,021721E+22	2,021820E+22	1,008753E+23	4,043542E+22	1,413107E+23
2696	5,043711E+22	5,043577E+22	2,021806E+22	2,021736E+22	1,008729E+23	4,043542E+22	1,413083E+23
2697	5,043698E+22	5,043788E+22	2,021846E+22	2,021835E+22	1,008749E+23	4,043681E+22	1,413117E+23
2698	5,043736E+22	5,043586E+22	2,021830E+22	2,021922E+22	1,008732E+23	4,043752E+22	1,413107E+23
2699	5,043513E+22	5,043565E+22	2,021986E+22	2,021896E+22	1,008708E+23	4,043882E+22	1,413096E+23
2700	5,043517E+22	5,043674E+22	2,021991E+22	2,022055E+22	1,008719E+23	4,044045E+22	1,413124E+23
2701	5,043511E+22	5,043342E+22	2,022028E+22	2,022049E+22	1,008685E+23	4,044077E+22	1,413093E+23
2702	5,043359E+22	5,043439E+22	2,022148E+22	2,022046E+22	1,008680E+23	4,044195E+22	1,413099E+23
2703	5,043436E+22	5,043450E+22	2,022088E+22	2,022175E+22	1,008689E+23	4,044263E+22	1,413115E+23
2704	5,043364E+22	5,043252E+22	2,022133E+22	2,022092E+22	1,008662E+23	4,044225E+22	1,413084E+23
2705	5,043302E+22	5,043505E+22	2,022154E+22	2,022117E+22	1,008681E+23	4,044271E+22	1,413108E+23
2706	5,043453E+22	5,043378E+22	2,022046E+22	2,022148E+22	1,008683E+23	4,044195E+22	1,413103E+23
2707	5,043384E+22	5,043336E+22	2,022098E+22	2,021988E+22	1,008672E+23	4,044087E+22	1,413081E+23
2708	5,043461E+22	5,043588E+22	2,022026E+22	2,022026E+22	1,008705E+23	4,044053E+22	1,413110E+23
2709	5,043574E+22	5,043405E+22	2,021928E+22	2,021958E+22	1,008698E+23	4,043887E+22	1,413087E+23
2710	5,043457E+22	5,043556E+22	2,021977E+22	2,021873E+22	1,008701E+23	4,043849E+22	1,413086E+23
2711	5,043541E+22	5,043691E+22	2,021879E+22	2,021970E+22	1,008723E+23	4,043849E+22	1,413108E+23
2712	5,043571E+22	5,043451E+22	2,021880E+22	2,021870E+22	1,008702E+23	4,043750E+22	1,413077E+23
2713	5,043519E+22	5,043642E+22	2,021946E+22	2,021861E+22	1,008716E+23	4,043807E+22	1,413097E+23
2714	5,043668E+22	5,043559E+22	2,021858E+22	2,021961E+22	1,008723E+23	4,043818E+22	1,413105E+23
2715	5,043573E+22	5,043420E+22	2,021954E+22	2,021885E+22	1,008699E+23	4,043839E+22	1,413083E+23
2716	5,043475E+22	5,043655E+22	2,022005E+22	2,022006E+22	1,008713E+23	4,044011E+22	1,413114E+23
2717	5,043515E+22	5,043431E+22	2,021980E+22	2,022079E+22	1,008695E+23	4,044060E+22	1,413101E+23
2718	5,043338E+22	5,043378E+22	2,022148E+22	2,022051E+22	1,008672E+23	4,044198E+22	1,413091E+23
2719	5,043316E+22	5,043469E+22	2,022161E+22	2,022212E+22	1,008679E+23	4,044374E+22	1,413116E+23
2720	5,043347E+22	5,043156E+22	2,022191E+22	2,022195E+22	1,008650E+23	4,044387E+22	1,413089E+23
2721	5,043189E+22	5,043277E+22	2,022309E+22	2,022200E+22	1,008647E+23	4,044509E+22	1,413098E+23
2722	5,043266E+22	5,043281E+22	2,022217E+22	2,022345E+22	1,008655E+23	4,044562E+22	1,413111E+23
2723	5,043224E+22	5,043093E+22	2,022265E+22	2,022238E+22	1,008632E+23	4,044504E+22	1,413082E+23
2724	5,043150E+22	5,043338E+22	2,022290E+22	2,022248E+22	1,008649E+23	4,044538E+22	1,413103E+23
2725	5,043339E+22	5,043222E+22	2,022159E+22	2,022246E+22	1,008656E+23	4,044404E+22	1,413097E+23
2726	5,043287E+22	5,043200E+22	2,022209E+22	2,022093E+22	1,008649E+23	4,044302E+22	1,413079E+23
2727	5,043274E+22	5,043466E+22	2,022152E+22	2,022154E+22	1,008674E+23	4,044306E+22	1,413105E+23
2728	5,043389E+22	5,043301E+22	2,022057E+22	2,022087E+22	1,008669E+23	4,044144E+22	1,413083E+23
2729	5,043283E+22	5,043413E+22	2,022121E+22	2,022005E+22	1,008670E+23	4,044125E+22	1,413082E+23
2730	5,043400E+22	5,043494E+22	2,022011E+22	2,022110E+22	1,008689E+23	4,044121E+22	1,413101E+23
2731	5,043476E+22	5,043265E+22	2,022014E+22	2,021997E+22	1,008674E+23	4,044011E+22	1,413075E+23
2732	5,043374E+22	5,043473E+22	2,022086E+22	2,022003E+22	1,008685E+23	4,044089E+22	1,413094E+23
2733	5,043509E+22	5,043425E+22	2,021985E+22	2,022103E+22	1,008693E+23	4,044088E+22	1,413102E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2734	5,043406E+22	5,043295E+22	2,022092E+22	2,022048E+22	1,008670E+23	4,044139E+22	1,413084E+23
2735	5,043241E+22	5,043494E+22	2,022175E+22	2,022176E+22	1,008674E+23	4,044351E+22	1,413109E+23
2736	5,043329E+22	5,043247E+22	2,022158E+22	2,022227E+22	1,008658E+23	4,044385E+22	1,413096E+23
2737	5,043174E+22	5,043173E+22	2,022329E+22	2,022197E+22	1,008635E+23	4,044526E+22	1,413087E+23
2738	5,043155E+22	5,043249E+22	2,022314E+22	2,022377E+22	1,008640E+23	4,044691E+22	1,413110E+23
2739	5,043191E+22	5,042976E+22	2,022337E+22	2,022359E+22	1,008617E+23	4,044696E+22	1,413086E+23
2740	5,042987E+22	5,043126E+22	2,022450E+22	2,022367E+22	1,008611E+23	4,044817E+22	1,413093E+23
2741	5,043103E+22	5,043128E+22	2,022341E+22	2,022479E+22	1,008623E+23	4,044820E+22	1,413105E+23
2742	5,043112E+22	5,042944E+22	2,022390E+22	2,022355E+22	1,008606E+23	4,044745E+22	1,413080E+23
2743	5,043000E+22	5,043191E+22	2,022427E+22	2,022358E+22	1,008619E+23	4,044786E+22	1,413098E+23
2744	5,043200E+22	5,043098E+22	2,022295E+22	2,022348E+22	1,008630E+23	4,044643E+22	1,413094E+23
2745	5,043124E+22	5,043089E+22	2,022347E+22	2,022219E+22	1,008621E+23	4,044566E+22	1,413078E+23
2746	5,043092E+22	5,043317E+22	2,022268E+22	2,022305E+22	1,008641E+23	4,044574E+22	1,413098E+23
2747	5,043241E+22	5,043127E+22	2,022185E+22	2,022229E+22	1,008637E+23	4,044414E+22	1,413078E+23
2748	5,043140E+22	5,043227E+22	2,022250E+22	2,022138E+22	1,008637E+23	4,044388E+22	1,413076E+23
2749	5,043300E+22	5,043311E+22	2,022121E+22	2,022223E+22	1,008661E+23	4,044344E+22	1,413096E+23
2750	5,043379E+22	5,043127E+22	2,022129E+22	2,022122E+22	1,008651E+23	4,044251E+22	1,413076E+23
2751	5,043179E+22	5,043356E+22	2,022227E+22	2,022149E+22	1,008654E+23	4,044377E+22	1,413091E+23
2752	5,043299E+22	5,043315E+22	2,022144E+22	2,022248E+22	1,008661E+23	4,044392E+22	1,413101E+23
2753	5,043199E+22	5,043142E+22	2,022275E+22	2,022203E+22	1,008634E+23	4,044478E+22	1,413082E+23
2754	5,043051E+22	5,043270E+22	2,022347E+22	2,022341E+22	1,008632E+23	4,044688E+22	1,413101E+23
2755	5,043183E+22	5,043021E+22	2,022330E+22	2,022388E+22	1,008620E+23	4,044718E+22	1,413092E+23
2756	5,043000E+22	5,042966E+22	2,022487E+22	2,022368E+22	1,008597E+23	4,044855E+22	1,413082E+23
2757	5,042993E+22	5,043075E+22	2,022443E+22	2,022540E+22	1,008607E+23	4,044982E+22	1,413105E+23
2758	5,043045E+22	5,042842E+22	2,022460E+22	2,022519E+22	1,008589E+23	4,044978E+22	1,413086E+23
2759	5,042804E+22	5,042976E+22	2,022595E+22	2,022513E+22	1,008578E+23	4,045108E+22	1,413089E+23
2760	5,042965E+22	5,042989E+22	2,022493E+22	2,022586E+22	1,008595E+23	4,045079E+22	1,413103E+23
2761	5,042984E+22	5,042805E+22	2,022541E+22	2,022461E+22	1,008579E+23	4,045002E+22	1,413079E+23
2762	5,042835E+22	5,043031E+22	2,022560E+22	2,022486E+22	1,008587E+23	4,045045E+22	1,413091E+23
2763	5,043029E+22	5,042962E+22	2,022423E+22	2,022484E+22	1,008599E+23	4,044907E+22	1,413090E+23
2764	5,042914E+22	5,042940E+22	2,022470E+22	2,022365E+22	1,008585E+23	4,044835E+22	1,413069E+23
2765	5,042942E+22	5,043140E+22	2,022376E+22	2,022431E+22	1,008608E+23	4,044807E+22	1,413089E+23
2766	5,043150E+22	5,042965E+22	2,022290E+22	2,022346E+22	1,008612E+23	4,044635E+22	1,413075E+23
2767	5,043014E+22	5,043073E+22	2,022372E+22	2,022258E+22	1,008609E+23	4,044630E+22	1,413072E+23
2768	5,043175E+22	5,043196E+22	2,022256E+22	2,022335E+22	1,008637E+23	4,044591E+22	1,413096E+23
2769	5,043216E+22	5,043026E+22	2,022277E+22	2,022263E+22	1,008624E+23	4,044540E+22	1,413078E+23
2770	5,042976E+22	5,043203E+22	2,022379E+22	2,022314E+22	1,008618E+23	4,044694E+22	1,413087E+23
2771	5,043122E+22	5,043124E+22	2,022316E+22	2,022409E+22	1,008625E+23	4,044725E+22	1,413097E+23
2772	5,043016E+22	5,042925E+22	2,022448E+22	2,022364E+22	1,008594E+23	4,044811E+22	1,413075E+23
2773	5,042910E+22	5,043044E+22	2,022492E+22	2,022492E+22	1,008595E+23	4,044984E+22	1,413094E+23
2774	5,043043E+22	5,042845E+22	2,022466E+22	2,022550E+22	1,008589E+23	4,045015E+22	1,413090E+23
2775	5,042794E+22	5,042821E+22	2,022631E+22	2,022539E+22	1,008561E+23	4,045170E+22	1,413078E+23
2776	5,042802E+22	5,042944E+22	2,022597E+22	2,022686E+22	1,008575E+23	4,045283E+22	1,413103E+23
2777	5,042872E+22	5,042707E+22	2,022627E+22	2,022657E+22	1,008558E+23	4,045284E+22	1,413086E+23
2778	5,042644E+22	5,042796E+22	2,022747E+22	2,022645E+22	1,008544E+23	4,045392E+22	1,413083E+23
2779	5,042827E+22	5,042810E+22	2,022647E+22	2,022712E+22	1,008564E+23	4,045359E+22	1,413100E+23
2780	5,042802E+22	5,042649E+22	2,022682E+22	2,022600E+22	1,008545E+23	4,045282E+22	1,413073E+23
2781	5,042666E+22	5,042874E+22	2,022664E+22	2,022626E+22	1,008554E+23	4,045291E+22	1,413083E+23
2782	5,042879E+22	5,042824E+22	2,022522E+22	2,022626E+22	1,008570E+23	4,045148E+22	1,413085E+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							
2783	5,042760E+22	5,042777E+22	2,022584E+22	2,022495E+22	1,008554E+23	4,045079E+22	1,413062E+23
2784	5,042844E+22	5,042985E+22	2,022499E+22	2,022526E+22	1,008583E+23	4,045024E+22	1,413085E+23
2785	5,043058E+22	5,042841E+22	2,022419E+22	2,022449E+22	1,008590E+23	4,044868E+22	1,413077E+23
2786	5,042870E+22	5,042936E+22	2,022499E+22	2,022386E+22	1,008581E+23	4,044886E+22	1,413069E+23
2787	5,043004E+22	5,043073E+22	2,022405E+22	2,022477E+22	1,008608E+23	4,044882E+22	1,413096E+23
2788	5,042995E+22	5,042884E+22	2,022437E+22	2,022422E+22	1,008588E+23	4,044858E+22	1,413074E+23
2789	5,042796E+22	5,043003E+22	2,022529E+22	2,022466E+22	1,008580E+23	4,044995E+22	1,413079E+23
2790	5,042979E+22	5,042933E+22	2,022463E+22	2,022561E+22	1,008591E+23	4,045024E+22	1,413094E+23
2791	5,042843E+22	5,042725E+22	2,022603E+22	2,022526E+22	1,008557E+23	4,045129E+22	1,413070E+23
2792	5,042749E+22	5,042884E+22	2,022648E+22	2,022644E+22	1,008563E+23	4,045293E+22	1,413093E+23
2793	5,042868E+22	5,042719E+22	2,022620E+22	2,022719E+22	1,008559E+23	4,045338E+22	1,413092E+23
2794	5,042595E+22	5,042649E+22	2,022784E+22	2,022712E+22	1,008524E+23	4,045496E+22	1,413074E+23
2795	5,042647E+22	5,042759E+22	2,022767E+22	2,022832E+22	1,008541E+23	4,045600E+22	1,413101E+23
2796	5,042707E+22	5,042521E+22	2,022789E+22	2,022790E+22	1,008523E+23	4,045579E+22	1,413081E+23
2797	5,042507E+22	5,042606E+22	2,022878E+22	2,022769E+22	1,008511E+23	4,045647E+22	1,413076E+23
2798	5,042676E+22	5,042672E+22	2,022762E+22	2,022843E+22	1,008535E+23	4,045605E+22	1,413095E+23
2799	5,042591E+22	5,042516E+22	2,022800E+22	2,022745E+22	1,008511E+23	4,045545E+22	1,413065E+23
2800	5,042493E+22	5,042738E+22	2,022788E+22	2,022746E+22	1,008523E+23	4,045534E+22	1,413077E+23
2801	5,042747E+22	5,042684E+22	2,022651E+22	2,022742E+22	1,008543E+23	4,045393E+22	1,413082E+23
2802	5,042646E+22	5,042604E+22	2,022704E+22	2,022611E+22	1,008525E+23	4,045315E+22	1,413056E+23
2803	5,042754E+22	5,042829E+22	2,022633E+22	2,022638E+22	1,008558E+23	4,045271E+22	1,413085E+23
2804	5,042901E+22	5,042723E+22	2,022554E+22	2,022579E+22	1,008562E+23	4,045133E+22	1,413076E+23
2805	5,042709E+22	5,042803E+22	2,022618E+22	2,022531E+22	1,008551E+23	4,045149E+22	1,413066E+23
2806	5,042831E+22	5,042936E+22	2,022536E+22	2,022628E+22	1,008577E+23	4,045165E+22	1,413093E+23
2807	5,042805E+22	5,042703E+22	2,022591E+22	2,022578E+22	1,008551E+23	4,045169E+22	1,413068E+23
2808	5,042652E+22	5,042806E+22	2,022687E+22	2,022600E+22	1,008546E+23	4,045288E+22	1,413075E+23
2809	5,042831E+22	5,042763E+22	2,022622E+22	2,022714E+22	1,008559E+23	4,045336E+22	1,413093E+23
2810	5,042658E+22	5,042546E+22	2,022750E+22	2,022697E+22	1,008520E+23	4,045447E+22	1,413065E+23
2811	5,042564E+22	5,042712E+22	2,022811E+22	2,022815E+22	1,008528E+23	4,045625E+22	1,413090E+23
2812	5,042653E+22	5,042556E+22	2,022790E+22	2,022882E+22	1,008521E+23	4,045672E+22	1,413088E+23
2813	5,042441E+22	5,042450E+22	2,022934E+22	2,022858E+22	1,008489E+23	4,045791E+22	1,413068E+23
2814	5,042512E+22	5,042586E+22	2,022913E+22	2,022964E+22	1,008510E+23	4,045877E+22	1,413097E+23
2815	5,042535E+22	5,042355E+22	2,022936E+22	2,022930E+22	1,008489E+23	4,045865E+22	1,413076E+23
2816	5,042337E+22	5,042466E+22	2,023013E+22	2,022898E+22	1,008480E+23	4,045911E+22	1,413071E+23
2817	5,042493E+22	5,042560E+22	2,022890E+22	2,022989E+22	1,008505E+23	4,045879E+22	1,413093E+23
2818	5,042412E+22	5,042348E+22	2,022922E+22	2,022891E+22	1,008476E+23	4,045814E+22	1,413057E+23
2819	5,042384E+22	5,042551E+22	2,022925E+22	2,022867E+22	1,008493E+23	4,045792E+22	1,413073E+23
2820	5,042633E+22	5,042524E+22	2,022781E+22	2,022851E+22	1,008516E+23	4,045633E+22	1,413079E+23
2821	5,042554E+22	5,042449E+22	2,022808E+22	2,022723E+22	1,008500E+23	4,045531E+22	1,413053E+23
2822	5,042623E+22	5,042730E+22	2,022740E+22	2,022759E+22	1,008535E+23	4,045499E+22	1,413085E+23
2823	5,042697E+22	5,042613E+22	2,022681E+22	2,022722E+22	1,008531E+23	4,045404E+22	1,413071E+23
2824	5,042522E+22	5,042666E+22	2,022765E+22	2,022661E+22	1,008519E+23	4,045426E+22	1,413061E+23
2825	5,042664E+22	5,042783E+22	2,022691E+22	2,022767E+22	1,008545E+23	4,045458E+22	1,413091E+23
2826	5,042638E+22	5,042490E+22	2,022745E+22	2,022732E+22	1,008513E+23	4,045477E+22	1,413060E+23
2827	5,042519E+22	5,042596E+22	2,022852E+22	2,022756E+22	1,008512E+23	4,045608E+22	1,413072E+23
2828	5,042646E+22	5,042593E+22	2,022780E+22	2,022882E+22	1,008524E+23	4,045662E+22	1,413090E+23
2829	5,042491E+22	5,042370E+22	2,022884E+22	2,022871E+22	1,008486E+23	4,045754E+22	1,413062E+23
2830	5,042405E+22	5,042551E+22	2,022954E+22	2,022972E+22	1,008496E+23	4,045926E+22	1,413088E+23
2831	5,042477E+22	5,042377E+22	2,022952E+22	2,023030E+22	1,008485E+23	4,045982E+22	1,413084E+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							
2832	5,042296E+22	5,042281E+22	2,023095E+22	2,022978E+22	1,008458E+23	4,046073E+22	1,413065E+23
2833	5,042344E+22	5,042450E+22	2,023067E+22	2,023101E+22	1,008479E+23	4,046167E+22	1,413096E+23
2834	5,042321E+22	5,042199E+22	2,023079E+22	2,023088E+22	1,008452E+23	4,046166E+22	1,413069E+23
2835	5,042150E+22	5,042297E+22	2,023160E+22	2,023050E+22	1,008445E+23	4,046211E+22	1,413066E+23
2836	5,042302E+22	5,042395E+22	2,023033E+22	2,023128E+22	1,008470E+23	4,046161E+22	1,413086E+23
2837	5,042305E+22	5,042159E+22	2,023032E+22	2,023015E+22	1,008446E+23	4,046047E+22	1,413051E+23
2838	5,042305E+22	5,042399E+22	2,023030E+22	2,022975E+22	1,008470E+23	4,046005E+22	1,413071E+23
2839	5,042507E+22	5,042402E+22	2,022898E+22	2,022969E+22	1,008491E+23	4,045867E+22	1,413078E+23
2840	5,042416E+22	5,042353E+22	2,022924E+22	2,022836E+22	1,008477E+23	4,045760E+22	1,413053E+23
2841	5,042443E+22	5,042642E+22	2,022868E+22	2,022894E+22	1,008508E+23	4,045761E+22	1,413085E+23
2842	5,042503E+22	5,042448E+22	2,022823E+22	2,022868E+22	1,008495E+23	4,045691E+22	1,413064E+23
2843	5,042386E+22	5,042448E+22	2,022926E+22	2,022796E+22	1,008483E+23	4,045722E+22	1,413056E+23
2844	5,042509E+22	5,042584E+22	2,022851E+22	2,022904E+22	1,008509E+23	4,045755E+22	1,413085E+23
2845	5,042509E+22	5,042292E+22	2,022872E+22	2,022886E+22	1,008480E+23	4,045758E+22	1,413056E+23
2846	5,042362E+22	5,042448E+22	2,022979E+22	2,022916E+22	1,008481E+23	4,045895E+22	1,413070E+23
2847	5,042437E+22	5,042448E+22	2,022929E+22	2,023051E+22	1,008488E+23	4,045980E+22	1,413086E+23
2848	5,042311E+22	5,042217E+22	2,023045E+22	2,023013E+22	1,008453E+23	4,046058E+22	1,413059E+23
2849	5,042239E+22	5,042405E+22	2,023123E+22	2,023113E+22	1,008464E+23	4,046236E+22	1,413088E+23
2850	5,042295E+22	5,042188E+22	2,023123E+22	2,023181E+22	1,008448E+23	4,046304E+22	1,413079E+23
2851	5,042133E+22	5,042091E+22	2,023268E+22	2,023133E+22	1,008422E+23	4,046401E+22	1,413063E+23
2852	5,042128E+22	5,042297E+22	2,023223E+22	2,023261E+22	1,008442E+23	4,046485E+22	1,413091E+23
2853	5,042144E+22	5,042017E+22	2,023198E+22	2,023255E+22	1,008416E+23	4,046453E+22	1,413061E+23
2854	5,042020E+22	5,042123E+22	2,023274E+22	2,023190E+22	1,008414E+23	4,046465E+22	1,413061E+23
2855	5,042183E+22	5,042214E+22	2,023156E+22	2,023249E+22	1,008440E+23	4,046405E+22	1,413080E+23
2856	5,042218E+22	5,042023E+22	2,023145E+22	2,023106E+22	1,008424E+23	4,046251E+22	1,413049E+23
2857	5,042190E+22	5,042317E+22	2,023140E+22	2,023077E+22	1,008451E+23	4,046217E+22	1,413072E+23
2858	5,042317E+22	5,042292E+22	2,023020E+22	2,023094E+22	1,008461E+23	4,046113E+22	1,413072E+23
2859	5,042238E+22	5,042215E+22	2,023069E+22	2,022966E+22	1,008445E+23	4,046035E+22	1,413049E+23
2860	5,042241E+22	5,042483E+22	2,023023E+22	2,023021E+22	1,008472E+23	4,046044E+22	1,413077E+23
2861	5,042367E+22	5,042240E+22	2,022954E+22	2,023008E+22	1,008461E+23	4,045962E+22	1,413057E+23
2862	5,042277E+22	5,042259E+22	2,023051E+22	2,022935E+22	1,008454E+23	4,045986E+22	1,413052E+23
2863	5,042355E+22	5,042411E+22	2,022987E+22	2,023061E+22	1,008477E+23	4,046048E+22	1,413081E+23
2864	5,042347E+22	5,042165E+22	2,023004E+22	2,023037E+22	1,008451E+23	4,046040E+22	1,413055E+23
2865	5,042183E+22	5,042335E+22	2,023122E+22	2,023078E+22	1,008452E+23	4,046199E+22	1,413072E+23
2866	5,042240E+22	5,042271E+22	2,023100E+22	2,023213E+22	1,008451E+23	4,046313E+22	1,413082E+23
2867	5,042165E+22	5,042011E+22	2,023234E+22	2,023161E+22	1,008418E+23	4,046395E+22	1,413057E+23
2868	5,042051E+22	5,042222E+22	2,023307E+22	2,023258E+22	1,008427E+23	4,046565E+22	1,413084E+23
2869	5,042124E+22	5,041997E+22	2,023268E+22	2,023348E+22	1,008412E+23	4,046617E+22	1,413074E+23
2870	5,041948E+22	5,041924E+22	2,023399E+22	2,023298E+22	1,008387E+23	4,046698E+22	1,413057E+23
2871	5,041921E+22	5,042125E+22	2,023362E+22	2,023423E+22	1,008405E+23	4,046785E+22	1,413083E+23
2872	5,041999E+22	5,041855E+22	2,023323E+22	2,023377E+22	1,008385E+23	4,046700E+22	1,413055E+23
2873	5,041910E+22	5,041985E+22	2,023393E+22	2,023302E+22	1,008390E+23	4,046696E+22	1,413059E+23
2874	5,042058E+22	5,042065E+22	2,023284E+22	2,023360E+22	1,008412E+23	4,046644E+22	1,413077E+23
2875	5,042100E+22	5,041892E+22	2,023280E+22	2,023218E+22	1,008399E+23	4,046497E+22	1,413049E+23
2876	5,041999E+22	5,042219E+22	2,023275E+22	2,023196E+22	1,008422E+23	4,046471E+22	1,413069E+23
2877	5,042148E+22	5,042145E+22	2,023134E+22	2,023234E+22	1,008429E+23	4,046368E+22	1,413066E+23
2878	5,042096E+22	5,042042E+22	2,023191E+22	2,023098E+22	1,008414E+23	4,046289E+22	1,413043E+23
2879	5,042097E+22	5,042288E+22	2,023158E+22	2,023154E+22	1,008439E+23	4,046312E+22	1,413070E+23
2880	5,042247E+22	5,042077E+22	2,023078E+22	2,023131E+22	1,008432E+23	4,046208E+22	1,413053E+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							
2881	5,042137E+22	5,042143E+22	2,023171E+22	2,023079E+22	1,008428E+23	4,046250E+22	1,413053E+23
2882	5,042157E+22	5,042269E+22	2,023131E+22	2,023222E+22	1,008443E+23	4,046353E+22	1,413078E+23
2883	5,042170E+22	5,042008E+22	2,023173E+22	2,023192E+22	1,008418E+23	4,046365E+22	1,413054E+23
2884	5,041985E+22	5,042172E+22	2,023305E+22	2,023221E+22	1,008416E+23	4,046526E+22	1,413068E+23
2885	5,042089E+22	5,042062E+22	2,023264E+22	2,023370E+22	1,008415E+23	4,046634E+22	1,413078E+23
2886	5,042021E+22	5,041821E+22	2,023393E+22	2,023319E+22	1,008384E+23	4,046712E+22	1,413055E+23
2887	5,041856E+22	5,042036E+22	2,023464E+22	2,023429E+22	1,008389E+23	4,046893E+22	1,413079E+23
2888	5,041927E+22	5,041846E+22	2,023404E+22	2,023509E+22	1,008377E+23	4,046913E+22	1,413069E+23
2889	5,041775E+22	5,041783E+22	2,023523E+22	2,023453E+22	1,008356E+23	4,046976E+22	1,413054E+23
2890	5,041759E+22	5,041925E+22	2,023505E+22	2,023560E+22	1,008368E+23	4,047065E+22	1,413075E+23
2891	5,041899E+22	5,041677E+22	2,023471E+22	2,023487E+22	1,008358E+23	4,046959E+22	1,413053E+23
2892	5,041775E+22	5,041858E+22	2,023533E+22	2,023403E+22	1,008363E+23	4,046936E+22	1,413057E+23
2893	5,041916E+22	5,041934E+22	2,023398E+22	2,023486E+22	1,008385E+23	4,046884E+22	1,413073E+23
2894	5,041931E+22	5,041781E+22	2,023392E+22	2,023348E+22	1,008371E+23	4,046740E+22	1,413045E+23
2895	5,041795E+22	5,042070E+22	2,023404E+22	2,023331E+22	1,008387E+23	4,046735E+22	1,413060E+23
2896	5,041988E+22	5,041992E+22	2,023257E+22	2,023350E+22	1,008398E+23	4,046607E+22	1,413059E+23
2897	5,041977E+22	5,041892E+22	2,023307E+22	2,023223E+22	1,008387E+23	4,046530E+22	1,413040E+23
2898	5,041959E+22	5,042106E+22	2,023295E+22	2,023292E+22	1,008407E+23	4,046587E+22	1,413065E+23
2899	5,042119E+22	5,041926E+22	2,023221E+22	2,023276E+22	1,008405E+23	4,046497E+22	1,413054E+23
2900	5,041951E+22	5,042023E+22	2,023319E+22	2,023229E+22	1,008397E+23	4,046547E+22	1,413052E+23
2901	5,041997E+22	5,042097E+22	2,023273E+22	2,023386E+22	1,008409E+23	4,046660E+22	1,413075E+23
2902	5,042031E+22	5,041818E+22	2,023330E+22	2,023342E+22	1,008385E+23	4,046672E+22	1,413052E+23
2903	5,041823E+22	5,041971E+22	2,023476E+22	2,023370E+22	1,008379E+23	4,046847E+22	1,413064E+23
2904	5,041923E+22	5,041897E+22	2,023416E+22	2,023512E+22	1,008382E+23	4,046928E+22	1,413075E+23
2905	5,041827E+22	5,041683E+22	2,023534E+22	2,023483E+22	1,008351E+23	4,047017E+22	1,413053E+23
2906	5,041622E+22	5,041859E+22	2,023622E+22	2,023600E+22	1,008348E+23	4,047221E+22	1,413070E+23
2907	5,041743E+22	5,041660E+22	2,023567E+22	2,023661E+22	1,008340E+23	4,047229E+22	1,413063E+23
2908	5,041605E+22	5,041615E+22	2,023681E+22	2,023582E+22	1,008322E+23	4,047263E+22	1,413048E+23
2909	5,041650E+22	5,041735E+22	2,023637E+22	2,023692E+22	1,008338E+23	4,047328E+22	1,413071E+23
2910	5,041790E+22	5,041532E+22	2,023596E+22	2,023610E+22	1,008332E+23	4,047205E+22	1,413053E+23
2911	5,041609E+22	5,041734E+22	2,023658E+22	2,023535E+22	1,008334E+23	4,047193E+22	1,413054E+23
2912	5,041734E+22	5,041833E+22	2,023507E+22	2,023610E+22	1,008357E+23	4,047118E+22	1,413069E+23
2913	5,041767E+22	5,041664E+22	2,023502E+22	2,023478E+22	1,008343E+23	4,046980E+22	1,413041E+23
2914	5,041641E+22	5,041875E+22	2,023540E+22	2,023457E+22	1,008352E+23	4,046997E+22	1,413051E+23
2915	5,041884E+22	5,041808E+22	2,023398E+22	2,023466E+22	1,008369E+23	4,046864E+22	1,413056E+23
2916	5,041845E+22	5,041755E+22	2,023440E+22	2,023342E+22	1,008360E+23	4,046781E+22	1,413038E+23
2917	5,041826E+22	5,041948E+22	2,023413E+22	2,023442E+22	1,008377E+23	4,046855E+22	1,413063E+23
2918	5,041964E+22	5,041796E+22	2,023349E+22	2,023425E+22	1,008376E+23	4,046775E+22	1,413054E+23
2919	5,041767E+22	5,041862E+22	2,023470E+22	2,023378E+22	1,008363E+23	4,046848E+22	1,413048E+23
2920	5,041829E+22	5,041934E+22	2,023427E+22	2,023517E+22	1,008376E+23	4,046945E+22	1,413071E+23
2921	5,041881E+22	5,041667E+22	2,023481E+22	2,023486E+22	1,008355E+23	4,046968E+22	1,413051E+23
2922	5,041628E+22	5,041770E+22	2,023649E+22	2,023533E+22	1,008340E+23	4,047182E+22	1,413058E+23
2923	5,041725E+22	5,041727E+22	2,023588E+22	2,023681E+22	1,008345E+23	4,047270E+22	1,413072E+23
2924	5,041601E+22	5,041531E+22	2,023695E+22	2,023652E+22	1,008313E+23	4,047347E+22	1,413048E+23
2925	5,041452E+22	5,041640E+22	2,023768E+22	2,023774E+22	1,008309E+23	4,047542E+22	1,413063E+23
2926	5,041622E+22	5,041458E+22	2,023712E+22	2,023804E+22	1,008308E+23	4,047516E+22	1,413060E+23
2927	5,041478E+22	5,041432E+22	2,023822E+22	2,023713E+22	1,008291E+23	4,047535E+22	1,413044E+23
2928	5,041514E+22	5,041610E+22	2,023758E+22	2,023807E+22	1,008312E+23	4,047565E+22	1,413069E+23
2929	5,041627E+22	5,041449E+22	2,023705E+22	2,023737E+22	1,008308E+23	4,047442E+22	1,413052E+23

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2930	5,041400E+22	5,041595E+22	2,023793E+22	2,023669E+22	1,008299E+23	4,047462E+22	1,413046E+23
2931	5,041562E+22	5,041681E+22	2,023651E+22	2,023729E+22	1,008324E+23	4,047380E+22	1,413062E+23
2932	5,041611E+22	5,041509E+22	2,023642E+22	2,023591E+22	1,008312E+23	4,047232E+22	1,413035E+23
2933	5,041544E+22	5,041673E+22	2,023660E+22	2,023590E+22	1,008322E+23	4,047250E+22	1,413047E+23
2934	5,041790E+22	5,041645E+22	2,023515E+22	2,023598E+22	1,008343E+23	4,047114E+22	1,413055E+23
2935	5,041696E+22	5,041621E+22	2,023559E+22	2,023488E+22	1,008332E+23	4,047046E+22	1,413036E+23
2936	5,041664E+22	5,041838E+22	2,023526E+22	2,023576E+22	1,008350E+23	4,047103E+22	1,413060E+23
2937	5,041806E+22	5,041671E+22	2,023478E+22	2,023562E+22	1,008348E+23	4,047040E+22	1,413052E+23
2938	5,041596E+22	5,041667E+22	2,023641E+22	2,023515E+22	1,008326E+23	4,047157E+22	1,413042E+23
2939	5,041671E+22	5,041754E+22	2,023606E+22	2,023653E+22	1,008342E+23	4,047259E+22	1,413068E+23
2940	5,041678E+22	5,041515E+22	2,023655E+22	2,023641E+22	1,008319E+23	4,047296E+22	1,413049E+23
2941	5,041429E+22	5,041570E+22	2,023802E+22	2,023721E+22	1,008300E+23	4,047523E+22	1,413052E+23
2942	5,041529E+22	5,041535E+22	2,023741E+22	2,023860E+22	1,008306E+23	4,047602E+22	1,413067E+23
2943	5,041414E+22	5,041328E+22	2,023849E+22	2,023817E+22	1,008274E+23	4,047666E+22	1,413041E+23
2944	5,041316E+22	5,041459E+22	2,023904E+22	2,023907E+22	1,008277E+23	4,047811E+22	1,413059E+23
2945	5,041508E+22	5,041322E+22	2,023840E+22	2,023933E+22	1,008283E+23	4,047774E+22	1,413060E+23
2946	5,041324E+22	5,041280E+22	2,023969E+22	2,023847E+22	1,008260E+23	4,047816E+22	1,413042E+23
2947	5,041340E+22	5,041498E+22	2,023902E+22	2,023935E+22	1,008284E+23	4,047838E+22	1,413068E+23
2948	5,041425E+22	5,041344E+22	2,023844E+22	2,023867E+22	1,008277E+23	4,047711E+22	1,413048E+23
2949	5,041251E+22	5,041390E+22	2,023921E+22	2,023810E+22	1,008264E+23	4,047730E+22	1,413037E+23
2950	5,041454E+22	5,041487E+22	2,023778E+22	2,023849E+22	1,008294E+23	4,047627E+22	1,413057E+23
2951	5,041498E+22	5,041335E+22	2,023757E+22	2,023712E+22	1,008283E+23	4,047470E+22	1,413030E+23
2952	5,041422E+22	5,041542E+22	2,023758E+22	2,023708E+22	1,008296E+23	4,047466E+22	1,413043E+23
2953	5,041643E+22	5,041562E+22	2,023614E+22	2,023728E+22	1,008320E+23	4,047342E+22	1,413055E+23
2954	5,041507E+22	5,041481E+22	2,023697E+22	2,023624E+22	1,008299E+23	4,047321E+22	1,413031E+23
2955	5,041492E+22	5,041693E+22	2,023688E+22	2,023698E+22	1,008318E+23	4,047386E+22	1,413057E+23
2956	5,041633E+22	5,041525E+22	2,023648E+22	2,023691E+22	1,008316E+23	4,047338E+22	1,413050E+23
2957	5,041447E+22	5,041448E+22	2,023804E+22	2,023680E+22	1,008290E+23	4,047483E+22	1,413038E+23
2958	5,041504E+22	5,041563E+22	2,023766E+22	2,023824E+22	1,008307E+23	4,047591E+22	1,413066E+23
2959	5,041469E+22	5,041334E+22	2,023807E+22	2,023830E+22	1,008280E+23	4,047636E+22	1,413044E+23
2960	5,041243E+22	5,041390E+22	2,023936E+22	2,023894E+22	1,008263E+23	4,047830E+22	1,413046E+23
2961	5,041384E+22	5,041359E+22	2,023878E+22	2,024015E+22	1,008274E+23	4,047893E+22	1,413064E+23
2962	5,041277E+22	5,041124E+22	2,024010E+22	2,023955E+22	1,008240E+23	4,047965E+22	1,413037E+23
2963	5,041190E+22	5,041311E+22	2,024063E+22	2,024026E+22	1,008250E+23	4,048089E+22	1,413059E+23
2964	5,041329E+22	5,041222E+22	2,023996E+22	2,024061E+22	1,008255E+23	4,048056E+22	1,413061E+23
2965	5,041136E+22	5,041130E+22	2,024109E+22	2,024002E+22	1,008227E+23	4,048111E+22	1,413038E+23
2966	5,041151E+22	5,041338E+22	2,024042E+22	2,024075E+22	1,008249E+23	4,048116E+22	1,413061E+23
2967	5,041243E+22	5,041162E+22	2,023980E+22	2,024002E+22	1,008241E+23	4,047981E+22	1,413039E+23
2968	5,041130E+22	5,041214E+22	2,024026E+22	2,023924E+22	1,008234E+23	4,047950E+22	1,413029E+23
2969	5,041356E+22	5,041344E+22	2,023875E+22	2,023964E+22	1,008270E+23	4,047839E+22	1,413054E+23
2970	5,041364E+22	5,041194E+22	2,023876E+22	2,023838E+22	1,008256E+23	4,047714E+22	1,413027E+23
2971	5,041274E+22	5,041448E+22	2,023879E+22	2,023829E+22	1,008272E+23	4,047707E+22	1,413043E+23
2972	5,041465E+22	5,041467E+22	2,023752E+22	2,023853E+22	1,008293E+23	4,047605E+22	1,413054E+23
2973	5,041367E+22	5,041287E+22	2,023843E+22	2,023767E+22	1,008265E+23	4,047610E+22	1,413026E+23
2974	5,041361E+22	5,041496E+22	2,023846E+22	2,023829E+22	1,008286E+23	4,047675E+22	1,413053E+23
2975	5,041468E+22	5,041342E+22	2,023803E+22	2,023843E+22	1,008281E+23	4,047646E+22	1,413046E+23
2976	5,041272E+22	5,041279E+22	2,023936E+22	2,023841E+22	1,008255E+23	4,047777E+22	1,413033E+23
2977	5,041314E+22	5,041418E+22	2,023898E+22	2,023994E+22	1,008273E+23	4,047892E+22	1,413062E+23
2978	5,041266E+22	5,041142E+22	2,023967E+22	2,023998E+22	1,008241E+23	4,047965E+22	1,413037E+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	5,041080E+22	5,041213E+22	2,024102E+22	2,024034E+22	1,008229E+23	4,048136E+22	1,413043E+23
2980	5,041234E+22	5,041211E+22	2,024049E+22	2,024149E+22	1,008245E+23	4,048197E+22	1,413064E+23
2981	5,041145E+22	5,040929E+22	2,024170E+22	2,024112E+22	1,008207E+23	4,048282E+22	1,413036E+23
2982	5,041027E+22	5,041161E+22	2,024220E+22	2,024175E+22	1,008219E+23	4,048395E+22	1,413058E+23
2983	5,041118E+22	5,041088E+22	2,024137E+22	2,024219E+22	1,008221E+23	4,048356E+22	1,413056E+23
2984	5,040944E+22	5,040964E+22	2,024227E+22	2,024147E+22	1,008191E+23	4,048374E+22	1,413028E+23
2985	5,041006E+22	5,041168E+22	2,024157E+22	2,024198E+22	1,008217E+23	4,048355E+22	1,413053E+23
2986	5,041114E+22	5,040966E+22	2,024107E+22	2,024119E+22	1,008208E+23	4,048226E+22	1,413031E+23
2987	5,041020E+22	5,041077E+22	2,024143E+22	2,024028E+22	1,008210E+23	4,048171E+22	1,413027E+23
2988	5,041213E+22	5,041258E+22	2,023995E+22	2,024078E+22	1,008247E+23	4,048073E+22	1,413054E+23
2989	5,041212E+22	5,041056E+22	2,023993E+22	2,023978E+22	1,008227E+23	4,047971E+22	1,413024E+23
2990	5,041120E+22	5,041305E+22	2,024015E+22	2,023951E+22	1,008243E+23	4,047966E+22	1,413039E+23
2991	5,041300E+22	5,041307E+22	2,023898E+22	2,023980E+22	1,008261E+23	4,047878E+22	1,413048E+23
2992	5,041231E+22	5,041111E+22	2,023975E+22	2,023899E+22	1,008234E+23	4,047873E+22	1,413022E+23
2993	5,041222E+22	5,041338E+22	2,023979E+22	2,023972E+22	1,008256E+23	4,047951E+22	1,413051E+23
2994	5,041281E+22	5,041171E+22	2,023957E+22	2,024010E+22	1,008245E+23	4,047967E+22	1,413042E+23
2995	5,041082E+22	5,041139E+22	2,024083E+22	2,024003E+22	1,008222E+23	4,048086E+22	1,413031E+23
2996	5,041126E+22	5,041264E+22	2,024062E+22	2,024154E+22	1,008239E+23	4,048216E+22	1,413061E+23
2997	5,041124E+22	5,040920E+22	2,024132E+22	2,024162E+22	1,008204E+23	4,048295E+22	1,413034E+23
2998	5,040960E+22	5,041017E+22	2,024267E+22	2,024175E+22	1,008198E+23	4,048442E+22	1,413042E+23
2999	5,041063E+22	5,041050E+22	2,024212E+22	2,024299E+22	1,008211E+23	4,048511E+22	1,413062E+23